# **CMSC 345**

## **Software Design and Development**

UMBC-CMSC 447 Section 2 Team 4
Team Awesome

# Planes for Hire

# <u>User Interface Design Document</u>

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# [Planes for Hire] User Interface Design Document

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### 1. Introduction

### 1.1 Purpose of This Document

The purpose of this document is to show the user how to navigate and interact with the Planes for Hire web application. Images will show how the Planes for Hire is interconnected and will display the different pages within the application, highlighting important features that will make it easy to use for consumers.

#### 1.2 References

- Refsnes Data (1999-2015). w3schools.com. Retrieved from "http://www.w3schools.com/googleapi/"
- 2. The PH Group (2001-2015). PHP. Retrieved from "http://php.net/"
- 3. QuinStreet Inc (2015). SQLCourse.com. Retrieved from "http://www.sqlcourse.com/"
- 4. Planes for Hire System Requirements

### 2. User Interface Standards

This selection contains an overview of the design standards used in the Planes for Hire web application. As seen in Figure 1.1 and 1.2, the general view for our Planes for Hire layout is a website which will display a possible of three boxes with different options. The top box includes the login, register, and search options. The two other boxes include the most options such as an interactive map and renting options. Some simple information includes the name of the application displayed on the top left screen in big red letters.

There are some standard options that are displayed even when the user is not logged in. The search bar allows the user to search for any airport by entering a string into the search bar's text field. The string entered by the user will appear on the search results page (Figure 7.0). The map displayed uses the Google Map API and shows the United States. The pins display the location of the airports across the US. The renting of the planes application will only be displayed once the user is logged in.

Once the user selects the login option, they are taken to the login page (Figure 2.0). There they can enter their information. Once logged in, they will be taken back to the main page. The registration option will take users to the registration page to create account as shown in Figure 3.0. It will ask for more information since it would be the first time the customer is using the application. The login and register option are then replaced with a greeting to the user and a logout option, respectively. This will also display the renting options for the users including the checkin and checkout buttons. These changes can be seen in Figure 4.1.

Figure 1.1

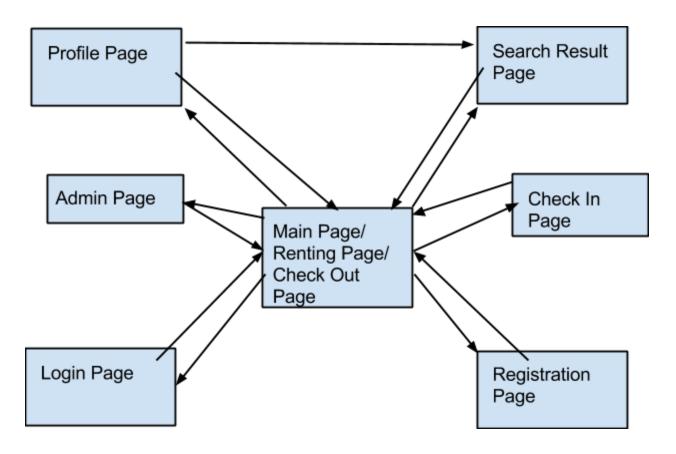


# 3. User Interface Walkthrough

Next, guide the reader through a series of screenshots of all system screens. (You do not need to include error and confirmation messages/pop-ups.) Give the screenshots figure numbers and labels that match those in the navigation diagram. Refer to the figure numbers in the text of the walkthrough. Explain what the reader is seeing in each screenshot: the major screen areas, menus, what each button does, how to navigate to the next screen or return to the previous, etc. Note that if a feature has been standardized (e.g., how to return to the previous screen) and explained in Section 2, you do not need to repeat it here.

## 3.1 Planes for Hire Navigation Diagram

The following diagram explains the possible user flow through the system.



## 3.2 Planes for Hire Walkthrough

#### 3.2.1 Logging In/ Registering

The first page, or the main page, the user will see the the registration and login option on the top right side of the screen next to the search bar (Figure 1.2, below). If this is the user's first time then they will click on the registration option. This will take the user to the Registration Page (Figure 3.0). Here the user will type in the following information: name, address, contact information, and their own password. Once they submit their information they will be returned to the main page already logged in (Figure 4.1). If the user has used the application before, then they would click the login option. This will take them to the Login Page (Figure 2.0). Here they would only have to enter their email and password and be taken to the main page as shown in Figure 4.1.

#### 3.2.2 Profile

Once the user is logged in they will see a greeting displayed next to the logout button. If they click their name that is displayed in the greeting then they will be taken to their personal profile page (Figure 6.1). On this page they can see their past purchases, basic information, current balance, avatar, and search bar. Here they can also edit any information

they want to. To edit their basic information, including name and address, they would click the edit option next to their basic information (Figure 6.2). To change their password, they would click the "Change Password" option that is displayed. To change their avatar picture they would select the edit option below their current picture. Then they would select an image from their computer and apply it. Users can pay their late fees from their profile page by selecting pay. Here users can also search for an airport and it will direct them to the Search Page (Figure 7.0) and then they will be directed back to the Main Page if their search is valid (Figure 4.1).

#### 3.2.3 Renting Planes

Once the user is logged in, they can rent out planes from the home page shown on Figure 4.1. The web application requires that you fill out the given information in order before proceeding any further. Once completed the form disappears and shows the check out results (Figure 4.2). When the user returns the plane, they will be taken to the Check In page as shown in Figure 5.0. This page is a confirmation for the customer to know that they have indeed checked in their plane. If the customer is late checking in, the page will also display the amount of the charge.

#### 3.2.4 Administrator

Administrator must monitor all the user travel history. To access the admin page, the admin will click on the login button (Figure 2.0) and will type in admin for username and password. After they are successfully logged in, they will be taken to the admin page (Figure 8.0). After navigating to the admin page, the admin has the power to delete or suspend users. They can also change the location of the airports, add new airports and add new airplanes to the database. The admin can view users travel history and assess late fees accordingly.

Figure 1.2 Main Page



Figure 2.0 Login Page

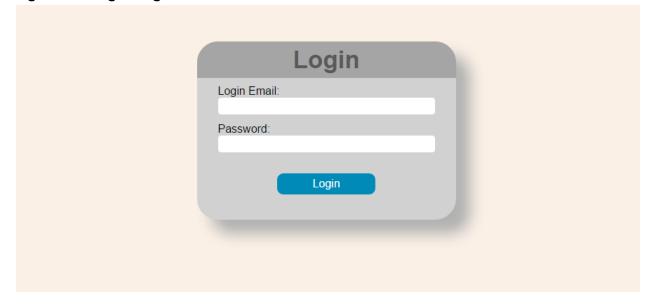


Figure 3.0 Registration Page

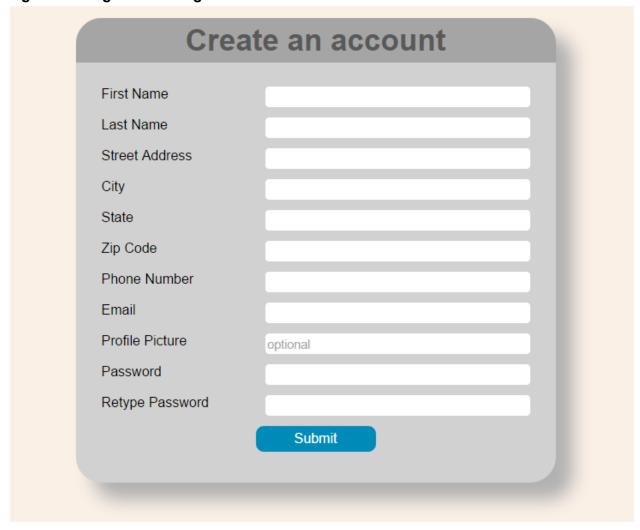


Figure 4.1 Main Page after logging in

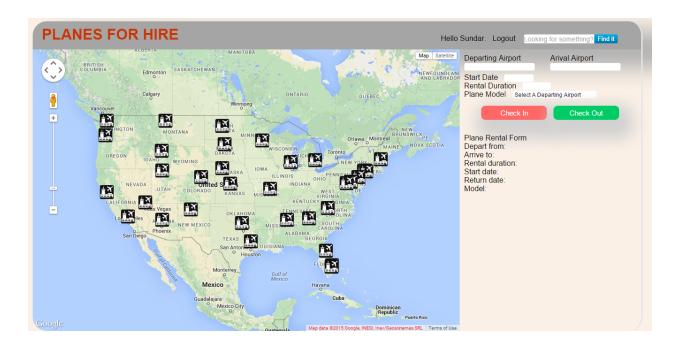


Figure 4.2 Check Out Results

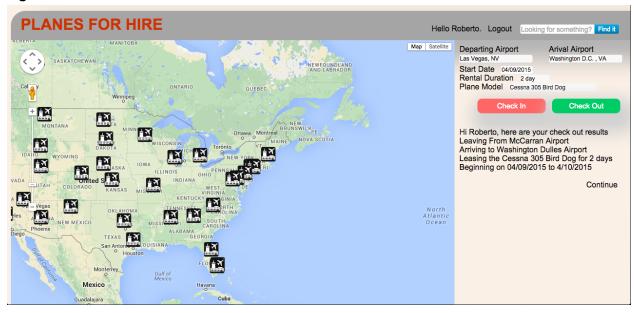


Figure 5.0 Check In Page



Figure 6.1 Profile Page

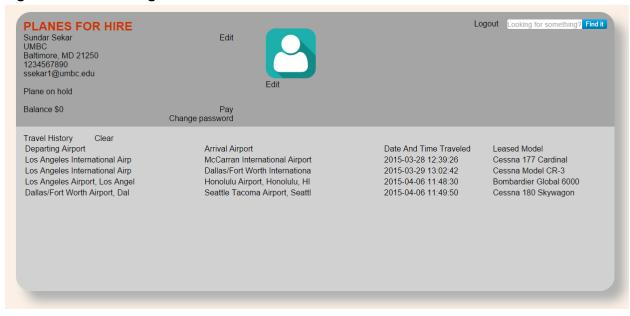


Figure 6.2 Profile Page editing information

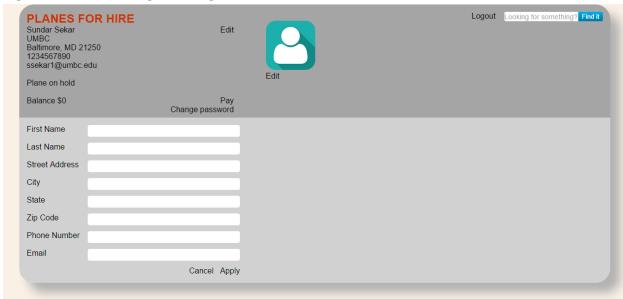


Figure 7.0 Search Result Page

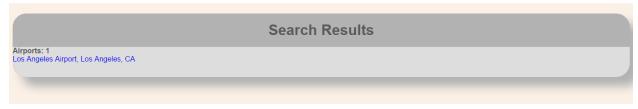
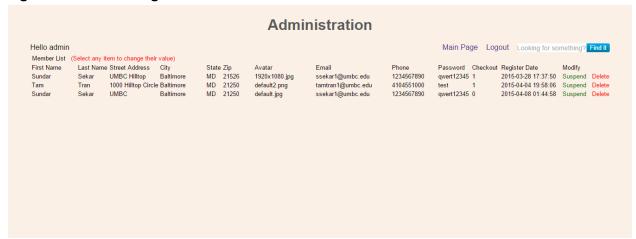


Figure 8.0 Admin Page



#### 4. Data Validation

On the main page, the user can enter a registered email and password. Upon entering this data, a php script will communicate with the database to verify if that email and password exists. If the username does not exist, or if the username exists but the password is invalid, the server will output an error message.

On the registration page, the user must put in a distinct username, and a password longer than 6 characters. The user must also put in a first name, last name, Street Address, City, State, Zip Code, Phone Number, Email, optionally a profile picture, and a password. If email is not distinct, the registration page will present an error message.

On the main page and user profile page, there is a Search bar. The search bar is not case sensitive, and will search for all airport locations given the query string. It will search on all cities, airport names, and states. The user is directed to search php in which the arguments from the search bar are added to the url. Search php will use this to do the work stated above. It will then list all airports found.

Entry location	Data type	Limits	
Email	String	Must be a valid email	
Name	String	None	
Phone Number	Integer	10 digits	
Street Address	String	5 digit number followed by a String	
Zip Code	Integer	5 digit Number	
Password	String	None	
Search Bar	String	None	
Avatar	JPEG, JPG, GIF, PNG	Must be in these formats	
Late Fees	Integer	None	

## Appendix A - Agreement Between Customer and Contractor

The customer agrees to a Planes For Hire web application with searching, google maps, and user accounts with security encryption capabilities. See System Requirements Specification for more information. Additional features will be provided in further development spirals.

When and if future changes to this document occur a drafted new document will be created. Both a hard and electronic copy of both versions will be presented to the client for review. Upon approval, the draft will be finalized and signed off by both parties.

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# Appendix B - Team Review Sign-off

This document has been collaboratively written by all members the team. Additionally, all team members have reviewed this document and agree on both the content and the format. Any disagreements or concerns are addressed in team comments below.

Team	
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# Appendix C - Document Contributions

Roberto wrote the appendices and purpose of the document. Sundar uploaded the image for section 2. Roberto wrote the descriptions for said section. Andrew and Sundar worked on data validation for section 4. Sundar wrote the references and uploaded most of the images for the Planes for Hire walkthrough. Roberto wrote the descriptions for the walkthrough and labeled the images.

For Spiral 2, Roberto took the lead. Andrew and Sundar helped edit the document.