Student Study Areas System

Planning Document

Team 6

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Student Study Areas System Vision Statement

The Student Study Areas System (SSA) is designed to help York University students efficiently find the most suitable study areas on campus. The system will maintain detailed, real-time information on study spaces and provide personalized insights to enhance student academic experiences at YorkU.

Primarily aimed at York University students who need guidance in choosing their study environment, the SSA will allow students to view information on study areas, including seat availability, student ratings, cleanliness, and busyness. This information will be easily accessible, and students will be able to search for and filter specific study spots.

The system will feature a review and rating system, enabling students to write and read reviews about specific study areas. These reviews will provide insights into various amenities, such as available outlets and suitability for studying or socializing. Students will also receive personalized recommendations based on their study preferences and past ratings.

Additionally, students can view and locate study spaces on campus using a map display that marks study areas and provides detailed directions, including landmarks and indoor paths. This will help students easily find study spots close to their classes using familiar reference points.

Envisioned as a web application, the SSA will use real-time data. In the pre-release version, it will incorporate actual map data from platforms to provide accurate information on locations and details of study areas. Future versions of the system will be networked with the client to gather personal opinions and insights on study areas they have visited, further refining the accuracy of the information provided.

The SSA will be a significant improvement over current systems, which offer limited information on study areas and do not provide personalized recommendations based on user’s preferences. The SSA will help students efficiently locate study areas that meet their preferences, reducing the time spent deciding where to go. By combining data on study areas and student preferences, the system will substantially benefit students' academic experiences, saving time and optimizing their study or socializing time.

The system's success will be evaluated based on two main criteria: adoption rates and user satisfaction. This will be measured by the number of active users and the volume of ratings and reviews. Additionally, positive feedback from the client and general student users will further validate the system's effectiveness.

User Story Map

Big User Stories Outline, Iteration 1:

Find study spaces on campus	
As a student, I want to be able to find possible study spaces available on campus.	
Priority: **High**	Cost: **2 weeks**

View study space information	
As a student, I want to be able to view real-time information regarding specific study spaces.	
Priority: **High**	Cost: **2 weeks**

Rate and read reviews of study spaces	
As a student, I want to be able to rate the study spaces and know what my classmates are thinking about them.	
Priority: **High**	Cost: **2 weeks**

Detailed User Stories Outline, Iteration 1:

Map display	
View a map of the entire campus with specific study places marked on it by pins.	
Priority: **High**	Cost: **X day**
Big Story: **Find study spaces on campus**	Team Member: Ngoc Phuc Khang Nguyen

Specific study place directions	
Get detailed directions, including landmarks and indoor paths, to specific study places.	
Priority: **High**	Cost: **1 day**
Big Story: **Find study spaces on campus**	Not completed in ITR1

Narrow down search area	
Narrow down the study space search areas on the map.	
Priority: **Low**	Cost: **1 day**

Big Story: **Find study spaces on campus**	Not finished in ITR1

Display study area amenities	
View study areas' basic amenities, including charging outlets, cleanliness, and accessibility, and loudness.	
Priority: **Medium**	Cost: **1 day**
Big Story: **View study space information**	Team Member: Kimberly Bonilla

Display busyness of study areas	
Determine how busy each area on campus is.	
Priority: **Medium**	Cost: **2 day**
Big Story: **View study space information**	Team Member: Emma Accardi

Write and display study space ratings	
Allow students to write their ratings about specific study spaces and view other students' ratings.	
Priority: **Medium**	Cost: **2 days**
Big Story: **Rate and read reviews of study spaces**	Not finished in ITR1

Release 0

Customer Meeting Summary:

Date: **Wednesday, January 22, 2025**
Customer: **Nica Riccardi (Urban Planning Student @York University)**
Length: **20 Minutes**
Discussion: **Interview 1: Base Discussion with Customer**

Big User Stories:

View Study Space Information

As a Student, I want to be able to view real-time information regarding specific Study Spaces.

Priority: High

Cost: 2 Weeks

Find Study Spaces on Campus

As a student, I want to be able to find possible study spaces available on campus.

Priority: High

Cost: 2 weeks

Rate and Read Reviews of Study Spaces

As a student, I want to be able to rate the study spaces and know what my classmates are thinking about them.

Priority: High

Cost: 2 Weeks

Detailed User Stories

Narrow Down Search Area

Narrow down the space search areas on the map.

Priority: Low

Cost: 1 day

Specific Study Place Directions

Get detailed directions, including landmarks and indoor paths, to specific study places.

Priority: High

Cost: 1 day

Map Display

View a map of the entire campus with specific study places marked on it by pins.

Priority: High Cost: X day

Write and Display Study Space Ratings

Allow students to write their ratings about specific study spaces and view other students' ratings.

Priority: Medium Cost: 2 days

Display Busyness of Study Areas

Determine how busy each area on Campus is.

Priority: Medium

Cost: 2 days

Display Study Area Amenities

View study areas' basic amenities, including charging outlets, cleaniness, and accessibility.

Priority: Medium

Cost: 1 day

Big User Stories Outline, Iteration 2:

Big user stories remained the same from ITR1 to ITR2. The goals of our app for Iteration 2 have remained the same.

Find study spaces on campus	
As a student, I want to be able to find possible study spaces available on campus.	
Priority: **High**	Cost: **2 weeks**

View study space information	
As a student, I want to be able to view real-time information regarding specific study spaces.	
Priority: **High**	Cost: **2 weeks**

Rate and read reviews of study spaces	
As a student, I want to be able to rate the study spaces and know what my classmates are thinking about them.	
Priority: **High**	Cost: **2 weeks**

Detailed User Stories Outline, Iteration 2:

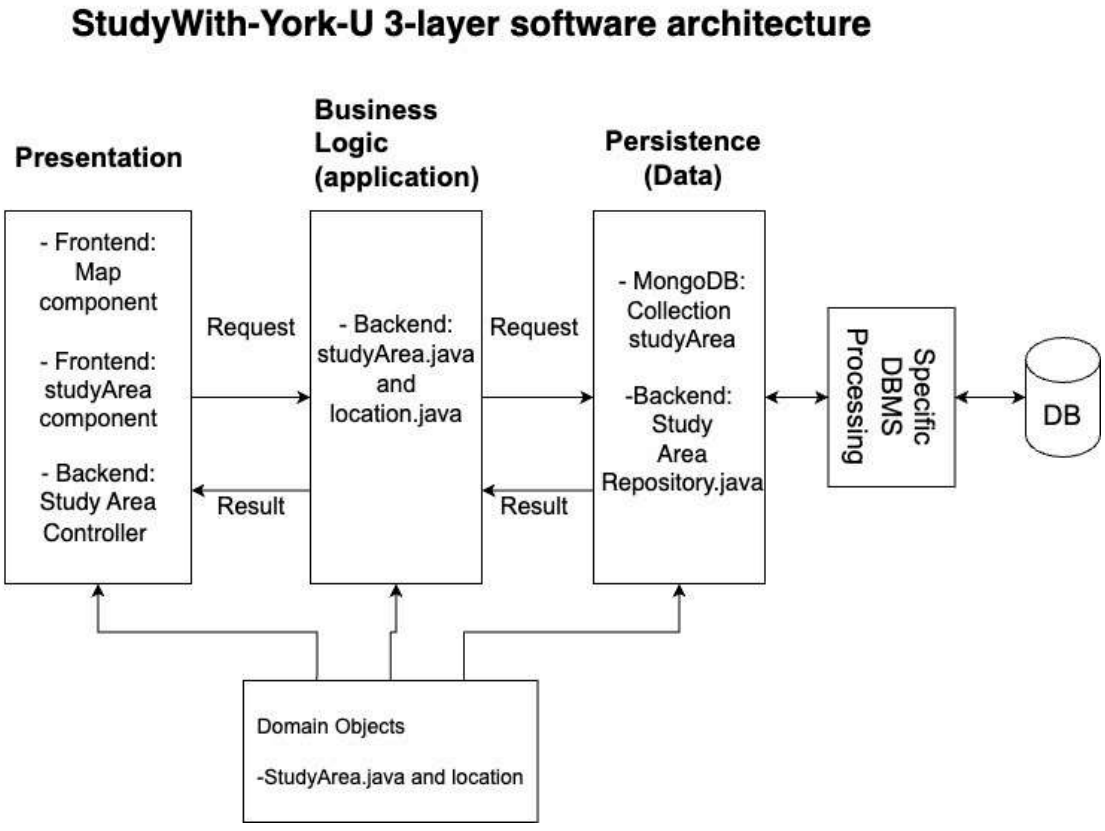
Specific study place directions - Leftover from ITR1	
Get detailed directions, including landmarks and indoor paths, to specific study places.	
Priority: **High**	Cost: **1 day**
Big Story: **Find study spaces on campus**	Team Member: Jericho Marc Mendoza

Narrow down search area - Leftover from ITR1	
Narrow down the study space search areas on the map.	
Priority: **Low**	Cost: **1 day**
Big Story: **Find study spaces on campus**	Team Member: Ashley Thong

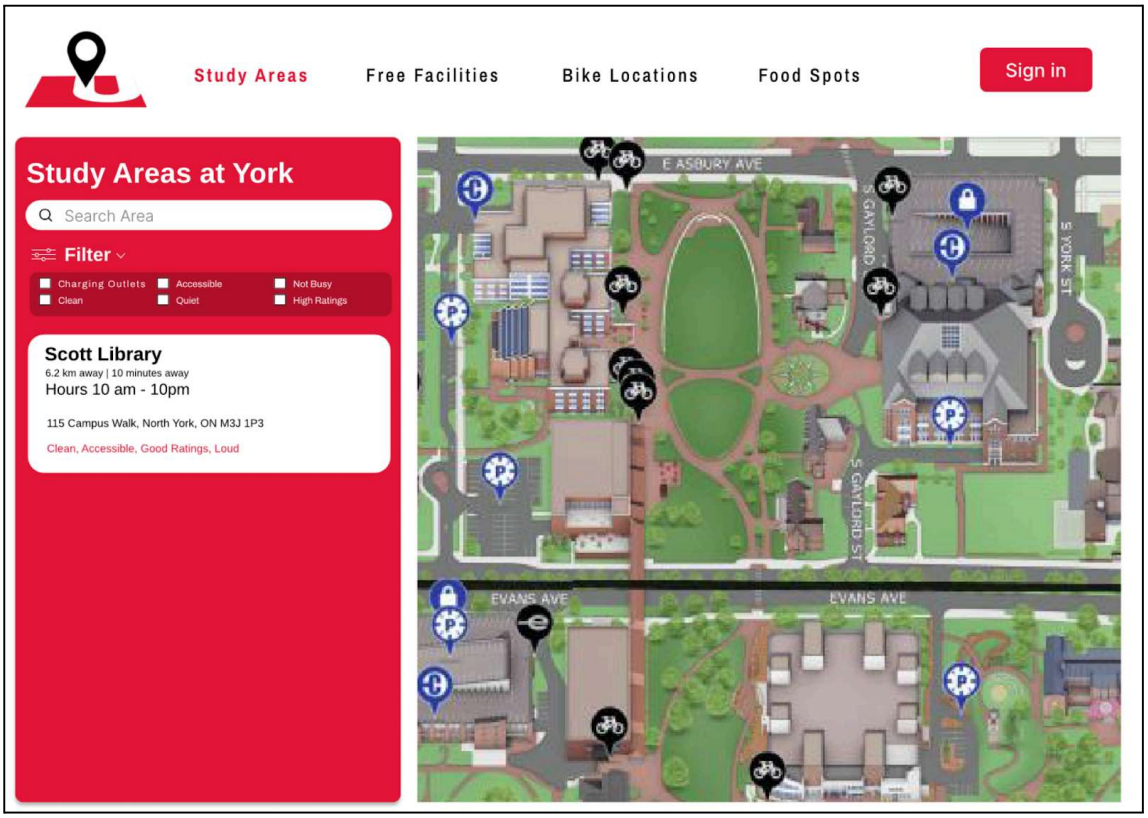
Write and display study space ratings	
Allow students to write their ratings about specific study spaces and view other students' ratings.	
Priority: **Medium**	Cost: **2 days**
Big Story: **Rate and read reviews of study spaces**	Not completed in ITR2

StudyWith-York-U 3-layer software architecture

1. **Presentation Layer:** Handle interaction with User (GUI). Includes all of the frontend components like the map and studyArea components.
2. **Business Logic:** Validation and processing data (calculations, business logic). Includes backend studyArea.java (model) and the location class in the model.
3. **Persistence:** Manage database operations like retrieving, updating and deleting data. Includes studyArea collection in MongoDB and backend studyAreaRepository.java to manage database operations (GET,POST, DELETE…), and backend studyAreaRepository.java.



Website Mockup



UML Class Diagram