Project Proposal Final Team 5

TerrierConnect

CS673 Software Engineering Fall 2024



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Title

TerrierConnect

Purpose

TerrierConnect provides a one-stop bulletin board service for all users from Boston University. Compared with the messages and notifications currently sent by email, TerrierConnect is more user-friendly. Provide personalized activity recommendations based on social interests. The platform will feature real-time location tracking via an interactive map, event publishing, and a modern user interface that allows students, professors, and staff to connect, share, and engage in campus life. With this application, users will be able to post updates, share events with mapped locations, and navigate the campus more easily. The application is designed to strengthen social connections and improve campus interactions, keeping the BU community informed and engaged with all university-related activities.

- Allow students to share daily campus life posts with others.
- Provide event publishing features with location display on the map.
- Help users navigate to campus buildings and event locations easily, or find friends within the campus, such as finding people to go to the same event.

Benefits

- 1. **Location Sharing (Map Functionality)**: Users can share their locations and event venues, enabling seamless coordination.
- 2. **Simplified Campus Navigation**: An interactive map will guide users to their destinations, whether for classes, meetings, or events.
- 3. **Real-Time Event Tracking**: The platform will allow users to track events in real time, enhancing participation and awareness.
- 4. **Free posting**: The app allows people to create many styles posts.
- 5. **Personalized Recommendations**: The app provides personalized posts or events recommendations by tags.

Major functionality

- 1. Embed Google Maps view into each post to show the location sent with the content. Navigate people attending study groups, collaborating on projects, or navigating campus events.
- 2. Display all posts or events about BU to users, or recommend to users by tags.
- 3. Users can use an embedded markdown editor to write contents to post information with any viewers. Everyone can post contents with location to let others know the location and date of the events.
- 4. Multiple status and tags can be added by the author for their own posts.

 Users can also search events by tags, names or status. Restraints can also be added on these events.
- 5. Account registration and login.

Target users

All BU students, faculty, and staff.

How we implement this project

Tech stack: Web Application

- Front-end: React

- Back-end: RESTful API build with Django

- Database: SQLite

- Tools: Docker, Nginx, Gunicorn (for production server deployment), Figma(for UI design)

Process Plan

This project will use an iterative and incremental development process, we will also introduce some agile software development methodologies. We will first conduct a requirement analysis and finalize the requirements document, design the

project's architecture, services, APIs, and UI design, and then create our project, implement our initial iteration.

We will define the responsibilities of each role in detail, each team member will perform their duties, and we will help each other when someone faces difficulty. We will schedule one or two meetings per week and take notes every time. We will also communicate at any time using email or discord to solve any problems encountered at any time. We will also have a progress report to record the weekly progress, the plan for the next week, and any problems encountered.

Members role:

Members	Roles	Responsibilities
Yi Zeng	Project Manager, Full Stack developer.	Design and develop the architecture of the product and product features and functionalities.
		Manages the project progress.
		Implements backend APIs, and API Integration.
Chaojin Guo	UX designer / Frontend Developer	Implements a responsive web interface in React.js
		Creates software documents like design, plan, requirements, and analysis.
		Using figma to design and improve the user interface.

Aradhana Mehra	Backend Developer / API Integration/ Quality Assurance	Implements robust backend APIs and functionalities by Django. Database design and relevant function implementation. Quality assurance and testing.
Tianchi Wu	UX designer / Frontend Developer	Implements a responsive web interface in React.js. Creates software documents like design, plan, requirements, and analysis. Using figma to design and improve the user interface.
Damodhar Pai	Quality Assurance / Backend Developer / API Integration	Quality assurance and testing. Implements robust backend APIs and functionalities by Django. Database design and relevant function implementation.