GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

SOEN 341 Software Process

Team Project, Fall 2025

Project Title: Campus Events & Ticketing

Objective.

This project will help you get a taste of software development skills firsthand. You will follow the Agile development approach; take advantage of GitHub distributed version control plus access control, bug tracking, software feature requests, task management, continuous integration, and wikis to support your project management process. The project is divided into 4 incremental deliveries which we refer to as sprints based on Agile Scrum methodology, which will be used in this course.

The duration of the project is around 10 weeks; the development process is an adapted Agile with 3 to 4 weeks long iterations, 4 iterations in total. The first 2 weeks of the first sprint are for training and setting up your development environment.

Because of the short span of this project, you are not expected to deliver a marketable product, but the result should be at least a compelling middle-fidelity prototype that could serve as the basis for building a real product. Check these two links on prototype fidelity quite helpful: A Guide to Prototype Fidelity:

- https://www.webfx.com/blog/web-design/design-mockup-fidelity/
- https://www.webfx.com/blog/web-design/wireframes-vs-prototypes-difference/

Description

- You are implementing a Campus Events & Ticketing Web Application designed to help students discover, organize, and attend events on campus. The system enables students to browse events, save them, claim free or paid tickets, and check in using QR codes. Organizers can create and manage events, track attendance, and access analytics through dashboards, while administrators moderate content and oversee organizations. The application streamlines event management, improves student engagement, and provides valuable insights for both organizers and campus administration.

As an example, you can take a look at: **https://www.campusgroups.com**

Core Features

We identify three primary users: Students, Organizers, and Administrators.

1. Student Event Experience
    - Event Discovery
        - Browse and search events with filters (date, category, organization).
    - Event Management
        - Save events to a personal calendar.
        - Claim tickets (free or mock paid).
        - Receive a digital ticket with a unique QR code.
2. Organizer Event Management
    - Event Creation
        - Enter event details: title, description, date/time, location, ticket capacity, ticket type (free or paid).
    - Event Analytics
        - Dashboard per event with stats: tickets issued, attendance rates, and remaining capacity.
    - Tools
        - Export the attendee list in CSV.
        - Integrated QR scanner for ticket validation (for simplicity, you can assume the QR code image can be provided via file upload).
3. Administrator Dashboard & Moderation
    - Platform Oversight
        - Approve organizer accounts.
        - Moderate event listings for policy compliance.
    - Analytics
        - View global stats: number of events, tickets issued, and participation trends.

- Management
    - Manage organizations and assign roles.

Additional Feature

In addition to these three core features, you need to propose one feature with your TA.

Programming Language and Frameworks

You are free to use any programming language or framework for the project.
Please send the following information to all the TAs BEFORE Sept 18:
1) names and student IDs of the team members,
2) your original Lab section, and
3) the time/section that works for you. If multiple timeslots/sections work for you, please provide them all.
Each team should have 6~8 team members. You can form a team with people from different lab sections, but you must be in the SAME LECTURE section.

Sprint 1 delivery instructions.

Create a GitHub repository named `<team_name-SOEN341_Project_F25>` and organize all project deliverables in subfolders for each sprint. For example, a folder for the minutes.

The table below provides details on the activities and the corresponding deliverables that must be present in your repository. A detailed grading rubric can be accessed here. This will be used by the markers.

Activities	Sprint Details

1. GitHub setup and initialization 2. README file 3. Sprint Plan 4. User stories and Task breakdown	• README file with ○ Description of the Project, objectives/ core feature • The info of your team members (real name, student number, and GitHub user name) • what languages & techniques do you plan to use (if haven't decided, then write sth like TBD) • User stories for Sprint 1 (Use GitHub issues). Identifying them with the prefix US.## • Task Breakdown (derived from user stories, and assigned to at least one team member). Use GitHub issues, with the prefix Task.## • Detailed log of each team member's contribution including time spent on each activity (document) • Meetings Minutes file (minutes files must be named <teamName_Sprint#_meetingnumber_meeting_date>

You must have regular meetings with your team and post their “minutes” in the corresponding subfolder in your repository.

At the end of each sprint, each team member will submit a detailed log of their activities, which will be considered to evaluate the individual contribution.

All members of the team should contribute equally to the project and all contributions must be traceable on GitHub.

Total weight 3%.