UNSW SYDNEY

Accommodation Web portal

Project Proposal

Computer Science Project

COMP3900/9900

Team: Old Driver

Scrum Master/Developer:

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Backgound

By the end of the 21st century, there is a good chance that people will travel more frequently to a wider range of international destinations. Australia, a country known for its unique and natural views, is one of the most popular countries that people prefer to travel to.

According to a report from Tourism Australia, the number of visitors who arrived in Australia in May is 609300, which increased by 5.2 percent in comparison to the same time of last year. By the end of May 2018, the number of tourists that came to Australia is 9 million which has increased by 6.2% to the last year.

Tourism has become one of the most progressive and profitable industries in Australia.According to Destination NSW, tourism consumption outweighs 92 billion dollars between 2008 and 2009, about 35.6% of which is directly contributed by tourism to Australia's GDP.

This gives Australia a high room occupancy rate of tourism accommodation and the demand for holiday house renting is increasing every year. From the statistics issued by Australia Bureau Statistics (2015-1016), the rate of room occupancy went up by 1.3% to 66.6% in June 2016, following increases of 1.3% during the period of March in 2016 and December 2015, and 1.1% in September of 2015. Furthermore, it turns out from the Australian Institute of Family Study that there were about 7,800,000 households in Australia in 2011.

Thus, there is a relationship of supply and demand between householders and tourists.

Because of the size of electrical devices like smartphone and laptop tending to be smaller, the internet became a popular way to obtain some valuable information.

At the same time, the valued data can be rapidly displayed and found on the Internet. For those reasons, most people would prefer to find information on tackling the problems of accommodation during their trips.

The idea of creating a new website is not developed for the first time. There are a lot of housing and renting websites in Australia such as Domain and Airbnb.

However, there are some drawbacks to their website. The first of those, these third-party websites prefer to show the useless and irrelative housing information as well as advertisement because of the desire for profits of the company. For example, there are quite a few similar contents on their websites like the advertisement for recommendation and some latest news about renting a house. As a consequence, this project will prepare to build a new holiday house renting website for tourists.

AIMS

The aim of this project is to build a Web application that provides a real estate renting platform located in NSW. The potential users of this website could be partitioned into two main groups, property providers, and searchers.

For property providers, this platform allows them to present their house, apartment or holiday units for rent, they will also be able to modify and maintain their advertisments.

For searchers, they could use this platform to search from the advertised properties according to their preferences.

The platform also provides a request section, on which the searchers could also post their specified requests of rent. In this section, property owners could post their offer under the searcher's post and searchers could also review and manage the provider's offer.

When the searcher has found their preferred property, they can make a reservation through the platform as long as the property is available.

From a general perspective, this web application aims to provide a concise and clear interface where the information that is considered irrelevant or distracting should be avoided. To achieve this, we intend to keep the arrangement of the portal straightforward. For instance, the main page of the website will contain primarily a search bar and login logout option, so that the searchers can concentrate on looking for the properties. (Some other subsequent options may be added during the development.)

Additionally, we will try to limit the amount of information provided to the user in case that the users are overwhelmed. To do this, the search result returned to the user should only contain properties that match the preferences selected by the user. This requires that all the advertised properties be carefully categorized in the background according to their characteristics. Apart from that, when presented to the users, the presentation of properties should be concise and clear, in order to help the users make decisions correctly.

Epics

Epics is divided into 6 major parts based on the project aim in terms of Home Page, Register Page, Post request, Post Accommodation, Searching and booking.

HomePage

After users enter the website, they could see the homepage first. The arrangement of home page will be kept simple and clear, consisting of a search bar to access the search engine, along with some buttons for the user to login logout and post information.

Log in/Log out

For the login page, after input correct id and password, the user will be allowed to manage their personal information on their individual webpage. If the user does not have an account for this website, they can register for a new one through a series of quick and simple steps.

After login, the provider will be able to post their accommodation as an advert. They could also edit, maintain, delete the advert or mark it as temporarily unavailable.

As a searcher, after they log in, they could use the search engine to look for accommodations that they prefer. They could also post requests in the post section to specify their requirements if the search results are considered unsatisfactory.

For users who do not have a registered account, they are treated as guests. Guests will have a limited access to this website. For instance, they will not be able to post requests, post advertisements or book for accommodations through the system. Nevertheless, they could still browse the web pages, use the search engine to search for properties. However, the information on the presented properties will be limited to guests. For example, the exact location and contact details of the property will not be accessible.

Post Accommodation

For providers, the accommodation advertising module will enable the user to post their accommodation with specific features. The system will ask the provider to specify the basic information about their place such as the structure, location, available period, etc. After that, the provider could also fill in the detailed description of the accommodation including the unique features of the house, notices for guests during their stay, uploading pictures and so on.

Search for Accommodation

For searchers, they can specify the desired location or a region of the accommodation they are looking for. The system should show a list of accommodations around the specific address by a certain distance or within the specified region.

With the given accommodations list, searchers can use filters to refine the list. The filter contains a series of parameters such as price range, area range, house type, number of rooms, lease period. In addition, users can also sort the list by choosing the parameters such as release date, price, and distance from search location.

Post Request

For searchers, they can specify their request with the approximate location, house type, number of rooms, lease period and expected price range. Then, the system will show a small list of accommodations that best match their requests. If the searchers find the results unsatisfactory, the requests will be posted on request section of the website, where potential providers can see the information and make a reply.

Book Accommodation

As soon as the user finds a satisfying accommodation, this accommodation can be booked through the system after the user has logged in. The tentative booking stages which are subject to change during the development of this project runs as follows.

The potential tenants should select the renting period from where it's available. This rent request will be sent to the accommodation provider. After the provider has confirmed the booking, the contact details and the exact location will be available for the tenants to see and the tenants will be notified to finalize the booking within 24 hours. During this time, the property will be marked as unavailable and will not be seen by other users.

Structure

The logical structure of the system is shown in the following figure.

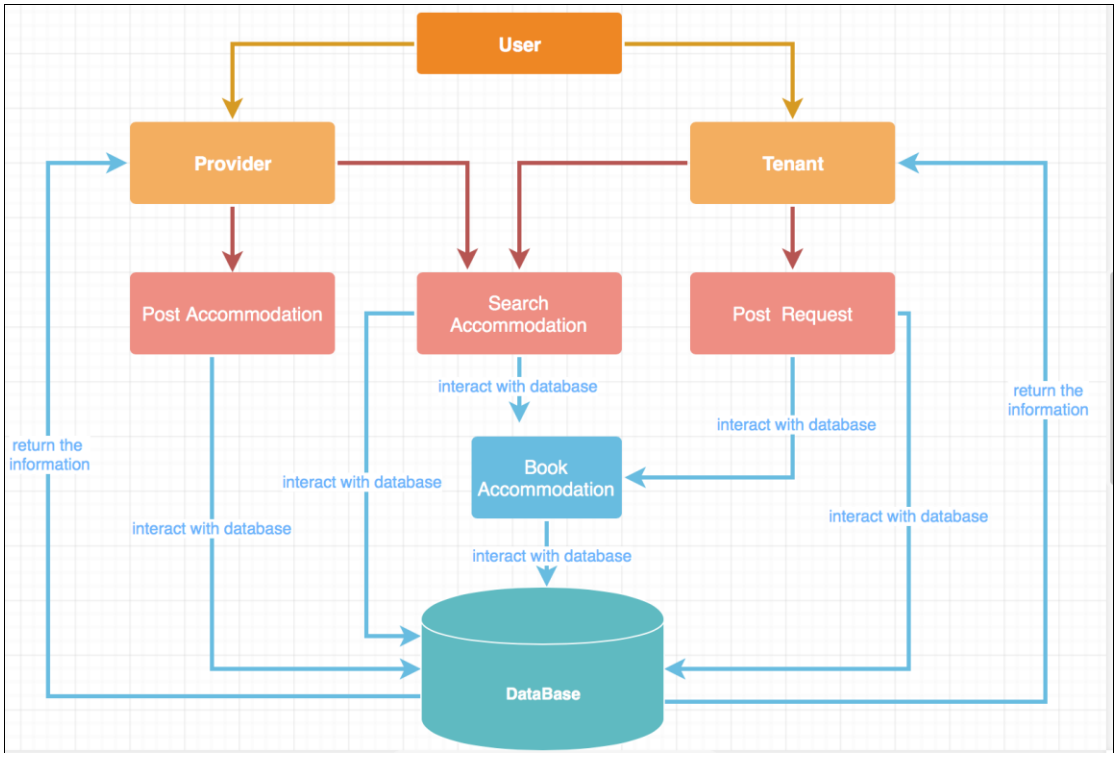

Figure 1: logical structure

Project Methodology

IDE: Sublime/Pycharm/VS code

Code Management: GitHub

Program Language: Python

SCRUM: Trello

Project Scrum

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Meeting

Tuesday 18:00 (every week)

Project Time-frame/Schedule

Friday 10th August	Finish Project Proposal	(Week 3)
Friday 17th August	Progress Demo	(Week 4)
Friday 7th September	Progress Demo	(Week 6)
Friday 21th September	Progress Demo	(Week 8)
Friday 5th October	Progress Demo	(Week 10)
Friday 12th October	Porject Demo & Report	(Week 11)
Tuesday 16th October	Peer Assessment	(Week 12)