Real Estate Website Project Plan

## Scope

The client brief is to design, build and deploy a real estate website where users can search for and upload houses for sale using a set list of criteria as detailed in the functional requirements. House posts are to be valid for 8 weeks, after which they expire and are flagged for removal from the database by the admin. User uploads allow for 10 images in a free tier, with extra features unlocked by payments which are outside of our scope. User uploads are held in staging for review by admin prior to being searchable on the site.

## Deliverables

By the completion time of the project the team will have delivered to the client the following things:

* Database - The database which will hold all relevant data for the website to function.
* The Website/Application - The entire website developed for the client, including the backend written in Ruby, the Rails server complete with the website.
* Documentation - This will include an overview of the project layout, website functionality, an administrator user manual for the admin control panel, etc.

## Functional Requirements

The following are the functional requirements to satisfy the client scope:

* Design, construction and deployment of a site with a simple interface for people to search for houses to buy and/or upload their own content and images of their house(s) for sale to a central database using the following criteria:
  + Location: Suburb/State
  + Price: Min/Max/Range
  + Bedrooms: Min/Max/Number
  + Property type: House/ Apartment/Land/Other
  + Bathrooms: Min/Max/Number
  + Car Spaces: set number in list
  + Min Land: sqm
  + Indoor features: Air con/ Alarm / etc.
  + Outdoor features: Garage/ Swimming Pool/ Spa/ etc.
* Website to work on latest version of major browsers (Chrome, Firefox, Safari, Internet Explorer) and be responsive on major mobile devices (iPhone 5, 6, 6+; Android phones with similar screen sizes 5 - 6”)
* Each house posting to last up to 8 weeks after which they are expired and flagged for removal via an admin, unless a payment is made by the user to extend the post (Payments outside of scope).
* Provision for users to upload 10 images for free. Whilst not part of our scope, extra image uploads and listing features will be able to be unlocked via additional payments by users.
* A admin interface shall be provided for staff to approve user uploads prior to their appearance on the main site.

## Completion Criteria

In order to be signed off, the Real Estate Website must meet all the functional requirements listed above as agreed upon by the client and project team, must be extensively tested for any issues, and be completed within the allocated timeframe as agreed upon and available inside this Project Plan document. The following completion criteria and testing procedures apply to the functional requirements listed above:

* New features are documented for the client to assist integration, including the structure of the project code and database.
* Site components pass minimum acceptance criteria with 85% pass rate for tests.
* No priority defects outstanding, where a priority defect is defined as a defect which crashes the site or return/performs unauthorised CRUD operations on the database.

Project success will be determined by adherence to the project specifications and objectives outlined. Deployment of the web application to the standard approved by the client and outlined within testing criteria will be acknowledged as the final stage of the successful project.

## Objective

Create a web application for the client based on the above scope and functional requirements, delivered according to the milestone schedule outlined below.

## Constraints/Assumptions/Risks

Constraints:

* Development for this project will take place at Central TAFE, this will include hosting the website on Central’s ‘Web24’ Server. Due to the server environment, the project will not be able to support anything that the current Central server can not.
* The database will have to be ‘MySQL’ as this is what the Central Web24 server runs. All development/testing/prototyping will be designed to work for MySQL.
* The project is to be completed by the 9th of June, 2016. This deadline may restrict additional features or last minute changes to the project.

Assumptions:

* The website will be developed in Ruby and deployed on Rails. In the development environment Ruby is constrained to version ‘2.2.3p173’ and Rails version ‘4.2.5’. It is assumed the clients environment will support these versions.
* The website will not include room for 3rd party advertising.
* The website will include a simple interface for administrators to manage approval of client submissions (e.g. users posting their houses) and removing submissions.
* The website will be accessible and compatible for multiple screen sizes and different devices such as different sized monitors and mobile devices at different screen resolutions.
* The website will support all major browsers and their current/latest versions.

Risks:

* The website could be incompatible with the clients environment due to different versions of ruby.
* Little access to the client to discuss/get approval for decisions.

## Milestones

The following represent the initial project milestones for 2016:

* Design completed by 9th March
* Client Approval completed by 16th March
* Development completed by 27th April
* Testing completed by 18th May
* Final Delivery completed by 9th June

These dates represent an initial best estimate and are subject to change due to the nature of the project. A seven day notice will be provided to the client for approval prior to any change to these dates which will be entered into an updated project plan upon approval.

Due to the nature of Agile project management, aspects of each phase may change after these dates during other phases of the project. Any further changes outside these milestones after initial client approval shall follow the Issue/Change Request Management procedures detailed below.

## Approach

An agile scrum methodology will be utilised to complete the project goals by the given milestones above. After the initial project analysis design will progress using wireframes and prototyping.

Programming work will be completed in short ‘sprints’, providing flexibility by allowing for design and feature changes after the initial client approval period, satisfying the latest client requirements. Changes after the initial client approval shall follow the Issue/Change Request Management procedures prior to being implemented in the next ‘sprint’.

Development and testing will be undertaken using the TAFE web24 server for initial hosting of the website prior to deployment to the client’s environment.

## Issue/Change Request Management

To keep track of all issues and change requests, an Issue/Change Log spreadsheet will also be maintained. As team members come across issues or receive a change request, they will add an entry into the log stating what the issue/change is, when the entry was created, who will action the the issue/change and when it should be actioned by. Any change requests from the client should be sent to [tafegroup-3@googlegroups.com](mailto:tafegroup-3@googlegroups.com), the project manager will log the change request and issue a response to the client following the communication management procedure below.

For internal issue/change tracking relating to the website itself, GitHub Issues will be used. As developers find code-related issues/change requests, they will create, tag and assign a new issue.

## Communication Management

For efficient communication management roles within the team will be established. A Project Manager will be assigned and be responsible for interacting directly with the client.

For communication between the team the use of tools such as; Slack, Email, Text, Phone and face to face meetings will be employed, all of this combined will increase communication between the team. Emails between the client and the team will be from the ‘Google Group’ Email address ‘[tafegroup-3@googlegroups.com](mailto:tafegroup-3@googlegroups.com)’.

Upon receiving formal written communication from the client the team will have responded to the client within 2 business days, with our course of action, following the issue/change request management procedures.

## Stakeholders

|  |  |  |  |
| --- | --- | --- | --- |
| **Stakeholder Group** | **Stakeholder** | **Roles** | **Contact Information** |
| Central Tafe | Nichola Kerr | Project Sponsor | Nichola.Kerr@central.wa.edu.au |
| TBA | TBC | Client |  |
| Group 3 | Daniel Swain,  Michael White,  Erdal Erkilic,  Simon Lehmann,  Tylden Horan | Project Team | tafegroup-3@googlegroups.com |
| Group 3 | TBA | Project Manager | tafegroup-3@googlegroups.com |

## Work Breakdown

The project has been broken up into the following high level work packages:

* Documentation
* Design
* Development
* Testing

A detailed work breakdown for these work packages can be found below.

## Detailed Work Breakdown

The following table represents an initial detailed work breakdown for the project:

|  |  |  |  |
| --- | --- | --- | --- |
| **Documentation** | **Design** | **Development** | **Testing** |
| Scope | WireFrame | Coding Structure | Test Functionality |
| Deliverables | Animations | Programming | Fix Bugs |
| Functional Requirements |  | Functional Requirements |  |
| Completion Criteria |  |  |  |
| Objectives |  |  |  |
| Constraints/Assumptions/Risk |  |  |  |
| Stakeholders |  |  |  |
| Communication Management |  |  |  |
| Issue/Change Request Management |  |  |  |
| Milestones |  |  |  |