Chapter 1: Introduction

1.1 Purpose

The purpose of the project is to develop a digital check-in platform for campus events that seamlessly integrates with the university's student identification database and payment system.

The system aims to automate and streamline the process of event attendance tracking, ticket verification, and on-site transactions, ensuring an efficient, secure, and user-friendly experience for students and event organizers.

Integration of these components will enable real-time monitoring of attendance records and payments, reducing administrative burdens and enhancing overall event management capabilities within the campus environment.

1.2 Scope

Campus Event Check-in System with Student ID and Payment Integration is created in order to streamline the process of campus event attendance tracking, ticket verification, and payment processing for students and event organizers.

Campus Event Check-in System shall facilitate the following operations:

- I. Check-in to campus events using student ID verification.
- II. Verify event tickets digitally.
- III. Process on-site payments through integrated payment gateways.
- IV. Provide real-time attendance and transaction records to event organizers.

1.3 Product Perspective

The Campus Event Check-in System is an integrated digital platform that operates as an extension of the university's event management and student information infrastructure. It interacts with the university's student database to authenticate users and with a payment gateway to process event-related transactions. The system supports two main user roles: students and event organizers. Students use the system to browse available

events, register, make payments, and check in using QR code. Organizers create events, manage attendee data, and monitor attendance status.

1.3.1 System Interface

The system interface requirements describe how the Campus Event Check-in System interacts with external systems such as the university's student database, payment gateway, event management modules, and notification services **Table 1.3.1.1**.

Table 1.3.1.1 System Interfaces Requirements

Requirement ID	Description	Priority	Author
REQ_SI001	The system shall integrate with the university student database to authenticate student identities and retrieve relevant information during registration and check-in.	High	Azhar
REQ_SI002	The system shall connect to a third-party payment gateway to process event payments securely, providing real-time confirmation of transaction status.	High	Ainee
REQ_SI003	The system shall interface with device cameras or scanners to scan student IDs or QR codes for efficient check-in and attendance tracking.	Medium	Alkatheri
REQ_SI004	The system shall be accessible via the latest versions of Chrome and Firefox on Windows, Linux, and Mac to ensure broad compatibility and usability.	High	Yousef
REQ_SI005	The system may optionally integrate with an email/SMS service to send notifications such	Low	Yousef

as	registration	confirmations	or	event	
rem	ninders to stud	ents.			

1.3.2 User Interface

The user interface (UI) requirements define the visual and interactive characteristics of the Campus Event Check-in System. These specifications aim to ensure consistency, clarity, and accessibility for end users across various devices **Table 1.3.2.1.**

Table 1.3.2.1 User Interface Requirements

Interface ID	Description	Priority	Author
REQ_UI001	The GUI for the Campus Event Check-in System will use three background colors: White (RGB Hex: #FFFFFF) as the primary color, Navy Blue (RGB Hex: #001F3F) as the secondary color, and Emerald Green (RGB Hex: #2ECC71) for emphasis elements such as confirmation banners or successful check-in indicators.	High	Yousef
REQ_UI002	The system will use two main font colors: Black (RGB Hex: #000000) on light backgrounds and White (RGB Hex: #FFFFFF) on dark backgrounds to ensure readability and accessibility for all user types.	High	Yousef
REQ_UI003	The font family used will be "Poppins" for all headings and titles, and "Roboto" for body text across both desktop and mobile versions of the application, to ensure modern and clean visual presentation.	Medium	Yousef
REQ_UI004	The minimum base font size will be set to 16pt to ensure clarity on both mobile and desktop devices. Font resizing through accessibility settings will also be supported.	High	Yousef

1.3.3 Hardware Interface

The Campus Check-in application will be compatible with any desktop or mobile device with the following specifications **Table 1.3.3.1**.

Table 1.3.3.1 Required Hardware Interfaces

Interface ID	Description	Priority	Author
REQ_H1001	The device must be equipped with a processor that is a 32-bit, ARM or x86, processor regardless of brand or manufacturer.	High	Azhar
REQ_H1002	The device must be equipped with at least 2GB of Random Access Memory (RAM).	High	Azhar
REQ_H1003	The device must include a secondary storage drive with a minimum of 1GB of free space.	High	Azhar
REQ_H1004	The device must be equipped with a network adapter that is compliant with the IEEE 802 family of standards.	High	Azhar
REQ_H1005	The device must be equipped with a display.	High	Azhar

1.3.4 Software Interface

The Campus Check-in application requires other software products to function properly. The interfaces between The Campus Check-in application and other software products are described in **Table 1.3.4.1**.

Table 1.3.4.1 Required Software Interfaces

Category	Name	Version Number	Purpose	Reference
Database	phpMyAdmin	5.2.1	Used to create, store,	phpMyAdmin
			modify, and delete	official page

			event, user, and registration data.	
Operating	Microsoft	Windows XP or later	Runs browser-based	Chrome Browser
System	Windows		application for admin and student users.	system requirement
	macOS	High Sierra 10.13 or later	Supports browser access on Apple devices.	macOS official site
	Linux	Ubuntu 18.04+, Debian 10+, openSUSE 15.2+, Fedora 32+	Runs the system via browser on Linux environments.	Linux distributions' sites
	Android	Android 7.0 Nougat or later	Accesses system via mobile browsers.	Android system requirements
	iOS	iOS 14.0 or later	Accesses system via Safari or Chrome on iPhones/iPads.	iOS system requirements
Browser	Google Chrome	113.0.5672.64	Primary browser interface used to access the system.	Chrome official page
	Microsoft	112.0.1722.48	Alternative browser to	Microsoft Edge
	Edge		access the system.	official page
	Safari	16.4.1	For iOS/macOS users to access the system.	Safari official page
	Opera	105.0.4970.63	Optional browser supported for accessing the platform.	Opera official page
Screen Reader	Speechify	9.35.0	Assists visually impaired users by reading onscreen content aloud.	Speechify official page

1.3.5 Communication Interface

Table 1.3.5.1 shows an overview of the communication interfaces used in the Campus Event Check-in System. It lists each interface or protocol along with its purpose, type of communication, and the users involved.

Table 1.3.5.1 Communication Interface Requirements

Requirement ID	Interface/Protocol	Purpose	Туре	Users
REQ_CI001	HTTP/HTTPS	Allows secure access to the web-based system via modern browsers on any device.	System- to-User	Students, Event Organizers, Admin Staff
REQ_CI002	RESTful API (JSON)	Enables secure interaction between frontend and backend for registration, login, and payments.	System- to- System	System Frontend, System Backend
REQ_CI003	WebRTC	Supports real-time access to device cameras for QR code scanning during check-in.	System- to-Device	Students, Event Organizers
REQ_CI004	SMTP / Email API	Sends registration confirmations, payment receipts, and event reminders via email.	System- to-User	Students

REQ_CI005	TLS/SSL	Encrypts all	Security	All System
		communication	(System-	Users
		between users and	to-User)	
		the system to ensure		
		privacy and data		
		integrity.		
REQ_CI006	TCP/IP	Provides reliable	Local	Administrative
		network connectivity	Network	Staff, IT
		across campus		Infrastructure
		systems for accessing		
		the application.		

1.3.6 Product Functions

Table 1.3.6.1 shows an overview of the core features to be implemented in the Campus Event Check-in System. Each feature is identified by a unique ID and includes a brief description along with the user roles that can access it.

Table 1.3.6.1 Campus Event Check-in System Function Table

Feature ID	Feature	Description	Accessible Roles
REQ_F001	Login	Allows users to securely log into the system.	Student, Event Organizer
REQ_F002	View Available Event	Displays a list of upcoming events open for registration.	Student
REQ_F003	View Event Detail	Provides detailed information about a selected event.	Student
REQ_F004	Register for Event	Enables students to register for a selected event.	Student

REQ_F005	Make Payment	Allows students to pay for event tickets.	Student
REQ_F006	Receive e- Ticket/QR Code	Generates a QR code for the student upon successful registration and payment.	Student (System)
REQ_F007	Show QR Attendance for Event	Displays the QR code used for scanning during check-in.	Student
REQ_F008	View Registration History	Shows a history of past registered events.	Student
REQ_F009	Create New Event	Allows organizers to create a new event.	Event Organizer
REQ_F010	Set Event Detail	Enables organizers to enter event name, date, time, and location.	Event Organizer
REQ_F011	View Events	Displays a list of events created by the organizer.	Event Organizer
REQ_F012	View Registrations with Attendance Status	Allows organizers to view who has registered and their attendance status.	Event Organizer
REQ_F013	Check-in Upon Arrival	Enables organizers to scan QR codes or student IDs to verify attendance.	Event Organizer

1.3.7 Use Case Diagram

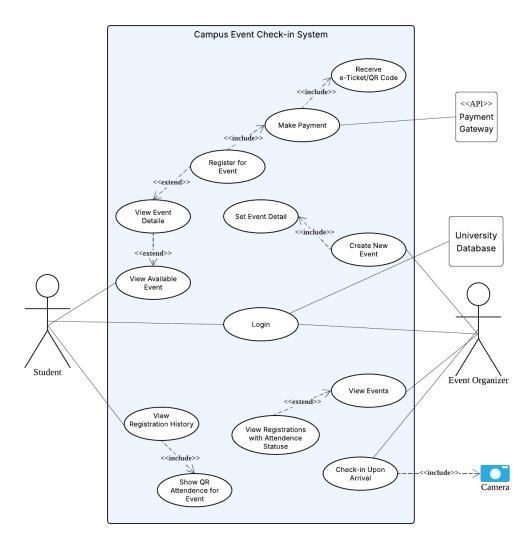


Figure 1.3.7.1 Use Case Diagram

1.3.8 User Characteristics

This section describes the end users of the Campus Event Check-in System and their expected level of knowledge. These characteristics help determine how the system should be designed for usability and accessibility. **Table 1.3.8.1** summarizes the intended users and their required understanding of the system.

Table 1.3.8.1 Intended Users and Expected Knowledge

Role	Description	Expected Knowledge
Student	University students who will use the	Basic understanding of web
	system to view events, register, make	browsing, online form usage, and
	payments, and check in.	scanning QR codes.
Event	Authorized university staff or student	Familiarity with web forms,
200110	rationized aniversity stair or student	Tarrinarity With Web 1811113,
Organizer	committees managing events,	participant tracking, and scanning
	registrations, and check-ins.	devices for check-in.

1.3.9 Limitations

Several limitations may affect the design, development, and usage of the system. These limitations must be considered to ensure that the system remains secure, scalable, and compliant.

- The system must comply with regional data protection laws to protect student privacy.
- Compatibility with assistive technologies (such as screen readers) is required for accessibility.
- Support for multiple languages may be needed in the future to cater to a diverse user base.

- The system must include secure login procedures and encryption for data in transit and at rest.
- User authentication must be robust to prevent unauthorized access.
- Measures must be in place to ensure data integrity and prevent corruption or loss.
- The system should be scalable to support growing numbers of users and data without performance loss.
- Key features must remain responsive, especially for time-sensitive operations like check-in.
- Regular system maintenance is required to address bugs, vulnerabilities, and browser compatibility.
- Compatibility issues may occur when integrated platforms are updated.
- Training resources and user documentation should be available to support users with limited technical expertise.

1.3.10 Assumptions and Dependencies

The development and deployment of the system are based on the following assumptions and dependencies:

- The university will provide access to its student information database for identity verification.
- A secure and reliable internet connection is available at event locations.
- Third-party services like payment gateway APIs will remain stable and available.
- Users (students and organizers) will have access to compatible browsers and devices.
- The university will assign responsible personnel for ongoing maintenance and updates.

• External systems used for integration (student database, payment gateway) must maintain backward compatibility.

1.3.11 Definitions

Table 7 provides the definitions of terms, acronyms, and keywords used throughout this document.

Terms, Acronyms and Word	Definition
Campus Event Check-in	The proposed web-based application to manage
System	student event participation, registration, and attendance.
Student	A university-registered individual who can register and check in to events.
Event Organizer	A staff or authorized user responsible for creating events and managing check-ins.
QR Code	A unique code generated after registration used to check in at the event venue.
Payment Gateway	A third-party service used to process online event payments securely.
Check-in	The process of confirming a student's attendance using their ID or QR code.
REST API	An interface using HTTP methods for client-server communication in the system.

Chapter 2: References

Chapter 2: Requirements

Requirements are the functionalities, behaviors, qualities, and constraints that the final system must fulfill. This chapter outlines the functional and non-functional requirements necessary for the successful implementation of the Campus Event Check-in System. Each requirement is described in detail, and diagrams are provided when necessary to illustrate system behavior, user interactions, and data flows. This section also includes any supporting information that aids in understanding or validating the system's expected operations and performance.

2.1 External Interfaces

This section details the external interface requirements of the Campus Event Check-in System. It outlines the actions available in the user interfaces and specifies the expected inputs and outputs for each interaction. These interfaces are designed to ensure a smooth and intuitive experience for users while supporting secure and efficient communication with external systems such as student databases, payment gateways, and scanning devices. The interfaces described here serve as the bridge between users and system functionalities.

2.1.1 Login User Interface

Since both the Student and the Event Organizer share the same login interface in the Campus Event Check-in System, the following tables **Table 2.1.1.1- Table 2.1.1.4** describe the common interface elements used for authentication, applicable to both user types.

Table 2.1.1.1 REQ_IO001 table

Requirement ID	REQ_IO0001	Version	1.0	
Item	Login Button (Input)			
Item Description	A button labelled "Login."			
Item Purpose	Initiates the submission of login credentials for authentication.			
Input Format	Button Valid Input Not Applicable			
Related I/O	REQ_IO0002, R submission)	EQ_IO0003 (Both field	ds must be filled for	

Author	Sulaiman

Table 2.1.1.2 REQ_IO0002 table

Requirement ID	REQ_IO0002	Version	1.0	
Item	Student ID Field	it ID Field (Input)		
Item Description	A text field labelled "Student ID."			
Item Purpose	Allows the user to input their Student ID for submission.			
Input Format	String Valid Input ASCII code from decimal 32 to			
			126	
Related I/O	None			
Author	Sulaiman			

Table 2.1.1.3 REQ_IO0003 table

Requirement ID	REQ_IO0003	Version	1.0	
Item	Password Field	ield (Input)		
Item Description	A text field labelled "Password."			
Item Purpose	Allows the user to input their password for submission.			
Input Format	String Valid Input ASCII code from decimal 32 to			
			126	
Related I/O	None			
Author	Sulaiman			

Table 2.1.1.4 REQ_IO0004 table

Requirement ID	REQ_IO0004	Version	1.0	
Item	Failure Message (Output)			
Item Description	A toast message displaying a failure message.			
Item Purpose	To notify the end user that the login was unsuccessful.			
Input Format	Not Valid Input Not Applicable			
	Applicable			
Related I/O	REQ_IO0001 (Only displayed after submitting input)			
Author	Sulaiman			

2.1.2 View Available Events Interface

Since the feature to view available events is exclusive to the Student user in the Campus Event Check-in System, the following **Table 2.1.2.1** describe the interface elements that enable students to access, browse, and explore the list of upcoming campus events.

Table 2.1.2.1 REQ_IO0101 table

Requirement ID	REQ_IO0101			
Item	Event blocks (input)			
Item description	A rectangle block with image and title of the event			
Item purpose	Have a quick visual look for available events			
Input format	Button Valid Input Not Applicable			
Related I/O	None			
Author	Lim Ai Nee			

2.1.3 Event details

Once a student selects an event from the available list, the system displays detailed information about that specific event. The following tables (Table XX.X – Table XX.X) define the interface components used to present event details, enabling students to make informed decisions before registration or attendance.

Table 2.1.3.1 REQ_IO0201 table

Requirement ID	REQ_IO0201	Version	1.0	
Item	Event's image (output)			
Item description	A visual representation of the event		nt	
Item purpose	Let user easily recognize the event			
Input format	None Valid Input None			
Related I/O	REQ_IO0101 is pressed			
Author	Lim Ai Nee			

Table 2.1.3.2 REQ_IO0202 table

Requirement ID	REQ_IO0202	Version	1.0	
Item	Event title (output)			
Item description	A text field with	A text field with event title		
Item purpose	Let user knows	Let user knows the event official name		
Input format	None	None Valid Input None		
Related I/O	REQ_IO0101 is pressed			
Author	Lim Ai Nee			

Table 2.1.3.3 REQ_IO0203 table

Requirement ID	REQ_IO0203	Version	1.0	
Item	Event date (output)			
Item description	A text field with starting date and time and ending date and time			
Item purpose	To let user know when is the event happening and make a schedule			
Input format	None Valid Input None			
Related I/O	REQ_IO0101 is pressed			
Author	Lim Ai Nee			

Table 2.1.3.4 REQ_IO0204 table

Requirement ID	REQ_IO0204	Version	1.0
Item	Event location (output)		
Item description	A text field that shows where the event held and its address		
Item purpose	To let user know where to go for the event		

Input format	None	Valid Input	None
Related I/O	REQ_IO0101 is pressed		
Author	Lim Ai Nee		

Table 2.1.3.5 REQ_IO0205 table

Requirement ID	REQ_IO0205	Version	1.0	
Item	Event capacity (output)			
Item description	A text field that shows how many slots for participants			
Item purpose	To let user know how limited slots of the events			
Input format	None Valid Input None			
Related I/O	REQ_IO0101 is pressed			
Author	Lim Ai Nee			

Table 2.1.3.6 REQ_IO0206 table

Requirement ID	REQ_IO0205	Version	1.0	
Item	Event ticket price (output)			
Item description	A text field that shows the price of ticket to enter the event			
Item purpose	To let user knows the cost required to attend the event			
Input format	None Valid Input None			
Related I/O	REQ_IO0101 is pressed			
Author	Lim Ai Nee			

Table 2.1.3.7 REQ_IO0207 table

Requirement ID	REQ_IO0207	Version	1.0
Item	Event's remark (output)		
Item description	A text field that contains other detail about the event		
Item purpose	To let user knows the any additional information about the event such as stuff to bring, attire and others		
Input format	None Valid Input None		
Related I/O	REQ_IO0101 is pressed		
Author	Lim Ai Nee		

Table 2.1.3.8 REQ_IO0208 table

Requirement ID	REQ_IO0208	Version	1.0
Item	Register event (input)		
Item description	A button with a text of "Register Event" on it		
Item purpose	Allow user to registe	r event	
Input format	Button Valid Input Not applicable		
Related I/O	REQ_IO0301		
Author	Lim Ai Nee		

2.1.4 Register for Event

The registration functionality allows students to confirm their participation in a selected campus event. The following tables (Table XX.X – Table XX.X) outline the user interface elements that facilitate the event registration process, including input fields and confirmation messages relevant to successful enrollment.

Table 2.1.4.1 REQ_IO0301 table

Requirement ID	REQ_IO0301	Version	1.0
Item	Name field (input)		
Item description	A text field with user's account name		
Item purpose	User can choose to re-enter the text field to desire input		
Input format	String Valid Input "{name}		
Related I/O	REQ_IO0208 is pressed		
Author	Lim Ai Nee		

Table 2.1.4.2 REQ_IO0302 table

Requirement ID	REQ_IO0302	Version	1.0		
Item	Student ID field (input)	Student ID field (input)			
Item description	A text field with user's	A text field with user's account student ID			
Item purpose	User can choose to re-	enter the	text field to desire input		
Input format	String Valid ASCII code from decimal 48 to 57 and 1 for 1 fo				
Related I/O	REQ_IO0208 is pressed				
Author	Lim Ai Nee				

Table 2.1.4.3 REQ_IO0303 table

Requirement ID	REQ_IO0303	Version	1.0	
Item	Mobile number field (input)			
Item description	A text field labelled with "mobile number"			
Item purpose	To let organizer to contact the participant			
Input format	String Valid Input "{area}-{subscriber}			
Related I/O	REQ_IO0208 is pressed			
Author	Lim Ai Nee			

Table 2.1.4.4 REQ_IO0304 table

Requirement ID	REQ_IO0304	Version	1.0		
Item	Email address field (i	Email address field (input)			
Item description	A text field labelled v	A text field labelled with "email"			
Item purpose	To let organizer inform participant any event details and information				
Input format	String Valid Input "{name}@{domain}				
Related I/O	REQ_IO0208 is pressed				
Author	Lim Ai Nee				

Table 2.1.4.5 REQ_IO0305 table

Requirement ID	REQ_IO0305	Version	1.0
Item	Ticket payment (inpu	ut)	

Item description	A button labelled with "Pay for Ticket"		
Item purpose	To let user proceed to payment process		
Input format	Button Valid Input Not applicable		
Related I/O	REQ_IO0208 is pressed		
Author	Lim Ai Nee		

2.1.5 Make Payment

For events that require a fee, the system provides an integrated payment interface to ensure a seamless transaction process. The following tables (Table XX.X – Table XX.X) specify the user interface components involved in the payment workflow, supporting secure input of payment details and confirmation of successful transactions.

Table 2.1.5.1 REQ_IO0401 table

Requirement ID	REQ_IO0401	Version	1.0	
Item	Pay button (input)			
Item Description	A button with the text "Pay"			
Item purpose	To initiate submit and confirm payment information			
Input format	Button Valid Input NA			
Related I/O	REQ_IO0402, REQ_IO0403, REQ_IO0404, REQ_IO0405			
Author	Azhar			

Table 2.1.5.2 REQ_IO0402 table

Requirement ID	REQ_IO0402	Version	1.0
Item	Credit Card Number Field (input)		
Item Description	Input field labelled "Credit Card Number"		
Item purpose	To input the credit card number		
Input format	String Valid Input ASCII Code 48 to 57		
Related I/O	REQ_IO10401		
Author	Azhar		

Table 2.1.5.3 REQ_IO0403 table

Requirement ID	REQ_IO0403	Version	1.0
Item	Expiry Date Field (input)		
Item Description	Input field labelled "Expiry Date"		

Item purpose	To input the Expiry Date of the Credit Card		
Input format	String Valid Input Date in the format		
			MM/YY
Related I/O	REQ_IO10401		
Author	Azhar		

Table 2.1.5.4 REQ_IO0404 table

Requirement ID	REQ_IO0404	Version	1.0
Item	CVV/CVC Security Code Field (input)		
Item Description	Input field labelled "CVV/CVC"		
Item purpose	To input the CVV/CVC security code of the Credit Card		
Input format	Integer	Valid Input	Integer of length 3
Related I/O	REQ_IO10401		
Author	Azhar		

2.1.6 Receive e-ticket/QR code

Upon successful registration and payment, the system generates a digital ticket in the form of a QR code. The following tables (Table XX.X – Table XX.X) describe the interface components responsible for delivering the e-ticket to the student, facilitating a secure and efficient check-in process at the event venue.

Table 2.1.6.1 REQ_IO501 table

Requirement ID	REQ_IO501	Version	1.0
Item	Event Name Label (output)		
Item Description	Label displaying the name of the event		
Item purpose	To display the name of the event for verification by user and event staff		
Input format	Not Applicable	Valid Input	Not Applicable
Related I/O	REQ_IO604 (Selected an event from registration history)		
Author	Azhar		

Table 2.1.6.2 REQ_IO502 table

Requirement ID	REQ_IO502	Version	1.0
Item	Details of events (Output)		
Item Description	List of labels displayi	ng the details of even	t, such as date and a
	brief description		
Item purpose	Allows user view details of past events		
Input format	None	Valid Input	Not Applicable
Related I/O	REQIO602		
Author	Azhar		

Table 2.1.6.3 REQ_IO502 table

Requirement ID	REQ_IO503	Version	1.0

Item	QR Code (Output)		
Item Description	A QR Code generated specific to the user and event		
Item purpose	To serve as a ticket and for event staff to verify attendance		
Input format	Not Applicable Valid Input Not Applicable		
Related I/O	None		
Author	Azhar		

2.1.7 View Registration History

The system provides students with access to their past event registrations through a dedicated history interface. The following tables (Table XX.X – Table XX.X) define the interface elements that allow students to view, track, and verify their previous event participation records in an organized manner.

Table 2.1.7.1 REQ_IO0601 table

Requirement ID	REQ_IO0601	Version	1.0
Item	View Event History (Input)		
Item Description	A button with the label "View Event History"		
Item purpose	Allows user to view past events that they have registered for		
Input format	Button Valid Input Not Applicable		
Related I/O	None		
Author	Azhar		

Table 2.1.7.2 REQ_IO602 table

Requirement ID	REQ_IO602	Version	1.0
Item	Events (Output)		
Item Description	List of labels displaying names of past events		
Item purpose	To display the event history of the user		
Input format	None Valid Input None		
Related I/O	REQIO603, REQIO604		
Author	Azhar		

Table 2.1.7.3 REQ_IO603 table

Requirement ID	REQ_IO603	Version	1.0
Item	View Details (Input)		
Item Description	Button next to each "Event" label		

Item purpose	Allows users to view details of past events		
Input format	Button Valid Input Not Applicable		
Related I/O	REQIO602, REQIO 605		
Author	Azhar		

Table 2.1.7.4 REQ_IO604 table

Requirement ID	REQ_IO604	Version	1.0	
Item	Generate QR Code (Input)			
Item Description	A button with the label "Generate QR Code"			
Item purpose	Allows user to generate QR code to verify ticket and attendance			
Input format	Button	Valid Input	Not Applicable	
Related I/O	REQIO501 (goes to View e-Reciept/QR code)			
Author	Azhar			

2.1.8 Show QR Attendance

To support on-site verification, the system allows event organizers to scan and display student attendance using QR codes. The following tables (Table XX.X – Table XX.X) detail the interface elements involved in scanning, validating, and presenting QR-based attendance records during event check-in.

Table 2.1.8.1 REQ_IO0701 table

Requirement ID	REQ_IO0701	Version	1.0	
Item	QR Code (output)			
Item description	A unique QR code generated for the registered event			
Item purpose	Allows the event staff to scan and verify attendance			
Input format	None Valid Input Not Applicable			
Related I/O	Triggered after successful registration			
Author	Yousef			

Table 2.1.8.2 REQ_IO0702 table

Requirement ID	REQ_IO0702	Version	1.0	
Item	Event Name Label (output)			
Item description	Displays the title of the	Displays the title of the event below the QR code		
Item purpose	Helps student identify which event the QR code belongs to			
Input format	None Valid Input Not Applicable			
Related I/O	Shown with QR code			
Author	Yousef			

Table 2.1.8.3 REQ_IO0703 table

Requirement ID	REQ_IO0703	Version	1.0	
Item	Back Button (input)			
Item description	A button labeled "Back" to return to the dashboard			
Item purpose	Allows user to exit the QR screen			
Input format	Button Valid Input Button Click			
Related I/O	Linked to user dashboard			
Author	Yousef			

2.1.9 Set Event Details

Event organizers are responsible for defining the details of each event they create within the system. The following tables (Table XX.X — Table XX.X) outline the interface components that enable organizers to input and manage event-related information, such as title, description, date, time, venue, and capacity.

Table 2.1.9.1 REQ_IO0801 table

Requirement ID	REQ_IO0801	Version	1.0
Item	Event Title Field (input)		
Item description	A text field labeled "Event Title"		
Item purpose	Allows organizer to name the event		
Input format	String Valid Input Min. 3 characters		
Related I/O	Linked to create event process		
Author	Yousef		

Table 2.1.9.2 REQ_IO0802 table

Requirement ID	REQ_IO0802	Version	1.0
Item	Event Date Picker (input)		
Item description	A calendar picker for choosing the event date		
Item purpose	Ensures valid and future event date is selected		
Input format	Date Valid Input Format: YYYY-MM-DD		
Related I/O	REQ_IO0808 (submit button)		
Author	Yousef		

Table 2.1.9.3 REQ_IO0803 table

Requirement ID	REQ_IO0803	Version	1.0	
Item	Event Time Field (input)			
Item description	Input field for eve	Input field for event start and end time		
Item purpose	Specifies when the event begins and ends			
Input format	Time Valid Input HH:MM (24-hour format)			
Related I/O	REQ_IO0808			
Author	Yousef			

Table 2.1.9.4 REQ_IO0804 table

Requirement ID	REQ_IO0804	Version	1.0
Item	Location Field (input)		
Item description	A text field for entering event location		
Item purpose	Specifies where the event will be held		
Input format	String Valid Input Valid campus address		
Related I/O	REQ_IO0808		
Author	Yousef		

Table 2.1.9.5 REQ_IO0805 table

Requirement ID	REQ_IO0805	Version	1.0
Item	Capacity Field (input)		
Item description	Field to define number of participant slots		

Item purpose	Limits how many users can register		
Input format	Integer Valid Input 1 to 5000		
Related I/O	REQ_IO0808		
Author	Yousef		

Table 2.1.9.6 REQ_IO0806 table

Requirement ID	REQ_IO0806	Version	1.0
Item	Ticket Price Field (input)		
Item description	Field to input the price of the event ticket		
Item purpose	Determines event cost for participants		
Input format	Float Valid Input e.g., 0.00 to 999.99		
Related I/O	REQ_IO0808		
Author	Yousef		

Table 2.1.9.7 REQ_IO0807 table

Requirement ID	REQ_IO0807	Version	1.0
Item	Description Field (input)		
Item description	Optional text field for additional notes		
Item purpose	Adds special instructions (e.g., dress code)		
Input format	String Valid Input Max. 255 characters		
Related I/O	REQ_IO0808		
Author	Yousef		

Table 2.1.9.8 REQ_IO0808 table

Requirement ID	REQ_IO0808	Version	1.0		
Item	Create Event Button (input)				
Item description	A button labeled "Create Event"				
Item purpose	Finalizes and submits event details				
Input format	Button Valid Input Click action				
Related I/O	Submits data from REQ_IO0801-0807				
Author	Yousef				

2.1.10 View Events (Organizer)

To facilitate event management, the system provides organizers with an interface to view a list of events they have created. The following tables (Table XX.X – Table XX.X) define the interface elements that support the organizer in monitoring, updating, or managing event entries efficiently.

Table 2.1.10.1 REQ_IO0901 table

Requirement ID	REQ_IO0901	Version	1.0	
Item	Events List (output))			
Item description	A scrollable list or grid showing all created events			
Item purpose	Allows organizer to view and manage existing events			
Input format	None Valid Input Not Applicable			
Related I/O	REQ_IO0902-0904			
Author	Yousef			

Table 2.1.10.2 REQ_IO0902 table

Requirement ID	REQ_IO0902	Version	1.0	
Item	Event Status Indicator (output)			
Item description	Badge showing event status (e.g., "Upcoming", "Completed")			
Item purpose	Helps organizer identify ongoing or past events			
Input format	None Valid Input Not Applicable			
Related I/O	REQ_IO0901			
Author	Yousef			

Table 2.1.10.3 REQ_IO0903 table

Requirement ID	REQ_IO0903	Version	1.0	
Item	Edit Button (input)			
Item description	Button labeled "Edit" for each listed event			
Item purpose	Allows organizer to make changes to event details			
Input format	Button Valid Input Click			
Related I/O	Links to Set Event Details form			
Author	Yousef			

Table 2.1.10.4 REQ_IO0904 table

Requirement ID	REQ_IO0904	Version	1.0
Item	Delete Button (input)		
Item description	A button labeled "Delete" shown for each event		

Item purpose	Lets organizer remove an event permanently		
Input format	Button Valid Input Confirmation pop-up required		
Related I/O	REQ_IO0901		
Author	Yousef		

2.1.11 View registrations and attendance status

To support effective event oversight, the system offers event organizers an interface to monitor participant registrations and their corresponding attendance status. The following tables (Table 2.1.10.1 – Table 2.1.10.5) define the user interface components that facilitate filtering, tracking, and exporting attendance-related data for each event.

Table 2.1.11.1 REQ_IO1001 table

Requirement ID	REQ_IO1001	Version	1.0	
Item	Registrations List (Output)			
Item description	A table displaying a list of students registered for a selected			
	event			
Item purpose	Enables the organizer to view all registered students for a			
	particular event			
Input format	Not Applicable Valid Input Not Applicable			
Related I/O	REQ_IO1005 (Event Selector)			
Author	Sulaiman			

Table 2.1.11.2 REQ_IO1002 table

Requirement ID	REQ_IO1002	Version	1.0
Item	Attendance Status Indicator (Output)		
Item	A status label showing whether the student has checked in		
description			
Item purpose	Helps organizers monitor and verify attendance		
Input format	Not Applicable	Valid Input	"Checked In" / "Not Checked In"
Related I/O	REQ_IO1001		
Author	Sulaiman		

Table 2.1.11.3 REQ_IO1003 table

Requirement ID	REQ_IO1003	Version	1.0
Item	Event Selector Dropdown (Input)		
Item description	A dropdown menu listing all events created by the organizer		
Item purpose	Lets the organizer select an event to view its registrations		
Input format	Dropdown Valid Input Selected Event ID		
Related I/O	REQ_IO1001		
Author	Sulaiman		

2.2 Function