“SW Engineering CEN 4010 Fall 2014”

# Williamsburg-Housing

Group 30

|  |  |  |
| --- | --- | --- |
| Gregory Prosper |  | gprosper@sfsuswe.com |
| Jevon Cheung |  | jcheun@sfsuswe.com |
| Zainub Baig |  | zbaig@sfsuswe.com |
| Doris Qiu |  | dqiu@sfsuswe.com |
| Nicholas Sankoe |  | nsanko@sfsuswe.com |
| Shukura Smart |  | ssmart@sfsuswe.com |

Milestone 1

September 25, 2014

Revision Table

|  |  |
| --- | --- |
| Revision 0 | N/A |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1.Executive Summary

Williamsburg-Housing is a web accessible online real estate service that makes the real estate business simple. Our service enables a real-estate company to post and maintain their latest information regarding real-estate while simultaneously allowing potential customers around the world to browse and search various listings according to their specifications(city, state, price, etc). Traditionally similar ideas centered around customers browsing through available homes and selecting the options they liked the best. Customers accessing our service will be able to design and customize a personal profile where they can be notified the moment their dream home hits the market.

At it’s core, Williamsburg-Housing brings real-estate companies and potential customers closer together by making the process less intimidating, more reliable, and most importantly, easier than ever before. Williamsburg-Housing was designed with an intuitive user interface, allowing anyone with basic computer knowledge to navigate the site with confidence in seconds. Our service can be viewed on a variety of devices of all shapes and sizes and is accessible to anyone with a standard internet connection. Williamsburg-Housing is making the interaction between real-estate companies and buyers simpler and easier than ever before.

2. Use Cases

The website would cater to two types of main users, the first being a ‘customer’ the second being a ‘realtor’. The names given are generalized and have more options to them than simply to ‘buy’ and to ‘sell’ in this particular case. The ‘customers’ have the option of using the websites accessible capabilities, such as browsing for homes through specific criteria given: city, category, price, zip code, family size etc.

Although at first glance it might appear to be potential home buyers purchasing a home may use this, it could also be the case that ‘customer’s use the ease and accuracy of the website to gain information about homes and their details so they can compare their own listing to it.

It could also be used by ‘customers’ to gain data on average of home pricing in certain areas, or in general, etc. The data collected could be used for future purchasing or selling purposes, when it comes to accurately pricing the house. It could also be used to find information on how many homeowners had a particular house.

The ‘realtors’ of the website would, ideally, be more committed to the website, and more than likely use the website as it is apparent they would use it: to sell listings which they are given and to look for listing which they wish to produce and sell to clients.

The website, which would be hosted and only accessible through the WWW, would be simplistic in understanding of its use. Customers need not have high level computer operation or coding knowledge to use the website in all of its available functionality.

The realtors would be expected to have some deeper knowledge of computer knowledge in terms of filling out forms properly, and learning the mechanisms for house listings. The website itself will be clean and easy to load, with not much lagging, and shall be simple to load on multiple browsers. It will also be usable on mobile devices, including but not limited to phones and tablets. The website will be accessible through the WWW in any country anywhere that allows amazon in its country. It is only accessible through the WWW.

3.Data Definition/glossary

Realtor: the real estate agent working with the potential buyer. They will provide listings from their clientele of available properties to the potential home buyer.

Customer: the potential buyer browsing through the listings provided to them by our

system.

4.Initial list of functional specs

I. Allow real estate agents to manage website content:

Agents should be able to add, remove, and modify listings.

II. Allow agents to have their own profile:

This profile will only allow realtors to have access to the postings that they made.

III. Potential home buyers can search home database:

Buyers will be able to search for homes within their criteria, based on number of bedrooms,bathrooms, and etc.

IV. Potential buyers will be able to make a profile:

Profile will allow customer to receive notifications of new home listings that match their criteria.

V. Customers and Realtors will have limited access:

Customers will not be able to add, delete, or modify any listings on site. Realtors will only be able to modify listings that they posted.

VI. Site will collect listing data:

Site will collect data on average price listings for particular area(neighborhoods), to help realtors and clients decide best prices for properties.

5.List of non-functional specs

I. Performance Test:

Stress test the site to make sure it’s operational under loads of user input.

II. Security Requirements for Client:

Security Recruitment must be complex enough to ensure confidential and secure access for user. Password must consist of one capital letter, one number, special character, and at least 8 characters long.

III. Availability and ease of access:

Easy for the user to access their profile on multiple interfaces.

Android/Apple Devices (Mobile Interface). Browsers support: Internet Explorer, Mozilla Firefox, Safari, Google Chrome

IV. Storage Profile:

Limit Amount of information each profile is allocated or allowed to save on profile to prevent server from being congested with high volume of information from client on each profile causing possible crashes of long load screens.

V. Response Time:

Perform requested action such as uploading, or downloading excel or documented information in a timely manner preventing user frustration with long wait times, and reduce possibility of crashes.

VI. Back-Up:

System will perform scheduled backups to ensure all clients information are secured and safe in case of system failure of servers crashing or being reset.

VII. Maintenance:

Scheduled maintenance on system integration to ensure all functions are at optimal performance and stability.

VIII. Usability:

Targeted to correct client and design to draw in target audience and allow ease of usage and navigation for client.

6.Competitive analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Trulia | HomeFinder.com | Zillow | Williamsburg-Housing (Our Website) |
| Find Homes For Rent |  |  |  |  |
| Average Price in Area |  |  |  |  |
| Sort by Multiple Parameters |  |  |  |  |
| Map View of Listings |  |  |  |  |
| Filter Listing Results with Criteria |  |  |  |  |
| Email New Listings |  |  |  |  |

Williamsburg-Housing will deliver many of the features available with other similar sites. Listings for home rentals won’t be available as it is not a core objective for the launch of this site. Implementing rental listings will occur after the site is established and evolving. The map view of the listings isn’t planned to be implemented by launch time but is possible depending on how efficiently resources are used. Williamsburg-Housing will be able to display average home prices in a specific area. This service isn't offered by the other websites that were compared.

7.High-level system architecture

Front-End

* HTML
* CSS
* JavaScript and JQuery
* Bootstrap

Back-End

* PHP
* MySQL

Supported Browsers

* Most Popular Browsers (ie Firefox, Safari and Google Chrome
* Mobile Friendly

The website will be hosted on a LAMP server. Netbeans will be used for coding and subversion handling. Bootstrap will be used to quickly build and design the site. PHP and MySQL will be used for database management of Listings. Site is expected to be compatible with all popular browsers and also mobile friendly.

8.Team

|  |  |
| --- | --- |
| Member | Role |
| Gregory Prosper | Product Owner |
| Zainub Baig | Scrum Master |
| Jevon Cheung | Development Team |
| Doris Qiu | Development Team |
| Nicholas Sankoe | Development Team |
| Shukura Smart | Development Team |