



SPRIT 1 SUMMARY

Software Process

Course: SOEN 341

Lab. Section: SK-X

Lab Coordinator: Praful Peethambaran Nair

SPRIT ONE

Setup initialization – Project Description - Work Breakdown Structure –
Rules & Responsibilities

Team: Lucky Seven

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GitHub Repository

<https://github.com/Gderhy/LuckySeven.git>

**We certify that this submission is our original work and
meets the Faculty's Expectations of Originality**

Date: 24-9-2023

SOEN-341 – Project Description and Tasks Division

1. Introduction

In this educational project, our primary objective is to collaboratively develop a functional real estate web application. This project serves as a platform for students to gain practical experience in software development and agile methodologies. As we commence this endeavor, we are enthusiastic about the prospect of building a real-world application from the ground up. Our aim is not only to acquire knowledge and skills but also to create a working real estate web application that showcases our collective efforts and problem-solving abilities.

2. Project Description

In the realm of software development and agile methodologies, our project embarks on the journey to create a fully functional Real Estate Web Application. This collaborative educational endeavor aims to provide students with a comprehensive understanding of software development while laying the foundation for future endeavors in the field.

The following core features should be included in the project:

2.1. Client

Search for a Property: Homebuyers can efficiently search for properties using specific criteria such as location, price range, bedroom count, and amenities.

Save Favorites: Users can curate a list of their favorite properties for easy access and comparison.

Request Property Visits: Interested homebuyers can seamlessly schedule property viewing appointments through the system.

Broker Discovery: The application facilitates the search for real estate brokers to assist in the buying process.

Mortgage Calculator: A mortgage calculator feature aids homebuyers in estimating monthly payments based on loan amount and interest rate. This feature is not applicable for the properties posted to rent.

2.2. Broker

Submit Offers: Brokers have the ability to submit purchase offers on behalf of their clients and monitor the status of these offers.

Request Property Visits: Brokers can schedule property visits on behalf of their clients.

Property Listing Management: CRUD operations on property listings allow brokers to maintain their property inventory.

Matching Properties: Brokers can utilize the system to match available properties with potential buyers based on their preferences and requirements.

Offer Management: Brokers can review and manage offers submitted by homebuyers for the properties they represent.

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Visit Management: Brokers have the capability to manage property visit appointments, including rescheduling and cancellations.

2.3. System Administrator:

CRUD Operations on Brokers: System administrators maintain control by performing CRUD (Create, Read, Update, Delete) operations on broker profiles.

As we navigate this project, our primary focus is on the collaborative development of a fully operational real estate web application. Each user type's features serve to enrich the user experience and provide practical insights into agile methodologies, teamwork, and project management.

3. User Stories

Based on the previous section, we are required to write four user stories.

3.1. Admin:

For admins, the system should provide the capability to perform CRUD operations on broker profiles. This includes creating, reading, updating, and deleting broker information. Efficient management of broker profiles ensures smooth oversight and control over the broker-related data.

3.2. Broker:

For Brokers, the system should allow the submission of purchase offers on behalf of clients and provide real-time monitoring of the status of these offers. Additionally, Brokers should be able to schedule property visits for clients, manage property listings (Create, Read, Update, Delete), match available properties with potential buyers, and review and manage offers submitted by homebuyers for properties they represent. Effective management and monitoring tools streamline the real estate transaction process.

3.3. Home Buyer:

Home Buyers require seamless access to the application, including secure login functionality. Once logged in, the system should enable efficient property searches based on specific criteria, such as location, price range, bedroom count, and amenities. To only access the for sell properties, the home buyer should filter the displayed property and select the *for sell* option. Furthermore, Home Buyers should have the ability to save properties as favorites for later reference and comparison. Finally, the home buyer should access a mortgage calculator to give him an estimate of his monthly payment.

3.4. Home Renter:

Home Renters, similar to Home Buyers, need secure login access to the application. Once logged in, they should be able to initiate property searches using different filter parameters tailored to their needs, such as rental price range, bedroom count, and amenities. To only access the for rent properties, the home buyer should filter the displayed property and select the *for rent* option. Additionally, enabling the functionality to save rental properties as favorites enhances the rental property search experience, facilitating the tracking and comparison of suitable rental options.

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4. Work Breakdown List

The following list will divide the projects into the needed webpages for the web application.

4.1. General:

- Login Page
- Registration Page
- Property Search Page
 - a. Include mortgage calculator for the properties listed for sell.

4.2. Admin:

- Administrator Dashboard (CRUD on brokers)

4.3. Broker:

- Property Listing Management
- Offer Submission & Offer Management
- Visit Management
- Broker Profile

4.4. Client:

- Visit Request Page
- Favorites Page
- Client Profile

The above webpages should include all the needed future for this project. The team members will work on developing two webpages in parallel.

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5. Rules and responsibilities

Each of the web pages mentioned in the previous section will be developed as a team. Here is a table of the rules and responsibilities along with their assigned team members.

Rule	Responsibilities	Assigned Team Members
Team Leader	<ol style="list-style-type: none">1. Identifying programming methodology to be used2. Dividing tasks3. Providing resources4. Peer reviewing5. Ensuring proper integration6. Providing support to any team member7. Schedule meetings and documentation	<ul style="list-style-type: none">• Kumai Alabbas ID: 40175088
SQL Specialist	<ol style="list-style-type: none">1. Creating database structure2. Managing SQL Queries3. Providing backend files to communicate with the database	<ul style="list-style-type: none">• Kumai Alabbas ID: 40175088
Static Frontend Developer	<ol style="list-style-type: none">1. Learning and using HTML and CSS2. Implementing the website overall appearance and layout3. Always respecting the due date	<ul style="list-style-type: none">• Manal Benkabbour ID: 40176066• Steven Zrihen ID: 40174529
Dynamic Frontend Developer	<ol style="list-style-type: none">1. Learning and using JavaScript2. Using the frontend elements and the data provided from the database to create dynamic environments for each webpage	<ul style="list-style-type: none">• Gabriel Derhy ID: 40247254• Leen Elsherbaji ID: 40177849• Yousef Enein ID: 40115494

All team members are responsible for their local setup, and they should all respect the due date of their tasks and report any problems as soon as possible to consistently meet the deadlines.

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6. Project Approach and Technology

In our project, we're taking a step-by-step approach to make sure our web application meets the provided requirements. First, we carefully analyzed the customers' needs to decide on the webpages we have to create. For this project, the following technologies will be used:

- MySQL will be used for creating the database structure and writing the needed SQL queries.
- HTML, CSS and Bootstrap will be used for the static front-end elements.
- JavaScript and React will be used for the dynamic front-end elements.
- PHP will be used to communicate with the server. Mainly for posting and extracting data from the database.

The above list of technologies covers all our needs to build the required web application.