  
**Term 2510**

**CSE 6224 SOFTWARE REQUIREMENTS ENGINEERING**

**Title: Campus Event Check-in System with Student ID and Payment Integration**

**Tutorial:** TT1L

**Group No:** Group 3

**Group Member:**

|  |  |
| --- | --- |
| **Student** | **Student ID** |
| Teng Huey Ting | 243UC2461A |
| Teoh Yi Xin | 243UC247NT |
| Yap Yi Ting | 243UC2462Y |
| Yee Lee Yiin | 243UC2461E |

**Team Member & Roles**

|  |  |  |
| --- | --- | --- |
| Student Name | Student ID | Responsibilities |
| Teng Huey Ting | 243UC2461A | * Project Scope * Elicitation Plan * Kano Model * SRS   + Requirement     - Functional Requirement     - Design Constraints     - Software System Attributes   + Appendices     - Assumptions and Dependencies     - Acronyms and Abbreviations |
| Teoh Yi Xin | 243UC247NT | * Project Vision, Scope, Goal * Context Object * Elicitation Plan * Kano Model * SRS   + Introduction   + Requirement     - Functional Requirement     - Performance Requirements     - Usability Requirements |
| Yap Yi Ting | 243UC2462Y | * Project Scope * Elicitation Plan * Kano Model * SRS   + Requirement     - Functional Requirement     - Interface Requirement     - Logical Database Requirement |
| Yee Lee Yiin | 243UC2461E | * Project Vision, Scope * Elicitation Plan * Kano Model * SRS   + Requirement     - Functional Requirement     - Supporting Information   + Verification     - Verification Approach     - Verification Criteria |

**Communication Plan**

Primary Platform: Microsoft Teams

* Group Chat Name: TT1L\_G3
* Meeting: Ad-hoc only
* File Sharing: GitHub name as TT1L\_G3\_Requirements\_Project
* Note-taking Tool: Microsoft Word (Synced via GitHub)

1. **Project Vision**

This project involves creating a digital check-in system for campus events that integrates with both the university's student identification database and payment processing system. The platform will streamline event attendance tracking while handling ticket verification and on-site purchases, providing a seamless experience for students, event organizers, and administrators.

The system will enable students to browse events, purchase tickets, and check-in using QR codes, while giving administrators tools to manage events, track attendance, and generate reports. Event organizers will benefit from real-time attendance monitoring and on-site ticket sales capabilities.

1. **Project Scope**

The Campus Event Check-in System streamlines event management by integrating with the university’s Student Identification Database, Payment Processing System, and University Calendar. It serves three human actor and three core system actors:

* Student
  + Register
  + login using Student ID
  + Edit personal profile information
  + Browse available campus events
  + Purchase event tickets online or on-site
  + View, download and display QR code tickets
  + Check-in to events using QR codes
  + View purchase history
  + Request refund
  + Register for events
* Event Organizer
  + View attendee tickets at check-in station
  + Track real-time event attendance
  + Assist with on-site ticket purchase
  + View and generate attendance reports
  + Create, edit, delete events
* Admin
  + Manage student accounts
  + Create, edit all events details
  + Generate revenue reports
  + View comprehensive attendance reports
  + Handle refund request
* Student Identification Database
  + Validated student credentials during login and registration
  + Provides secure access to student profile
* Payment Processing System
  + Facilitates online and on-site transactions and refunds
  + Track revenue and integrates with financial reports
* University Event Calendar
  + Synce event schedules to avoid overlaps
  + Display real-time availability to users

1. **Project Goals**
2. Streamline Event Check-in
   * Enable fast and secure event check-in using student ID and QR code to reduce queues and manual tracking
3. Simplify Event Management
   * Allow event organizers to easily create, update, and monitor events through a user-friendly interface
4. Enhance Student Experience
   * Provide student with a convenient way to view events, register, and make payments online or via mobile
5. Ensure Accurate Payment Handling
   * Integrate payment processing to ensure all transactions are tracked and reconciled correctly by finance staff
6. Improve Attendance and Revenue Reporting
   * Generate real-time attendance date and financial reports for performance analysis and decision-making
7. Improve Attendance Tracking
   * Implement reliable QR code-based check-in to accurately record event participants
8. Optimize for Mobile Use
   * Ensure the system works well on mobile devices for convenience check-ins and ticket access
9. **Introduction**

This document identifies and describes the context objects (actors, external systems, and physical objects) and requirements sources for the Campus Event Check-in System. The system integrates with the university’s Student Identification Database and Payment Processing System to streamline event attendance tracking, ticket verification, and on-site purchases.

1. **System Boundary**

The system interacts with:

* Actor: Students, Event Organizer, Admin
* External Systems: Student Identification Database, Payment Processing System, University Event Calendar
* Physical Objects: Student Id Card, Check-in Station, Mobile Devices

1. **Context Objects**

**3.1 Actors**

|  |  |  |
| --- | --- | --- |
| Actor | Role | Interaction with System |
| Student | * Primary user * Register for events * Check in * Purchase ticket | * Log in via Student ID * Edit Profile * Browses events * Registers for events * Scans QR/ID at check-in * Pays for tickets online * View/download QR code * View purchase history * Refund |
| Event Organizer | * Manage events * Verify ticket * Track attendance * Assist on-site ticket purchases * View attendance reports | * Add, edit and delete events * View and generate attendance reports * Validate check-in * Monitor and update attendance * Help students buy tickets on-site |
| Admin | * Manage student account * Manage Event * Reconciles payment * Generates revenue reports * View attendance reports | * Modify student account information * Create, edit event details * Create financial reports on ticket sales * Audits transactions * View and generate attendance reports * Handle request refund |

**3.2 Requirements Sources**

**External Systems:**

* Student Identification Database:
  + Validated student credentials and enrollment status in real time
  + Provides secure access to student profile for editing
* Payment Processing System:
  + Facilitates online and on-site ticket purchases and refund
  + Secures transaction data and syncs payment records with revenue reports
* University Event Calendar:
  + Syncs event details (date, time, venue) for student browsing
  + Prevent scheduling conflicts by auto-updating event availability

**Physical Components:**

* Mobile Devices:
  + Students use smartphones to display QR tickets
  + Event organizers use tablet or mobile to scan QR ticket, process on-site purchase, and view attendance dashboard, manage event
* Desktop Devices:
  + Admin handle refund request, view attendance report, manage event

1. **Context Diagram**

A diagram with text in center

AI-generated content may be incorrect.

1. **Assumptions and Constraints**

Assumptions

* All students have valid student IDs for login and check-in
* Event locations will have internet access
* The University Events Calendar will provide accuracy of event details
* Students will use their smartphones or devices to scan QR codes for check-in

Constraints

* Must comply with university data policies
* Payment processing must use approved vendors
* System must work with existing Student ID formats