**Project Research Document - Freelance Me**

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**October 10 2016**

**Detailed Discussion:**

This project implements a website that will serve as an instrument to allow people locate jobs advertised in the website and work as a freelancer. There are two types of users in this website: ‘System Admin’ and ‘Users’. ‘System Admin’ users are the administrators of the website. They have the ability to manage other users (e.g. enable / disable a user), handle user complaints and perform maintenance on the website. Normal ‘Users’ can post jobs on the website and vice versa, can also look for existing jobs posted by other users of the website.

The first page that both type of users will encounter is the login page. From here, users can login with their username and password or they can register for a new account. Logging into the system, the user account is determined based on its type (i.e. ‘System Admin’ / ‘User’) and the appropriate features are enabled for them. If the user type is ‘System Admin’, they have the rights to access administrative features that are limited to other types of users in the website. However, they are unable to post jobs or to work as a freelancer. If the user type is ‘User’, they are brought to the homepage where to can choose to search for jobs using various search tools, manage their account or post a new advertisement for a job.

A ‘User’ of the website can search for advertised jobs using different types of search tools:

* **Search Bar:** Inputting the job keywords (e.g. ‘Car Wash Jobs’) into the field and pressing the search button.
* **Search by Categories:** Clicking on one of the specified job categories that will return jobs based on that category.
* **Searching based on Location:** Specifying the user’s location and returning a list of jobs based on that location.

The search result can be viewed by the user using different preferences. For instance, the default view is a webpage, containing the results organised into a list. Users can traverse through the list, filter the jobs or to sort it alphabetically (A – Z or Z-A). Another preference would be to view the result using a map which will display jobs based on its location. Using this preference, users can also filter the jobs on the map (e.g. show only jobs that are based in Dublin).

Once a user finds a job that they are interested on, they can then click the ‘offer’ button to make an offer to user who posted the job advertisement (i.e. the employer). A dialog will then appear in which the user can input the rate (in €) they are willing to do the job for and also check the agree checkbox to verify that they agree with the terms and conditions of the website. Once submitted, the offer will appear in the comment section of the job description page. The “employer” user can then review the offer and also the user acting as the “freelancer” (e.g. review the freelancer’s CV). If the employer is satisfied with the offer and that they have verified that the freelancer user meets the required qualifications to do the job, they can then press the accept button. Otherwise the employer user can reply to the freelancer user stating the reason for cancelling the offer (e.g. the rate is too high / the applicant does not meet the qualification requirements of the job).

If a user accepts an offer, they will then be redirected into a page in which they will need to pay the deposit to the freelancer. In this page, the employer user can choose the payment method (e.g. Visa Debit) and input all their personal details to successfully pay the deposit to the freelancer user. The balance will later be paid to the freelancer user once the job has been completed. By paying the deposit, this gives the employer the rights to cancel the job three days before the job commence date. The deposit is not refundable to the employer user.

**Existing Applications in this domain:**

**Adverts.ie:**

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| **Similarities** | **Differences** |
| Search products / jobs / services based on keywords in a search bar. | This project mainly focuses on jobs posted by users of the website. |
| Ability to leave comments in the product description page. | The payment method in this project is direct debit. This is to prevent fraud and to enable the employer user to pay the deposit / balance to freelancer user much easier. |
| Place an offer to the seller of a product or service. | The job posted in my project website is more directly targeting the freelancer community. With my website, there is direct contractual employment between two individual users. |
| Place an add to the website. | Ability to perform pre-employment screening on an individual by examining their CV located in their profile account page. |
| Search products / jobs / services by categories | By paying the deposit first after an employer user accepts an offer, they are entitled to the ability of cancel the job 3 days before the commence date. The deposit is non-refundable to the employer user, |

**Platform, Technologies and Libraries:**

The operating system platform in which I plan to develop my website on is Windows 10. For the development platform, I will be using PHP and following the Model, View and Controller (MVC) model. Using PHP will enable different implementation possibilities for various features such us the login / register page or displaying the list of users in a table. To improve the user interface or to implement complex graphical components, I will be using the libraries of Twitter Bootstrap. With Twitter Bootstrap, I can also distinctly align components in my page easier using grid classes.

For data definition (creating/altering tables, creating indexes etc.) and data manipulation (adding/removing columns, creating constraints etc.), I plan to use MYSQL with PHPMYADMIN as the Integrated Development Environment (IDE). During the development phase, I plan to deploy my project into a localhost test server called ‘Wamp’. By deploying my project into Wamp, I am able to test whether the features of my website are working properly or if a bug exist. If there are implementation errors, Wamp will identify these and display the line number with the description of the error in the webpage of the browser. Using Wamp will also enable access to PHPMYADMIN for MYSQL.

For version control I plan to use GitHub. Using GitHub will enable redundancy for my project that will insure data integrity and durability by allowing me to revert into a previous version if necessary. As for the payment integration of the website, I plan to use Stripe. There are also plans to deploy this website into a cloud service provider like Azure.

**The risk:**

The criteria that I consider as risks to my project is the inability to deploy my website into Window Azure or to implement payment integration using Stripe into the system. Deploying a PHP website into Windows Azure involves multiple vital steps which tends to increase the complexity involved. While on my placement, I deployed Maven projects into the company’s live Tomcat Server which is located overseas in Sweden. However, I have never deployed a project into any Cloud Service Provider. I will therefore need to carefully examine Windows Azure to investigate the type of services for my requirements and also to determine if there will be any unexpected cost that comes with deploying a PHP website into Azure. I have also never implemented a system that incorporate a payment integration functionality. Therefore, I will also need to study Stripe to discover how to implement and integrate it as part of my system.