Thesis Project: Real Estate Website - Swell Dwell
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Background:

Creating a web/mobile application and running it as my side venture has always been an idea since I started coding. I never had a chance and confidence to dive deep into the idea and create an application. After taking varieties of courses at Touro, now I have the confidence, skills and the reason to research and do something that I have always wanted to.

Recently, my brother who lives in Nepal was having trouble selling his newly built house. Luckily he found couple of real estate websites (http://1ropani.com, http://hamrobazaar.com/c112-real-estate) to list his house. He was complaining that the listing the property in those sites were not easy. Following were some of the complaints he had.

1. He had to visit the real estate office to list the property on the website.
2. Listing the property in the website was not very cheap.
3. The website was not up to date with the properties listed. Many properties were still listed for sale or rent even after they sold or rented.
4. Presentations of properties in the website were awful.
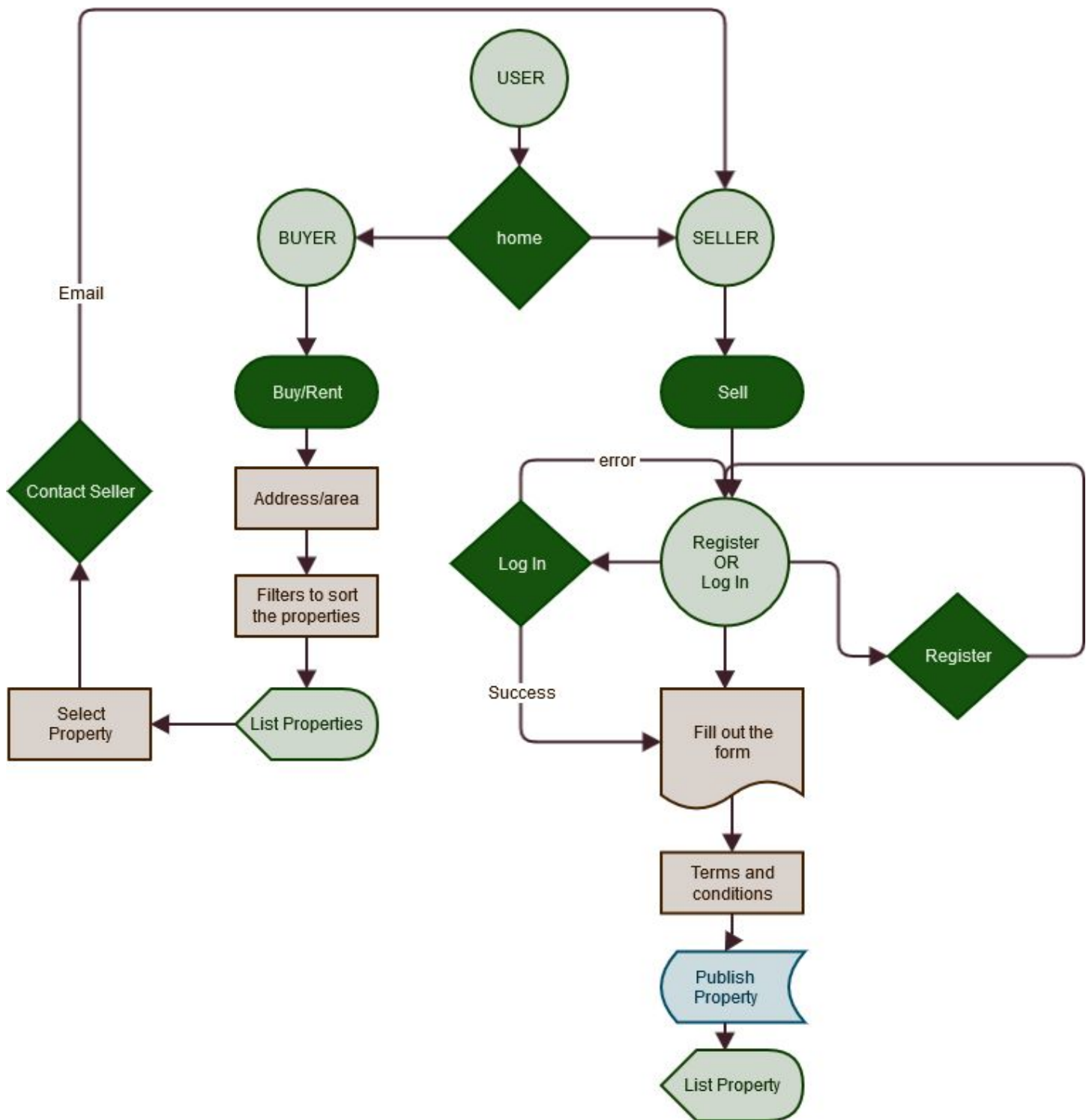5. The website was not user friendly.

After going through both of the websites I found few more usability issues

1. In one ropani.com Contact form to contact the property owner can be much easier with the form in the page instead using an email service provider.
2. Commenting on the property listing is unnecessary. The conversation between the lister and the prospective buyer should be confidential
3. 1ropani.com makes a good use of markers in the map. Why not have filter on that page to sort the properties?
4. Bothe the web sites need some major branding and designing work to have a good presence on the web
5. 1ropani.com ruins beautiful images of properties by imposing the log in the middle of all the property images which is not necessary.

In order to solve all the above problems and also to emerge as a strong competitor in Nepali online real estate market, I would like to build a real estate website where people can list their properties hassle free. The design of the website will be user friendly. The properties listed in the website will have better presentation.

Following are some of the key features which are not available or not implemented in a usable fashion in existing real estate websites mentioned above. Following key features that will set my web application apart from the existing ones:

● Free Property Listing (Except for some paid features)
● Intuitive property search
● Search/Sort properties in Map
● User friendly UI/UX
● Organic SEO for each property listing by allowing submission of meta keywords and description.

The basic functionalities of the web application are illustrated in the flowchart. Additional functionalities will be added in the process of design and development.

Flowchart built at: http://www.gliffy.com/go/publish/10724011

Website Organization:

The website will have following pages:

1. Landing Page
2. Buy
3. Rent
4. List
5. About /Contact
6. Terms and Conditions
7. Other static pages…

Project Workflow and time frame:

Projected time frame to complete a bare bone but functional the web application with basic idea of a real estate listing website is approximately 3 months. All the successful applications such as Google, Facebook, and Twitter have evolved in a period of time. They have changed the way they look and how they work. This has become the nature of the online applications. If an application does not adapt the user behavior, it fails. The application I am going to build will also change in terms of aesthetics and functionalities in a period of time.

1. Flowchart: one week
The concept and basic functionalities of the web application was laid out in a flowchart in about a week.

2. Wireframe: one week
Wire framing the application will take about a week.

3. Mockup/Branding/Design: one - two weeks
The website will be branded on the concept of minimalism – less is more. Most of the components of the site will be black and white. I want to create an impression to the users that platform they are using to sell their product is minimalistic and it allows the users to look sophisticated. The grayscale theme of the application will make the properties listed in the web site pop up and attractive.

Depending upon user feedback and suggestions, design changes will be considered as the application continues to grow.

4. Development: ~
Basic infrastructure of the site will be developed in the period of these 3 months. The development of the site will be a continuous process as we evolve, learn about the needs of the users. The development of the application will be done in such a way that the application is scalable and modular. For this reason, I have chosen Laravel as the framework which allows me to modularize all the components and the functionalities of the application with the idea of model view controller (MVC). While developing the application, speed of the application for users will be the top priority.

The website will be built responsive so that users will have better experience using the application in mobiles and tablets.

5. Marketing: ~
Marketing of the website will be a continuous process before/after website launch. Marketing of the website will be mostly done online. Social media such as Facebook, Twitter, Google Plus and search engines like Google, Yahoo, Bing will be the primary platform to market the application. The site will contain meta information to publish in the search engines to market itself. All the properties in the site will be made sharable to the social media

directly from the website. Classical approach of marketing such as distribution of fliers and brochures and publication of ad campaigns in newspapers and magazines will also be a part of marketing. Word of mouth will be another important method of marketing the website. Most importantly, better customer service will be the best way of marketing the website and I hope to have a wonderful team of customer service to support the website.

Technical Specification:

Following languages and frameworks will be used to create the application:

- PHP/MySQL [LARAVEL]
- JavaScript [jQuery]
- HTML/ CSS [BOOTSTRAP]
- Google Map

Some of the tools to use above technologies and frameworks are:

- Sublime Text
- Composer
- Grunt
- SASS
- Firefox/Firebug
- Gliffy
- Adobe Suite

Development Resources

- http://laravel.com
- https://laracasts.com/
- http://cheats.jesse-obrien.ca/
- https://laravel.com/
- http://gruntjs.com/
- https://angularjs.org/
- http://getbootstrap.com/
- http://sass-lang.com/
- https://jquery.com/