Role Assured Publicly Accessible Information

RAPAI System

Data Entry and Display Screens

Interactive Systems Design
Final Project
Group 3

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Project Description

For our final project in the Interactive Systems Design class, we developed a system that permits users to enter and view information that will be of interest to students of the School of Information Sciences (SIS) at the University of Pittsburgh. Items that will be available via this system are items such as announcements; messages; scheduled events, for instance conferences and workshops; opportunities such as job openings and internships; items for sale; and items needed such as "I need a queen size bed".

System Purpose

The purpose of the system we developed is two-fold:

- **Data Entry** – the system provides the ability to enter data that will be stored in an Oracle database.

- **Data Display** – the system also provides the ability to view data that has been stored within the database. When the data display option is selected, the system will display a list of items that are in the database. If the user clicks on an item from the list, the details associated with that item will be displayed.

This project is in support of the Role Assured Publicly Accessible Information System, also known as RAPAI, managed by Dr. Michael Spring. The information entered and maintained within this system will be available via the touch screen displays located in the lobby of the School of Information Sciences building at the University of Pittsburgh.

Data Entry Screen Overview

The system provides the ability to enter data in the following categories:

- **Announcements** – general announcements that do not fit into any of the categories below.

- **Pitt Events** – events occurring at Pitt. The following categories are available.

    - Lecture
    - Talk
    - Workshop
    - Ph.D. Proposal
    - Dissertation Defense
    - Study Group

- **Non-Pitt Events** – events occurring outside of Pitt. The following categories are available.

    - Conference
    - Workshop

- **Opportunities** - opportunities available to students. The following categories are available.

    - Job Opening
    - Internship
    - Practicum
    - Independent Study
    - Special Topic Seminar
    - Experiment

- Other

- **Sales** – items that are for sale, and items that are needed. The following categories are available.

  - Need a Book
  - Need Furniture
  - Need a Car
  - Need Other

  - Book For Sale
  - Furniture For Sale
  - Car For Sale
  - Other For Sale

- **Housing** – housing for sale / rent and people in need of housing. The system provides the ability to post items for efficiencies, townhouses, duplexes, single family houses and subletting.

  - Need Housing
  - House For Sale / Rent

- **Messages** – the ability to post a message for a specific person.

These data entry screens will be available by going to a public web site that belongs to Pitt's School of Information Science. Users will access these screens from their workstation within their offices or via the computer lab in the SIS building. The screens currently located at this URL are screens that were initially developed as a prototype. These screens will be replaced by the screens developed during this project.

Item Display Screen Overview

The system will provide the ability to display a list of items currently stored within the Oracle database for each of the categories below.

- Announcements
- Pitt Events
- Non-Pitt Events
- Opportunities
- Sales
- Housing
- Messages

For each of these categories, the system provides two types of display screens as follows:

- List of all items
- Item details for a specific item

The display screens will be available via the touch screen display screens in the lobby of the SIS building. Therefore, the interactivity of these screens is limited to a selection of items. The ability to search for items within the system is not available.

System Overview

The system we developed consists of several components including:

- Web pages
- Java Servlets
- Cascading Style Sheets
- XML Transformer Files
- Java Script code files.

The specific components that comprise the system are listed below for the data entry screens, data list display and the data item display.

Data Entry Function - 8 Web Pages, 7 Java Servlets, 5 JavaScript Files, 4 CSS Files

- Data Entry Main Menu Page
- Announcement Entry Page
- Pitt Event Entry Page
- Non-Pitt Event Entry Page
- Opportunities Entry Page
- Sales Entry Page
- Housing Entry Page
- Messages Entry Page

- JavaScript code files
- Cascading Style Sheet files

- Announcement Database Insert Java Servlet
- Pitt Event Database Insert Java Servlet
- Non-Pitt Event Database Insert Java Servlet
- Opportunities Database Insert Java Servlet
- Sales Database Insert Java Servlet
- Housing Database Insert Java Servlet
- Messages Database Insert Java Servlet

Data Retrieval Function - 14 Web Pages, 14 XML Transformer Files, 14 Java Servlets

Data List Components

- Announcement List Page
- Pitt Event List Page
- Non-Pitt List Page
- Opportunities List Page
- Sales List Page
- Housing List Page
- Messages List Page

- Announcement Data List Retrieval Java Servlet
- Pitt Event Data List Retrieval Java Servlet
- Non-Pitt Event List Data Retrieval Java Servlet
- Opportunities List Data Retrieval Java Servlet
- Sales Data List Retrieval Java Servlet
- Housing Data List Retrieval Java Servlet
- Messages Data List Retrieval Java Servlet

- Announcement List XML Transformer File
- Pitt Event List XML Transformer File
- Non-Pitt List XML Transformer File
- Opportunities List XML Transformer File
- Sales List XML Transformer File
- Housing List XML Transformer File
- Messages List XML Transformer File

Item Details Components

- Announcement Details Page
- Pitt Event Details Page
- Non-Pitt Details Page
- Opportunities Details Page
- Sales Details Page
- Housing Details Page
- Messages Details Page

- Announcement Details XML Transformer File
- Pitt Event Details XML Transformer File
- Non-Pitt Details XML Transformer File
- Opportunities Details XML Transformer File
- Sales Details XML Transformer File
- Housing Details XML Transformer File
- Messages Details XML Transformer File

- Announcement Data Item Retrieval Java Servlet
- Pitt Event Data Item Retrieval Java Servlet
- Non-Pitt Event Item Data Retrieval Java Servlet
- Opportunities Item Data Retrieval Java Servlet
- Sales Data Item Retrieval Java Servlet
- Housing Data Item Retrieval Java Servlet
- Messages Data Item Retrieval Java Servlet

System Architecture

The system architecture is comprised of data entry and data display web pages that communicate to an Oracle database only by the execution of Java Servlets. The diagram below depicts the system components, and the relationship between them.
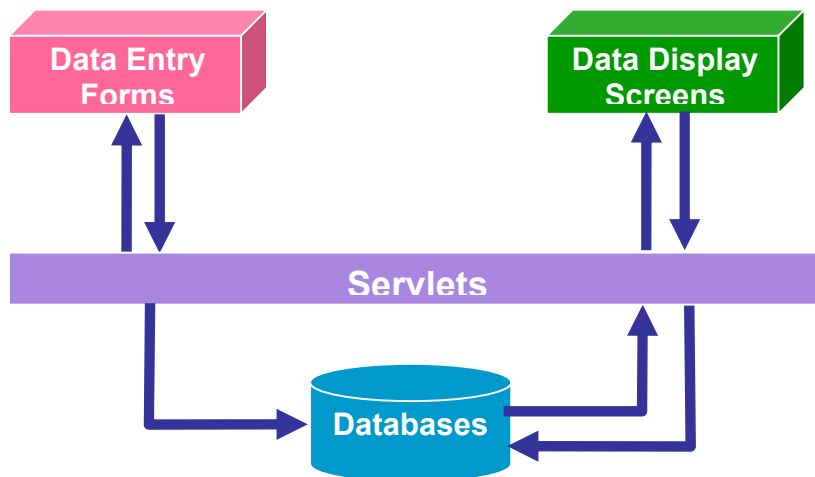
Figures 1 and 2 below depict the specific components associated with the Data Entry and Data Display functions.
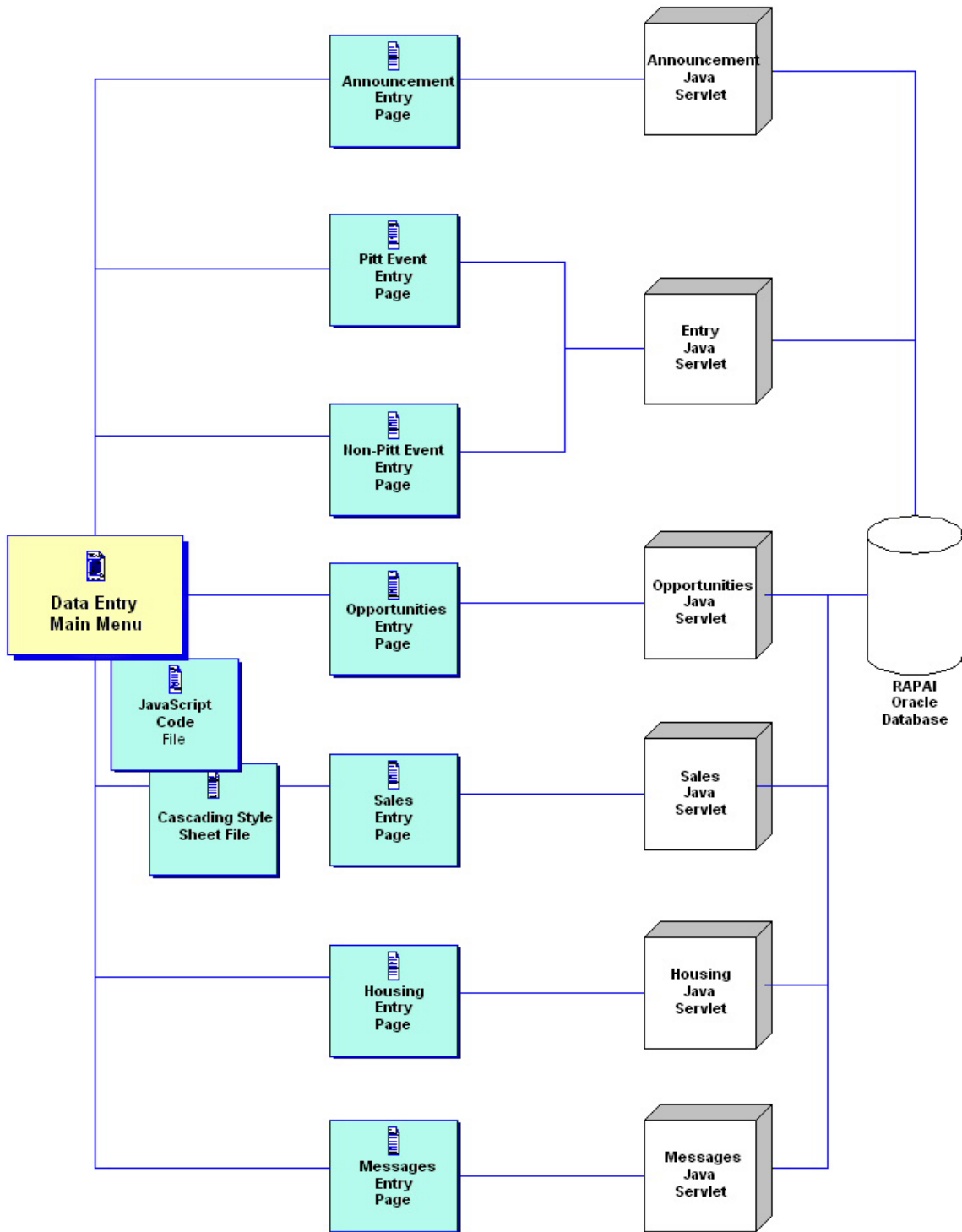
Figure 1
Data Entry Function Components
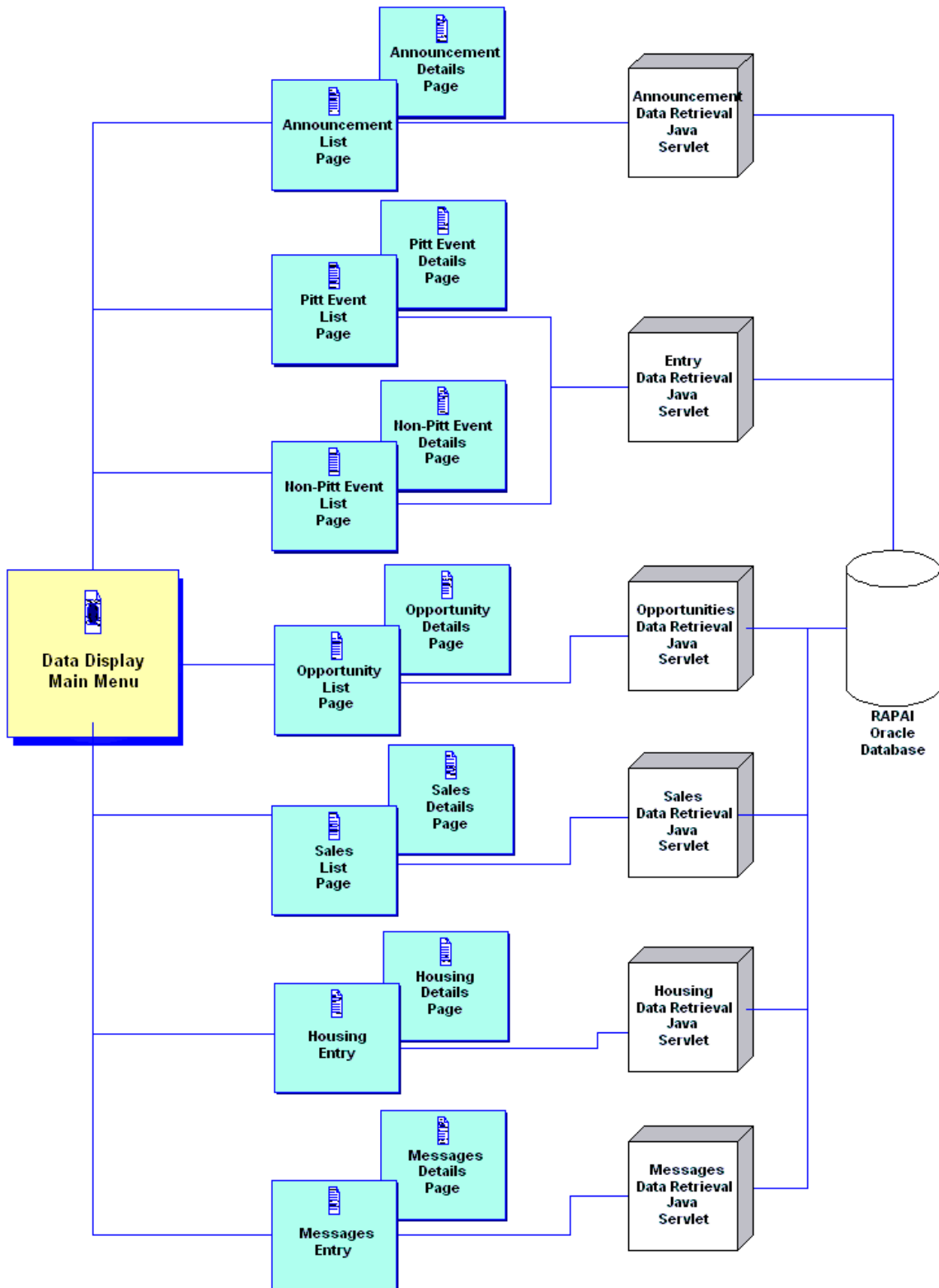
Figure 2
Data Display Function Overview

Design Process

Throughout our system design, we utilized the **Iterative Design Process**. As depicted in the diagram below, during this process the current design is analyzed in order to build a model of how the user is expected to perform an activity with the system's support. This analysis enables assessments to be made of the design's usability, which feeds into the enhancement of the design. This process repeats as the interface screens are enhanced to meet the user's need.
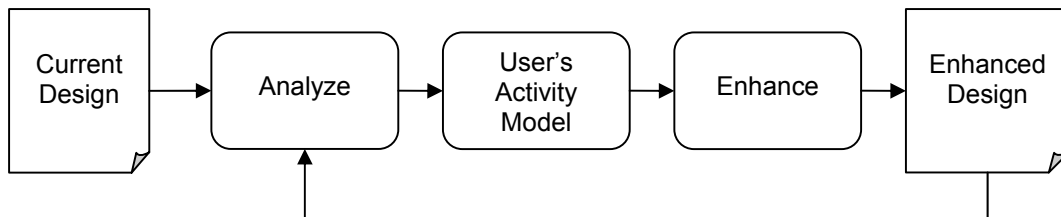
To implement this concept that we learned in class, we performed the following steps:

- **Conducted User Studies**
  - **Interviews**
  - **Questionnaires**
  - **Talk Aloud**

- **Analyzed User Studies**

- **Developed Prototype Screens**

- **Reviewed Prototype Screens with Users**

- **Developed all System Components**

- **Conducted User Studies on Final Screens**
  - **Interviews**
  - **Questionnaires**

We began our design process by analyzing interface screens that were designed prior to our involvement in the RAPAI project. We conducted User Studies on these screens to determine what the users liked and disliked. Based on the results of the User Studies, we developed prototype screens and reviewed them with the user base. Based on their suggestions we revised the screens. We continued the review of prototype screens and reviewing the prototype screens with the users until we felt we had a design that fit the user's need. Once we had the interface screen design finalized, we developed the Java Servlets, and presented the user with a completely working system. Once the system was finalized, we conducted our final User Studies by performing interviews and questionnaires.

Interface Screens

During the design process, we went through several iterations of our interface screens. Within this document, for some of the screens we will present to you two different versions of the screens.

During our analysis of the existing RAPAI system, we not only reviewed the screens that had been developed, we also reviewed the Oracle database that stores data for the RAPAI system. In this review of the existing interface screens and the database, we felt there were fields that should be added to the database to store information that would be valuable for the end user. For example, for a house that is for sale, the database did not include a field for the square footage or room sizes

for the home. Based on our analysis of the screens and the database, we developed a version of the screens that contained all the fields we felt were important to the end user. As the end of the semester neared, and we were presented with the inability of getting these additional fields added to the database the by the RAPAI database administrator, we decided to alter our screens to include only the fields that were present in the database tables. We wanted to ensure we had a system to present in our demo that was fully functional. Thus, we wanted to demonstrate not only the interface screens, but to demo that the Java Servlets that inserted data into the database were developed and functional. So, we removed the additional fields from our interface screens. Within this section of this document we will present both the screens that are posted on the SIS web server, and the screens that we feel are reflective of screens that will be most beneficial to the end user.

Data Entry Screens

We designed data entry screens for the following categories and sub-categories:

- **Announcements**
- **Pitt Events**
  - Lecture
  - Talk
  - Workshop
  - Ph.D. Proposal
  - Dissertation Defense
  - Study Group
- **Non-Pitt Events**
  - Conference
  - Workshop
- **Opportunities**
  - Job Opening
  - Experiment
  - Internship
  - Practicum
  - Independent Study
  - Special Topic Seminar
  - Experiment
  - Other
- **Sales**
  - Need a Book
  - Need Furniture
  - Need a Car
  - Need Other
  - Book For Sale
  - Furniture For Sale
  - Car For Sale
  - Other For Sale
- **Housing**
  - Need Housing
  - House For Sale / Rent
- **Messages**

As we designed the data entry screens, we felt it was necessary to reduce the user's memory load and only present them with the fields that are applicable for each of the sub-categories within the categories above. The following screen snap shots will present each of the sub-category screens.

Once we designed each of the individual screens, we designed screens that permitted the user to quickly go to other data entry screens by providing a banner down the left side of the screen that permits the user to display the data entry screen for another category.

Announcement Data Entry Screen

Pitt Event Data Entry Screens

The Pitt Event category includes the sub-categories for Lectures, Talks, Workshops, Ph.D. Proposals, Dissertation Defenses and Study Groups. The screens for each sub-category are depicted below.

Pitt Events – Lecture Screen

The following screen was implemented on the SIS web server.

We developed an alternative version of the screen with additional fields that we felt were necessary to maximize the system to the user's needs. This screen is depicted below.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Lecture ▾

Lecture Information

Lecture Title	
Speaker/Presenter	
Chairperson	
Start Date	04/29/2005
End Date	04/29/2005
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Event Room	
Event Address	
City / State / Zip	
Country	
Description	Maximum of 450 characters
Cost	$ 0 Format: 0000000.00
Sponsor	
URL	

Display Information

Display Date	04/29/2005
Dispose Date	04/29/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Pitt Event – Talk Screen

The following screen was implemented on the SIS web server.

The enhanced screen with additional fields is depicted below.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Talk ▾

Talk Information

Talk Title	
Speaker/Presenter	
Chairperson	
Start Date	04/29/2005 📅
End Date	04/29/2005 📅
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Event Room	
Address	
City / State / Zip	
Country	
Description	Maximum of 450 characters
Cost	$ 0 Format: 0000000.00
Sponsor	
URL	

Display Information

Display Date	04/29/2005 📅
Dispose Date	04/29/2005 📅

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Pitt Event – Workshop Screen

The following screen has been implemented on the SIS web server.

School of Information Sciences

Entry Page

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Workshop

Workshop Information

Workshop Title	
Workshop Date	04/29/2005
Workshop Room	
Address	
City / State	
Country	
Description	Maximum of 450 characters
Cost	$ 0.00
URL	

Display Information

Display Date	04/29/2005
Dispose Date	04/29/2005

Reset Form   Submit Information

Friday, April 29   9:51 AM

The enhanced workshop screen with the additional fields is below.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Workshop

Workshop Information

Workshop Title	
Presenter	
Workshop Date	04/29/2005
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Workshop Room	
Address	
City / State / Zip	
Country	
Objectives of Workshop	Maximum of 450 characters
Description	Maximum of 450 characters
Workshop Requirements	
Cost	$ 00.00 Format: 0000000.00
Sponsor	
URL	

Display Information

Display Date	04/29/2005
Dispose Date	04/29/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Pitt Event - Ph.D. Proposal Screen

The screen that was implemented on the SIS web server is below.

School of Information Sciences

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Ph.D. Proposal

Proposal Information

Proposal Title	
Event Date	04/29/2005
Event Room	
Description	Maximum of 450 characters

Display Information

Display Date	04/29/2005
Dispose Date	04/29/2005

Reset Form   Submit Information

Friday, April 29   9:51 AM

The enhanced Pitt Ph.D. Proposal screen is as follows.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Ph.D. Proposal ▾

Proposal Information

Presenter	
Title	
Event Date	04/29/2005 📅
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Event Room	
Description	Maximum of 450 characters

Display Information

Display Date	04/29/2005 📅
Dispose Date	04/29/2005 📅

Contact Information

Name	
Phone		Enter number: ###-###-####
Email Address	

[Reset Form] [Submit Information]

Pitt Event - Dissertation Defense Screen

The screen that was implemented on the SIS web server is as follows:

This is the enhanced screen for the Dissertation Defense Pitt Event function.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Dissertation Defense ▾

Defense Information

Presenter	
Title	
Event Date	04/29/2005
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Event Room	
Description	Maximum of 450 characters
Faculty Advisor	

Display Information

Display Date	04/29/2005
Dispose Date	04/29/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

[Reset Form]   [Submit Information]

Pitt Event - Study Group Screen

This is the screen that was implemented on the SIS web server.

This is the enhanced screen for the Pitt Event Study Group function.

RAPAI – Pitt Event Screen – Pitt

This form is used to submit **Pitt Events**

Event Information

Event Type	Study Group ⌄

Study Group Information

Study Topic	
Study Date	04/29/2005 📅
Time	HH:MM ○ A.M. ○ P.M.
Location	
Number of Students	0
Students Attending / Signed up	Maximum of 450 characters

Display Information

Display Date	04/29/2005 📅
Dispose Date	04/29/2005 📅

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Non-Pitt Event Screens

The Non-Pitt Event category includes data entry screens for conferences and workshops. The data entry screens are depicted below.

Non-Pitt Event – Conference Screen

The screen implemented on the SIS web server is as follows.

The enhanced screen for a Non-Pitt Conference is below.

RAPAI – Non-Pitt Event Screen

This form is used to submit **non-pitt events**

Event Information

Event Type	Conference ▾

Conference Information

Conference Title	Maximum 50 chars
Start Date	04/29/2005 📅
End Date	05/19/2005 📅
Chairperson	
Address	
Address	
City / State / Zip		
Country	
Description	Maximum of 450 characters
Cost	$ 0.00 Format: $0000000.00
URL	

Display Information

Display On	04/29/2005 📅
Dispose On	05/19/2005 📅

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Non-Pitt Event – Workshop Screen

The screen implemented on the SIS web server is depicted below.

The enhanced Non-Pitt Workshop screen is as follows.

RAPAI – Non-Pitt Event Screen

This form is used to submit **non-pitt events**

Event Information

Event Type	Workshop ▼

Workshop Information

Workshop Title	Maximum 50 chars
Presenter	
Date	04/29/2005 🔲
Start Time	HH:MM ○ A.M. ○ P.M.
End Time	HH:MM ○ A.M. ○ P.M.
Chairperson	
Address	
Address	
City / State / Zip			
Country	
Description	Maximum of 450 characters
Objectives	Maximum of 450 characters
Requirements	Describe any requirments of the workshop such as participants must bring a laptop. Maximum of 450 characters
Cost	$ 0.00 Format $0000000.00
URL	

Display Information

Display On	04/29/2005 🔲
Dispose On	05/19/2005 🔲

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Opportunities Data Entry Screens

For the opportunity category we developed data entry screens for categories including Job Openings, Internships, Practicum's, Independent Studies, Special Topic Seminars, Experiments, and a general Other Opportunities category.

Opportunities - Job Opening

The screen implemented on the SIS web server was equivalent to the enhanced screen we developed.

Opportunities – Experiment

The implemented screen for Experiments is as follows:

The enhanced field screen for Experiments is:

RAPAI - Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Experiment ▼

Experiment Information

Experiment Title	
Description	Maximum of 450 characters
Pre-requisite Conditions	Maximum of 450 characters
Requirements	Maximum of 450 characters
Compensation	$ 0.00
URL	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone		Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Opportunities – Internship

The screen implemented for Internships on the SIS web server is as follows:

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Sales

RAPAI - Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Internship

Internship Information

Internship Topic	
Description	Maximum of 450 characters
URL	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	
Email Address	

Reset Form   Submit Information

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The enhanced Internship screen is depicted below.

RAPAI - Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Internship ▼

Internship Information

Internship Topic	
Description	Maximum of 450 characters
Internship Sponsor	
URL	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

[Reset Form] [Submit Information]

Opportunities – Practicum

The screen implemented for a Practicum posting is represented below. This screen is equivalent to the enhanced version that we developed.

Opportunities - Independent Study

The implemented screen for an Independent Study opportunity is as follows. This screen is equivalent to the enhanced version of our screen.

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Sales

RAPAI - Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Independent Study ▾

Independent Study Information

Study Topic	
Description	Maximum of 450 characters
URL	

Display Information

Display On	04/29/2005 📅
Dispose On	04/29/2005 📅

Contact Information

Name	
Phone	
Email Address	

Reset Form   Submit Information

Friday, April 29   12:19 PM

Opportunities - Special Topic Seminar

School of Information Sciences

Entry Page

RAPAI - Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Special Topic Seminar ▾

Special Topic Information

Seminar Topic	
Date	📅
Credentials Desired	Maximum of 450 characters
Description	Maximum of 450 characters
URL	

Display Information

Display On	04/29/2005 📅
Dispose On	04/29/2005 📅

Contact Information

Name	
Phone	
Email Address	

Announcements
Events-Pitt
Events-Non Pitt
Messages
Opportunities
Sales

Friday, April 29   12:19 PM

This is an enhanced version of the Special Topic Seminar data entry screen that we developed.

RAPAI – Add An Opportunity

This form is used to submit **opportunities**

Posting Information

Opportunity Type	Special Topic Seminar ∨

Special Topic Information

Seminar Topic	
Date	
Start Time	
End Time	
Credentials Desired	Maximum of 50 characters
Description	Maximum of 450 characters
URL	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Opportunities – Other Opportunity

The implemented Other Opportunity data entry screen is as below. This screen is equivalent to the enhanced version of the Other Opportunity screen.

Sales Data Entry Screens

Within the Sales category, we developed data entry screens for posting a need for a book, furniture, car, and other items. We also developed data entry screens for users to post items for sale such as books, furniture, cars, and other items. The data entry screens are represented below.

Sales - Need a Book

The implemented Sales – Need a Book screen is represented below.

School of Information Sciences

Entry Page

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Sales

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

| Sell or Need an Item? | Need ▼ |
| Item Catagory | Book ▼ |

Book Information

Book Title	
Book Description	
Asking Price	$ 00.00

Display Information

| Display On | 04/29/2005 |
| Dispose On | 05/19/2005 |

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Friday, April 29   12:30 PM

The enhanced version of the Need a Book data entry screen is as follows:

RAPAI – Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Need
Item Catagory	Book

Book Information

Book Title	
Book's URL	
Book Description	
Use in Class	
Asking Price	$ 00.00

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Sales - Need Furniture

The version of the Need Furniture data entry screen that was implemented on the SIS web server is depicted below. This screen is equivalent to the enhanced version of the screen we designed.

Sales - Need a Car

The version of the Sales, Need a Car screen that we implemented is reflected below.

The enhanced version of the Need a Car screen is below.

Sales - Need Other

The Other sale screen that we implemented on the SIS web server is shown below.

School of Information Sciences

Entry Page

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Sales

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

| Sell or Need an Item? | Need ▾ |
| Item Catagory | Other ▾ |

Item Information

Item	
Description	
Price	$ 00.00

Display Information

| Display On | 04/29/2005 |
| Dispose On | 05/19/2005 |

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Friday, April 29   12:35 PM

The slightly enhanced version of this screen is shown below.

RAPAI – Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Need
Item Catagory	Other

Item Information

Item	
Description	
Item's URL	
Price	$ 00.00

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Sales - Book for Sale

The Book for Sale screen that was implemented on the SIS web server is below.

The enhanced Book for Sale screen that we developed is represented below.

RAPAI – Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell ▾
Item Catagory	Book ▾

Book Information

Book Title	
Book's URL	
Book Description	
Book Condition	
Used in Class	
Selling Price	$ 000.00

Shipping Information

Book's Location	Address, City, State, Zip, Country
Shipping Charges	$ 00.00
Shipping Method	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Sales - Furniture for Sale

The Furniture for Sale screen that we developed is represented below.

School of Information Sciences

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell
Item Catagory	Furniture

Furniture Information

Description	
URL	
Selling Price	$ 00.00

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Announcements
Events-Pitt
Events-Non Pitt
Messages
Opportunities
Sales

Friday, April 29   12:35 PM

The enhanced version of the Furniture for Sale data entry screen is as follows:

RAPAI – Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell
Item Catagory	Furniture

Furniture Information

Furniture Type	
Description	
Condition	
URL	
Selling Price	$ 00.00

Shipping Information

Location of Furniture	Address, City, State, Zip, Country
Shipping Charges	$ 00.00
Shipping Method	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Sales - Car for Sale

The implemented version of the Car for Sale data entry screen is shown below.

The enhanced Car for Sale screen that we developed is as follows.

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell ▾
Item Catagory	Car ▾

Car Information

Car's Make	
Model	
Year	YYYY
Mileage	
Description	
Condition	
URL	
Selling Price	$ 00.00

Shipping Information

Car Location	Address, City, State, Zip, Country
Shipping Charges	$ 00.00
Shipping Method	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Sales - Other for Sale

Below is the screen that was implemented for the Other item for Sale.

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell
Item Catagory	Other

Item Information

Item Name	
Item Description	
Price	$ 00.00

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

The enhanced version of the Other item for Sale data entry screen is as follows:

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell ▾
Item Catagory	Other ▾

Item Information

Item Name	
Item Description	
Item URL	
Price	$ 00.00

Shipping Information

Item's Location	Address, City, State, Zip, Country
Shipping Charges	$ 00.00
Shipping Method	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

[Reset Form]   [Submit Information]

Housing Data Entry Screens

We developed data entry screens for posting a house for sale or rent, and for personnel to post a need for a house of several types. These screens are represented below.

Housing - Need Housing

The Need a House data entry screen that we implemented on the SIS web server is as follows:

RAPAI – Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

| Sell or Need an Item? | Need |
| Item Category | Housing |

Housing Information

Housing Type	Efficiency
Address	
City and State	
Zip Code	
Description	
Rent	$ 000.00 / Month
Lease From	04/29/2005
Lease To	04/29/2005
Have a Roommate?	Yes

Display Information

| Display On | 04/29/2005 |
| Dispose On | 05/19/2005 |

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Friday, April 29   12:35 PM

The enhanced version of the Need Housing screen that we developed is as follows:

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Need ▾
Item Catagory	Housing ▾

Housing Information

Housing Type	Efficiency ▾
Desired Rent	$ 000.00 / Month
Desired Location	
Moving Date	MM/DD/YYYY
Desired Number of Bedrooms	1 ▾
Desired Number of Baths	1 ▾
Desired Square Footage	
Description	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Housing - House for Sale / Rent

The screen that we implemented for a house for sale or rent is depicted below:

School of Information Sciences

Entry Page

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Sales

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

| Sell or Need an Item? | Sell |
| Item Catagory | Housing |

Housing Information

Housing Type	Efficiency
Address	
City and State	
Zip Code	
Description	
Rent	$ 000.00 / Month
Lease From	04/29/2005
Lease To	05/28/2005
Have a Roommate?	Yes

Display Information

| Display On | 04/29/2005 |
| Dispose On | 05/19/2005 |

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Friday, April 29   12:35 PM

The enhanced version of the House for Sale or Rent is as follows:

RAPAI - Sales Screen

This form is used to submit **Sales Announcements**

Sell / Need Information

Sell or Need an Item?	Sell ▾
Item Catagory	Housing ▾

Housing Information

Housing Type	Efficiency ▾
Desired Rent	$ 000.00 / Month
Desired Location	
Moving Date	MM/DD/YYYY
Desired Number of Bedrooms	1 ▾
Desired Number of Baths	1 ▾
Desired Square Footage	
Description	

Display Information

Display On	04/29/2005
Dispose On	05/19/2005

Contact Information

Name	
Phone	Enter number: ###-###-####
Email Address	

Reset Form   Submit Information

Messages Data Entry Screen

The Messages data entry screen that we developed and implemented is shown below. This version is equivalent to the enhanced version that we developed.

Data Display Screens

The screens that were developed to display data that resides within the system are divided into two categories:

- Item List Display
- Item Details Display

For each of the categories, the screens for each of these categories are shown below.

When the user entered each item into the system, they designated a date when the item should start to be displayed, and a date when the item should no longer be displayed. We have coded the Java Servlets to only retrieve data that falls within these dates. Therefore, for each of the data display items, only the items that fall within the Display Date and the Expiration Date dates that were entered when the data within the system.

Announcement Display

The Announcement List Display is as follows:

The Announcement Detail display is depicted below:

Pitt Events Data Display

The Pitt Item and Detail displays are included below.

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Current Event at Pitt

Below is the detail of the event you selected.

Title	Telecommunications Security	
Type	Lecture	
Start	2005-05-05 00:00:00.0	
End	2005-05-05 00:00:00.0	
Cost	$20	
Address	135 North Bellefield Ave	
.	Room 350	This lecture will present the concepts of security in telecommunications
City	Pittsburgh	
State	PA	
Country	USA	
URL	http://www.telesecurity.com	
Chairperson	D Tibber	
Post	2005-04-27 00:00:00.0	
Expiry	2005-05-05 00:00:00.0	

Return

Friday, April 29   2:16 PM

Non-Pitt Event Data Display

The Non-Pitt Events that are stored within the system, and are supposed to be displayed for a particular day, will be displayed in the formats below. Both the Item Lists and Item Detail screens are shown below.

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Current Non-Pitt Events (Page 1)

Below are several non-Pitt events that you may be interested in.

conference
Non-Pitt Conference

conference
Tea

Conference
AAAA

Conference
aaaaaaaaaaa

Conference
Computers in India

Conference
State of IT in India

Next----->

Friday, April 29   2:23 PM

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Current Non-Pitt Event

Below is the detail of the event you selected.

Title	Research in Pervasive Databases	
Type	workshop	
Start	2005-05-11 00:00:00.0	
End	2005-05-11 00:00:00.0	
Cost	$70	
Address	450 Frick Ave	This workshop will discuss the research that has been performed on Pervasive Databases
.	Room 309	
City	Pittsburgh	
State	PA	
Country	USA	
URL	http://pervasivedatabases.com	
Chairperson	Henry Samuels	
Post	2005-04-28 00:00:00.0	
Expiry	2005-05-12 00:00:00.0	
Return		

Friday, April 29   2:23 PM

Messages Data Display

The data display screens for the display of messages are shown below.

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Current Messages (Page 1)

Below are several messages that you may be interested in.

Hey Aporna..........I just want to see if this works!!!

Hey Aporna.........I just want to see if this works!!!

Test # 1 - Monday

Test # 1 - Monday

First test message - Monday

First test message - Monday

Please don't rename files, or remove files, or put files where you didn't find them. Please have courtesy, and respect for others.

Please don't rename files, or remove files, or put files where you didn't find them. Please have courtesy, and respect for others.

Write the Message here. Use up to 500 characters

Write the Message here. Use up to 500 characters

Just wanted to thank you for all of your hard work on our projects this semster

Just wanted to thank you for all of your hard work on our projects this semster

---

Friday, April 29   2:24 PM

School of Information Sciences

Current Messages

Below is the detail of the message you selected.

Sender	Velma	
Recipient	Jumo	Just wanted to thank you for all of your hard work on our projects this semster
Sent Time	2005-04-24 00:00:00.0	
Post	2005-04-24 00:00:00.0	
Expiry	2005-05-14 00:00:00.0	
Return		

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Friday, April 29   2:24 PM

Opportunities Data Display

The screens that display the list of Opportunities and the details of an Opportunity are shown below.

School of Information Sciences

Current Job Opportunities (Page 1)

Below are several opportunities that you may be interested in.

Experiment

Smokers Experiment

Experiment

Smokers Experiment

Experiment

TEST FOREVER

Experiment

TEST FOREVER #2

Experiment Participation

EEEEEEEEEEE

Experiment Participation

Monday Test # 5

Next----->

Friday, April 29   2:30 PM

School of Information Sciences

Current Job Opportunities

Below is the detail of the opportunity you selected.

Title	Smokers Experiment	
Type	Experiment	
Compensation	25.00	
Contact	V Payne	This experiment will perform various tests on smokers
Phone	4123582419	
Email	vlp2@pitt.edu	
Post	2005-04-24 00:00:00.0	
Expiry	2005-05-14 00:00:00.0	

Return

Navigation buttons: Announcements, Events-Pitt, Events-Non Pitt, Messages

House Data Display

The screens that display a list of houses for sale and people needing houses, as well as the details for each posting is depicted below.

School of Information Sciences

Announcements

Events-Pitt

Events-Non Pitt

Messages

Opportunities

Houses

Sales

Current Housings (Page 2)

Below are several houses that you may be interested in.

<-----Previous

Room

Good Area. Apartment for rent.

Room

Room for rent

Room

Small apartment for rent

Sublet

null

Twnhse

null

Twnhse

null

Friday, April 29   2:30 PM

School of Information Sciences

Current Houses

Below is the detail of the house you selected.

Title	Good Area. Apartment for rent.	
Type	Room	
Lease From	2005-04-25 00:00:00.0	
Lease to	2005-05-16 00:00:00.0	
Address	33 Oxford Lane	
.		
Area	Oakland	Nice Spacious apartment for rent
Zip	15260	
Rent	$	
Roommate	N	
Contact	Thelma Lane	
Phone	4125557777	
Email	tl@yahoo.com	
Post	2005-04-25 00:00:00.0	
Expiry	2005-05-16 00:00:00.0	
Return		

Navigation: Announcements, Events-Pitt, Events-Non Pitt, Messages, Opportunities, Houses, Sales

Friday, April 29   2:30 PM

Sales Data Display

The Sales list and detail screens are listed below.

School of Information Sciences

Current Sales (Page 2)

Below are several sales that you may be interested in.

need

Monday - Test # 3

need

Monday - Test # 4

need

Please work!!!

need

Queen Size Bed

need

Television

need

Test # 2 - Monday

Friday, April 29   2:32 PM

Interactive Features of the System

During the design of the data entry screens we attempted to build in as many of the **heuristics** as possible. We feel we have built the following heuristics into all interface screens:

- Simple and Natural Dialog
- Speak the User's Language
- Minimize User Memory Load
- Provide Feedback
- Prevention of Errors
- Good Error Messages
- Provide Shortcuts

Specifically, the interactive features that we implemented are represented below.

Help Pop-up Tool Tip

When the user cursors over a field, a small tool tip will pop up to help the user understand the purpose of the field. An example of this feature is shown below.

Highlight Current Field

We felt it would be helpful to alter the background color of the field the user is entering. During data entry, if the user is interrupted by something like a phone call, when they look back to the screen, they will know exactly what field they were entering. A screen snap-shot is included below.

Auto Fill Data

When a user begins to enter data, if there are words that match the data being entered by the user, a window will pop up below the text box including a list of words that the user can choose from to reduce their typing.   An example follows.

Non-Entry of Required Fields During Data Entry

If a user skips over a field that is required and clicks in the next data entry field, both the label and the entry field that they skipped over will be highlighted in pink designating the field is required. This feature is represented in this example.

Required Fields Missing Message

When the user submits the web page and there are fields that are required but have not been entered, a modal window will pop up to alert the user of the missing field.

Once the user clicks the "OK" button to the modal window, the field that is required will be color coded in red and the cursor will be placed in that field.

Calendar Pop-up

For all the date fields, we have provided a calendar icon that the user can click to select a date. Once the user clicks on a date, the date field will automatically be populated into that field.

Phone Number Formatting

As the user types the phone number, the system will automatically format the phone number properly as reflected below.

Auto Empty Fields

For the fields that has been pre-filled, such as the monetary fields, when the user clicks in that field, the pre-filled value will disappear to allow the user to enter their data. The images below demonstrate the pre-filled data and the data that has disappeared.

Job Opening Information

Job Openning Title	
Description	Maximum of 450 characters
Compensation	$ 0.00
URL	

Job Opening Information

Job Openning Title	
Description	Maximum of 450 characters
Compensation	$
URL	

Data Insert Confirmation

Once all the data has been entered, and the submit button has been clicked; a Java Servlet will be called to insert the data into an Oracle database. The system displays a message to the user confirming the insert of the data into the database.

School of Information Sciences

Entry Page

Announcements

Events-Pitt

Success, Thank you for inserting an opportunity.

The insertion was succeeded. To see the current list of opportunities, Click here

User Studies

Throughout our project, we conducted User Studies to determine how the users felt about the system that was being developed. Our User Studies consisted of the following:

- Interview
- Questionnaire
- Think Aloud Video

The users that were involved in the User Study were:

- Academic Personnel – Dr. Michael Spring

- Information Technology Personnel – these personnel are designers and developers of information systems as their career. Their experience ranged from 20+ years of experience to 5+ years experience.

Interview

We interviewed one current user and several potential users of the RAPAI system to determine what features were desired and what features were not desired. The questions we asked during the interview were as follows.

- What is your overall impression of the interface screen?
- Was the screen easy or hard to use?
- What was you impression on the "look and feel" of the system?
- What would you like to see changed within the system?
- Do you feel your needs were met when using the system?

Interview Results

The general impression we received when interviewing the users on the initial screens that were developed prior to our involvement of the system was:

- The screens were skimpy in that they did not provide a detailed explanation of the purpose of the screen and did not provide details of the meaning of data fields.

- Some screens contained data entry objects that were not related to the topic being entered.

- The screens are not visually attractive. The green color that was used is not appealing to the eye.

- The date and time fields were very difficult to use. The date entry fields should be one text box rather than different entry fields for the month, day, year, hour, minute and seconds.

The feedback that we received when interviewing the users on the final screens were as follows:

- The screens were easy to use. They were well developed and it was easy to flow from one step to the next step when performing data entry.

- The fact that the screens only displayed the fields applicable to the item being entered was a major enhancement over the previous screens.

- The dynamic feature of the screens was very helpful when entering data.

- The feedback the system provided as the data was being entered with various color coded screen objects was extremely beneficial.

- The date picker was very helpful and made entering dates extremely easy.

- The drop down boxes that popped up to automatically fill in data according to what you are typing was somewhat distracting when the items were not really related to what I was entering, but were also very beneficial when the data was related to the data being entered.

- The screens were appealing visually. They were pleasing to the eye.

Questionnaire

We asked users to fill out a questionnaire for both the initial screens and the final screens. The questions asked in the questionnaire were:

1. Is the purpose of the screen evident?
   Yes   No   Not Sure

2. Is the form easy to use?
   Yes   No   Not Sure

3. Does the form contain fields to enter all the information you desire to specify?
   Yes   No   Not Sure

4. Were there fields on the form that you did not desire to specify?
   Yes   No   Not Sure

5. Were you confused when you first saw the form?
   Yes   No   Not Sure

6. How long did it take to become proficient with the form?
   < 5 minutes   5 – 10 minutes   > 10 minutes

7. Did you make any mistakes when entering data into the form?
   Yes   No   Not Sure

8. Did the system properly display errors when errors were made?
   Yes   No   Not Sure

9. Were your mistakes difficult to correct?
   Yes   No   Not Sure

10. Are the screens pleasant to look at?
    Yes   No   Not Sure

11. Do you think the information is organized logically?
    Yes   No   Not Sure

12. Would you rename any of the fields / options?
    Yes   No   Not Sure

13. Would you rename /reword any of the fields options in the drop down boxes?
    Yes   No   Not Sure

    If so, which ones? What would you name them?

14. Would you rename any of the fields / options?

Yes   No   Not Sure

If so, which ones? What would you name them?

15. What could make the screen easier to use?

16. What changes would you recommend to the form?

17. What changes to the screen would make it faster to enter the data?

18. How long did it take you to enter the data?

The returned questionnaires are included within Appendix 1. Some of the users answered the complete questionnaire, some did not.

Think Aloud Video

We put together a video of the think aloud session that was performed on the initial screens. The user talked through using the screen and gave her impression of the system, as well as the items she felt needed to be changed. The video is available on-line at the following address:

http://www2.sis.pitt.edu/~jumpolp/movies/ThinkAloud2.wmv

Appendix 1

User Questionnaires

RAPAI – Newsreel Form Entry Screens
User Studies Interview

In the class I am taking this semester, we are studying Interactive System Design. We are learning how to develop valuable interfaces. Part of our good interface design includes conducting user studies. I would like your help in analyzing two different screens and completing a questionnaire for each screen. Once you have completed the questions, if you could add up your points that would be helpful. If you could fill the form out on-line and email it back to me, that would help me out a lot. I have to include it in my report for my class. I will not use your names – just a id number will be used to identify you.

If you could take a few minutes to complete this by Tuesday at Noon I would appreciate it. I have to compile the results, build graphs and complete my documentation to be handed in on Wednesday.

The background of the screens are as follows --- There are touch screen displays in the lobby of the School of Information Sciences building where students can go to view information. Some of the items on these screens are events occurring at Pitt, events occurring outside of Pitt, various Opportunities such as internships and practicum, and Sell / Need items such as "I have a book for sale" or "I'm looking for an apartment" The screens you will be reviewing are screens that permit people to enter data that will show up on these screens.

Thank you very much for your participation.

The questions on the next page are in reference to the Newsreel screens that are found at http://webdev.sis.pitt.edu/entry_public/. For each of you I have designated what form you should select and evaluate.

News Reel Questions:

1. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5__

2. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

3. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3____

4. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

5. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: _3____

6. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: ___3__

7. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__
8. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

9. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

10. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

11. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: _5___

12. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

13. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

If so, which ones? What would you name them?

14. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: _____

If so, which ones? What would you name them?
EXPIRY

15. What could make the screen easier to use?
COLOR

16. What changes would you recommend to the form?
BUMP DATES

17. What changes to the screen would make it faster to enter the data?

18. How long did it take you to enter the data?
10 MIN

RAPAI Screens:

19. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

20. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

21. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: _4____

22. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

23. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

24. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

25. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___
26. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

27. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

28. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: _5____

29. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

30. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: _3____

31. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

If so, which ones? What would you name them?

32. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

If so, which ones? What would you name them?

33. What could make the screen easier to use?

34. What changes would you recommend to the form?
YOU CAN ACCEPT THE ERROR MESSAGES AS DATA

35. What changes to the screen would make it faster to enter the data?

36. How long did it take you to enter the data?

37. Which screen did you like better?
___ First Screen   ___X__ Second Screen

Why? BECAUSE VELMA DID IT

User Questionnaire 2:
News Reel Questions:

1. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: _5___

2. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: __5__

3. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

4. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

5. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

6. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5__

7. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5__

8. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5__

9. Were your mistakes difficult to correct?

Yes (5)	No (3)	Not Sure (0)	Points: __3__

10. Are the screens pleasant to look at?

Yes (5)	No (3)	Not Sure (0)	Points: __4__

11. Do you think the information is organized logically?

Yes (5)	No (3)	Not Sure (0)	Points: __5__

12. Would you rename any of the fields / options?

Yes (5)	No (3)	Not Sure (0)	Points: __3__

13. Would you rename /reword any of the fields options in the drop down boxes?

Yes (5)	No (3)	Not Sure (0)	Points: __5__

If so, which ones? What would you name them?
PRACTICUM . . . ????

14. Would you rename any of the fields / options?

Yes (5)	No (3)	Not Sure (0)	Points: __5__

If so, which ones? What would you name them?
DESCRIPTION → JOB DESCRIPTION / RESPONSIBILITIES
Possibly display max character allowed to prepare user.

15. What could make the screen easier to use?

16. What changes would you recommend to the form?
    COMPENSATION FIELD SHOULD SUPPORT MORE THAN 99999 – THIS JOB PAID 6
    DIGITS!

17. What changes to the screen would make it faster to enter the data?
18. How long did it take you to enter the data? 2-3 minutes

Which screen did you like better?

___ First Screen   __X__ Second Screen

Why?
Much easier to use – more dynamic based on the data entry function.
Date entry much better.
Much better visually.

User Questionnaire 3:

News Reel Questions:

1. Is the purpose of the screen evident?

Yes (5)	No (3)	Not Sure (0)	Points: ___3__

2. Is the form easy to use?

Yes (5)	No (3)	Not Sure (0)	Points: __5___

3. Does the form contain fields to enter all the information you desire to specify?

Yes (5)	No (3)	Not Sure (0)	Points: __5___

4. Were there fields on the form that you did not desire to specify?

Yes (5)	No (3)	Not Sure (0)	Points: __3___

5. Were you confused when you first saw the form?

Yes (5)   No (3)   Not Sure (0)   Points: __5___

6. How long did it take to become proficient with the form?
   < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

7. Did you make any mistakes when entering data into the form?
   Yes (5)   No (3)   Not Sure (0)   Points: ___3__

8. Did the system properly display errors when errors were made?
   Yes (5)   No (3)   Not Sure (0)   Points: __5___

9. Were your mistakes difficult to correct?
   Yes (5)   No (3)   Not Sure (0)   Points: __3___

10. Are the screens pleasant to look at?
    Yes (5)   No (3)   Not Sure (0)   Points: __3___

11. Do you think the information is organized logically?
    Yes (5)   No (3)   Not Sure (0)   Points: __5___

12. Would you rename any of the fields / options?
    Yes (5)   No (3)   Not Sure (0)   Points: __5___

13. Would you rename /reword any of the fields options in the drop down boxes?
    Yes (5)   No (3)   Not Sure (0)   Points: ___3__

If so, which ones? What would you name them?

14. Would you rename any of the fields / options?
    Yes (5)   No (3)   Not Sure (0)   Points: __3___

If so, which ones? What would you name them?

15. What could make the screen easier to use?
    Better descriptions of fields.

16. What changes would you recommend to the form?
    Help for fields, color, fonts

17. What changes to the screen would make it faster to enter the data?
    N/A

18. How long did it take you to enter the data?
    2 minutes

RAPAI Screens:

19. Is the purpose of the screen evident?
    Yes (5)   No (3)   Not Sure (0)   Points: __5___

20. Is the form easy to use?
    Yes (5)   No (3)   Not Sure (0)   Points: __5___

21. Does the form contain fields to enter all the information you desire to specify?
    Yes (5)   No (3)   Not Sure (0)   Points: __5___

22. Were there fields on the form that you did not desire to specify?
    Yes (5)   No (3)   Not Sure (0)   Points: __3___

23. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

24. How long did it take to become proficient with the form?
   < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

25. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

26. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

27. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __0___

28. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

29. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

30. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

31. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: _3____

If so, which ones? What would you name them?

32. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

If so, which ones? What would you name them?

33. What could make the screen easier to use?
   n/a

34. What changes would you recommend to the form?
   If you select "job opening", the phone # field is too short. Error handling.
   Put in a expire date earlier than display date, an there was no error.
   Did not know what fields were required.

35. What changes to the screen would make it faster to enter the data?
   n/a

36. How long did it take you to enter the data?
   2 minutes

37. Which screen did you like better?
   ___ First Screen   __x___ Second Screen

Why? Liked the description of fields, font size, color, calendar on date fields, and overall look of the screen.

User Questionnaire 4:

News Reel Questions:

1.   Is the purpose of the screen evident?

Yes (5)   No (3)   Not Sure (0)   Points: __5__

2.   Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: __5__

3.   Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: _5___

4.   Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

5.   Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

6.   How long did it take to become proficient with the form?
     < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5__

7.   Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

8.   Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

9.   Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

10. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __0___

11. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

12. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: _3____

13. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

14. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

15. What could make the screen easier to use?
Got an SQL error. Most people would not know what that is.

16. What changes would you recommend to the form?
Error handling.   Put 55555 in cost field. Need error handling if cost field is too much

17. What changes to the screen would make it faster to enter the data?
Put cursor on field that has the error in it

18. How long did it take you to enter the data?
Less than 5 minutes.
RAPAI Screens:
19. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

20. Is the form easy to use?

Yes (5)   No (3)   Not Sure (0)   Points: __5___

21. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

22. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

23. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

24. How long did it take to become proficient with the form?
   < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

25. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

26. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

27. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

28. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

29. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

30. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

31. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

32. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

33. What could make the screen easier to use?
Error handling
Come back to proper screen after an error is displayed
Put cursor in field that has the error

34. What changes would you recommend to the form?
Error handling: Calendar icon date chooser does not work
                SQL errors coming up do not mean anything to a "regular" user

35. What changes to the screen would make it faster to enter the data?
Come back to proper screen after an error is displayed
Put cursor in field that has the error

36. How long did it take you to enter the data?
Les than 5 min

37. Which screen did you like better?
_x__ First Screen   _____ Second Screen

Why? Easier to use. Error handling works much better although it is not totally correct.

User Questionnaire 5:

News Reel Questions:

1. Is the purpose of the screen evident?
Yes (5)   **No (3)**   Not Sure (0)   Points: __3___

2. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

3. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

4. Were there fields on the form that you did not desire to specify?
Yes (5)   **No (3)**   Not Sure (0)   Points: __3___

5. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

6. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

7. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

8. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

9. Were your mistakes difficult to correct?
Yes (5)   **No (3)**   Not Sure (0)   Points: __3___

10. Are the screens pleasant to look at?
Yes (5)   **No (3)**   Not Sure (0)   Points: __3___

11. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

12. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

13. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __5___
If so, which ones? What would you name them?

14. Would you rename any of the fields / options?
Yes (5)   **No (3)**   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

15. What could make the screen easier to use? Maybe "Help" text.

16. What changes would you recommend to the form? Make the Screen larger. Looks too small
    and cramped at left of form.

17. What changes to the screen would make it faster to enter the data? Add more selections to the
    drop down box called "Category"

18. How long did it take you to enter the data? 2 minutes

19. Which screen did you like better?

___ First Screen   __X__ Second Screen

Why? More dynamic, visually appealing, easier to use.

User Questionnaire 6:

News Reel Questions:

1. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

2. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

3. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

4. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

5. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

6. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: ___5__

7. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

8. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

9. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __3__

10. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

11. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

12. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

13. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?
14. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__
If so, which ones? What would you name them?

15. What could make the screen easier to use?
    More descriptive. As a first time user I was confused by the Post and Expiry Dates. They are
    obvious now and didn't take long to understand, but my initial reaction was one of confusion.
    Scanning the form first made it more clear.

16. What changes would you recommend to the form?
    Color, layout. Pretty it up.

17. What changes to the screen would make it faster to enter the data?
    My errors occurred when I tried to enter a date of April 31. For calendar experts and people who know that little saying about days in the months, this is obviouley an invalid date. The drop down only giving valid dates for the month would be helpful. The error message when I submitted could have been nicer also.

18. How long did it take you to enter the data?
    2 minutes

RAPAI Screens:

19. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: _5____

20. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

21. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: _5____

22. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

23. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

24. How long did it take to become proficient with the form?
    < 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

25. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

26. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

27. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: _5____

28. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: _0____

29. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: _5____

30. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

31. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

32. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: _3____
If so, which ones? What would you name them?

33. What could make the screen easier to use?

A required field indicator. The fact that requiring every field may be too much.

34. What changes would you recommend to the form?
Have validation on state and country.

35. What changes to the screen would make it faster to enter the data?
The date picker was a nice touch unfortunately it made my browser hang every time. I'm sure its just my machine.

36. How long did it take you to enter the data?
3 minutes

37. Which screen did you like better?
__x_ First Screen   _____ Second Screen

Why?
While less attractive and more basic, it allowed me to be more efficient. Just like me.

User Questionnaire 7:

News Reel Questions:
1. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

2. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

3. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

4. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

5. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: ___3__

6. How long did it take to become proficient with the form?
< 5 minutes (5)   5 – 10 minutes (3)   > 10 minutes (1) Points: __5___

7. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

8. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

9. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

10. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __0___
11. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

12. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

13. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __5___
If so, which ones? What would you name them?

Rename 'Post Date' and 'Expiry Date' to 'Posted' and 'Expires'. It's evident that they are dates from the calendar drop-down menus.

14. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___
If so, which ones? What would you name them?
Have to think about the selections under 'Category'…can get lengthy if you keep adding items.

15. What could make the screen easier to use?
Changing the drop-down years automatically, starting with the current year. Otherwise, it becomes an annual maintenance item. Was it an arbitrary selection for the number of years displayed? Do you really need to display more than two years worth of information?(current year and next year)

16. What changes would you recommend to the form?
Current date should be appear as the default value for 'Posted'…edits should not allow older entries, which is currently permitted.
Drop the cents text box. In actual cash transactions, pennies don't matter as evidenced by their hoarding by the public.
Put a cap on the amount of data that can be entered in the Contact text box. I was able to enter a very long string of x's which the screen accepted….probably truncated when inserted into the database tables.
What prevents someone from using this form as a personal ad? Would a personal ad be an acceptable use of this form?
What about the ability for the user to delete entries? Situation where the user re-thinks his/her decision to post the item after successfully submitting the entry; or where the items are no longer available but have not expired (ie, an apartment that is rented before the end of the month, which is the expiration date). How would you prevent any arbitrary deletions?
What about the ability for the user to modify entries? Situation where the user needs to correct data that was entered (wrong phone number, etc), even before the expiration date. How would you prevent arbitrary changes?

17. What changes to the screen would make it faster to enter the data?
Not sure

18. How long did it take you to enter the data?
Not very long at all…maybe a minute or two.

RAPAI Screens:

19. Is the purpose of the screen evident?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

20. Is the form easy to use?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

21. Does the form contain fields to enter all the information you desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

22. Were there fields on the form that you did not desire to specify?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

23. Were you confused when you first saw the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

24. How long did it take to become proficient with the form?
 < 5 minutes (5)   5 – 10 minutes (3) > 10 minutes (1) Points: __5___

25. Did you make any mistakes when entering data into the form?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

26. Did the system properly display errors when errors were made?
Yes (5)   No (3)   Not Sure (0)   Points: ___5__

27. Were your mistakes difficult to correct?
Yes (5)   No (3)   Not Sure (0)   Points: __3___

28. Are the screens pleasant to look at?
Yes (5)   No (3)   Not Sure (0)   Points: __0___

29. Do you think the information is organized logically?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

30. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___

31. Would you rename /reword any of the fields options in the drop down boxes?
Yes (5)   No (3)   Not Sure (0)   Points: __3___
If so, which ones? What would you name them?

32. Would you rename any of the fields / options?
Yes (5)   No (3)   Not Sure (0)   Points: __5___
If so, which ones? What would you name them?
Correct the spelling of 'Category' under 'Need/Sell Information'.
Change 'Display Information' to something that describes how long this posting will be available.
The current title tells me it's something about the form itself.
Change 'Display On' to 'Posted'.
Change 'Dispose On' to 'Expires'.
'Phone Number' does not accept the format specified.

33. What could make the screen easier to use?

34. What changes would you recommend to the form?
Get the 'Date Picker' to function. While you were able to switch months and years, I was unable to select any specific date.
Put a cap on the amount of data that can be entered in the Contact text box.   I was able to enter a very long string of x's which the screen accepted….probably truncated when inserted into the database tables.
What prevents someone from using this form as a personal ad? Would a personal ad be an acceptable use of this form?
Do you really need cents for the Price?
What about the ability for the user to delete entries? Situation where the user re-thinks his/her decision to post the item after successfully submitting the entry; or where the items are no longer available but have not expired (ie, an apartment that is rented before the end of the month, which is the expiration date). How would you prevent any arbitrary deletions?
What about the ability for the user to modify entries? Situation where the user needs to correct data that was entered (wrong phone number, etc), even before the expiration date. How would you prevent arbitrary changes?
Why so much shaded space to the left and right of each section?   Could shift everything a bit to the left.

35. What changes to the screen would make it faster to enter the data?
Not sure.

36. How long did it take you to enter the data?
About two minutes.

37. Which screen did you like better?

___ First Screen   ___X__ Second Screen

Why?

More information is displayed across a larger area.