The University of the West Indies

Department of Computing and Information Technology

Undergraduate Project Course | **INFO 3604**

Project Scope Document

Project Name: **QuickRental**

Members

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Project Scope Statement

QuickRental will be developed as a mobile application, written in React Native, that will useable on iOS and Android smartphones, to provide a superior catalogue for apartments in the UWI St. Augustine area and a more effective tool in searching for the perfect apartment.

General Project Information

The project our team intends to embark on will serve as an all-in-one mobile app solution called QuickRental, for students of the University of the West Indies (UWI) who are seeking rental accommodation near to campus.

Our mobile application, QuickRental will be built to ease the finding of apartments near UWI for students, staff, employees and anyone that wants to rent an apartment near UWI. It also aids the landlords in advertising their apartment to a wider audience and hence, gaining them more revenue. Many students go through overbearing stress and waste time looking for apartments. Many apartments found online are also not as advertised and trust worthy. We, as UWI students, can attest to this. Thus, our application, QuickRental, takes away all of the burden and has the majority of apartments right on the app, fully trustworthy, for the user to just browse and find their ideal apartment.

Problem/Opportunity Statement

At the University of the West Indies, finding the right apartment as a student is extremely difficult and time-consuming. Many students normally find apartments via word-of-mouth or facebook. However, they are usually not as pictured, walking distance is never obvious and contacting the landlords can be a chore; landlords may appear rude and abrupt since they do not have much time to dedicate to responding to calls and organising visits. This confirms that existing methods of advertisement are not effective. Therefore, students must take great care and effort to locate an apartment that fits within their budget and level of comfort.

Project Objectives

Functional Goals:
1. A user can register an account with QuickRental.
   a. A Landlord can register to add/update/delete apartment listings.
   b. An apartment searcher can register to browse and find their ideal apartment, post comments on apartments and direct message landlords.
2. To make tenants in the St Augustine area happier with their choice of apartment, improving Customer Satisfaction by at least 30% by April.
   a. Landlords can add apartment listings, creating a wide range of apartments that are readily available for prospective tenants to browse through.
   b. Allow apartment searchers to leave and read comments and the amount of hearts on apartments, to evaluate an apartment based on public perception.
3. To optimize and revolutionize the decision making process involved in finding the ideal apartment.
   a. Allow apartment searchers to enter their ideal criteria through an advanced search.

    b. Allow apartment searchers to view the exact location of an apartment on a map, all features, photos, availability, hearts, comments, and be able to live chat with the landlord.

4. To improve personal relations between tenants and their landlords by 50%, by April 12th.

    a. Allow apartment searchers to live chat with the landlord for faster and assured communication.

Strategic Goals:

1. QuickRental team would employ the agile development approach, along with peer and extreme programming.

2. QuickRental team would employ SCRUM methodology throughout the development process.

    a. Every two weeks a SCRUM meeting would be held, and each member would get a chance to be SCRUM master and product owner.

    b. All tasks would be planned in advanced and posted on Trello for better management.

    c. Every two weeks, a sprint retro would be held to show what has been developed during an increment.

3. QuickRental team would meet with stakeholders, both landlords and apartment searchers, after each increment for feedback.

    a. Official meetings would be called with both types of users to demonstrate each incremental progress of the app, and to obtain feedback.

    b. The feedback obtained would be taken seriously and would give direction to the development of the app.

Quality Goals:

1. Improve Tenant Retention by 75% by September 1st 2019.

2. Improve overall quality and standards of St Augustine apartments by 50% by Q1 2020. This can be accomplished through:

a. Improving exposure of apartment listings by 50% by April 12th.

b. Reducing perceived risk by providing risk assessment through tenant reviews, by 30% by September 1st.

3.

Project Description

The user interface would enable users to find apartments, townhouses and homes for rent using GPS location and mapping, check real-time availability, price ranges, type of apartment, be it double room or studio etc. and read comments submitted by other renters to gain insights about properties as well as view a virtual tour of the complex and neighborhood information for each listing. The app will enable live chat with the landlord for more details. In addition, it is key for landlords to be able to use out app to post their listings and updates.

Business Benefits

- Saves time of both the Landlord and tenant by optimising communication methods and processes.
- Greater exposure of apartment listings will reduce downtime of apartment and increase potential revenue.
- Comment system will help reduce risk for prospective tenants.
- Social networking capability will improve the relations between tenants and their landlords, due to increased satisfaction and ease of communication.
- Potential to open source, providing a tool that Universities around the world can use for their specific locale.
- Eliminates the need for landlords to spend excessive money on advertising.
- Streamlines major activities thereby cultivating a more satisfactory tennant experience and paving the way for healthy landlord-tenant relations.

Project Deliverables

- Conduct survey on tenants of UWI to determine/quantise their satisfaction with their current apartments, and need for an improved searching method by January 30th.

- Develop a React Native app for Android and iOS, containing a searchable index of apartments by April 2nd. To accomplish this:

  - Develop the structure of the database to store, query, edit (includes add, delete, update) and sort apartment data by March 8th.
    - Database structure will allow storage of apartment details (eg. location, image links, amenities, comments) and user account information.
  - Construct user-friendly designs, based on user feedback, and further improve designs. ***This is an ongoing process, and will be performed in each iteration.***
  - Implement designs and functionality using React Native Framework by April 2nd.
    - Develop pages (home, filter, apartment listing and details (maps, virtual tour, comments, details, contact) and profile page) by March 22th.
    - Implement Google Maps API, and allow landlord to create location pins by April 2nd.
    - Use database to implement CRUD functionality. Database will allow complex user queries using detailed criteria through filtering by April 2nd.

- Develop a personal direct messaging platform that allows communicating text and image between the landlord and tenants by April 19th.

- Conduct survey on completed application to determine user friendliness and overall satisfaction with application. *This will be performed after each iteration.*

- Use feedback from survey to further improve application. *This will be performed after each iteration.*

Estimated Project Duration: One Semester (3 months)

Gantt Chart for Estimated Project Duration: