EventSync – Campus Event Management & Check-In System

Software Requirements Specification (SRS)

CSCE 247 – Software Engineering
Nocturnal++
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Table Of Contents

EventSync 1

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1. Introduction 3
2. Stakeholders 4
3. Constraints 8
4. Overall Description 9
5. Business Use Cases 10
6. Functional Requirements 11
7. Non-Functional Requirements 11
9. Competitive Analysis 12

1. Introduction

Purpose

There are many applications centered around planning and going to events, but few are catered toward the academic setting. Our application's goal is to create a center for students to find events near them on campus and for leaders to be able to monitor and interact with attendees.

Campus Event Management & Check-In System

Business Problem

- Manual sign-ins
- No idea who actually attended
- Poor engagement tracking

Features

- Event creation
- Student RSVP
- QR code check-in
- Attendance analytics

2. Stakeholders

Primary Stakeholders

- **University of South Carolina Students**
    - **Undergraduate Students** Attend academic, social, and career events; require attendance verification for involvement credit.
    - **Graduate Students** Attend research talks, department events, and professional workshops.
    - **Exchange / International Students** Attend orientation and cultural events; benefit from clear check-in and communication.
- **University of South Carolina**

    - **Student Affairs & Engagement Offices** Track student participation and event impact.
    - **Academic Departments** Host workshops, info sessions, and lectures.
    - **Campus IT** Supports deployment and system reliability.

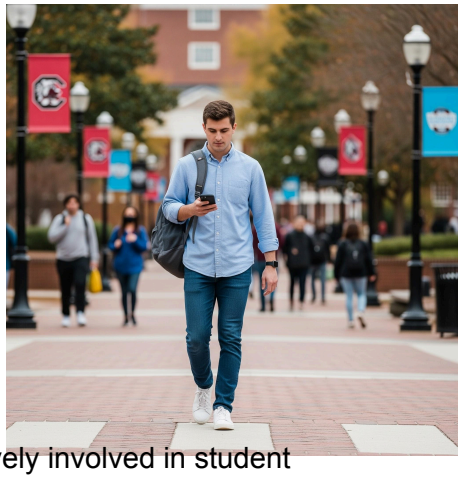
Secondary Stakeholders

- **Student Organizations**
    - Officers and executive boards who create and manage events.
- **Event Staff / Volunteers**
    - Assist with check-in and event operations.
- **University Administration**
    - Uses engagement data for funding and strategic planning.

Personas

Alex Carter

Age: 20
Hometown: Raleigh, NC
Student: Undergraduate (Computer Information Systems)
Work: Part-time IT Lab Assistant
Character: Achiever



Bio

Alex is a sophomore at the University of South Carolina who is actively involved in student organizations, career fairs, and technical workshops. He often attends events between classes and values anything that saves time and reduces friction.

Goals

- Quickly RSVP for campus events from his phone
- Check in without waiting in long lines
- Receive confirmation that his attendance was recorded
- Build a record of involvement for résumés and scholarships

Frustrations

- Paper sign-in sheets that slow entry
- Events claiming attendance credit but losing records
- Confusing or last-minute location changes

Brands & Influences

Google, Apple, LinkedIn, Handshake

Maya Rodriguez

Age: 23
Hometown: Orlando, FL
Student: Graduate Student (Public Health)
Work: Graduate Research Assistant
Character: Organizer

Bio

Maya is a graduate student who regularly attends academic talks, workshops, and professional development events. Her schedule is tight, and she expects campus systems to be reliable and professional.

Goals

- View accurate event details and reminders
- Avoid overcrowded or disorganized events
- Ensure attendance is properly tracked for program requirements
- Receive updates or changes in real time

Frustrations

- Events with unclear schedules
- No confirmation after checking in
- Wasting time at check-in tables

Brands & Influences

Notion, Google Calendar, Slack, Microsoft

Jordan Matthews

Age: 28
Hometown: Columbia, SC
Role: Student Organization President
Affiliation: Student Government–Recognized Organization
Character: Leader

Bio

Jordan manages planning and execution of large campus events, often hosting 50–200 attendees. He is responsible for reporting attendance to Student Affairs and justifying funding allocations.

Goals

- Create and publish events quickly
- Track RSVPs ahead of time
- Run fast, reliable check-in at the door

- Export accurate attendance reports

Frustrations

- Illegible or duplicate sign-ins
- No-show attendees with no data insight
- Manually compiling attendance spreadsheets

Brands & Influences

Google Sheets, Canva, Trello, USC Student Affairs

Dr. Lisa Thompson

Age: 41
Hometown: Charleston, SC
Role: Assistant Director of Student Engagement
Character: Strategist

Bio

Dr. Thompson oversees student engagement initiatives and evaluates which programs drive meaningful participation. She relies on accurate data to make funding and policy decisions.

Goals

- Analyze campus-wide event engagement trends
- Identify high-impact programs
- Ensure compliance with student data standards

Frustrations

- Inconsistent attendance reporting
- Inflated or unreliable participation numbers
- Manual data aggregation from multiple organizations

Brands & Influences

Tableau, Microsoft Excel, Higher Ed Analytics Tools

3. Constraints

3.1 Time Constraints

- This project must be completed within the assigned course timeline (approximately **two weeks** for Part 1 deliverables, with remaining development milestones aligned to the semester schedule).
- Major scope changes after requirements approval may be limited due to schedule.

3.2 Monetary Constraints

- This project has a development budget of **$0**.
- Only free, open-source, or university-provided tools/services may be used.

3.3 Technical Constraints

- The backend code must be implemented in **Java**.
- The system must be accessible on multiple device types, including:
    - Desktop PCs
    - Laptops
    - Mobile devices iOS/Android
- The application must be web-based and supported on modern browsers
- QR code check-in must function using standard device cameras

3.4 Workplace / Operational Constraints

- The system must be usable in real event environments where:
    - Wi-Fi may be inconsistent or congested
    - Lighting and crowd flow can affect check-in speed
- Event check-in should be operable by volunteers with minimal training.
- The system must support quick throughput at entry points (events often begin all at once).

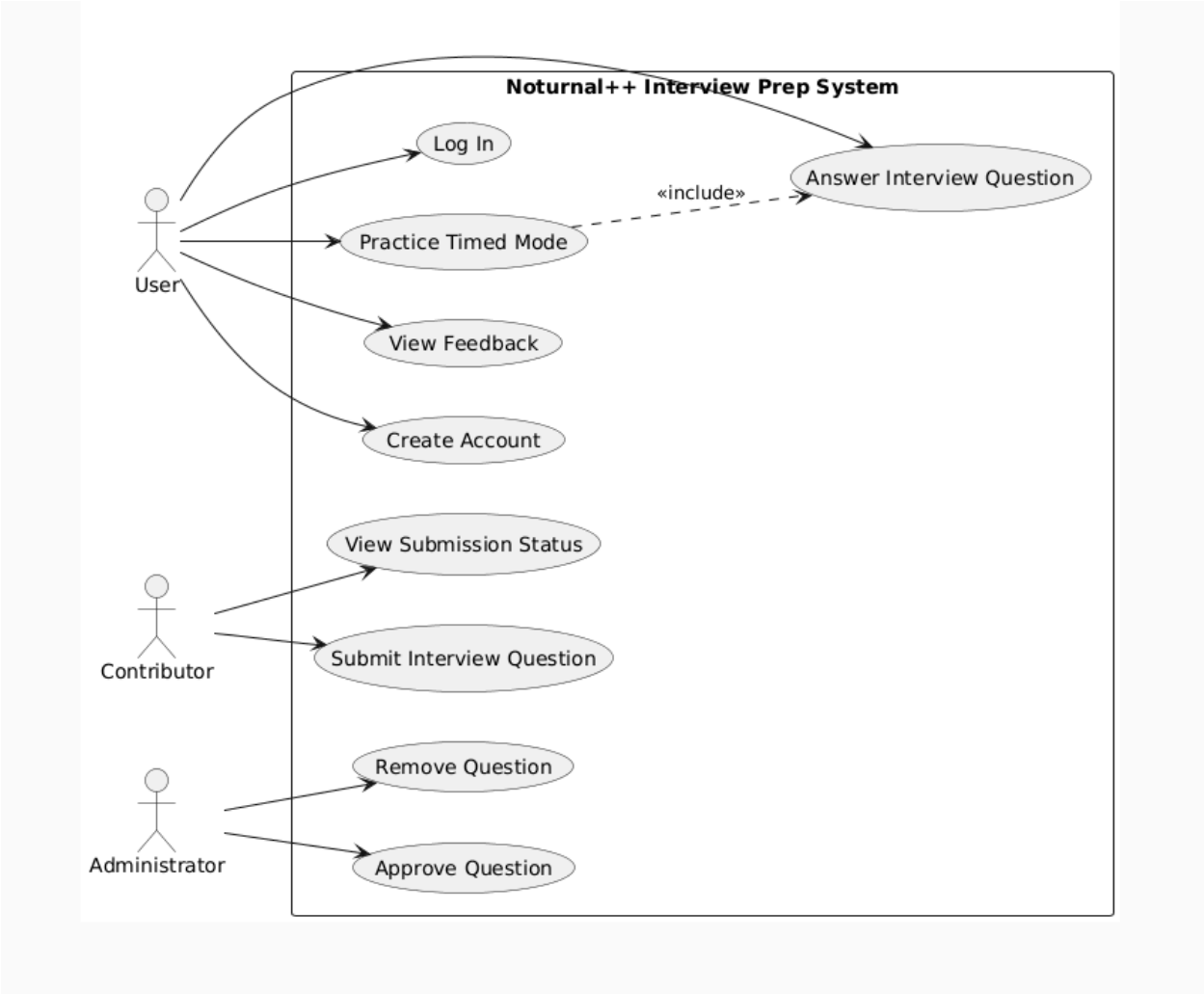
3.5 Partner Applications / Integration Constraints

- If integrations are used, they must rely on commonly available tools such as:
    - University email
    - Calendar export rather than paid API integrations
- The system should not depend on paid third-party services due to the $0 budget.

4. Overall Description

EventSync is a web-based application that will be used within the University of South Carolina to help manage campus events and attendance. Students will be able to access the system from their phones or laptops to view events, RSVP, and check in at events using a QR code. Event organizers and university staff will use EventSync to create events, track attendance, and review participation data. All RSVP and check-in information will be stored in a central database so that organizers and administrators can easily see who attended events and better understand overall student engagement across campus.

5. Business Use Cases



6. Function Requirements

Requirements Spreadsheet

7. Non-Functional Requirements

Look and Feel Requirements:

- The application shall be easy to use and features will be easily identifiable.

Usability Requirements:

- The application will be accessible for anyone who wishes to use it.

Performance Requirements:

- The application will be able to run without crashing no matter the device.

Maintainability and Support Requirements:

- The application will be able to run on any operating system.

Security Requirements:

- Any data stored on the application will be secured and protected.

Legal Requirements:

- The application will follow all state and local laws.

9. Competitive Analysis

	Eventbrite
Strengths	• Lists all events in local area • Easy setup for scheduling an event

	● Works offline and will sync later
Weaknesses	● Not made for students ● Focuses on all events rather than campus ones
Summary	It is an application designed for finding events and selling tickets to them. It's focus isn't towards student events and is more towards events with the intention of making money off of attendance.

	Cvent
Strengths	● Allows for badge printing for added security ● Can schedule multi-session events ● Lots of demographics and data to show
Weaknesses	● Designed around corporations and their needs ● Steep learning curve
Summary	The target for this application are corporations and their employee's needs. It is a very in-depth system that features many analytics, but just wouldn't work in a college environment.

	Whova
Strengths	● Attendee profiles ● Messaging system and polls
Weaknesses	● Designed for the attendee to actively participate
Summary	The audience for this application is also business focused, but it allows for creating more familiar relationships with other users.

This data indicates that these applications are designed around planning events that are not academically focused. They show that the application created needs to be easy to use and allow for data to be shown to the host, such as attendance polls and peak check in times.