



TRƯỜNG ĐẠI HỌC FPT

MINISTRY OF EDUCATION AND TRAINING

FPT UNIVERSITY

Capstone Project Document

Planify - Easy Event Planning Platform

Group 35		
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Acknowledgement

Definition and Acronyms

Acronym	Definition
AWS	Amazon Web Services
BA	Business Analysis
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
PM	Project Manager
SDD	Software Design Description
SPMP	Software Project Management Plan
SRS	Software Requirement Specification
UAT	User Acceptance Test
UC	Use Case
API	Application Program Interface

I. Project Introduction

1.1 Purpose

This chapter provides an overview of the project by introducing its background and the context in which the problem arises. It also presents a literature review of existing systems and relevant studies to highlight current limitations and challenges. Based on these insights, an initial direction for improvement is proposed through the development of a new system or solution.

1.2 Overview

1.2.1 Project Information

- English name: **Planify - Easy Event Planning Platform**
- Vietnamese name: **Planify - Nền tảng lập kế hoạch sự kiện dễ dàng**
- Project code: **PEP**
- Group name: **SEP490-G35**
- Software type: **Web Application**

1.2.2 Project Team

Full Name	Role	Email	Mobile
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Table 1.1 Project team

1.3 Product Background

In the context of higher education today, extracurricular activities, academic seminars, and community engagement programs play a crucial role in fostering students holistic skill development. However, at many universities, event planning and organization are still largely conducted manually or through fragmented tools such as Google Forms, Excel spreadsheets, or group messaging applications. This fragmented approach often results in a lack of standardization, significant time consumption, and reduced efficiency in event preparation.

At FPT University, extracurricular activities take place vibrantly and continuously throughout the year. As highlighted in the article “FPT University – A University Where Every Season Has Events and Students Experience Year-Round”¹, students constantly engage in a wide range of events, from welcoming freshmen through F-Camp to various cultural, sports, and academic

programs year-round. This dynamic environment demands that clubs and event organizers prepare event plans more quickly, professionally, and time-efficiently than ever before.

According to a study conducted at Van Lang University², the adoption of a digitized event preparation system helped streamline event planning processes, monitor progress more effectively, shorten organizational timelines, and improve collaboration among stakeholders.

Additionally, an internal survey conducted among student clubs at FPT University (Hanoi campus) revealed that:

- 68% of event organizers stated that planning and submitting event proposals for approval is the most time-consuming step in the entire process.
- 45% reported difficulties in tracking and assigning tasks to their team members.

Based on these findings, the project team proposes the development of Planify, a comprehensive event planning platform designed to digitize the entire workflow from proposal creation, approval, task delegation to progress tracking, with the core objective of helping student organizations plan events more easily, more quickly, and with significant time savings.

Planify will offer the following key features:

- Standardized electronic forms for event proposal creation
- Automated online approval workflows from organizers to campus managers
- Task assignment and flexible progress tracking tools
- A centralized student portal for discovering, registering for, and staying updated on upcoming events

Through Planify, event planning will become simpler, more streamlined, and time-saving, enabling FPT University students to fully embrace and enjoy the dynamic, vibrant experiences that the university offers.

Reference:

¹ FPT University – A University Where Every Season Has Events and Students Experience Year-Round: <https://daihoc.fpt.edu.vn/>

² Research at Van Lang University: <https://pubs.aip.org/aip/acp/article-abstract/>

1.4 Existing Solutions

1.4.1 EventCreate

EventCreate Websites offers a powerful platform with comprehensive tools for event planning and management, from website creation, registration management, to marketing and reporting. With high user ratings and 24/7 support

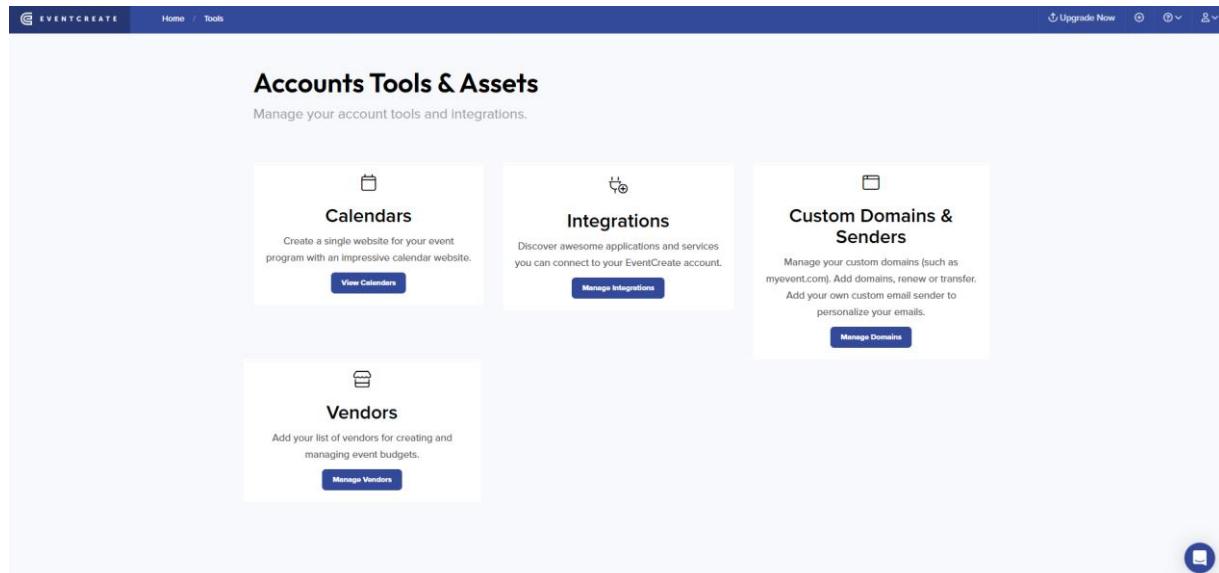


Figure 1.1 EventCreate

Link: <https://www.eventcreate.com>

System Actors:

- **Users:** This includes event planners, organizers, or any individual who manages events, from small-scale events like private parties to large-scale events like professional conferences.
- **Administrators:** Individuals or teams within an organization responsible for managing and maintaining the EventCreate platform, such as configuring or managing multiple events.
- **Customer Support:** EventCreate's support team, which provides 24/7 chat, email, or phone support to resolve user issues.

Features:

- **Event Website:** Create professional event websites in minutes, with beautiful design templates and HTML/CSS/JS customization without programming skills. The website is mobile-friendly and supports custom domains.
- **Payments:** Sell tickets online with no processing fees, optimizing revenue.
- **Invitations & Promotion Tools:** Send invitations via email or SMS, share event links, and track delivery performance with automated reminders.
- **Integrations:** Connect with platforms like Salesforce, MailChimp, Google Sheets, and more for added flexibility.
- **Team Collaboration:** Allows adding collaborators with different roles (co-planner, designer, viewer), enhancing team management.

- **Mobile Apps:** An iOS app is available for managing events on the go, but there is currently no Android app.

Pros:

- **User-friendly interface:** Many reviews emphasize that the platform is easy to use, even for those without technical skills.
- **Comprehensive Features:** Provides an all-in-one solution, from website creation, subscription management, to marketing and analytics, reducing the need for multiple tools.
- **Save time:** Automate tasks like sending invites and managing registrations, allowing users to focus on the creative aspects.
- **Highly customizable:** Users can personalize event websites and features to their needs, from colors, layouts to content

Cons:

- **Paid Features:** Some advanced features require upgrading to a paid plan, which may limit free version users.
- **Complex for large events:** The interface can become cumbersome when managing large or complex events, with many tabs and options to check.
- **No auto-save feature:** Users risk losing work if they forget to save manually, especially when working for long periods of time.

1.4.2 Aisle Planner

Aisle Planner is a software platform that helps event professionals, like wedding planners, manage everything from client outreach to event day. It offers tools like a custom CRM, budget management, and layout design, making it suitable for businesses that host multiple events. However, the subscription fee can be steep (\$60/month for 15 events), and there is no mobile app.

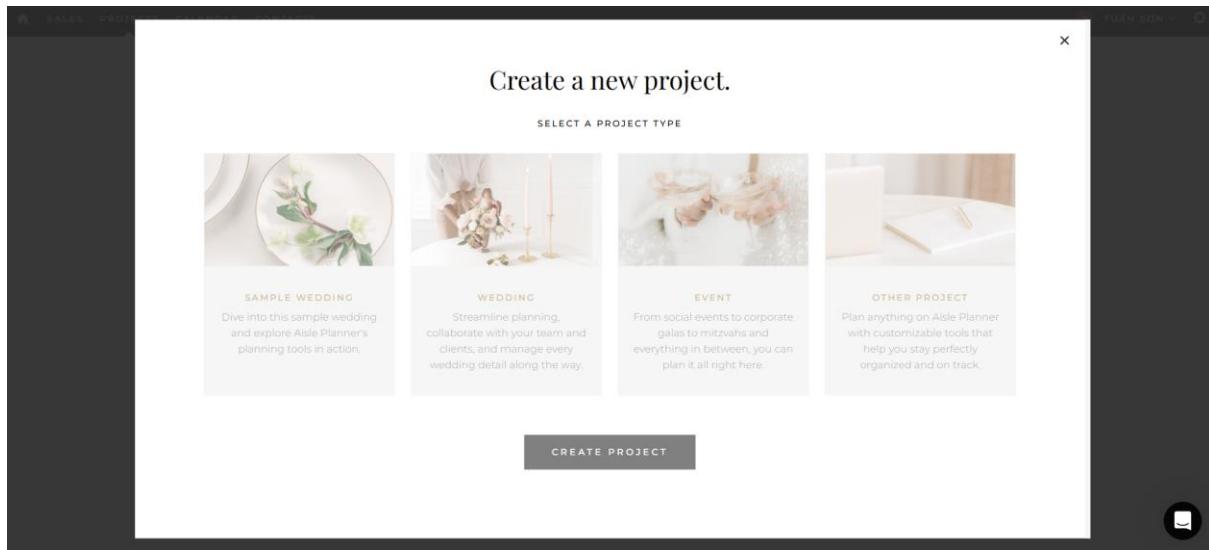


Figure 1.2 Aisle Planner

Link: <https://www.aisleplanner.com>

System actors:

- **User:** Professionals such as event planners, venues, caterers, floral designers, photographers, stylists, and entertainment providers.
- **Administrator:** An individual responsible for managing and maintaining the Monday.com platform for their organization.
- **Colleagues, Customers, Planning Partners:** People who can access the platform with different permissions, such as editing or viewing information.

Features:

- **Custom Dashboard:** Users can create custom dashboards to track their work and personal progress in a way that works best for them.
- **Time Management:** Integrated time tracking tool helps users effectively manage working time for each project.
- **Easily create schedules:** Create schedules, CAD-based layouts, vendor management, budgets, and project manuals.
- **Specific functions:** for weddings, like floor layout design and RSVP management.
- **Real-Time Collaboration:** Collaborate with colleagues, customers, partners, with real-time access and automatic task assignment.

Pros:

- **All-in-One Business & Event Management:** A comprehensive solution for marketing, sales, and project management, reducing the need for multiple platforms.
- **Customizable:** Customizable to fit unique business needs, with an intuitive, stylish, and easy-to-use interface.
- **Smart Planning Tool for Teams and Clients:** Useful tools with wedding specific functions, help maintain consistency between clients, ease work on event day.
- **Streamlined Solution:** Some couples may have access to the organization's established venues or plans, reducing the cost to the individual.

Cons:

- **High Cost:** Mainly for businesses planning multiple events, not suitable for individuals, with high subscription fees (\$60/month for 15 events).
- **Mobile App:** There is no mention of a mobile app, which could be a limitation for users who need to manage on their phones.
- **Performance:** Some reviews dislike the platform, despite the good planner, suggesting there is a difference in user experience.
- **Not flexible:** This application is only suitable for special events such as weddings

1.5 Business Opportunity

At FPT University, the continuous stream of extracurricular, academic, and community events throughout the year places significant pressure on student clubs and event organizers to plan quickly and efficiently. However, in reality, the event planning process is still largely

manual, relying on fragmented tools such as Google Docs, Google Sheets, and group messaging applications, leading to time-consuming processes, repetitive tasks, and a high risk of errors.

Internal surveys reveal that 68% of event organizers acknowledge that planning and submitting proposals for approval is the most time-consuming step in the entire event organization process. The absence of a centralized platform to support standardized proposal creation, fast approval workflows, clear task delegation, and real-time progress tracking is slowing down event preparation, directly impacting the operational efficiency of student organizations and the overall quality of events.

This strong need to shorten event planning time creates a clear business opportunity for Planify - a comprehensive digital platform that offers:

- Standardized electronic forms for event planning right from the start.
- Automated approval workflows to reduce waiting times.
- Intuitive tools for task assignment and progress tracking.
- A centralized portal for browsing, registering, and managing events.

By focusing on the core objective of saving event planning time, Planify not only addresses the urgent "pain points" faced by student organizations at FPT University but also lays the foundation for expansion to other campuses in the future.

1.6 Software Product Vision

Planify is a specialized software designed to support event planning, focusing on simplicity, efficiency, and maximizing time savings for users. The product is specifically developed for staff, lecturers, and students at FPT University Hanoi, with the goal of digitizing the entire event planning process - from filling in information, assigning tasks, tracking progress, to managing budgets. By integrating AI technology, Planify suggests planning steps quickly, minimizes manual operations, and optimizes resource allocation. In the future, the software will be expanded to other FPT campuses such as Da Nang, Can Tho, and Ho Chi Minh City, and eventually to universities nationwide. With an intuitive interface and smart operational workflow, Planify transforms event planning into an easy, accurate, and professional experience.

1.7 Project Scope & Limitations

1.7.1 Major Features

FE-01: Authentication

1. Login
2. Logout
3. Authorization
4. Change Password for Admin

FE-02: ManagerProfile

1. View Profile
2. Update Profile

FE-03: ManageEvent

1. List Event
2. Detail Event
3. Create Event
4. Update Event

FE-04: ManageTask

1. Create Task
2. Update Task
3. View Task List

FE-05: Manage Implementer

1. View List Implementer
2. Add Implementer

FE-06: Manage Campus Manager

1. View List Campus Manager
2. Add Campus Manager

FE-07: Manage Cost

1. Create Estimated Costs
2. Update Estimated Costs

FE-08: Admin Functions

1. View Dashboard
2. View UserList

FE-09: Manage Event Organizer

1. Create Event Organizer
2. Update Event Organizer

FE-10: Manage Campus

1. Create Campus
2. Update Campus

FE-11: Manage Sub-Task

1. Create Sub-Task
2. Update Sub-Task
3. Assign Sub-task

FE-12: Manage Event Category

1. Create Event Category
2. Update Event Category

FE-13:Manage Risk

1. Create Risk
2. Update Risk

FE-14:Mange Request

1. View Request
2. Approve Request
3. Reject Request

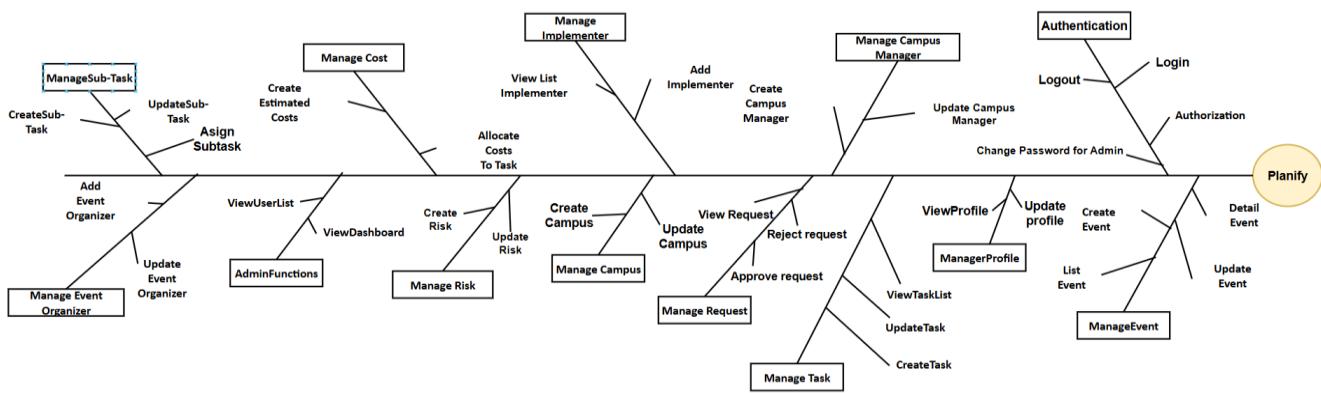


Figure 1.3 Major Feature Tree

1.7.2 Limitations & Exclusions

1.7.2.1 Limitations

- LI-1: The initial version of Planify is specifically designed for the internal processes of FPT University; applying it to other institutions will require further customization.
- LI-2: Planify was initially developed as a web-based platform; mobile applications are not available in the first release and will be considered in future development phases.
- LI-3: The AI functionality in Planify currently serves as a planning assistant by suggesting steps, while content creation and detailed scheduling still require manual input from the event organizers.

1.7.2.2 Exclusions

- EX-1: Planify does not directly handle tasks such as venue booking, logistics preparation, event decoration, or on-site staff coordination on the event day.
- EX-2: Planify only supports event planning and budget tracking; it does not manage participant fee collection, invoice payments, or vendor contract management.
- EX-3: The software does not include features for issuing electronic tickets or scanning QR codes for event attendee check-in.

II. Project Management Plan

2.1 Purpose

This chapter provides a comprehensive project management plan, detailing how the project will be organized, monitored, and executed. It covers essential components such as project scope, objectives, risk management, development process, quality assurance, and team responsibilities. The goal is to ensure the project is carried out efficiently and effectively through structured planning, clear role definitions, and well-established communication strategies.

2.2 Overview

2.2.1 Scope & Estimation

#	WBS Item	Complexity	Est.Effort (man-days)
1	<i>Authentication</i>		21
1.1	Login	Complex	8
1.2	Logout	Simple	3
1.3	Authorization	Medium	6
1.4	Change Password of Admin	Medium	4
2	<i>User Profile</i>		12
2.1	View Profile	Simple	4
2.2	Update Profile	Complex	8
3	<i>Event Management</i>		95
3.1	Create Event	Complex	12
3.2	Update Event	Complex	12
3.3	Delete Event	Medium	4
3.4	View Event Detail	Medium	6
3.5	Approve Event	Medium	6
3.6	Reject Event	Medium	6
3.7	Send Request	Medium	6

3.9	View All Events	Medium	4
3.10	Search Events	Medium	4
3.11	View Attended Event History	Medium	4
3.12	Add Favorite Event	Simple	4
3.13	Delete Favorite Event	Simple	2
3.14	View Favorite Events	Simple	2
3.15	View Draft Events	Simple	2
3.16	View My Events	Simple	3
3.17	Suggest Event Plan	Hard	8
4	<i>Event Organizer Management</i>		12
4.1	Create Event Organizer	Medium	4
4.2	Update Event Organizer	Medium	4
4.3	Delete Event Organizer	Simple	4
5	<i>Task & Sub-task Management</i>		44
5.1	Create Task	Medium	5
5.2	Update Task	Medium	5
5.3	Delete Task	Simple	4
5.4	Create Sub-task	Medium	8
5.5	Update Sub-task	Medium	6
5.6	Delete Sub-task	Simple	4
5.7	Assign Sub-task	Simple	4
5.8	View Sub-task List	Simple	4
5.9	View Task List	Simple	4
6	<i>Implementer Management</i>		16
6.1	View List Implementer	Medium	6
6.2	Add Implementer to Event	Medium	6

6.3	Delete Implementer from Event	Medium	4
7	<i>Registration & Participants</i>		22
7.1	Register for Event	Medium	6
7.2	Cancel Registration	Medium	4
7.3	View Registered Events	Medium	6
7.4	View Number of Registrants	Medium	6
8	<i>Risk & Cost Management</i>		38
8.1	Create Risk	Medium	6
8.2	Update Risk	Medium	6
8.3	Delete Risk	Simple	4
8.4	Create Cost	Medium	6
8.5	Update Cost	Medium	6
8.6	Delete Cost	Medium	4
8.7	Export Cost to Excel	Medium	6
9	<i>Event Category Management</i>		22
9.1	List Categories	Medium	6
9.2	Create Category	Medium	6
9.3	Update Category	Medium	6
9.4	Delete Category	Medium	4
10	<i>Dashboard</i>		12
10.1	View Dashboard	Complex	12
11	<i>Request Management</i>		8
11.1	My Requests	Medium	4
11.2	List of Event Requests	Medium	4
12	<i>Campus Manager</i>		8
12.1	Create Campus Manager	Medium	4

12.2	Update Campus Manager	Medium	4
13	Campus Management		4
13.1	Create Campus	Medium	2
13.2	Update Campus	Medium	2
14	Users Management		22
14.1	Import Users from Excel	Medium	8
14.2	View User List	Medium	6
14.3	Ban User	Medium	4
14.4	Unban User	Medium	4
Total Estimated Effort (man-days)			336

Table 2.1 Work Breakdown Structure (WBS) - Estimation of Effort

2.2.2 Project Objectives

#	Metric	Unit	Planned	Actual	Notes / References
1	Effort Usage	Person-day	336	336	Total effort allocated for the project.
2	Review Defects	No of defects	≤ 10 defects	5 defects	Defects found during review sessions
3	Unit Test Defects	No of defects	≤ 15 defects	8 defects	Defects found during unit test
4	Integration Test Defects	No of defects	≤ 8 defects	3 defects	Defects found during integration test
5	System Test Defects	No of defects	≤ 10 defects	2 defects	Defects found during system test
6	Timeliness	%	100%	95%	On time milestones/ All time milestones

7	Requirement Completeness	%	100%	97%	Completed Requirements/ Total Requirements (failed if <75%)
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Table 2.2 Quality Metrics

2.2.3 Project Risks

No	Risk Description	Avoidance Plan	Contingency Plan
R1	Project deadline delay	Break down tasks into smaller milestones with clear deadlines. Regularly track progress. Encourage proactive communication to detect issues early.	Adjust the plan if needed. Prioritize important tasks. Work overtime if necessary.
R2	Conflict among team members	Establish clear working rules. Encourage open communication among members.	Organize team meetings with the lecturer to identify causes and propose solutions.
R3	Members lack experience and technique skills	Conduct internal training and knowledge sharing among team members.	Experienced members provide guidance. Allocate more time for self-study and practice
R4	Technical issues	Research technical aspects thoroughly before implementation. Always have backup solutions.	Work as a team to find the best solutions. Seek guidance from lecturers or experts.
R5	Requirement changes	Clearly define requirements from the beginning. Discuss thoroughly with the lecturer to avoid major changes later.	If changes occur, all members must join a meeting to adjust the plan accordingly.

Table 2.3 Project Risk Assessment - Identified risks and mitigation strategies

2.3 Management Approach

2.3.1 Project Process

We have chosen to develop this project by using the Iterative and Incremental model.

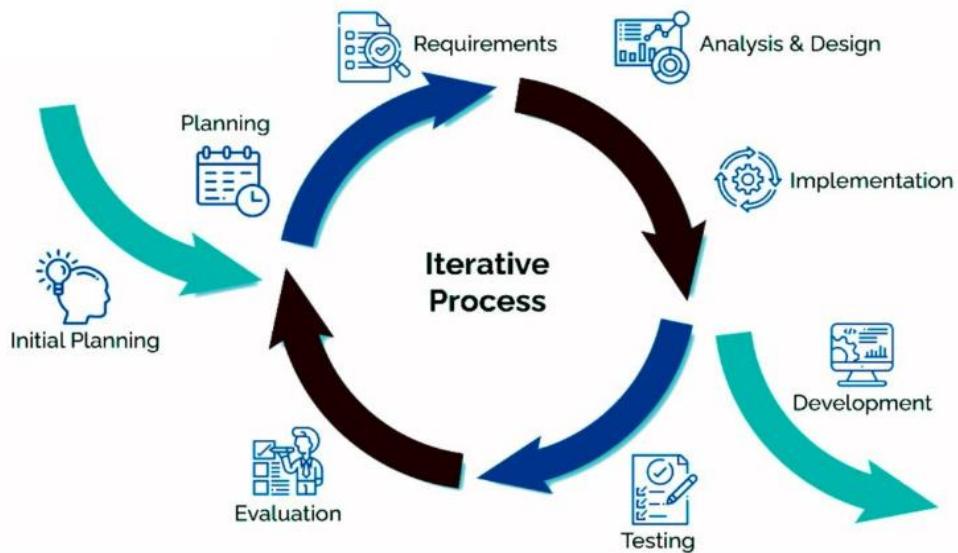


Figure 2.1 Project process

We've opted for this approach for the following reasons:

- Feature Prioritisation: Given the extensive feature set of this application, it could be time-consuming to develop it all at once. With this approach, we can prioritise and release the most critical features first, ensuring that users get access to essential functionality sooner.
- Early Testing and Review: By implementing and testing functions early in the development process, we can identify and address any issues or improvements promptly. This proactive approach enhances the overall quality of the system by preventing potential problems from accumulating.
- Continuous Feedback: Incremental development allows us to gather feedback from stakeholders after each phase of development. This ongoing feedback loop helps us to identify and rectify issues early, reducing the likelihood of unexpected complications as the project progresses.
- Adaptability to Changing Requirements: In today's dynamic environment, requirements can change. This approach accommodates modifications more easily since we're not locked into a rigid development plan. We can adjust our course to align with evolving project needs, ensuring the final product remains relevant and effective.

Apply Iterative & Incremental Model to project, we provided to 2 integrations as follows:

Iteration 1:

- Requirement Gathering & Analysis
- Design and Analysis of Project Architecture
- Implementation

- Test Execution: Unit Testing and Integration Testing
- Evaluation

Iteration 2:

- Requirement Analysis
- Design and Analysis of Project Architecture
- Implementation
- Test Execution: Integration Testing and System Testing
- Evaluation

2.3.2 Quality Management

2.3.2.1 Defect Prevention

- Apply coding standards and best practices to minimize defects during development.
- The technical leader must carefully review each merge request before it could be merged.
- When a defect is identified, the relevant team or individual must be notified immediately to ensure timely resolution.

2.3.2.2 Testing

- **API Testing:**
 - Testing APIs directly to determine if they meet expectations for functionality, reliability, performance, and security. API testing will test all of the individual implemented APIs of the system API Service.
- **Unit Testing:**
 - Developers will write and execute unit tests for functions of project
 - Target: 100% of core functionalities must pass unit tests.
- **Integration Testing:**
 - Make sure the binding and data transfer between functions work well. The data that is transmitted, received, and exchanged between the service layer, the control layer, and the database is correct.
- **System Testing:**
 - After completing unit & integration testing, Evaluate the complete functionality of the system against the functional requirements.
- **Acceptance Testing:**
 - Perform acceptance testing after completing unit, integration, system testing.
 - Acceptance testing determines whether all major functions are working properly. Ensures that the software is complete, the main business requirements of the application are working and no critical errors occurred in the system.

2.3.3 Training Plan

Training Area	Participants	When, Duration	Evidence
ReactJS (Front-End)	All developers	Week 3, 03/02/2025	ReactJS Training

ASP .NET Web API (Back-End)	Back-end developers	Week 4, 12/02/2025	<u>.NET Training</u>
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Table 2.4 Training plan

2.4 Project Deliverables

#	Deliverable	Due Date	Notes
1	Project Plan	10/01/2025	Plan project goals.
2	Project Introduction Document	17/01/2025	Introduce the project
3	Project Management Plan Document	07/02/2025	Prepare Project plan such as Scope and Estimation, Project Objectives, Project Risks, Technical Training, Project Deliverables...
4	Software Requirement Specification Document	14/02/2025	Write SRS document
5	Software Design Document	21/02/2025	Create Architecture Design, Database Design(Entity Relationship Design), Detail Design
6	Software Test Documentation	21/03/2025	Test case document
7	Software User Guides	04/04/2025	Software user guides
8	Final Project Report	11/04/2025	Final project final
9	Final Package	23/04/2025	Final Codes and Documents.

Table 2.5 Deliverables and Deadlines - Documents and software releases

2.5 Responsibility Assignments

2.5.1 Project Organization

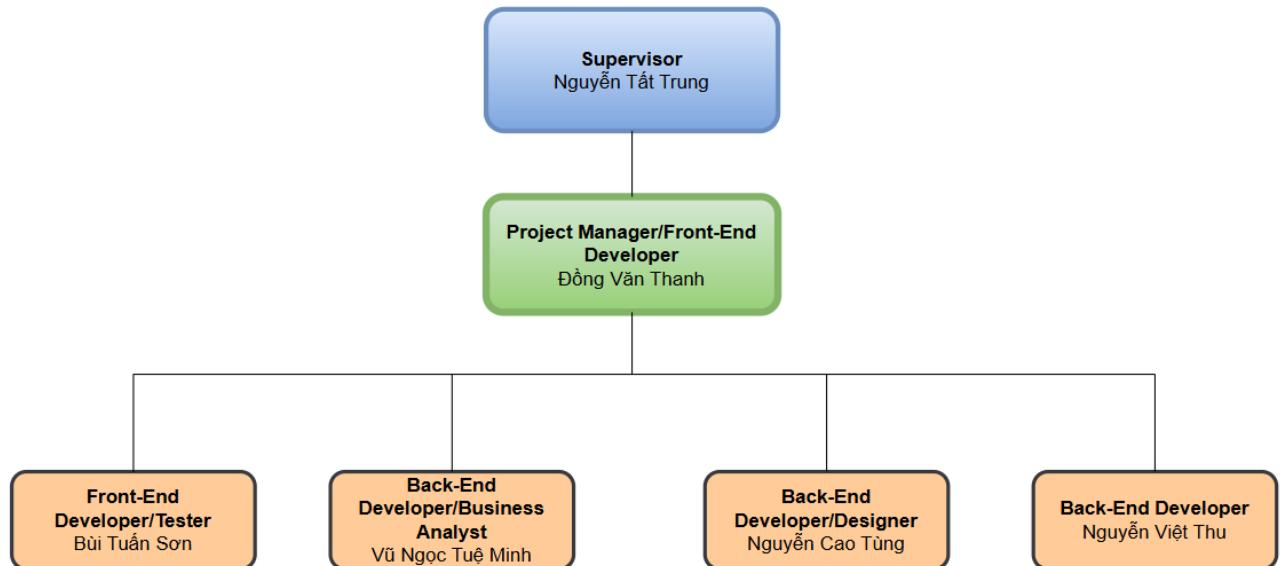


Figure 2.2 Team Member Hierarchy

2.5.2 Roles of the members in the Project

#	Member	Roles
1	Nguyễn Tất Trung	Supervision (Lecturer in Software Engineering Faculty of FPT University)
2	Đồng Văn Thành	Project Manager, Front-End Developer
3	Bùi Tuấn Sơn	Front-End Developer, Tester
4	Vũ Ngọc Tuệ Minh	Back-End Developer, Business Analyst
5	Nguyễn Cao Tùng	Back-End Developer, Designer
6	Nguyễn Việt Thu	Back-End Developer

Table 2.6 Project Organization - Team structure and roles

2.5.3 Responsibility

Responsibility	ThanhDV	SonBT	MinhVNT	TungNC	ThuNV
Project Planning & Tracking	A/R	R	R	R	R

Prepare Project Introduction Document	A/R	R	R	R	R
Prepare SRS Document (Overview Part)	A/R	R	R	R	R
Prepare SRS Document (User Requirements)	A/R	R	R	R	R
Prepare SDD Document	A/R	R	R	R	R
Prepare Testing Document	A/R	R	R	R	R
Learn new technology	R	R	A/R	R	R
Database Analyse	C	R	A/R	I	I
Conduct Coding: Database	R	C	A/R	I	I
Conduct Coding: Backend	I	R	A/R	R	R
Conduct Coding: Frontend	R/I	A/R	R	I	I
Conduct Testing	A/R	R	R	R	R
Prepare User Manual	R	R	R	R	R
Prepare Weekly Report and Meeting Report	A/R	R/I	I	I	I

A: Accountable R: Responsibility C: Consult I: Informed

Table 2.7 RACI Responsibility Assignment Matrix

2.6 Project Communications

Communication Item	Who/ Target	Purpose	When, Frequency	Type, Tool, Method(s)
Team weekly meeting	All team members, Supervisor	Report project progress, Discuss and solve important problems, define next week plan	01:00 pm Friday	Offline
Team daily working	All team members	Work together	Everyday	Messenger
Team daily meeting	All team members	Review process and problems encountered	09:00 am Everyday	Google Meet
Unscheduled meeting	All team members	Discuss and solve the urgent problem	When there are urgent problems	Google Meet

Table 2.8 Communication Plan - Meeting schedules and collaboration tools

2.7 Configuration Management

2.7.1 Document Management

- Documentation tools
 - Google Docs
 - Google Sheets
- Documentation Standards
 - The newly created reports will have version 1.
 - Edited reports will be marked with version 1.x (x is times of changes).
 - Font family : Arial
- Document Management Process
 - All documents will be stored on Google Drive.
 - All reports will be delivered to the supervisor through Drive.

2.7.2 Source Code Management

- The source code will be hosted and managed by team members on Github.
- Individual functions within the function list will be developed in their respective separate branches.
- Each commit to these branches will be required to adhere to predefined guidelines.
- Furthermore, a comprehensive code review will be conducted prior to merging any code from the function branches into the main branch.

2.7.3 Tools & Infrastructures

Category	Tools / Infrastructure
Technology	React JS v19.0 (Frontend), Web-based Application (Browser on PC), .Net 8.0 (Backend)
Database	SQL Server 2022
IDEs/Editors	Visual Studio Code, Visual Studio 2022
Diagramming	DrawIO
Documentation	Ms Office, Google Docs/Sheets/Slides
Version Control	GitHub (Source Codes), Google Drive (Documents)
Deployment server	AWS EC2, RDS, Amazon Linux, Nginx, Kestrel
Project management	GitHub (Tasks, Defects)
Testing	Swagger, Excel, NUnit
Communication	Facebook's Messenger, Discord, Google Meet

Table 2.9 Tools & Infrastructure - List of technologies and platforms used

III. Software Requirement Specification

3.1 Purpose

This chapter defines the software requirements of the system to ensure that all functionalities are clearly specified before development. It includes a context diagram, main workflows, user and system requirements, non-functional attributes such as usability, performance, and security, as well as supporting business rules. The purpose is to provide a solid foundation for system design and implementation by establishing a comprehensive and well-documented requirement baseline.

3.2 Requirement Overview

3.2.1 Context Diagram

Planify is a web-based event planning system that streamlines event organization, task management, and collaboration. It connects event organizers, implementers, and campus managers, ensuring efficient coordination. The Figure 3.1.1 Context Diagram below illustrates how Planify interacts with external entities and manages event-related processes.

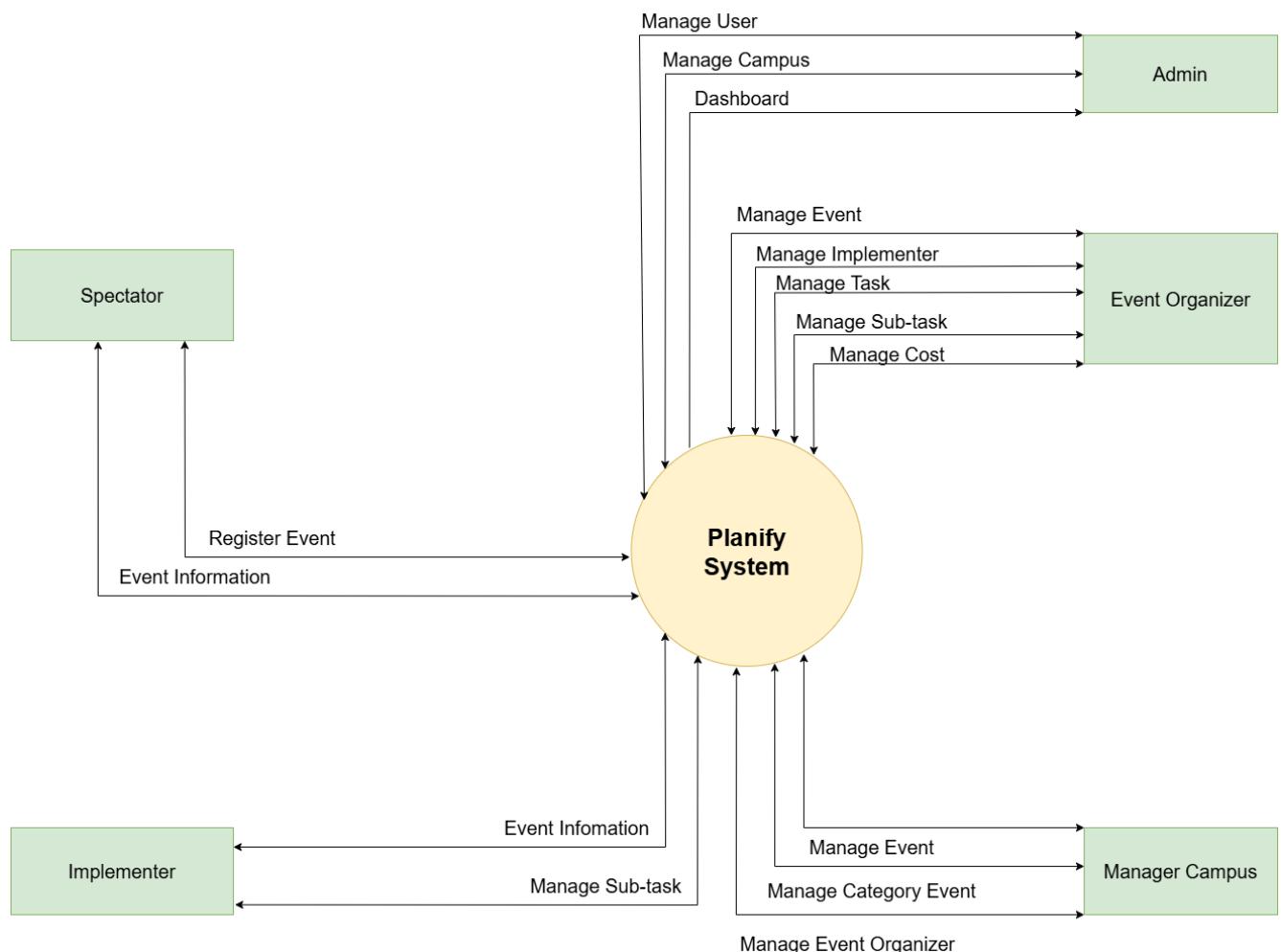


Figure 3.1 Context Diagram

3.2.2 Main Workflows

3.2.2.1 Authentication

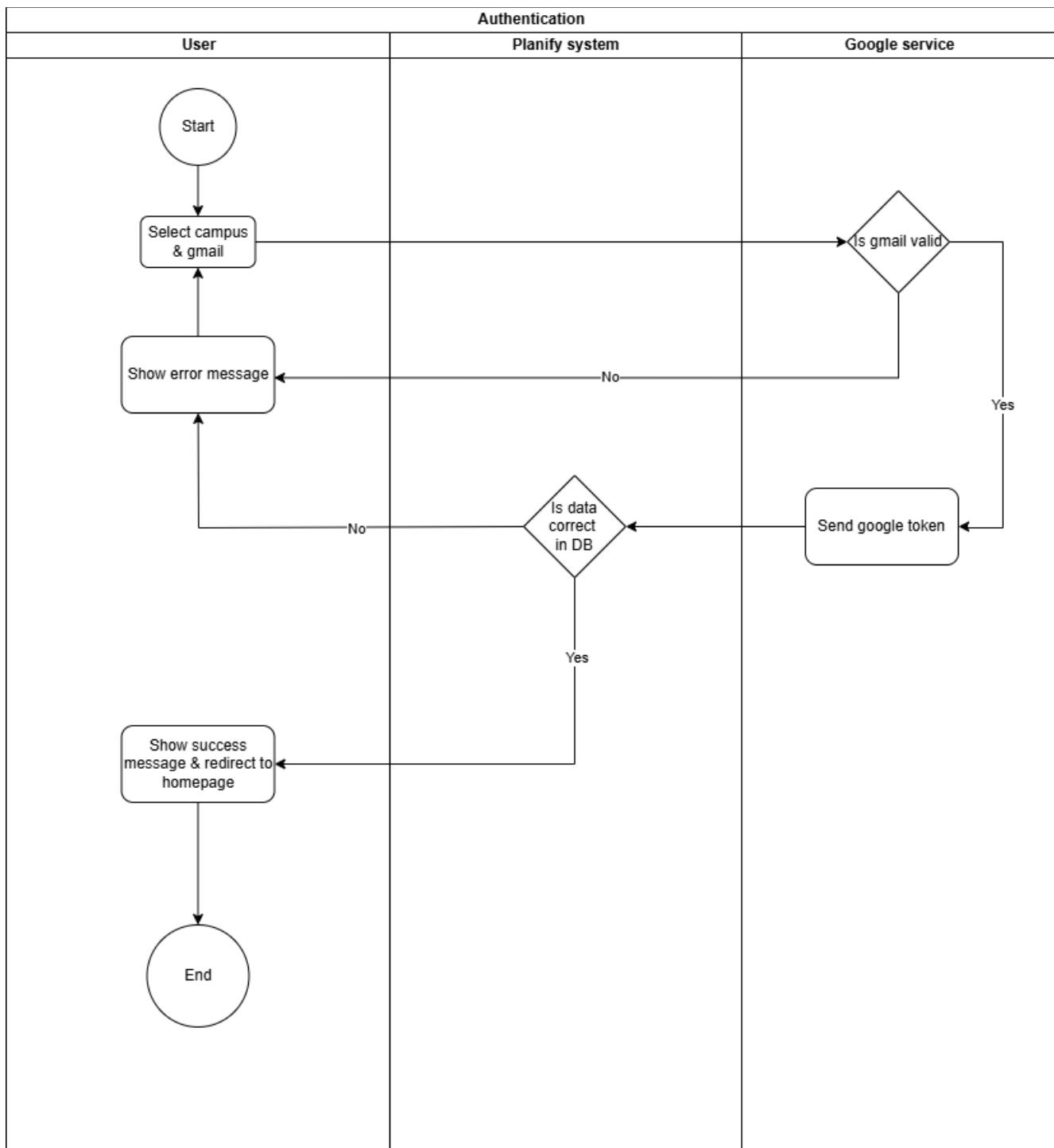


Figure 3.2 Login

3.2.2.2 Create Event

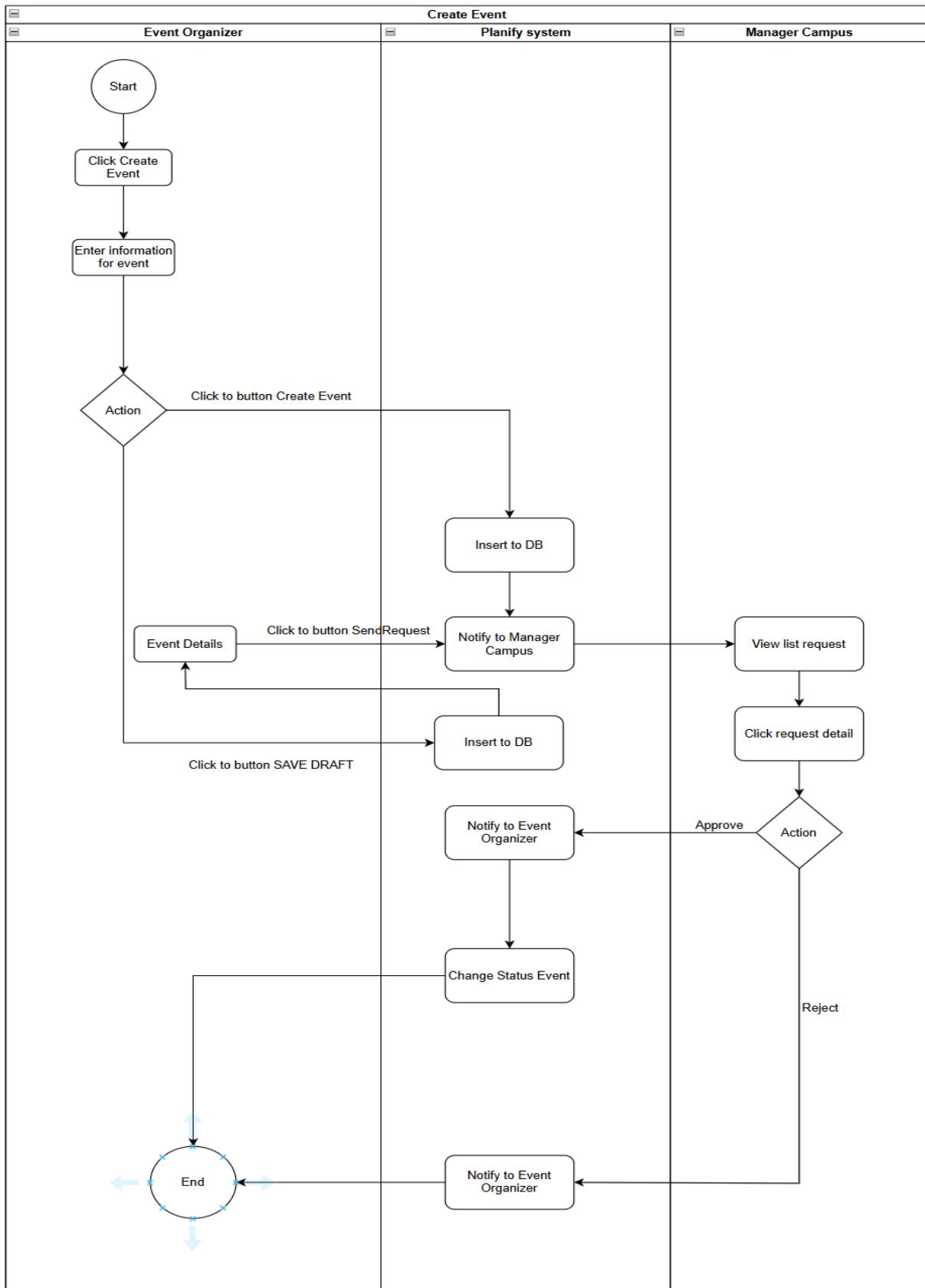


Figure 3.3 Create Event

3.2.2.3 Update status subtask

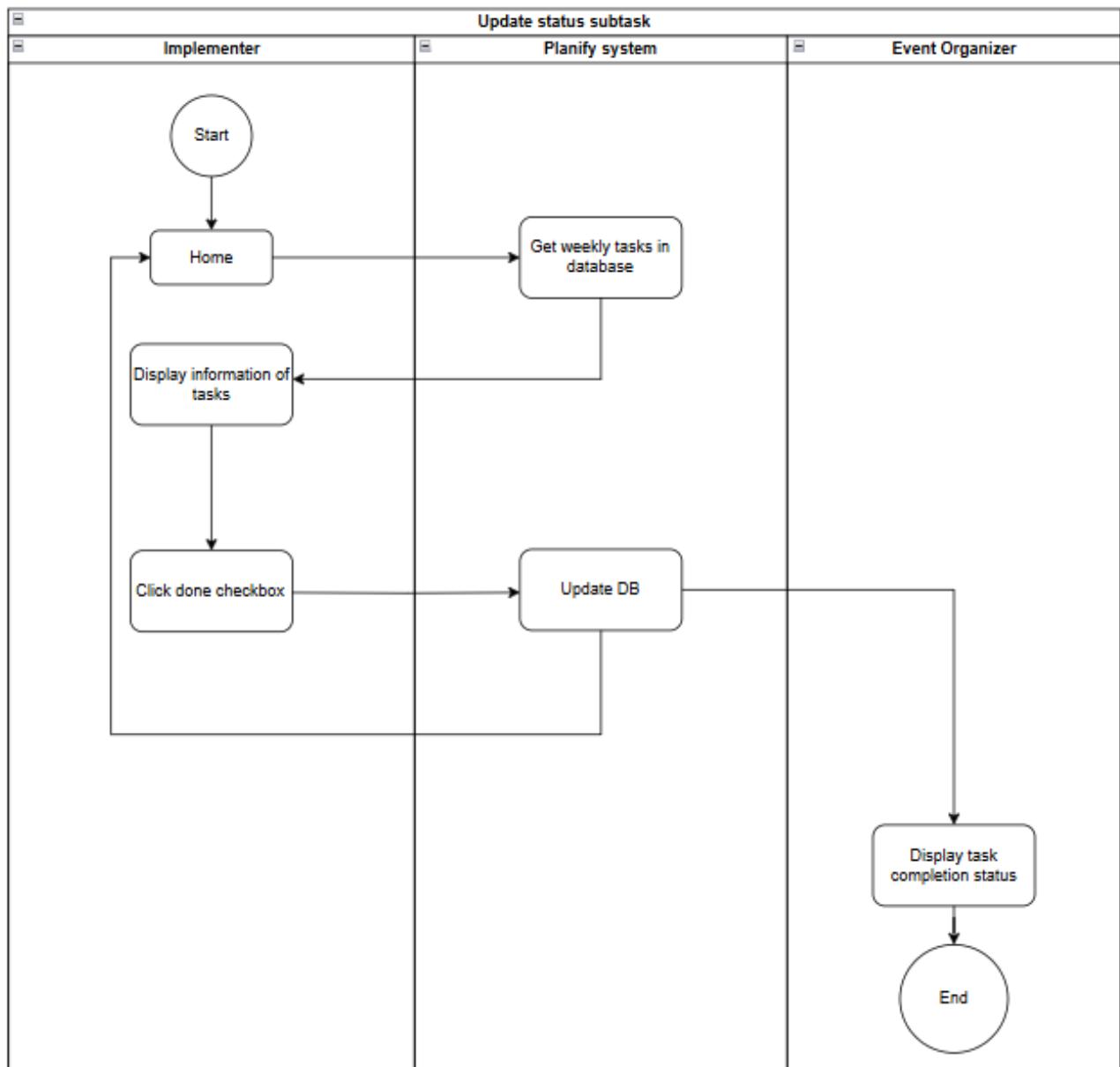


Figure 3.4 Update status subtask

3.2.2.4 Register for the event

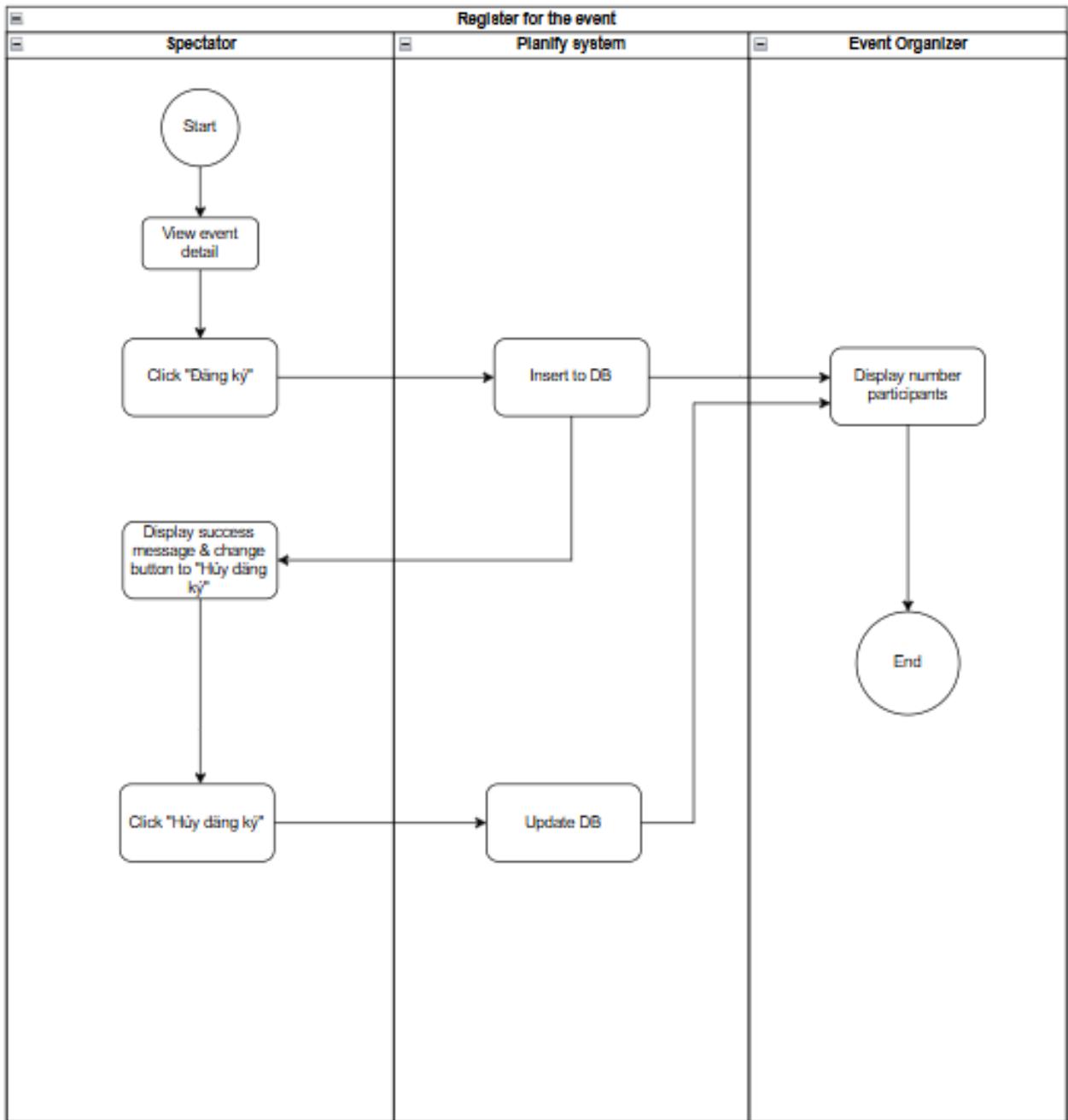


Figure 3.5 Register for the event

3.2.3 User Requirements

3.2.3.1 Actors

#	Actor	Description
1	Admin	The admin has the right to manage user accounts, manage campuses, create campuses and count the number of each type of

		event.
2	Campus Manager	The Campus Manager is responsible for managing and overseeing all event proposals submitted within their assigned campus. They have the authority to review, approve, or reject event plans to ensure alignment with the campus's objectives. Additionally, the Campus Manager can create and assign roles to Event Organizers to support the effective implementation and operation of events.
3	Event Organizer	The Event Organizer works with the Campus Manager and implementers, is responsible for the detailed planning events. They create a task list, assign tasks to Implementers, track the progress of the event's implementation, manage budgets, calculate the event's estimated costs and submit a budget request to the Campus Manager for approval.
4	Implementer	The Implementer is added by the Event Organizer to perform assigned tasks within the event plan. They carry out the assigned work and report upon task completion
5	Spectator	The spectator can view all university events, search for events and view event details.

Table 3.1 Actors Description

3.2.3.2 Use Cases

3.2.3.2.1 Use case diagram



Figure 3.5 Use Cases Diagram

3.2.3.2.2 Use case description

ID	Use Case	Actors	Use Case Description
1	Login	Admin, Campus Manager, Event Organizer, Implementer, Spectator	This function allows all roles to access the system.
2	Log out	Admin, Campus Manager, Event Organizer, Implementer, Spectator	This function allows users to securely log out of the system.
3	View profile	Campus Manager, Event Organizer, Implementer, Spectator	This function allows users to view their personal information.
4	Update profile	Campus Manager, Event Organizer, Implementer, Spectator	This function allows users to update their personal information.
5	Create event	Event Organizer	This function allows Event Organizer to create event plans.
6	Update event	Event Organizer	This function allows Event Organizer to update event information.
7	Delete event	Event Organizer	This function allows Event Organizer to delete events.
8	Event detail	Campus Manager, Event Organizer, Implementer, Spectator	This function allows Campus Manager, Event Organizer, Implementer, Spectator to view detailed information of the event.
9	Search event	Campus Manager, Event Organizer, Implementer, Spectator	This function allows Campus Manager, Event Organizer, Implementer, Spectator to search for the desired event
10	Send request	Event Organizer	This function allows Event Organizer to send event approval requests to Campus Manager.
11	Add implementer	Event Organizer	This function allows the Event Organizer to add an Implementer to the event.
12	Delete implementer	Event Organizer	This function allows the Event Organizer to remove the Implementer from the event.

13	Create task	Event Organizer	This function allows Event Organizer to create tasks.
14	Update task	Event Organizer	This function allows Event Organizer to update tasks.
15	Delete task	Event Organizer	This function allows Event Organizer to delete tasks.
16	Search task	Event Organizer	This function allows Event Organizers to search tasks.
17	Create sub-task	Event Organizer	This function allows Event Organizer to create sub-tasks.
18	Update sub-task	Event Organizer	This function allows Event Organizer to update sub-tasks.
19	Delete sub-task	Event Organizer	This function allows Event Organizer to delete sub-tasks.
20	View list implementer	Event Organizer	This function allows the Event Organizer to view the list of members in the event.
21	Export to Excel	Event Organizer, Campus Manager	This function allows Event Organizer, Campus Manager to export to Excel files.
22	Create risk	Event Organizer	This function allows Event Organizer to create risks.
23	Update risk	Event Organizer	This function allows Event Organizers to update risks.
24	Delete risk	Event Organizer	This function allows Event Organizers to delete risks.
25	Create cost	Event Organizer	This function allows Event Organizer to create costs.

26	Update cost	Event Organizer	This function allows Event Organizers to update costs.
27	Delete cost	Event Organizer	This function allows Event Organizers to delete costs.
28	Add image	Event Organizer	This function allows the Event Organizer to add photos to the event.
29	Delete image	Event Organizer	This function allows the Event Organizer to delete photos to the event.
30	List of participants	Event Organizer	This function allows Event Organizers to view the list of event registrants.
31	My request	Event Organizer	This function allows the Event Organizer to view the list of events sent to Campus Manager.
32	View task board	Implementer	This function allows the Implementer to see my tasks.
33	View attended event history	Implementer	This function allows the Implementer to see the list of events that have been tasked.
34	Add favorite event	Campus Manager, Event Organizer, Implementer, Spectator	This function allows Campus Manager, Event Organizer, Implementer, Spectator to add events to favorites.
35	Delete favorite event	Campus Manager, Event Organizer, Implementer, Spectator	This function allows Campus Manager, Event Organizer, Implementer, Spectator to delete events from favorites.
36	View list favorite event	Campus Manager, Event Organizer, Implementer, Spectator	This function allows Campus Manager, Event Organizer, Implementer, Spectator to see the list of favorite events.
37	Register for the event	Spectator	This function allows Spectator to register for events.
38	Unregister for the event	Spectator	This function allows Spectator to unregister for events.

39	View list event registered	Spectator	This function allows Spectator to view the list of registered events.
40	List event categories	Campus Manager	This function allows Campus Manager to view the list of event categories.
41	Create event categories	Campus Manager	This function allows Campus Manager to create a new event category.
42	Update event categories	Campus Manager	This function allows Campus Manager to update the event category.
43	Delete event categories	Campus Manager	This function allows Campus Manager to delete the event category.
44	Approve event planning request	Campus Manager	This function allows Campus Manager to approve event plan.
45	Reject event planning request	Campus Manager	This function allows Campus Manager to reject event plan.
46	Create Event Organizer	Campus Manager	This function allows Campus Manager to create new people to become Event Organizers.
47	View list Event Organizer	Campus Manager	This function allows Campus Manager to view the Event Organizer list.
48	Update Event Organizer	Campus Manager	This feature allows Campus Manager to de-privileged Event Organizers.
49	List request	Campus Manager	This function allows Campus Manager to view the list of events sent by the Event Organizer.
50	View list users	Admin	This function allows Admin to view the list of users.
51	View user detail	Admin	This function allows Admin to detail user information.

52	Ban user	Admin	This function allows Admin to ban users from activity.
53	Unban user	Admin	This function allows Admin to allow users to operate.
54	Create Campus Manager	Admin	This function allows Admin to create a new Campus Manager.
55	Update Campus Manager	Admin	This function allows Admin to update Campus Manager.
56	Dashboard	Admin	This function allows Admin to view event statistics for 1 year, campus statistics, event type statistics.
57	Create users	Admin	This function allows Admin to create multiple users at once.
58	Change password	Admin	This function allows Admin to change passwords.
59	View list campus	Admin	This function allows Admin to view campus lists.
60	Create campus	Admin	This function allows Admin to create a new campus.
61	Update campus	Admin	This function allows Admin to update campus
62	Delete campus	Admin	This function allows Admin to delete campus

Table 3.2 Use Case Description

3.2.4 System Functionalities

3.2.4.1 Screen Flow

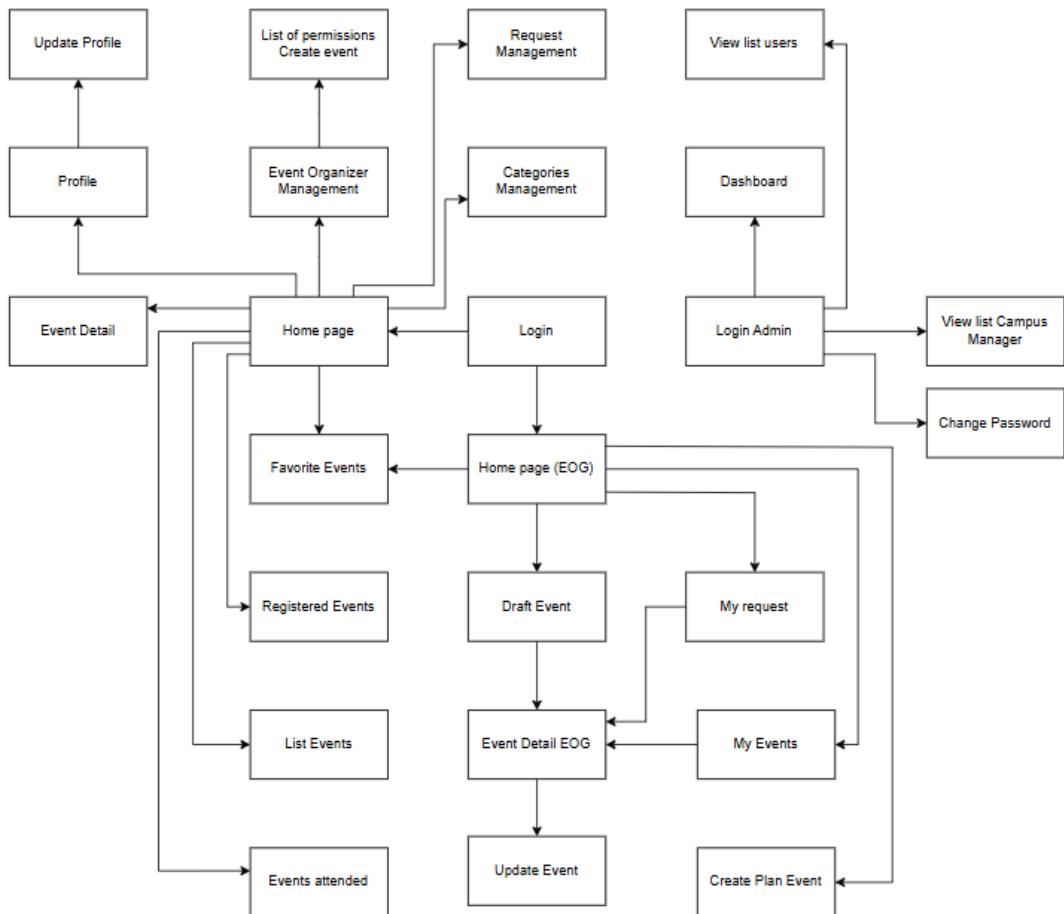


Figure 3.6 Screen Flow

3.2.4.2 Screen Authorization

Screen	Admin	Manager Campus	Guest	Event Organizer	Implementer	Spectator
Login	X	X	X	X	X	X
Home page		X		X	X	X
Favorite Events		X		X	X	X
Registered Events						X

List Event					X	
Event attended					X	
Event Detail		X		X	X	X
Event Organizer Management		X				
List of permissions		X				
Create event						
Categories Management		X				
Request Management		X				
Profile		X		X	X	X
Update Profile		X		X	X	X
Create Plan Event				X		
Draft Events				X		
Update Event				X		
My Requests				X		
My Events				X		
Dashboard	X					
View List Users	X					
View List Campus Manager	X					
Change Password	X					

Table 3.3 Screen Authorization

3.2.5 Entity Relationship Diagram

3.2.5.1 ERD

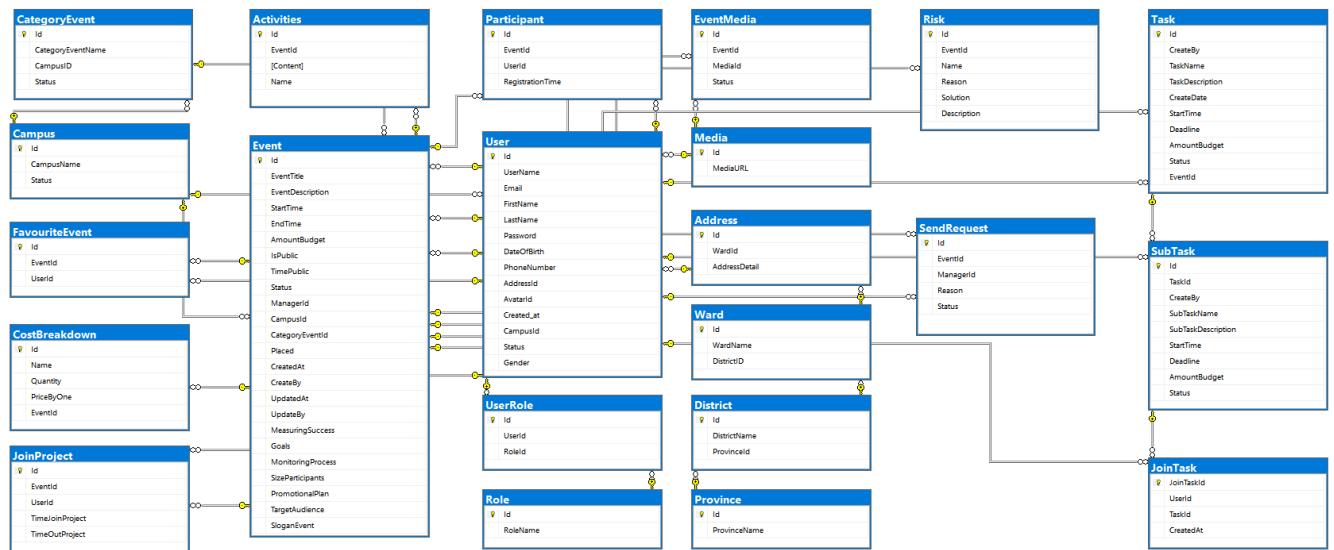


Figure 3.7 Entity Relationship Diagram

3.2.5.2 Entity Description

#	Entity	Description
1	Role	Defines user roles such as Admin, Manager, or Spectator.
2	CategoryEvent	Stores categories for events, linked to a specific campus.
3	Campus	Stores details of campuses, such as their names and statuses.
4	Province	Stores province details for user addresses.
5	District	Stores district details, linked to provinces.
6	Ward	Stores ward details, linked to districts.
7	User	Stores user details like username, email, password, address, and role.
8	Event	Manages event details, including title, description, schedule, and budget.
9	SendRequest	Tracks requests related to events, including reasons and approval status.

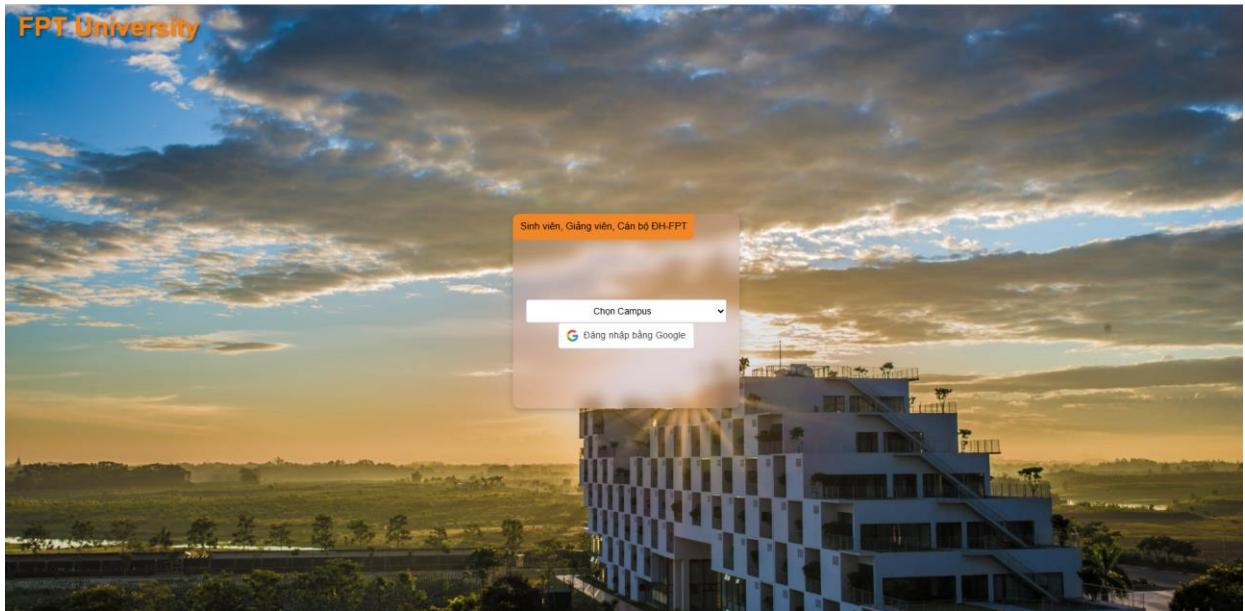
10	EventMedia	Links media items (e.g., images, videos) to specific events.
11	JoinProject	Maps users to events they participate in, with join and leave times.
12	Address	Stores detailed address information for users linked to wards, districts, and provinces.
13	FavouriteEvent	Stores events marked as favorites by users.
14	Task	Manages task details, including description, deadlines, and budget.
15	UserRole	A junction table mapping users to roles.
16	Media	Stores URL for media files used across the system, referenced by EventMedia.
17	Participant	Stores details of participants in events, including their roles or statuses, linked to users and events.
18	JoinTask	Maps users to tasks they participate in, with join and leave times.
19	AssignTask	Assigns users to subtasks, tracking assignment duration.
20	SubTask	Manages subtasks within a task, including deadlines and budgets.
21	CostBreakdown	Stores detailed budget breakdowns for events.
22	Activities	Stores details of activities within events.

Table 3.4 Entity Description

3.3 Functional Specifications

3.3.1 Authentication Feature

UC-1_Login for User

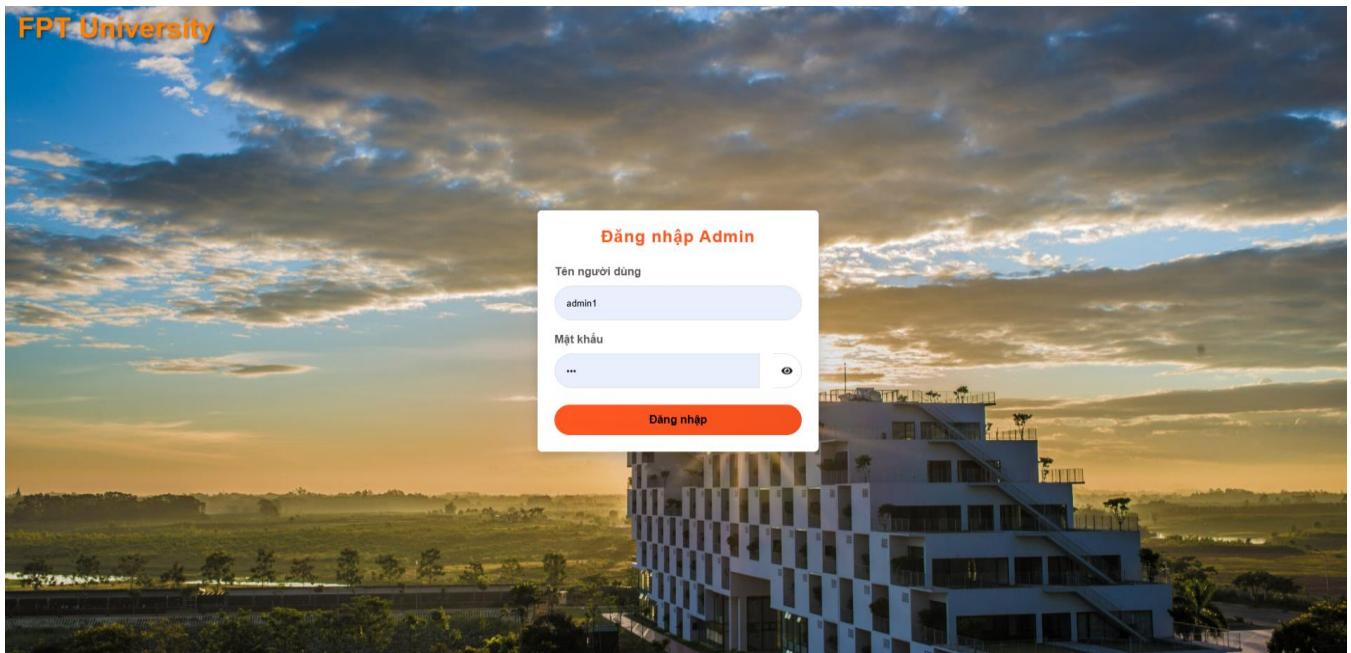


Screen 3-1: Login

UC ID and Name:	UC-1_Login for User		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager, Event Organizer, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows the user to log into the system		
Preconditions:	User account has been created		
Postconditions:	User logs in the system successfully		

Normal Flow	<ol style="list-style-type: none"> 1. The user accesses the Login screen 2. The user choose the campus 3. The user clicks the "Đăng nhập với Google" button 4. The system allows the user to go to the logged in home page
Alternative Flows:	N/A
Exceptions:	Show error message if user select wrong campus or google account
Priority:	Must Have
Frequency of Use:	High
Business Rules:	BR-02, BR-03
Other Information:	N/A
Assumptions:	N/A

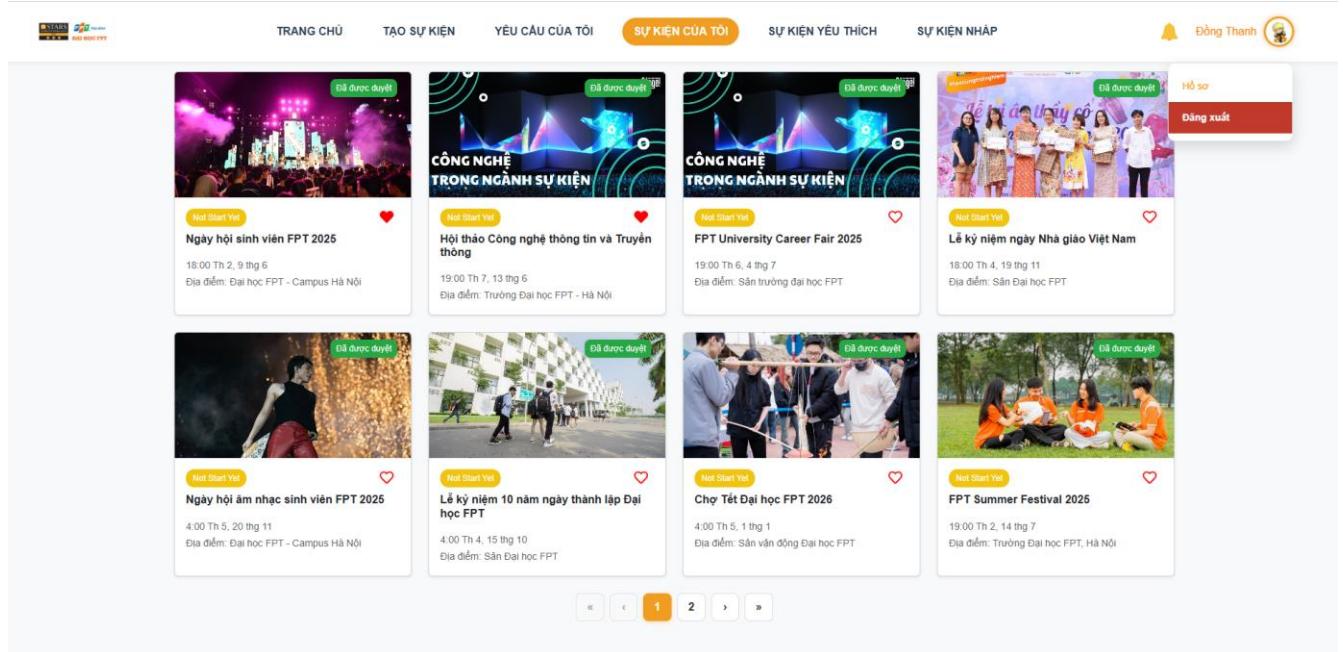
UC-2_Login for Admin



Screen 3-2: Login for Admin

UC ID and Name:	UC-2_Login for Admin		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to log into the system.		
Preconditions:	Admin account has been created		
Postconditions:	Admin logs in the system successfully		
Normal Flow	<ol style="list-style-type: none"> 1. Admin accesses the admin login screen 2. Admin enter username and password 3. Click “Đăng nhập” button 4. System validates the login details 5. System allows user to access 6. System accesses the Dashboard 		
Alternative Flows:	N/A		
Exceptions:	<ul style="list-style-type: none"> - If the user enters an incorrect username or password, the system should display an error message and allow the user to try again. 		
Priority:	Must Have		
Frequency of Use:	High		
Business Rules:	BR-02		
Other Information:	N/A		
Assumptions:	N/A		

UC-3_Log out



Screen 3-3: Log out

UC ID and Name:	UC-3_Log out		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Admin, Manager Campus, Event Organizer, Implementer, Spectator	Secondary Actor:	None
Description:	This use case allows users to log out of the website system		
Preconditions:	The user is logged into the system		
Postconditions:	The user has logged out of the website system		
Normal Flow	<ol style="list-style-type: none"> The user clicks on the avatar icon on the header of the logged in website. Click “Đăng xuất” button 		

Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Low
Frequency of Use:	Sometimes
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

UC-4_Authorization

UC ID and Name:	UC-4_Authorization		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Admin, Manager Campus, Event Organizer, Implementer, Spectator	Secondary Actor:	None
Description:	Site system users want to log in to their existing account.		
Preconditions:	The user has an account registered in the system		
Postconditions:	<ol style="list-style-type: none"> 1. The user can log out from their account when they choose to end their session. 2. The user can access their profile, update their information, and perform various actions within the website. 		

Normal Flow	<ol style="list-style-type: none"> On the login page, the user choose Campus and clicks to “Login with Google” button The system will display the appropriate screen based on the user's account information
Alternative Flows:	In case of server errors or technical issues during authentication, the user may receive an error message and should be encouraged to try again later or contact customer support.
Exceptions:	N/A
Priority:	High, Must Have
Frequency of Use:	High
Business Rules:	BR-04
Other Information:	N/A
Assumptions:	N/A

UC-5_Change Password for Admin

The screenshot shows the Planify application interface. On the left, there is a sidebar with the following menu items:

- Dashboard
- Danh sách Users
- Quản lý Campus Manager
- Đổi mật khẩu** (highlighted in blue)
- Logout

The main content area displays a modal window titled "Đổi mật khẩu". The modal contains three input fields with placeholder text and a "Xác nhận" (Confirm) button:

- * Mật khẩu cũ (Old password): Nhập mật khẩu cũ (Enter old password) with a clear icon.
- * Mật khẩu mới (New password): Nhập mật khẩu mới (Enter new password) with a clear icon.
- * Xác nhận mật khẩu mới (Confirm new password): Xác nhận mật khẩu mới (Confirm new password) with a clear icon.

At the bottom right of the modal are two buttons: a blue "Đổi mật khẩu" (Change Password) button and a white "Hủy" (Cancel) button.

Screen 3-4: Change Password for Admin

UC ID and Name:	UC-5_Change Password for Admin		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows Admin to change password.		
Preconditions:	Admin successfully logged into the system		
Postconditions:	Password has been changed		
Normal Flow	<ol style="list-style-type: none"> 1. Admin accesses the change password screen 2. The system display screen change password 3. The admin must enter their current password for verification 4. The admin enters a new password and confirm password 5. The system update the admin's password in the database 6. The system notifies the admin that the password change was successful. 		
Alternative Flows:	N/A		
Exceptions:	<ol style="list-style-type: none"> 1. Admin entered wrong old password 2. Admin did not enter 6 characters for new password 3. Confirm password does not match password 		
Priority:	Medium		
Frequency of Use:	Sometimes		
Business Rules:	BR-05, BR-06		
Other Information:	N/A		
Assumptions:	N/A		

3.3.2 Profile Feature

UC-6_View Profile

The screenshot shows a user profile page. At the top, there is a header with navigation links: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, and SỰ KIỆN NHẬP. On the right side of the header, there is a notification icon with the name 'Đồng Thanh' and a small profile picture.

The main content area displays a user profile for 'Đồng Thanh'. It includes a placeholder image, the name 'Đồng Thanh', the email 'thanhhdvhe160422@fpt.edu.vn', and a 'Cập nhật hồ sơ' button. To the right of this is a table titled 'Thông tin hồ sơ' containing the following data:

Họ và tên	Đồng Thanh
Ngày sinh	21/11/2001
Giới tính	Nam
Địa chỉ	Ngách 225/15, Di Trạch, Hoài Đức, Hà Nội
Số điện thoại	0366568943
Email	thanhhdvhe160422@fpt.edu.vn

Screen 3-5: View Profile

UC ID and Name:	UC-6_View Profile		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Manager Campus, Event Organizer, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows users to view all personal information		
Preconditions:	The user has successfully logged in to the website system		
Postconditions:	Users can view all of their personal information		
Normal Flow	<ol style="list-style-type: none"> 1. The user access to the system 2. The user clicks on avatar on header bar 3. User clicks "Hồ sơ" button 4. The system will display the user's information 		

Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-07
Other Information:	N/A
Assumptions:	N/A

UC-7_Update Profile

The screenshot displays a user profile on the left and a form for updating personal information on the right. The profile includes a placeholder photo, the name 'Đồng Thanh', and the email 'thanhdvhe160422@ptt.edu.vn'. The update form is titled 'Cập nhật hồ sơ' and contains fields for Name (Họ), Last Name (Tên), Date of Birth (Ngày sinh), Gender (Giới tính), Address (Địa chỉ), and Phone Number (Số điện thoại). There are also dropdown menus for Province (Tỉnh), District (Huyện), and Ward (Xã). At the bottom of the form are two buttons: a red 'Hủy' (Cancel) button and a green 'Lưu' (Save) button.

Screen 3-6: Update Profile

UC ID and Name:	UC-7_Update Profile
-----------------	---------------------

Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Manager Campus, Event Organizer, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows users to update their personal information		
Preconditions :	The user has successfully logged into the website		
Postconditions:	The user's personal information is updated in the system		
Normal Flow	<ol style="list-style-type: none"> 1. The user clicks on the avatar icon in the header after logging into the website 2. The user selects "Hồ sơ" from the dropdown menu 3. The system displays the user's current personal information 4. The user clicks the "Cập nhật hồ sơ" button 5. The system displays editable fields for the user to update 6. The user enters the new information 7. The user clicks the "Lưu" button to save changes 8. The system records and updates the new personal information 		
Alternative Flows:	N/A		
Exceptions:	<ol style="list-style-type: none"> 1. The user leaves the "Họ" or "Tên" field empty The system displays: "Vui lòng nhập họ tên" and prevents form submission. 2. The user selects a date of birth that is in the future The system displays: "Ngày sinh không được ở tương lai" and prevents form submission. 3. The user leaves the "Địa chỉ" field empty The system displays: "Vui lòng nhập địa chỉ" and prevents form submission. 4. The user enters a phone number containing non-numeric characters The system displays: "Số điện thoại chỉ được chứa chữ số" and prevents form submission. 		

	<p>5. System error while saving the data</p> <p>The system displays error messages for invalid fields.</p>
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-07,BR-08, BR-09,BR-10
Other Information:	N/A
Assumptions:	N/A

3.3.3 Event Management

UC-8_Create Event

Thông tin chung

Tên sự kiện*
Nhập tên sự kiện

Loại sự kiện*
Chọn loại sự kiện

Bắt đầu (Thời gian bắt đầu phải trước hiện tại 2 tháng)*
ddmm/yyyy -- --

Kết thúc*
ddmm/yyyy -- --

Địa điểm*
Nhập địa điểm

Slogan
Nhập slogan

Mô tả

Screen 3-7: Create Event

UC ID and Name:	UC-8_Create Event
-----------------	-------------------

Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizer create event		
Preconditions:	The user has successfully logged into the website system as role Event Organizer		
Postconditions:	The event is successfully created and saved in the system		
Normal Flow:	<ol style="list-style-type: none"> 1. The user clicks to Create Event on the header of the logged in website. 2. The system displays fields for the user to enter information. 3. The user enters information to create an event. 4. The user clicks the Create Event button. 		
Alternative Flows:	<ul style="list-style-type: none"> - The user clicks the "Lưu bản nháp" button instead of submitting. - The system stores the event with a "Draft" status. 		
Exceptions:	<ol style="list-style-type: none"> 1. The user leaves the "Tên sự kiện" field empty The system displays: "Vui lòng nhập tên sự kiện" and prevents form submission. 2. The user does not select a "Loại sự kiện" The system displays: "Vui lòng chọn loại sự kiện" and prevents form submission. 3. The user selects a "Thời gian bắt đầu" that is less than 2 months from the current date The system displays: "Thời gian bắt đầu phải trước hiện tại ít nhất 2 tháng" and prevents form submission. 4. The user selects a "Thời gian kết thúc" that is earlier than the "Thời gian bắt đầu" The system displays: "Thời gian kết thúc phải sau thời gian bắt đầu" and prevents form submission. 5. The user leaves the "Địa điểm" field empty The system displays: "Vui lòng nhập địa điểm" and prevents form submission. 		

	<p>6. The user does not add any "Nhiệm vụ"</p> <p>The system displays: "Vui lòng thêm ít nhất một nhiệm vụ" and prevents form submission.</p>
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-11,BR-12,BR-13,BR-14,BR-15,BR-16,BR-17,BR-28
Other Information:	N/A
Assumptions:	N/A

UC-9_Update Event

Screen 3-8: Update Event

UC ID and Name:	UC-9_Update Event
-----------------	-------------------

Created By:	ThanhDV	Date Created	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizers to update event information.		
Preconditions:	User is logged in with the Event Organizer role and the event is in draft status.		
Postconditions:	Event information has been changed		
Normal Flow	<ol style="list-style-type: none"> 1. The user logged in as Event Organizer 2. User clicks on "Draft Event" on header 3. The system will display detailed information of the event 4. User clicks on "Update Event" button at the bottom of the web 5. User changes event information then saves information 		
Alternative Flows:	N/A		
Exceptions:	If the user leaves the required fields blank or enters incorrect format, the system will display the corresponding error message and will not be changed.		
Priority:	High		
Frequency of Use:	Moderately		
Business Rules:	BR-11,BR-12,BR-16, BR-18, BR-19,BR-28		
Other Information:	N/A		
Assumptions:	N/A		

UC-10_Delete Event

Danh sách chi phí (4)

STT	TÊN CHI PHÍ	SỐ LƯỢNG	ĐƠN GIÁ	THÀNH TIỀN	HÀNH ĐỘNG
1	Xây dựng sân khấu	1	30.000.000 đ	30.000.000 đ	
2	Trang trí hội trường	1	20.000.000 đ	20.000.000 đ	
3	Quảng cáo	1	5.000.000 đ	5.000.000 đ	
4	Ăn uống	1000	5.000.000 đ	5.000.000.000 đ	

Tổng cộng: 5.055.000.000đ

Tổng cộng 4 chi phí < 1 > 10 / page

Danh sách người đăng ký sự kiện (0)

Không tìm thấy người tham gia

Xóa sự kiện Cập nhật sự kiện Gửi yêu cầu

Screen 3-9: Delete Event

UC ID and Name:	UC-10_Delete Event		
Created By:	ThanhDV	Date Created	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizers to delete events.		
Preconditions:	User is logged in with the Event Organizer role and the event is in draft status.		
Postconditions:	Event removed from draft list		

Normal Flow	<ol style="list-style-type: none"> 1. The user logged in as Event Organizer 2. User clicks on "Draft Event" on header 3. The system will display detailed information of the event 4. The user click “Xóa sự kiện” button
Alternative Flows:	N/A
Exceptions:	None
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-18, BR-19
Other Information:	N/A
Assumptions:	N/A

UC-11_View Event Detail

The screenshot shows a user interface for viewing event details. At the top, there is a navigation bar with links: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, and SỰ KIỆN NHẬP. On the right side of the header is a notification bell icon labeled 'Đồng Thành' with a count of 8.

The main content area displays several images of a concert or festival stage with bright lights and a large crowd. Below the images, the text 'Ngày hội sinh viên FPT 2025' is visible, along with a red button labeled 'Chưa bắt đầu'.

Screen 3-10: View Event Detail

UC ID and Name:	UC-11_View Event Detail		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows Event Organizer, Campus Manager, Implementer, Spectator view all information of the event.		
Preconditions:	User logs into the correct campus system.		
Postconditions:	The screen displays all the information of an event.		
Normal Flow	<ol style="list-style-type: none">1. User successfully logged into the system2. On the home screen, the user clicks on an event		

	3. The system displays information about that event
Alternative Flows:	<ol style="list-style-type: none"> 1. The user accesses favorite event page 2. The system displays all events that the user favorites 3. The user clicks on an event 4. The system displays information about that event
Exceptions:	N/A
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-07
Other Information:	N/A
Assumptions:	N/A

UC-12_Approve Event

The screenshot shows the 'Danh Sách Yêu Cầu' (List of Requests) screen. The top navigation bar includes links for 'TRANG CHỦ', 'QUẢN LÝ EVENT ORGANIZER', 'QUẢN LÝ LOẠI SỰ KIỆN', 'QUẢN LÝ YÊU CẦU' (highlighted in orange), and 'SỰ KIỆN YÊU THÍCH'. On the right, there's a user profile for 'John Doe' with a notification icon.

The main content area is titled 'DANH SÁCH YÊU CẦU'. It displays three columns of events:

- Chưa được chấp thuận (Not Approved):**
 - Ngày hội âm nhạc sinh viên FPT 2025 (From: 04/00/20/11/2025, To: 13/00/20/11/2025) - Buttons: Phê duyệt (Approve), Từ chối (Reject)
 - Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT (From: 04/00/15/10/2025, To: 13/00/17/10/2025) - Buttons: Phê duyệt (Approve), Từ chối (Reject)
 - Chợ Tết Đại học FPT 2026 (From: 04/00/01/01/2026, To: 08/00/01/01/2026) - Buttons: Phê duyệt (Approve), Từ chối (Reject)
 - FPT Summer Festival 2025 (From: 19/00/14/07/2025) - Buttons: Phê duyệt (Approve), Từ chối (Reject)
- Đã chấp thuận (Approved):**
 - Sự kiện Chào sinh viên mới FPT (From: 19/00/09/01/2025, To: 01/00/10/03/2025)
 - Hội thảo Công nghệ thông tin và Truyền thông (From: 19/00/13/06/2026, To: 03/00/15/06/2026)
- Đã từ chối (Rejected):**
 - Lễ kỷ niệm ngày Nhà giáo Việt Nam (Reason: Không hợp lệ) (From: 18/00/19/11/2025, To: 03/00/20/11/2025)

Screen 3-11: Approve Event

UC ID and Name:	UC-12_Approve Event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	This function allows the Campus Manager approve event from Event Organizer		
Preconditions:	User logged in as Campus Manager Event is pending approval		
Postconditions:	The event is accepted and displayed for everyone to follow		
Normal Flow	1. The user logs into the system 2. The user accesses event request screen 3. The system will display all events sent request from Event Organizer 4. The user accesses an event to view event details 5. The user clicks “Duyệt yêu cầu” button		
Alternative Flows:	The user can clicks “Duyệt yêu cầu” button in event request screen		
Exceptions:	N/A		
Priority:	High		
Frequency of Use:	Frequently		
Business Rules:	BR-20		
Other Information:	N/A		
Assumptions:	N/A		

UC-13_Reject Event

The screenshot shows a list of events categorized as follows:

- Chưa được chấp thuận (Not approved):**
 - Ngày hội âm nhạc sinh viên FPT 2025 (From: 04/01/2025 to: 13/01/2025)
 - Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT (From: 04/10/2025 to: 13/10/2025)
 - Chợ Tết Đại học FPT 2026 (From: 04/01/2026 to: 08/01/2026)
 - FPT Summer Festival 2025 (From: 19/07/2025 to: 14/07/2025)
- Đã chấp thuận (Approved):**
 - Sự kiện chào sinh viên mới FPT (From: 19/01/2025 to: 01/03/2025)
 - Hội thảo Công nghệ thông tin và Truyền thông (From: 13/06/2026 to: 15/06/2026)
- Đã từ chối (Rejected):**
 - Lễ kỷ niệm ngày Nhà giáo Việt Nam (Reason: Không hợp lệ) (From: 18/11/2025 to: 03/12/2025)

Screen 3-12: Reject Event

UC ID and Name:	UC-13_Reject event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	This function allows the Campus Manager reject event from Event Organizer		
Preconditions:	User logged in as Campus Manager Event is pending approval		
Postconditions:	The event is rejected and not visible to the user		
Normal Flow	1. The user logs into the system		

	<p>2. The user accesses event request screen</p> <p>3. The system will display all events sent requests from Event Organizer</p> <p>4. The user accesses an event to view event details</p> <p>5. The user clicks “Hủy yêu cầu” button</p>
Alternative Flows:	The user can click “Hủy yêu cầu” button in event request screen
Exceptions:	The user will be notified of an error if no reason is entered.
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-20, BR-21
Other Information:	N/A
Assumptions:	N/A

UC-14_Send Request

UC ID and Name:	UC-14_Send Request		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizer to send request for event plan approval		

Preconditions:	User logged into the system as Event Organizer Event must be in draft status or newly created
Postconditions:	Events will be approved or rejected from Campus Manager
Normal Flow	<ol style="list-style-type: none"> 1. The user logged into the system 2. The user clicks “Tạo sự kiện” on header bar 3. The system displays all fields for users to enter event plan information 4. The user enters full information 5. The user clicks “Tạo sự kiện” button 6. The system will send the request of that event to Campus Manager
Alternative Flows:	<ol style="list-style-type: none"> 1. The user logged into the system 2. The user clicks “Sự kiện nháp” on header bar 3. The system displays events that have been saved as drafts 4. The user clicks on event to view event details 5. The user clicks “Gửi yêu cầu” button
Exceptions:	N/A
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-18, BR-19
Other Information:	N/A
Assumptions:	N/A

UC-15_View All Event

The screenshot shows a user interface for viewing events. At the top, there are tabs: TRANG CHỦ, DANH SÁCH SỰ KIỆN (selected), LỊCH SỬ SỰ KIỆN ĐÃ THAM GIA, and SỰ KIỆN YÊU THÍCH. There is also a search bar labeled 'Tìm kiếm sự kiện...' and a 'Tìm kiếm' button. On the left, there is a sidebar with filtering options: 'Bộ lọc' (Filter) containing 'Kiểu sự kiện' (All), 'Địa điểm' (All), 'Ngày bắt đầu' (dd/mm/yyyy), and 'Ngày kết thúc' (dd/mm/yyyy). Below these are buttons for 'Tất cả' (All) and 'Áp dụng bộ lọc' (Apply filter). The main area displays a grid of event cards:

- Event 1:** CÔNG NGHỆ TRONG NGÀNH SỰ KIỆN (FPT University Career Fair 2025)
- Event 2:** CÔNG NGHỆ TRONG NGÀNH SỰ KIỆN (FPT University Career Fair 2025)
- Event 3:** Ngày hội sinh viên FPT 2025
- Event 4:** Ngày hội âm nhạc sinh viên FPT 2025
- Event 5:** Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT
- Event 6:** Hội thảo Công nghệ thông tin và Truyền thông
- Event 7:** Chợ Tết Đại học FPT 2025
- Event 8:** Lễ kỷ niệm ngày Nhà giáo Việt Nam
- Event 9:** FPT Summer Festival 2025
- Event 10:** Các sự kiện khác

At the bottom of the grid, there are navigation arrows for page 1, 2, and 3.

Screen 3-13: View All Event

UC ID and Name:	UC-15_View All Event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows user view all event in campus		
Preconditions:	The user is logged into the system		
Postconditions:	All events will be displayed		
Normal Flow	<ol style="list-style-type: none"> 1. The user is logged into system 2. The system will display all events on campus 		

Alternative Flows:	N/A
Exceptions:	N/A
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-07
Other Information:	N/A
Assumptions:	N/A

UC-16_Search Event

The screenshot shows a web-based event management system. At the top, there are navigation links: TRANG CHỦ, DANH SÁCH SỰ KIỆN (selected), LỊCH SỬ SỰ KIỆN ĐÃ THAM GIA, and SỰ KIỆN YÊU THÍCH. On the right, there is a user profile icon and a search bar labeled 'Tìm kiếm'.

Left Sidebar (Bộ lọc):

- Kiểu sự kiện: Tất cả, Hồi thảo công nghệ (selected).
- Ngày kết thúc: dd/mm/yyyy.
- Áp dụng bộ lọc (button).
- Xóa bộ lọc (button).

Top Right Search Bar:

Sự kiện công nghệ

Main Content Area (Sự kiện):

Bộ lọc đang áp dụng:

Event Image	Name	Date	Location
	Ngày hội sinh viên FPT 2025	18/00 Th 2, 9 tháng 6	Địa điểm: Đại học FPT - Campus Hà Nội
	CÔNG NGHỆ TRONG NGÀNH SỰ KIỆN	19/00 Th 7, 13 tháng 6	Địa điểm: Trường Đại học FPT
	CÔNG NGHỆ TRONG NGÀNH SỰ KIỆN	19/00 Th 6, 4 tháng 7	Địa điểm: Sân trường đại học FPT
	Lễ kỷ niệm ngày Nhà giáo Việt Nam	18/00 Th 4, 19 tháng 11	Địa điểm: Sân Đại học FPT
	Ngày hội âm nhạc sinh viên FPT 2025	4/00 Th 5, 20 tháng 11	Địa điểm: Đại học FPT - Campus Hà Nội
	Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT	4/00 Th 4, 15 tháng 10	Địa điểm: Sân Đại học FPT
	Chợ Tết Đại học FPT 2025	4/00 Th 5, 1 tháng 1	Địa điểm: Sân vận động Đại học FPT
	FPT Summer Festival 2025	19/00 Th 2, 14 tháng 7	Địa điểm: Trường Đại học FPT, Hà Nội

Pagination: < 1 > >>

Screen 3-14: Search Event

UC ID and Name:	UC-16_Search Event
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Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows users to search on demand		
Preconditions:	The user is logged into the system		
Postconditions:	Events found by search request		
Normal Flow	<ol style="list-style-type: none"> 1. The user is logged into system 2. The system will display all events on campus 3. The user enters keywords in text box 4. The user clicks “Tim kiém” button 5. The system displays events by search 		
Alternative Flows:	<ol style="list-style-type: none"> 1. The user select category and enters location in sidebar 2. The user clicks “Lọc sự kiện” button 3. The system displays event by filter 		
Exceptions:	If there are no events matching the search, the system will display a message saying there are no events.		
Priority:	High		
Frequency of Use:	Moderately		
Business Rules:	BR-22, BR23		
Other Information:	N/A		
Assumptions:	N/A		

UC-17_View Attended Event History

TÊN SỰ KIỆN	THỜI GIAN BẮT ĐẦU	Địa Điểm	CATEGORY
FPT Summer Festival 2025	19:00 CN, 14 thg 7	Trường Đại học FPT, Hà Nội	Ngày hội thể thao
Lễ hội hè FPT 2025	5:00 Th 5, 27 thg 6	Trường Đại học FPT, Hà Nội	Ngày hội thể thao
FPT University Career Fair 2025	19:00 Th 3, 13 thg 6	Sân trường đại học FPT	Hội thảo công nghệ

Screen 3-15: View Attended Event History

UC ID and Name:	UC-17_View Attended Event History		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Implementer	Secondary Actor:	None
Description:	This function allows the Implementer to view all joined events		
Preconditions:	1. The user has logged into the system with the role of Implementer 2. The user who have already made plans for that event		
Postconditions:	View all joined events		
Normal Flow	1. The user has logged into the system 2. The user clicks "Lịch sử sự kiện đã tham gia" on header bar 3. The system displays all event joined		
Alternative Flows:	N/A		

Exceptions:	If the user has not participated in any event, a message saying there is no event will be displayed.
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-24
Other Information:	N/A
Assumptions:	N/A

UC-18_Add Favorite Event

The screenshot shows a list of events on a platform. The events listed are:

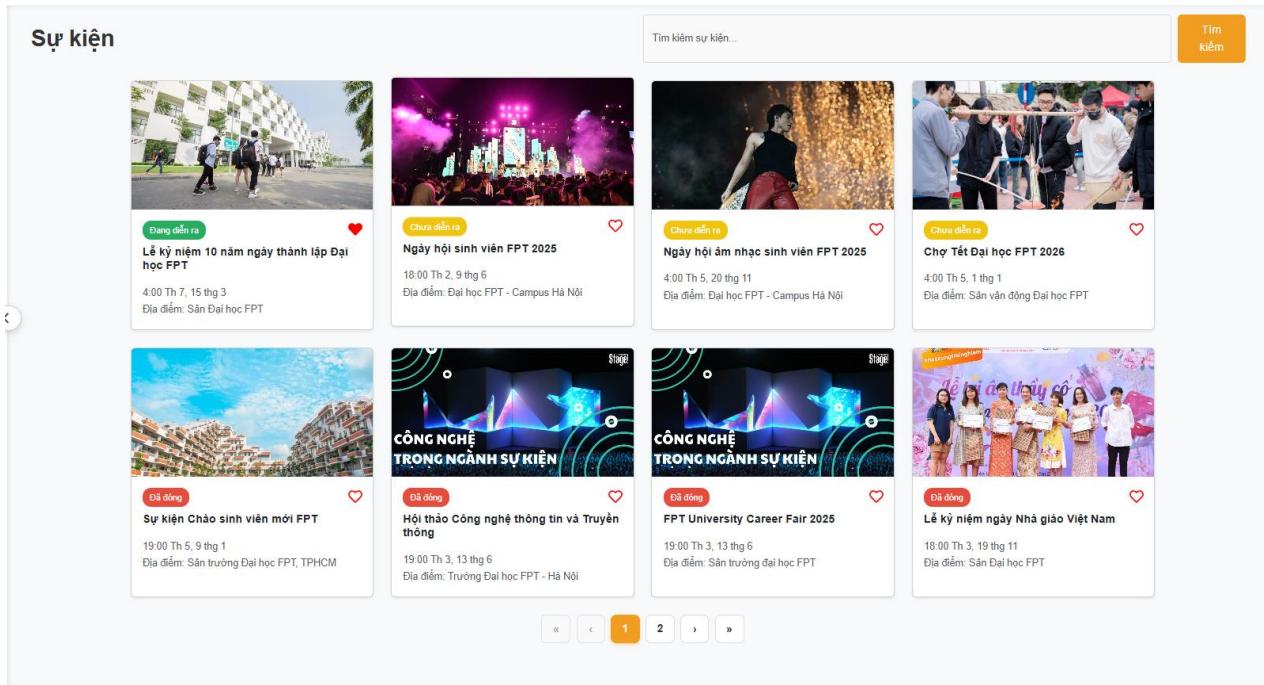
- Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT (Has ended)
- Ngày hội sinh viên FPT 2025 (Has ended)
- Ngày hội âm nhạc sinh viên FPT 2025 (Has ended)
- Chợ Tết Đại học FPT 2026 (Has ended)
- Sự kiện chào sinh viên mới FPT (Has ended)
- Hội thảo Công nghệ thông tin và Truyền thông (Has ended)
- FPT University Career Fair 2025 (Has ended)
- Lễ kỷ niệm ngày Nhà giáo Việt Nam (Has ended)

Screen 3-16: Add Favorite Event

UC ID and Name:	UC-18_Add Favorite Event
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Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows user add event to favorites		
Preconditions:	The user is logged into the system		
Postconditions:	Event added to favorites list		
Normal Flow	<ol style="list-style-type: none"> 1. The user logged into system 2. The system displays event in campus 3. The user click icon heart 		
Alternative Flows:	<ol style="list-style-type: none"> 1. The Event Organizer go to my event 2. The system displays all created events 3. The Event Organizer clicks on white heart to add to favorites list 		
Exceptions:	N/A		
Priority:	Meidum		
Frequency of Use:	Moderately		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

UC-19_Delete Favorite Event



Screen 3-17: Delete Favorite Event

UC ID and Name:	UC-19_Delete Favorite Event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows users to delete event favorites		
Preconditions:	The user is logged into the system Event has been added favorite by user		
Postconditions:	The event will be removed from favorite events		
Normal Flow	1. The user logged into system 2. The system displays event in campus		

	3. The user clicks on red heart to unfavorite
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Low
Frequency of Use:	Frequently
Business Rules:	BR-07
Other Information:	N/A
Assumptions:	N/A

UC-20_View Favorite Events

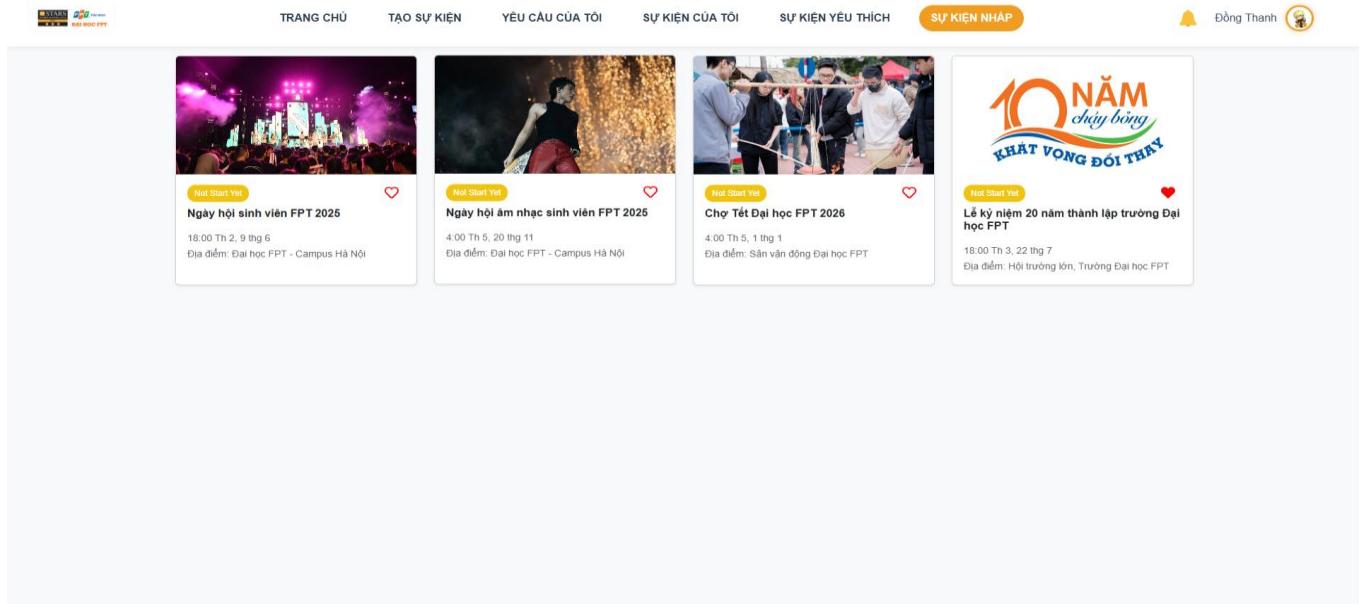
The screenshot displays a list of favorite events from a university's website. The events are arranged in two rows of four. Each event card includes a thumbnail image, the event name, date, and location. A red heart icon indicates it is a favorite.

Event	Date	Location
Ngày hội sinh viên FPT 2025	18:00 Th 2, 9 tháng 6	Đại học FPT - Campus Hà Nội
Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT	4:00 Th 7, 15 tháng 3	Sân Đại học FPT
Sự kiện Chào sinh viên mới FPT	19:00 Th 5, 9 tháng 1	Sân trường Đại học FPT, TPHCM
FPT Summer Festival 2025	19:00 CN, 14 tháng 7	Trường Đại học FPT, Hà Nội
Lễ hội Hè FPT 2025	5:00 Th 5, 27 tháng 6	Trường Đại học FPT, Hà Nội
Ngày hội âm nhạc sinh viên FPT 2025	4:00 Th 5, 20 tháng 11	Đại học FPT - Campus Hà Nội
Chợ Tết Đại học FPT 2026	4:00 Th 5, 1 tháng 1	Sân vận động Đại học FPT
Hội thảo Công nghệ thông tin và Truyền thông	19:00 Th 3, 13 tháng 6	Trường Đại học FPT - Hà Nội

Screen 3-18: View Favorite Event

UC ID and Name:	UC-20_View Favorite Event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer, Campus Manager, Implementer, Spectator	Secondary Actor:	None
Description:	This function allows users to view all favorited events		
Preconditions:	The user is logged into the system Event has been added favorite by user		
Postconditions:	Displays all favorited events		
Normal Flow	1. The user logged into system 2. The user go to favorite event page 3. The system displays all favorite events		
Alternative Flows:	N/A		
Exceptions:	If the user has not favorited any event, a message saying there are no events will be displayed		
Priority:	High		
Frequency of Use:	Frequently		
Business Rules:	BR-07		
Other Information:	N/A		
Assumptions:	N/A		

UC-21_View Draft Event



Screen 3-19: View Draft Event

UC ID and Name:	UC-21_View Draft Event		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizer to view all draft events		
Preconditions:	The user logs into the system with the Event Organizer role The event has been saved as a draft status by Event Organizer		
Postconditions:	Displays all draft events		
Normal Flow	1. The Event Organizer has logged into the system 2. The Event Organizer goes to the draft event screen		

	3. The system displays all event draft
Alternative Flows:	N/A
Exceptions:	If the user does not have any drafts, the system will display a message
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-26
Other Information:	N/A
Assumptions:	N/A

UC-22_View My Events

The screenshot shows a user interface for viewing events. At the top, there are navigation tabs: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI (highlighted in orange), SỰ KIỆN YÊU THÍCH, and SỰ KIỆN NHẬP. On the right side, there are icons for Đồng Thanh (Friendship) and a bell notification.

The main content area displays a grid of event cards. There are two rows of four cards each. Each card contains a thumbnail image, the event name, its status, and some additional details like date and location.

- Row 1:**
 - Lễ kỷ niệm 10 năm ngày thành lập Đại học FPT (Status: Chưa được duyệt)
 - Ngày hội sinh viên FPT 2025 (Status: Đang chờ xác nhận)
 - Ngày hội âm nhạc sinh viên FPT 2025 (Status: Chưa được duyệt)
 - Chợ Tết Đại học FPT 2026 (Status: Chưa được duyệt)
- Row 2:**
 - Lễ kỷ niệm 20 năm thành lập trường Đại học FPT (Status: Đang chờ xác nhận)
 - Sự kiện chào sinh viên mới FPT (Status: Chưa được duyệt)
 - Hội thảo Công nghệ thông tin và Truyền thông (Status: Chưa được duyệt)
 - FPT University Career Fair 2025 (Status: Chưa được duyệt)

At the bottom center, there are navigation arrows for pagination: <, <, 1, 2, >, >.

Screen 3-20: View My Events

UC ID and Name:	UC-22_View My Events		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows Event Organizer to view all created events		
Preconditions:	The user logs into the system with the Event Organizer role		
Postconditions:	Displays all created events		
Normal Flow	<ol style="list-style-type: none"> 1. The Event Organizer has logged into the system 2. The Event Organizer goes to the my event screen 3. The system displays all created event 		
Alternative Flows:	N/A		
Exceptions:	If the user has not created any event, a message will be displayed that there is no event		
Priority:	Medium		
Frequency of Use:	Moderately		
Business Rules:	BR-26		
Other Information:	N/A		
Assumptions:	N/A		

3.3.4 Event Organizer Management

UC-23_Create Event Organizer

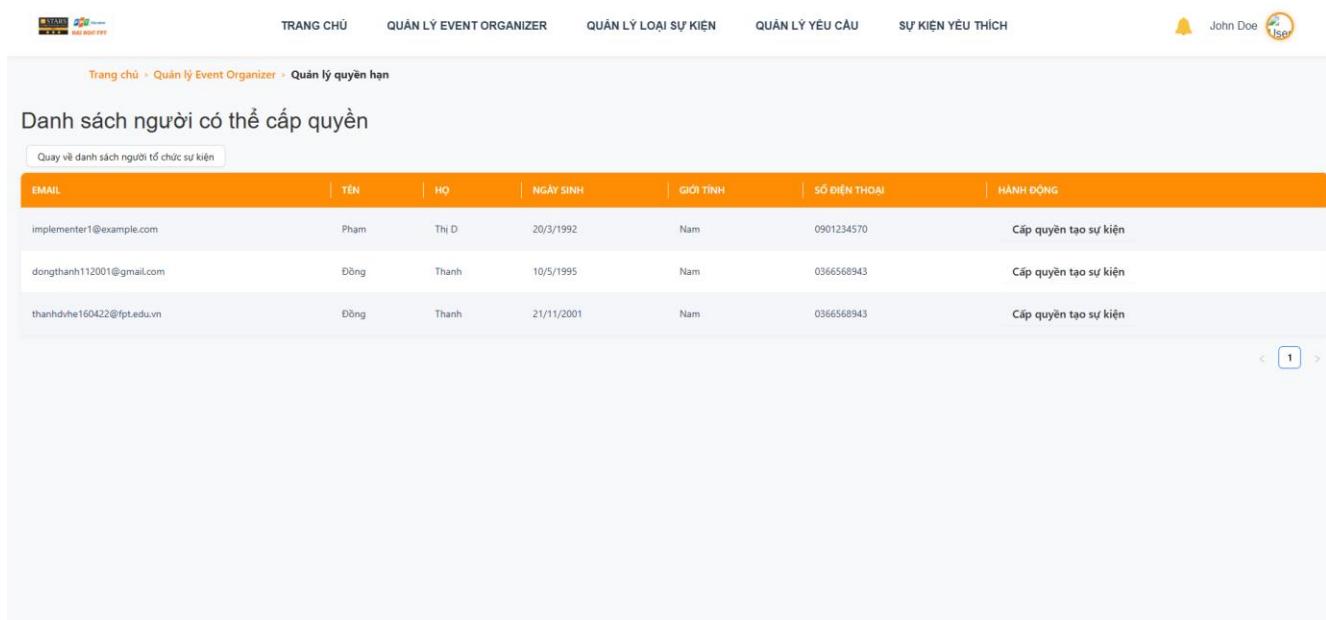
The screenshot shows a user interface for managing event organizers. At the top, there are tabs: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER (highlighted in orange), QUẢN LÝ LOẠI SỰ KIỆN, QUẢN LÝ YÊU CẦU, and SỰ KIỆN YÊU THÍCH. On the right, there's a user profile for 'John Doe'. Below the tabs, a sidebar lists 'Danh sách người tổ chức sự kiện' (List of Event Organizers) with buttons for 'Tạo người tổ chức sự kiện' and 'Danh sách cấp quyền'. The main area displays a form for creating a new organizer, with fields for Email, Name, Date of Birth, Gender, Phone Number, and Office. An orange 'Tạo' button is at the bottom of the form.

Screen 3-21: Create Event Organizer

UC ID and Name:	UC-23_Create Event Organizer		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	This function allows Campus Manager to create new Event Organizers.		
Preconditions:	The user logs into the system with the Campus Manager role		
Postconditions:	New Event Organizer created		
Normal Flow	<ol style="list-style-type: none"> 1. The user logged into system 2. The user accesses the Event Organizer management screen 3. The system will display all information about the list of Event Organizers 		

	4. The user clicks on the "Tạo người tổ chức sự kiện" button 5. The user enters full information 6. The user clicks on the "Tạo" button
Alternative Flows:	N/A
Exceptions:	If the user does not enter enough information about the Event Organizer, a message will be displayed.
Priority:	High
Frequency of Use:	Sometimes
Business Rules:	BR-08, BR-20, BR-25
Other Information:	N/A
Assumptions:	N/A

UC-24_Update Event Organizer



The screenshot shows a web application interface for managing event organizers. At the top, there is a navigation bar with links: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER, QUẢN LÝ LOẠI SỰ KIỆN, QUẢN LÝ YÊU CẦU, and SỰ KIỆN YÊU THÍCH. On the right side, there is a user profile for 'John Doe' with a photo placeholder.

The main content area displays a table titled 'Danh sách người có thể cấp quyền' (List of users who can be granted permissions). The table has columns: EMAIL, TÊN, HỌ, NGÀY SINH, GIỚI TÌNH, SỐ ĐIỆN THOẠI, and HÀNH ĐỘNG. The data in the table is as follows:

EMAIL	TÊN	HỌ	NGÀY SINH	GIỚI TÌNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
implementer1@example.com	Phạm	Thị D	20/3/1992	Nam	0901234570	Cấp quyền tạo sự kiện
dongthanh112001@gmail.com	Đồng	Thanh	10/5/1995	Nam	0366568943	Cấp quyền tạo sự kiện
thanhdvhe160422@fpt.edu.vn	Đồng	Thanh	21/11/2001	Nam	0366568943	Cấp quyền tạo sự kiện

At the bottom right of the table, there is a small navigation bar with icons for back, forward, and search.

Screen 3-22: Update Event Organizer

UC ID and Name:	UC-24_Update Event Organizer		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	This function allows Campus Manager to grant users the right to become Event Organizer		
Preconditions:	<p>The user logs into the system with the Campus Manager role</p> <p>The users must exist</p>		
Postconditions:	The user becomes Event Organizer		
Normal Flow	<ol style="list-style-type: none"> 1. The user logged into system 2. The user accesses the Event Organizer management screen 3. The system will display all information about the list of Event Organizers 4. The user clicks on the “Danh sách cấp quyền” button 5. The system displays all people who are not Event Organizers 6. The user clicks on the “Cấp quyền tạo sự kiện” button 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Moderately		
Business Rules:	BR-08, BR-20, BR-25		
Other Information:	N/A		
Assumptions:	N/A		

UC-25_Delete Event Organizer

EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	0912345678	<input type="button" value="Delete"/>
dongvanminh76@gmail.com	Implementer T	10/5/1995	Nam	0912345678	<input type="button" value="Delete"/>
spectator1@example.com	Hoàng Văn C	25/7/1998	Nam	0901234571	<input type="button" value="Delete"/>

Screen 3-23: Delete Event Organizer

UC ID and Name:	UC-25_Delete Event Organizer		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	This function allows Campus Manager to remove Event Organizer permissions		
Preconditions:	The user logs into the system with the Campus Manager role The users must exist		
Postconditions:	The user has been removed from creating events		
Normal Flow	1. The user logged into system 2. The user accesses the Event Organizer management screen		

	<p>3. The system will display all information about the list of Event Organizers</p> <p>4. The user clicks on the “Xóa” button</p>
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Low
Frequency of Use:	Sometimes
Business Rules:	BR-20
Other Information:	N/A
Assumptions:	N/A

3.3.5 Task & Sub-task Management

UC-26_Create Task

Screen 3-24: Create Task

UC ID and Name:	UC-26_Create Task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to create tasks in events		
Preconditions:	The user logs into the system with the Event Organizer role		
Postconditions:	Task created successfully		
Normal Flow	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the event creation screen 3. The user clicks on create event button 4. The system displays task information to the user 5. The user enters information 		
Alternative Flows:	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the draft event list screen 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen 6. The user clicks on the "Tạo nhiệm vụ" button 		
Exceptions:	If the user does not enter the required fields, the system will display an error message.		
Priority:	High		
Frequency of Use:	Frequently		
Business Rules:	BR-18, BR-26, BR-19, BR-27, BR-28, BR-13		

Other Information:	N/A
Assumptions:	N/A

UC-27_Update Task

The screenshot shows a modal dialog titled "Cập nhật nhiệm vụ" (Update Task) overlaid on a main application window. The main window displays a list of tasks under "Danh sách nhiệm vụ (2)". The task details are as follows:

#	TÊN	MÔ TẢ
1	Xây dựng sân khấu và trang trí hội trường [2 Subtask]	Thiết kế và trang trí sân khấu, hệ thống âm thanh, ánh sáng cho sự kiện
2	Chương trình sự kiện [2 Subtask]	Xây dựng chương trình sự kiện

The modal dialog contains the following fields:

- Tiêu đề:** Xây dựng sân khấu và trang trí hội trường
- Mô tả:** Thiết kế và trang trí sân khấu, hệ thống âm thanh, ánh sáng cho sự kiện
- Bắt đầu:** 23/04/2025 03:45
- Hạn chót:** 20/07/2025 03:00
- Budget (VND):** 50.000.000

Buttons at the bottom of the dialog include "Hủy" (Cancel) and "Cập nhật" (Update).

Screen 3-25: Update Task

UC ID and Name:	UC-27_Update Task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to update tasks in events		

Preconditions:	The user logs into the system with the Event Organizer role The event must exist as draft
Postconditions:	The task has been changed.
Normal Flow	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the draft event list screen 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen 6. The user clicks on the "Cập nhật" button
Alternative Flows:	N/A
Exceptions:	If the user does not enter the required fields, the system will display an error message.
Priority:	High
Frequency of Use:	Moderately
Business Rules:	BR-18, BR-26, BR-19, BR-27, BR-28, BR-13
Other Information:	N/A
Assumptions:	N/A

UC-28_Delete Task

Screen 3-26: Delete Task

UC ID and Name:	UC-28_Delete Task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to delete tasks in events		
Preconditions:	The user logs into the system with the Event Organizer role Event exist as draft		
Postconditions:	The task has been deleted		
Normal Flow	1. The user has logged into the system 2. The user accesses the draft event list screen 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen		

	6. The user clicks on the "Xóa" button
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Low
Frequency of Use:	Occasionally
Business Rules:	BR-26, BR-18, BR-19
Other Information:	N/A
Assumptions:	N/A

UC-29_Create Sub-task

The screenshot shows a software interface for event management. The main window displays a list of tasks for an event titled "Chương trình nghệ thuật". A modal window titled "Thêm công việc con mới" (Add new child task) is open, prompting for details like task name, description, start date, end date, and budget. The background shows other event management features like guest management and task lists.

Screen 3-27: Create Sub-task

UC ID and Name:	UC-29_Create Sub-task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to create sub-tasks in events		
Preconditions:	<p>The user logs into the system with the Event Organizer role</p> <p>The tasks must exist</p>		
Postconditions:	Sub-task created successfully		
Normal Flow	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the event creation screen 3. The user clicks on create event button 4. The system displays task information to the user 5. The user enters information 6. The user click "Tạo nhiệm vụ con" button 		
Alternative Flows:	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the draft event list screen 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen 6. The user clicks on the "Tạo nhiệm vụ" button 7. The user enters the task information 8. The user clicks on the "Tạo nhiệm vụ con" button 		
Exceptions:	If the user does not enter the required fields, the system will display an error message.		
Priority:	Medium		
Frequency of Use:	Moderately		
Business Rules:	BR-18, BR-26, BR-19, BR-27, BR-28, BR-13		

Other Information:	N/A
Assumptions:	N/A

UC-30_Update Sub-task

Screen 3-28: Update Sub-task

UC ID and Name:	UC-30_Update Sub-task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to update sub-tasks in events		
Preconditions:	The user logs into the system with the Event Organizer role Event must exist as draft		

	Task must exist
Postconditions:	The sub-task has been changed.
Normal Flow	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the draft event list screen 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen 6. The user clicks on the task 7. The system displays task information and button “Tạo nhiệm vụ con” 8. The user clicks “Tạo nhiệm vụ con” button
Alternative Flows:	N/A
Exceptions:	If the user does not enter the required fields, the system will display an error message.
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-18, BR-26, BR-19, BR-27, BR-28, BR-13
Other Information:	N/A
Assumptions:	N/A

UC-31_Delete Sub-task

The screenshot shows a software application interface for managing events. At the top, there are tabs: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, and SỰ KIỆN NHẬP. Below the tabs, the main content area displays an event titled 'Lễ khai mạc' (Opening Ceremony) under the heading 'Chương trình nghệ thuật'. To the right of the event title, there is a summary box with the following information:

- Chi tiết nhiệm vụ:** Xây dựng sân khấu và trang trí hội trường.
- Tình trạng:** Hoàn thành: 0%
- Bắt đầu:** 23/04/2025
- Hạn chót:** 20/07/2025
- Ngân sách:** 50.000.000 đ
- Mô tả:** Thiết kế và trang trí sân khấu, hệ thống âm thanh, ánh sáng cho sự kiện

Below this summary, there is a button labeled '+ Tạo công việc con mới' (Create new child task).

The main content area also includes a section titled 'Danh sách nhiệm vụ (2)' (List of tasks (2)) which lists two tasks:

#	TÊN	MÔ TẢ	BẮT ĐẦU	HẠN CHỐT	NGÂN SÁCH	HÀNH ĐỘNG
1	Xây dựng sân khấu và trang trí hội trường	Thiết kế và trang trí sân khấu, hệ thống ánh... [2 Subtask]	23/04/2025	20/07/2025	50.000.000 đ	
2	Chương trình sự kiện	Xây dựng chương trình biểu diễn, bố trí...	23/04/2025	18/07/2025	40.000.000 đ	

Below the task list, there is a section titled 'Quản lý người tham gia sự kiện (0)' (Manage event participants (0)).

Screen 3-29: Delete Sub-task

UC ID and Name:	UC-31_Delete Sub-task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to delete sub-tasks in events		
Preconditions:	The user logs into the system with the Event Organizer role The event must exist as draft The task must exist		
Postconditions:	The sub-task has been deleted		
Normal Flow	1. The user has logged into the system 2. The user accesses the draft event list screen		

	<ul style="list-style-type: none"> 3. The system displays all draft events 4. The user clicks on any draft event 5. The system displays the detailed draft event on the screen 6. The user clicks on the task 7. The system displays information task and list sub-task 8. The user click “Xóa” button in sub-task
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Low
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-18, BR-26, BR-29, BR30, BR-31
Other Information:	N/A
Assumptions:	N/A

UC-32_Assign Sub-task

The screenshot shows a software interface for managing events. At the top, there are tabs for 'TRANG CHỦ', 'TAO SỰ KIỆN', 'YÊU CẦU CỦA TÔI', 'SỰ KIỆN CỦA TÔI', 'SỰ KIỆN YÊU THÍCH', and 'SỰ KIỆN NHÃN'. The 'TAO SỰ KIỆN' tab is active. Below it, there's a section for 'Lễ khai mạc' (Opening ceremony) with a note 'Chương trình nghệ thuật'. A modal window titled 'Giao công việc con Thiết kế sân khấu' is open, showing a search bar with 'd' and a list of users: Phạm Thị D, Đồng Thành, Đồng Thành, John Doe, and Implementer T. To the right of the modal, there's a preview of a task with details: 'Bắt đầu: 23/04/2025', 'Hạn chót: 20/07/2025', 'Ngân sách: 50,000,000 đ', and a note 'Thiết kế và trang trí sân khấu, hệ thống âm thanh, ánh sáng cho sự kiện'. Below the modal, there's a table titled 'Danh sách công việc con (2)' with two rows: 'Thiết kế sân khấu' and 'Trang trí hội trường'. The 'Thiết kế sân khấu' row has a note 'Thiết kế sân khấu theo concept chung của sự kiện'. The 'Trang trí hội trường' row has a note 'Trang trí hệ thống ánh sáng, backdrop cho hội trường'.

Screen 3-30: Assign Sub-task

UC ID and Name:	UC-32_Assign Sub-task		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to assign subtasks to implementer		
Preconditions:	The user logs into the system with the Event Organizer role The event must exist The task must exist The sub-task must exist		
Postconditions:	Subtasks are assigned to implementers		
Normal Flow	1. The user has logged into the system 2. The user accesses the my event list screen 3. The system displays all events 4. The user clicks on any event 5. The system displays the detailed event on the screen 6. The user clicks on the task 7. The system displays information task and list sub-task 8. The user click "Assign" button in sub-task 9. The user enters email or name of implementer		
Alternative Flows:	N/A		
Exceptions:	If the user is not found, the system will display a message		
Priority:	High		
Frequency of Use:	Frequently		

Business Rules:	BR-02, BR-07, BR-26, BR-29, BR-30, BR-32
Other Information:	N/A
Assumptions:	N/A

UC-33_View Task List

The screenshot shows a user interface for managing tasks. At the top, there is a navigation bar with links for 'TRANG CHỦ', 'TẠO SỰ KIỆN', 'YÊU CẦU CỦA TÔI', 'SỰ KIỆN CỦA TÔI', 'SỰ KIỆN YÊU THÍCH', 'SỰ KIỆN NHẬP', and a user profile icon for 'Đồng Thành'. Below the navigation, there are two collapsed sections: 'Lễ khai mạc' and 'Chương trình nghệ thuật'. A large central panel displays a table titled 'Danh sách nhiệm vụ (2)' with the following data:

#	TÊN	MÔ TẢ	BẮT ĐẦU	HẠN CHỐT	NGÂN SÁCH	HÀNH ĐỘNG
1	Xây dựng sân khấu và trang trí hội trường [2 Subtask]	Thiết kế và trang trí sân khấu, hệ thống á...	23/04/2025	20/07/2025	50.000.000 ₫	[Edit, Delete, Preview]
2	Chương trình sự kiện [2 Subtask]	Xây dựng chương trình biểu diễn, bố trí t...	23/04/2025	18/07/2025	40.000.000 ₫	[Edit, Delete, Preview]

Below this table is another section titled 'Quản lý người tham gia sự kiện (0)' with a button to 'Thêm người tham gia'.

Screen 3-31: View Task List

UC ID and Name:	UC-33_View Task List		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to view the tasks list		
Preconditions:	The user logs into the system with the Event Organizer role		

	The event must exist
Postconditions:	Displays task list
Normal Flow	<ol style="list-style-type: none"> 1. The user has logged into the system 2. The user accesses the my event list screen 3. The system displays all events 4. The user clicks on any event 5. The system displays detailed events and task lists on the screen
Alternative Flows:	N/A
Exceptions:	If there are no tasks, the system will display a message
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-07, BR-26, BR-29, BR-33
Other Information:	N/A
Assumptions:	N/A

UC-34_View Sub-task List

The screenshot shows a web-based application interface for managing events. At the top, there is a navigation bar with tabs: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, and SỰ KIỆN NHÃN. Below the navigation bar, there is a header for 'Lễ khai mạc' (Opening Ceremony) under 'Chương trình nghệ thuật' (Art Program). On the right side, there is a sidebar with sections for 'Chi tiết nhiệm vụ' (Task Details), 'Danh sách công việc con' (Child Task List), and 'Quản lý người tham gia sự kiện' (Event Participant Management). The main content area displays a table titled 'Danh sách nhiệm vụ (2)' (List of Tasks (2)) with columns: #, TÊN (Name), MÔ TẢ (Description), BẮT ĐẦU (Start Date), HẠN CHỐT (Due Date), NGÂN SÁCH (Budget), and HÀNH ĐỘNG (Actions). Two tasks are listed:

#	TÊN	MÔ TẢ	BẮT ĐẦU	HẠN CHỐT	NGÂN SÁCH	HÀNH ĐỘNG
1	Xây dựng sân khấu và trang trí hội trường [2 Subtask]	Thiết kế và trang trí sân khấu, hệ thống ánh... [2 Subtask]	23/04/2025	20/07/2025	50.000.000 ₫	+ Tạo công việc con mới
2	Chương trình sự kiện [2 Subtask]	Xây dựng chương trình biểu diễn, bố trí t... [2 Subtask]	23/04/2025	18/07/2025	40.000.000 ₫	+ Tạo công việc con mới

Below the task list, there is a section titled 'Quản lý người tham gia sự kiện (0)' (Event Participant Management) with a note 'Không có người tham gia nào' (No participants).

Screen 3-32: View Sub-task List

UC ID and Name:	UC-34_View Sub-task List		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows users to view the subtask list		
Preconditions:	The user logs into the system with the Event Organizer role The event must exist The task must exist		
Postconditions:	Displays subtask list		
Normal Flow	6. The user has logged into the system 7. The user accesses the my event list screen 8. The system displays all events 9. The user clicks on any event		

	10. The system displays the detailed event on the screen 11. The user clicks on the task 12. The system displays information task and list sub-task
Alternative Flows:	N/A
Exceptions:	If there are no tasks, the system will display a message
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-07, BR-26, BR-29, BR-30, BR-34
Other Information:	N/A
Assumptions:	N/A

3.3.6 Manage Implementer

UC-35_View List Implementer

The screenshot displays a software interface for managing event implementers. At the top, there are tabs for 'TRANG CHỦ', 'QUẢN LÝ EVENT ORGANIZER', 'QUẢN LÝ LOẠI SỰ KIỆN', 'QUẢN LÝ YÊU CẦU' (highlighted in orange), 'SỰ KIỆN YÊU THÍCH', and a user profile for 'John Doe'. Below the tabs is a table listing two events:

#	TÊN	MÔ TẢ	BẮT ĐẦU	HẠN CHỐT	NGÂN SÁCH	HÀNH ĐỘNG
1	Xây dựng sự kiện 2 Subtask	Xây dựng kế hoạch tổ chức sự kiện âm ...	16/04/2025	19/11/2025	70.000.000 đ	⋮
2	Quảng bá sự kiện	Quảng bá sự kiện âm nhạc đến sinh viê...	16/04/2025	14/11/2025	30.000.000 đ	⋮

Below the table is a section titled 'Quản lý người tham gia sự kiện (0)' with columns for 'HỌ TÊN' and 'THỜI GIAN THAM GIA'. A message indicates 'Không có người tham gia nào'.

Further down, there is a section titled 'Danh sách rủi ro (2)' with columns for 'TÊN RỦI RO', 'NGUYỄN NHÂN', 'GIẢI PHÁP', and 'MÔ TẢ'.

TÊN RỦI RO	NGUYỄN NHÂN	GIẢI PHÁP	MÔ TẢ
Thời tiết xấu	Khả năng mưa lớn vào ngày sự kiện	Sẵn sàng áp dụng kế hoạch dự phòng...	Mưa lớn có thể ảnh hưởng đến chất lượng sự kiện và số lư...

Screen 3-33: View List Implementer

UC ID and Name:	UC-35_View List Implementer		
Created By:	TungNC	Date Created:	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	Campus Manager, Implementer
Description:	This function allows the campus manager, event organiser or implementer to view the list of all implementers in an event.		
Preconditions:	The user must be logged into the system as a manager, Event Organizer or implementer.		
Postconditions:	The system displays a list implementer of an event.		

Normal Flow	<ol style="list-style-type: none"> 1. The user logs into the system, and the system verifies permissions. 2. The user chooses an event. 3. The system retrieves and displays the event details which include the list of implementers.
Alternative Flows:	None
Exceptions:	If the event not have any implementer, the system displays the message "Không có người tham gia nào."
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-20, BR-24, BR-26, BR-35
Other Information:	N/A
Assumptions:	N/A

UC-36_Add Implementer to Event

The screenshot shows a user management interface. At the top, there's a navigation bar with links like 'TRANG CHỦ', 'TAO SỰ KIỆN', 'YÊU CẦU CỦA TÔI', 'SỰ KIỆN CỦA TÔI', 'SỰ KIỆN YÊU THÍCH', 'SỰ KIỆN NHÁP', and a user profile 'Ceo Tùng'. A search dialog is open, titled 'Tim kiếm người dùng', with the search term 'ceo'. It displays a list of users with columns for 'HÌNH ĐẠI DIỆN' (Avatar), 'HỌ TÊN' (Name), 'EMAIL', and 'HÀNH ĐỘNG' (Actions). Below the dialog, a table lists two users: 'John Doe' and 'Hoàng Văn C'. At the bottom right of the interface, there's a button '+ Thêm rủ ro'.

Screen 3-34: Add Implementer to Event

UC ID and Name:	UC-36_Add Implementer to Event		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allows event organizers to add implementers to the events that they create.		
Preconditions:	1. The user must be logged into the system as an event organiser. 2. The event needed to add implementers has not been submitted.		
Postconditions:	The system displays a new list of implementers after adding.		
Normal Flow:	1. Event organizer logs in. 2. Navigates to "Sự kiện nháp".		

	3. Click button “Thêm người tham gia”.
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-02, BR-07, BR-18, BR-26, BR-32, BR-36
Other Information:	N/A
Assumptions:	N/A

UC-37_Delete Implementer from Event

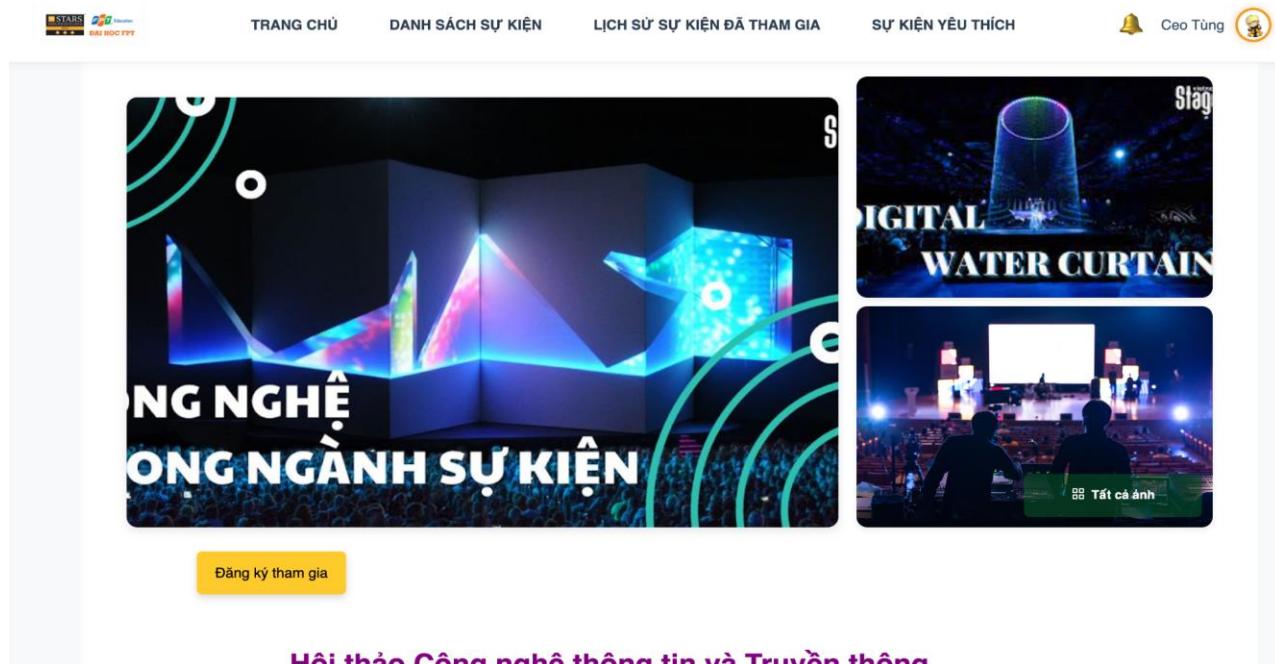
Screen 3-35: Delete Implementer from Event

UC ID and Name:	UC-37_Delete Implementer from Event		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None

Description:	Allows event organizer to delete implementers out of their events
Preconditions:	The user must be logged into the system as an event organiser.
Postconditions:	The system displays a new list implementers of an event without the recently deleted implementers.
Normal Flow:	<ol style="list-style-type: none"> 1. Event organizer logs in. 2. Navigates to “Sự kiện nháp” 3. In list “Quản lý người tham gia sự kiện”, click delete icon and confirm to delete implementer who useless.
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-18, BR-26, BR-32, BR-37
Other Information:	N/A
Assumptions:	N/A

3.3.7 Registration & Participants

UC-38_Register for Event



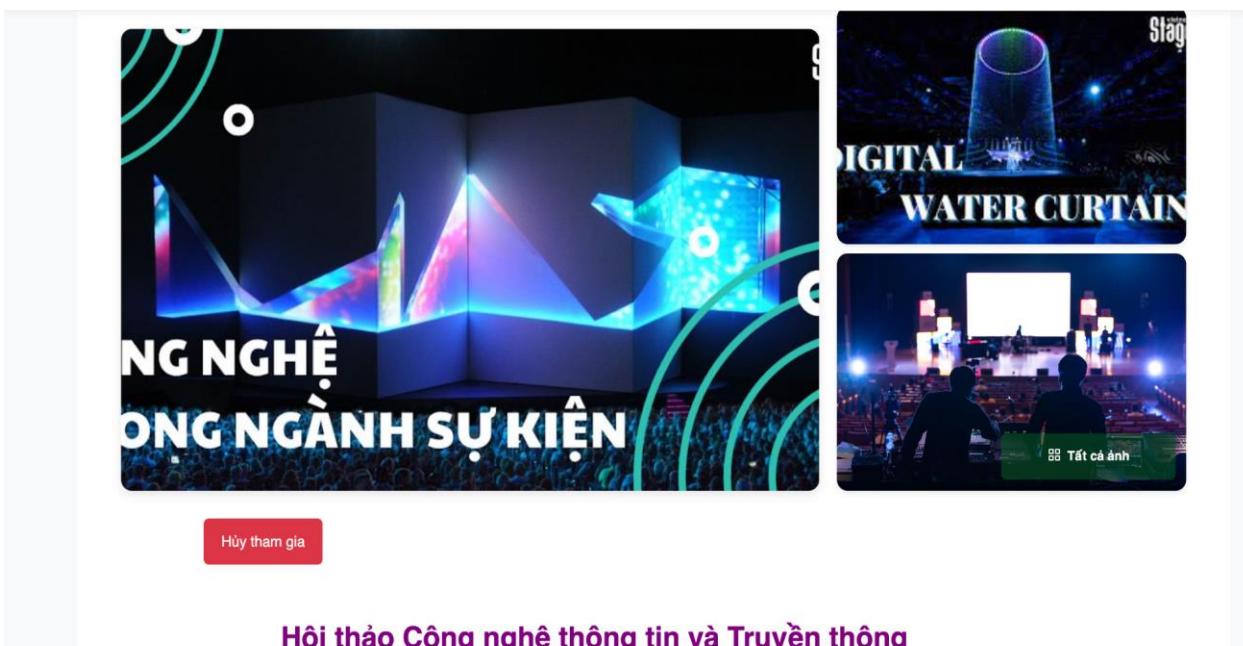
Hội thảo Công nghệ thông tin và Truyền thông

Screen 3-36: Register for Event

UC ID and Name:	UC-38_Register for Event		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Spectator	Secondary Actor:	None
Description:	Allow users to register for an upcoming event		
Preconditions:	User successfully logged into the system		
Postconditions:	The system displays notification “Đăng ký thành công”		
Normal Flow:	<ol style="list-style-type: none"> 1. The spectator logged into system 2. Navigates to an event 		

	3. Click button “Đăng ký tham gia”
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Frequently
Business Rules:	BR-07, BR-23, BR-27, BR-38, BR-39
Other Information:	N/A
Assumptions:	N/A

UC-39_Cancel Registration



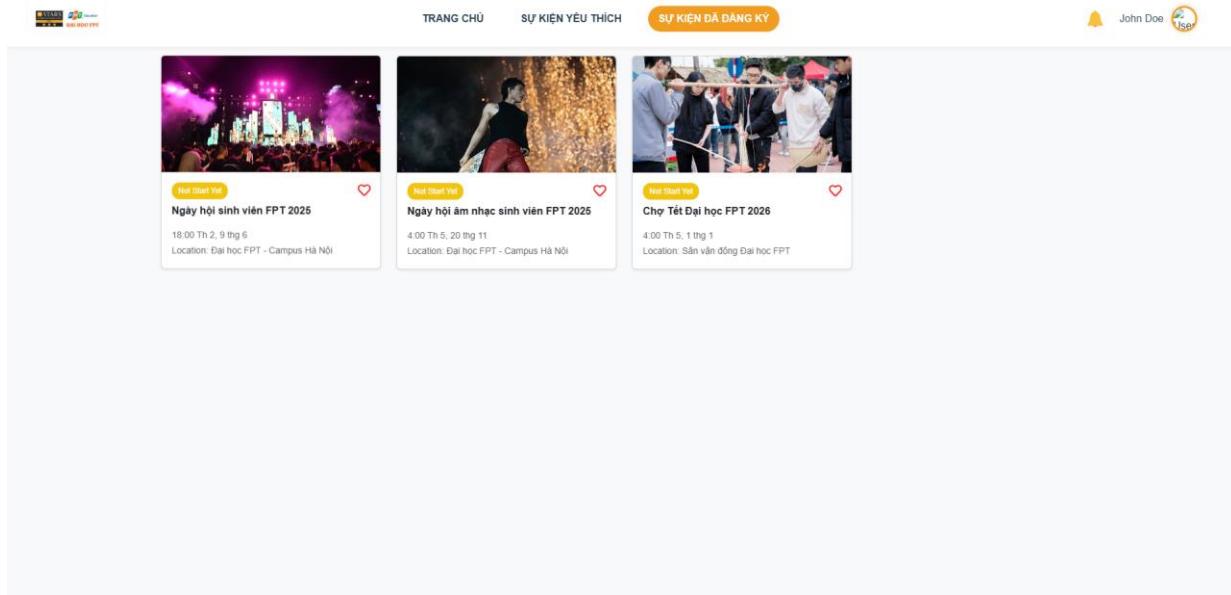
Hội thảo Công nghệ thông tin và Truyền thông

Screen 3-37: Cancel Registration

UC ID and Name:	UC-39_Cancel Registration		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Spectator	Secondary Actor:	None

Description:	Allow users to cancel registration of an event
Preconditions:	<ol style="list-style-type: none"> User successfully logged into system User registered at least one event
Postconditions:	The system display notification “Huỷ đăng ký thành công”
Normal Flow:	<ol style="list-style-type: none"> Spectator logged into system Navigates to an registered event Click button “Huỷ đăng ký”
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-23, BR-27, BR-39, BR-40, BR-41
Other Information:	N/A
Assumptions:	N/A

UC-40_View Registered Events



Screen 3-38: View Registered Events

UC ID and Name:	UC-40_View Registered Events		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Spectator	Secondary Actor:	Implementer
Description:	Allow users to view a list of registered events.		
Preconditions:	1. Users successfully logged into the system as a spectator or implementer. 2. Users registered at least one event.		
Postconditions:	The system displays a list of events that the user registered.		
Normal Flow:	1. Users logged into the system. 2. Navigates to “Sự kiện đã đăng ký”		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-07, BR-23, BR-24, BR-38, BR-39, BR-42, BR-43, BR-44		
Other Information:	N/A		
Assumptions:	N/A		

UC-41_View Number Of Registrants

The screenshot shows a web-based event management application. At the top, there is a navigation bar with links for 'TRANG CHỦ', 'TẠO SỰ KIỆN', 'YÊU CẦU CỦA TÔI', 'SỰ KIỆN CỦA TÔI', 'SỰ KIỆN YÊU THÍCH', 'SỰ KIỆN NHÁP', and a user profile for 'Ceo Tùng'. Below the navigation bar, there is a table listing four items:

Số	Mô tả	Số lượng	Tổng giá trị
2	Tạo lập kế hoạch diễn già	1	20.000.000 đ
3	Chuẩn bị trang thiết bị âm thanh	1	30.000.000 đ
4	Quảng bá sự kiện	1	30.000.000 đ

Below the table, there is a summary row: 'Tổng cộng: 110.000.000 đ' and a page navigation section: 'Tổng cộng 4 chi phí < 1 > 10 / page'.

Below this, there is another section titled 'Danh sách người đăng ký sự kiện (1)'. It has a table with columns: 'STT', 'TÊN', 'EMAIL', and 'THỜI GIAN ĐĂNG KÝ'. One entry is shown:

STT	TÊN	EMAIL	THỜI GIAN ĐĂNG KÝ
1	Ceo Tùng	ceotungnguyen@gmail.com	15:59 22/04/2025

Page navigation: '< 1 >'.

Screen 3-39: View Number Of Registrants

UC ID and Name:	UC-41_View Number Of Registrants		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow the event organizer to view the list of registrants.		
Preconditions:	The user successfully logged into the system as an event organizer.		
Postconditions:	List the number of people registered to attend the event		
Normal Flow:	<ol style="list-style-type: none"> 1. The event organizer logged into the system. 2. Navigates to “Sự kiện của tôi” 3. Scroll to field “Danh sách người đăng ký sự kiện” 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		

Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-19, BR-23, BR-26, BR-38, BR-39, BR-45, BR-46
Other Information:	N/A
Assumptions:	N/A

3.3.8 Risk & Cost Management

UC-42_Create Risk

STT	Tên rủi ro	Lý do	Mô tả	Giải pháp
1	Tên rủi ro	Lý do	Mô tả	Giải pháp
2	Tên rủi ro	Lý do	Mô tả	Giải pháp

+ Tao rủi ro

+ Tao hoạt động

Rủi ro

Ảnh

Screen 3-40: Create Risk

UC ID and Name:	UC-42_Create Risk		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to list the risks they may encounter while creating events.		
Preconditions:	1. The user must login to the system as an event organizer. 2. The event is being created or in the draft list.		

Postconditions:	The system displays new list risks with new risks having been entered.
Normal Flow:	<ol style="list-style-type: none"> 1. The user successfully logged into the system. 2. Navigates to “Tạo sự kiện”. 3. Click add icon in field “Rủi ro”. 4. Enter risk information.
Alternative Flows:	<ol style="list-style-type: none"> 1. The user successfully logged into the system. 2. Navigates to “Sự kiện nháp”. 3. Click add icon in field “Rủi ro”. 4. Enter risk information.
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-17, BR-18, BR-19, BR-23, BR-26, BR-47, BR-48, BR-49
Other Information:	N/A
Assumptions:	N/A

UC-43_Update Risk

The screenshot shows a web-based event management application. At the top, there is a navigation bar with links: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, SỰ KIỆN NHÁP, and Ceo Tùng. A user profile icon is also present.

The main content area displays two lists: 'Danh sách rủi ro (2)' and 'Danh sách chi phí (4)'. The 'Rủi ro' list includes columns for Name, Description, and Actions. The 'Chi phí' list includes columns for STT, Name, Description, and Actions.

A modal window titled 'Cập nhật rủi ro' is open, showing fields for 'Tên rủi ro' (Risk name), 'Thời tiết xấu' (Bad weather), 'Nguyên nhân' (Cause), 'Giải pháp' (Solution), and 'Mô tả' (Description). It also contains a 'Hủy' (Cancel) button and a 'Cập nhật' (Update) button.

Screen 3-41: Update Risk

UC ID and Name:	UC-43_Update Risk		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to update the risks they may encounter while creating events.		
Preconditions:	1. The user must login to the system as an event organizer. 2. The event is in the draft list.		
Postconditions:	The system displays new list risks with new risks having been updated.		
Normal Flow:	1. The user successfully logged into the system. 2. Navigates to "Sự kiện nháp". 3. Click update icon in field "Rủi ro".		

	4. Enter update risk information.
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-01, BR-07, BR-17, BR-18, BR-19, BR-23, BR-26, BR-48, BR-49, BR-50, BR-51
Other Information:	N/A
Assumptions:	N/A

UC-44_Delete Risk

TÊN RỦI RO	NGUYỄN NHÂN	GIẢI PHÁP	MÔ TẢ
Thời tiết xấu	Khả năng mưa lớn, gió lớn vào...	Chuẩn bị kế hoạch dự phòng ...	Thời tiết xấu có thể làm ảnh hưởng đến việc tổ c...
Vấn đề về an ninh	Nguy cơ an ninh do sự kiện gâ...	Tăng cường lực lượng an ninh,...	Không kiểm soát được số lượng người tham gia, ...

STT	TÊN CHI PHÍ	SỐ LƯỢNG	ĐƠN GIÁ	THÀNH TIỀN	HÀNH ĐỘNG
1	Thiết kế trang trí sân khấu	1	15.000.000 đ	15.000.000 đ	
2	Trang trí không gian sự kiện	1	15.000.000 đ	15.000.000 đ	
3	Quảng bá sự kiện	1	20.000.000 đ	20.000.000 đ	

Screen 3-42: Delete Risk

UC ID and Name:	UC-44_Delete Risk		
Created By:	TungNC	Date Created	27/02/2025

Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to remove the risks they may encounter while creating events.		
Preconditions:	1. The user must login to the system as an event organizer. 2. The event is in the draft list.		
Postconditions:	The system displays new list risks after some risks are deleted.		
Normal Flow:	1. The user successfully logged into the system. 2. Navigates to “Sự kiện nháp”. 3. Click delete icon in field “Rủi ro”. 4. Confirm delete risk information.		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-01, BR-07, BR-17, BR-18, BR-19, BR-23, BR-26, BR-49, BR-50, BR-52, BR-53, BR-54		
Other Information:	N/A		
Assumptions:	N/A		

UC-45_Create Cost

The screenshot shows a user interface for managing event costs. At the top, there is a navigation bar with links: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, SỰ KIỆN NHÁP, and a user profile for 'Ceo Tùng'. Below the navigation is a main content area titled 'Danh sách chi phí (4)'. A modal window titled 'Thêm chi phí mới' is open, prompting for 'Tên chi phí' (Name), 'Số lượng' (Quantity), and 'Đơn giá (VND)' (Unit Price). The quantity is set to 1, and the unit price is 0. The total amount shown is 60.000.000 đ. There are buttons for 'Hủy' (Cancel) and 'Thêm mới' (Add New). Below the modal, the main list shows four items: Thiết kế trang trí sân khấu, Trang trí không gian sự kiện, Quảng bá sự kiện, and Logistic và an ninh, each with a value of 10.000.000 đ. A summary at the bottom indicates a total of 60.000.000 đ.

Screen 3-43: Create Cost

UC ID and Name:	UC-45_Create Cost		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to create the costs they may pay while creating events.		
Preconditions:	1. The user must login to the system as an event organizer. 2. The event is in the draft list.		
Postconditions:	The system displays new list costs with new costs which are created.		
Normal Flow:	1. The user successfully logged into the system. 2. Navigates to “Sự kiện nháp”. 3. Click button “Thêm chi phí” in field “Danh sách chi phí”. 4. Enter new cost information.		
Alternative Flows:	N/A		

Exceptions:	N/A
Priority:	High
Frequency of Use:	Frequently
Business Rules:	BR-01, BR-07, BR-13, BR-14, BR-15, BR-17, BR-18, BR-19, BR-23, BR-26, BR-55, BR-56, BR-57
Other Information:	N/A
Assumptions:	N/A

UC-46_Update Cost

The screenshot shows a modal dialog titled "Cập nhật chi phí" (Update expense) over a main interface. The dialog contains three input fields: "Tên chi phí" (Expense Name) with value "Thiết kế trang trí sân khấu", "Số lượng" (Quantity) with value "1", and "Đơn giá (VND)" (Unit Price) with value "15,000,000". Below the dialog, the main interface displays a table of expenses with columns "STT", "TÊN CHI PHÍ", "ĐƠN GIÁ (VND)", and "HÀNH ĐỘNG". The total amount shown is 60,000,000 VND. At the bottom, there are navigation links for page 1 of 10.

Screen 3-44: Update Cost

UC ID and Name:	UC-46_Update Cost		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to update the expense that they created.		
Preconditions:	1. The user must login to the system as an event organizer.		

	2. The event is in the draft list.
Postconditions:	The system displays new list costs after cost is updated.
Normal Flow:	<ol style="list-style-type: none"> 1. The user successfully logged into the system. 2. Navigates to “Sự kiện nháp”. 3. Click update icon in field “Danh sách chi phí”. 4. Enter new cost information.
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-01, BR-07, BR-13, BR-14, BR-15, BR-17, BR-18, BR-19, BR-23, BR-26, BR-55, BR-56, BR-57, BR-58
Other Information:	N/A
Assumptions:	N/A

UC-47_Delete Cost

Danh sách chi phí (4)

STT	TÊN CHI PHÍ	SỐ LƯỢNG	ĐƠN GIÁ	THÀNH TIỀN
1	Thiết kế trang trí sân khấu	1	15.000.000 đ	15.000.000 đ
2	Trang trí không gian sự kiện	1	15.000.000 đ	15.000.000 đ
3	Quảng bá sự kiện	1	20.000.000 đ	20.000.000 đ
4	Logistic và an ninh	1	10.000.000 đ	10.000.000 đ
Tổng cộng:				60.000.000 đ

Xác nhận xóa chi phí
Bạn có chắc chắn muốn xóa chi phí này?

Hủy Xóa

Tổng cộng 4 chi phí < 1 > 10 / page

Danh sách người đăng ký sự kiện (0)
Không tìm thấy người tham gia

Screen 3-45: Delete Cost

UC ID and Name:	UC-47_Delete Cost		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow event organisers to remove unnecessary expenses.		
Preconditions:	1. The user must login to the system as an event organizer. 2. The event is in the draft list.		
Postconditions:	The system displays new list costs after some costs are deleted.		
Normal Flow:	1. The user successfully logged into the system. 2. Navigates to “Sự kiện nháp”. 3. Click delete icon in field “Danh sách chi phí”. 4. Confirm delete cost information.		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-01, BR-07, BR-17, BR-18, BR-19, BR-23, BR-26, BR-56, BR-57, BR-58, BR-63, BR-64		
Other Information:	N/A		
Assumptions:	N/A		

UC-48_Export Cost To Excel

The screenshot shows a web application interface for managing event costs. At the top, there are navigation links: TRANG CHỦ, TẠO SỰ KIỆN, YÊU CẦU CỦA TÔI, SỰ KIỆN CỦA TÔI, SỰ KIỆN YÊU THÍCH, SỰ KIỆN NHÁP, and Ceo Tùng. On the far right, there is a user profile icon.

In the center, there is a table titled "Danh sách chi phí (4)". The table has columns: STT, TÊN CHI PHÍ, SỐ LƯỢNG, ĐƠN GIÁ, THÀNH TIỀN, and HÀNH ĐỘNG. The data in the table is as follows:

STT	TÊN CHI PHÍ	SỐ LƯỢNG	ĐƠN GIÁ	THÀNH TIỀN	HÀNH ĐỘNG
1	Thiết kế trang trí sân khấu	1	15.000.000 đ	15.000.000 đ	
2	Trang trí không gian sự kiện	1	15.000.000 đ	15.000.000 đ	
3	Quảng bá sự kiện	1	20.000.000 đ	20.000.000 đ	
4	Logistic và an ninh	1	10.000.000 đ	10.000.000 đ	

Below the table, there is a summary: Tổng cộng: 60.000.000 đ. At the bottom right, there is a pagination indicator: Tổng cộng 4 chi phí < 1 > 10 / page.

Below the cost table, there is another section titled "Danh sách người đăng ký sự kiện (0)". It includes the message: Không tìm thấy người tham gia.

Screen 3-46: Export Cost To Excel

UC ID and Name:	UC-48_Export Cost To Excel		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	Allow the event organizer to export costs to excel files.		
Preconditions:	1. The user logged into the system as an event organizer. 2. The event has a cost that needs to be exported or be created.		
Postconditions:	Navigates to file excel that will be created.		
Normal Flow:	1. The event organizer successfully logged into the system. 2. Navigates to "Sự kiện của tôi". 3. Click button "Export to Excel" in field "Danh sách chi phí".		
Alternative Flows:	1. The event organizer successfully logged into the system. 2. Navigates to "Sự kiện nháp". 3. Click button "Export to Excel" in field "Danh sách chi phí".		

Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-19, BR-23, BR-26, BR-56, BR-57, BR-65, BR-66
Other Information:	N/A
Assumptions:	N/A

3.3.9 Event Category Management

UC-49_List Categories

The screenshot shows a web application interface for managing event categories. At the top, there is a navigation bar with links: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER, QUẢN LÝ LOẠI SỰ KIỆN (highlighted in orange), QUẢN LÝ YÊU CẦU, SỰ KIỆN YÊU THÍCH, and a user profile for John Doe. Below the navigation is a title 'Quản lý danh mục sự kiện' and a sub-header 'Cơ sở: Hòa Lạc'. A green button labeled 'Tạo mới' (Create New) is visible. The main content area displays a table with five rows of data:

ID	Tên danh mục	Hành động
1	Hội thảo công nghệ	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa

Screen 3-47: List Categories

UC ID and Name:	UC-49_List Categories		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	Allow campus manager to view all event categories of his campus		
Preconditions:	User logged into system as a campus manager		

Postconditions:	System displays a list of event categories.
Normal Flow:	<ol style="list-style-type: none"> Campus manager successfully logged into system Navigates to “Quản lý loại sự kiện”
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-20, BR-67
Other Information:	N/A
Assumptions:	N/A

UC-50_Create Category

The screenshot shows the 'QUẢN LÝ LOẠI SỰ KIỆN' (Event Category Management) section of the application. At the top, there are navigation links: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER, QUẢN LÝ LOẠI SỰ KIỆN (highlighted in orange), QUẢN LÝ YÊU CẦU, SỰ KIỆN YÊU THÍCH, and a user profile for John Doe. Below the navigation, the title 'Quản lý danh mục sự kiện' is displayed, along with the location 'Cơ sở: Hòa Lạc'. A green 'Tạo mới' (Create New) button is visible. The main area shows a table with five rows of existing categories: 'Hội thảo công nghệ', 'Triển lãm nghệ thuật', 'Ngày hội thể thao', 'Hội nghị giáo dục', and 'Festival âm nhạc'. Each row has 'Cập nhật' and 'Xóa' buttons. A modal window is open over the table, titled 'Tạo danh mục', containing a text input field 'Tên' with the placeholder 'Nhập tên...', a 'Hủy' (Cancel) button, and a green 'Tạo' (Create) button.

Screen 3-48: Create Category

UC ID and Name:	UC-50_Create Category		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Campus Manager	Secondary Actor:	None

Description:	Allow campus managers to create new event categories.
Preconditions:	User successfully logged into the system as a Campus Manager.
Postconditions:	System display create page for event category.
Normal Flow:	<ol style="list-style-type: none"> Campus manager logged into the system. Navigates to “Quản lý loại sự kiện”. Click button “Tạo mới”.
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	High
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-20, BR-68, BR-69
Other Information:	N/A
Assumptions:	N/A

UC-51_Update Category

The screenshot displays the 'Quản lý danh mục sự kiện' (Event Category Management) interface. At the top, there are navigation links: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER, QUẢN LÝ LOẠI SỰ KIỆN (highlighted in orange), QUẢN LÝ YÊU CẦU, SỰ KIỆN YÊU THÍCH, and a user profile for John Doe. Below the navigation, the title 'Quản lý danh mục sự kiện' is shown, along with the location 'Cơ sở: Hòa Lạc'. A green 'Tạo mới' button is visible on the right. The main area shows a table with the following data:

ID	Tên danh mục	Hành động
1	Hội thảo công nghệ	[Cập nhật] [Xóa]
2	Triển lãm nghệ thuật	[Cập nhật] [Xóa]
3	Ngày hội thể thao	<div style="border: 1px solid #ccc; padding: 5px;"> Cập nhật danh mục X </div> <div style="margin-top: 5px;"> <input type="text" value="Hội thảo công nghệ"/> Hủy Cập nhật </div>
4	Hội nghị giáo dục	[Cập nhật] [Xóa]
5	Festival âm nhạc	[Cập nhật] [Xóa]

Screen 3-49: Update Category

UC ID and Name:	UC-51_Update Category
-----------------	-----------------------

Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	Allow campus managers to update event categories.		
Preconditions:	User logged into the system as a campus manager.		
Postconditions:	System display update page for event category.		
Normal Flow:	<ol style="list-style-type: none"> 1. Campus manager successfully logged into the system. 2. Navigates to “Quản lý loại sự kiện”. 3. Click the “Cập nhật” button of the category that needs to be updated. 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-07, BR-20, BR-70, BR-71		
Other Information:	N/A		
Assumptions:	N/A		

UC-52_Delete Category

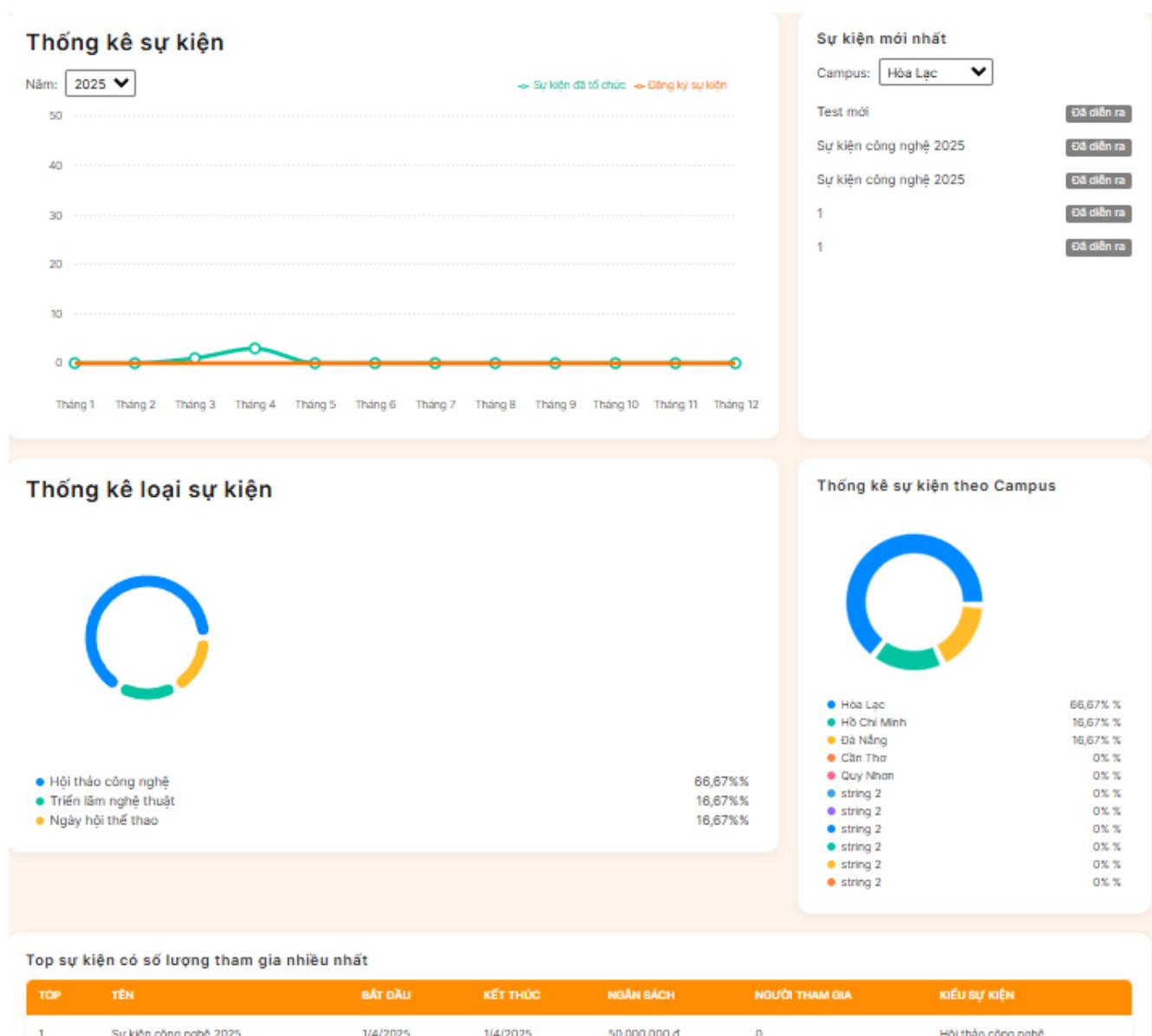
Screen 3-50: Delete Category

UC ID and Name:	UC-52_Delete Category		
Created By:	TungNC	Date Created	27/02/2025
Primary Actor:	Campus Manager	Secondary Actor:	None
Description:	Allow campus managers to delete event categories.		
Preconditions:	User logged into the system as a campus manager.		
Postconditions:	Event category deleted from the system		
Normal Flow:	<ol style="list-style-type: none"> 1. Campus manager successfully logged into system 2. Navigates to “Quản lý loại sự kiện”. 3. Click the “Xoá” button of the category that needs to be deleted. 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		

Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-20, BR-72, BR-73, BR-74
Other Information:	N/A
Assumptions:	N/A

3.3.10 Dashboard

UC-53_View Dashboard



Screen 3-51 Admin Dashboard

UC ID and Name:	UC-53_Dashbroad		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	<i>None</i>
Description:	This function allows the admin to view statistic		
Preconditions:	User logged into the system as admin		
Postconditions:	The statistics are displayed.		
Normal Flow	1. User login to the system as admin 2. The system checks permissions and redirects to the dashboard.		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	High		
Frequency of Use:	Frequently		
Business Rules:	BR-07, BR-75, BR-76		
Other Information:	N/A		
Assumptions:	N/A		

3.3.11 Request Management

UC-54_My Request

STT	TIÊU ĐỀ SỰ KIỆN	TRẠNG THÁI	LÝ DO	THỜI GIAN TẠO
1	Test mới	Đã duyệt	Không có	07:17 17/03/2025
2	Mới xong	Đã duyệt	ngu	19:27 18/03/2025
3	Test ảnh my draft	Đã duyệt	Không có	03:26 09/04/2025
4	Test mới	Đã duyệt	Không có	07:17 17/03/2025
5	Test mới	Đã duyệt	Không có	07:17 17/03/2025
6	Test mới	Đã duyệt	Không có	07:17 17/03/2025

Screen 3-52 List My Requests

UC ID and Name:	UC-54_My requests		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	None
Description:	This function allows the event organizer to view all their request events		
Preconditions:	User logged into the system as event organizer		
Postconditions:	List request events displayed		
Normal Flow	1. User login to the system as event organizer 2. The system checks permissions and redirects to homepage of event organizer 3. Go to "Yêu cầu của tôi" 4. The system display list event		
Alternative Flows:	N/A		

Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-07, BR-19, BR-26, BR-77
Other Information:	N/A
Assumptions:	N/A

UC-55_List of event requests

Danh sách yêu cầu

STT	Tiêu đề sự kiện	Trạng thái	Lý do	Từ	Đến	Hành động
11	Test mới	Đã duyệt	N/A	07:16 18/03/2025	07:16 20/03/2025	
12	Test mới	Đã duyệt	N/A	07:16 18/03/2025	07:16 20/03/2025	
13	Test mới	Đã duyệt	N/A	07:16 18/03/2025	07:16 20/03/2025	
14	Test mới	Đã duyệt	N/A	07:16 18/03/2025	07:16 20/03/2025	
15	Test mới	Đã duyệt	Không có	07:16 18/03/2025	07:16 20/03/2025	
16	Âm nhạc 1	Không xác định	N/A	12:49 20/06/2025	12:49 28/06/2025	
17	rghegfd	Chưa được duyệt	N/A	14:35 28/06/2025	14:35 29/06/2025	<button>Phê duyệt</button> <button>Từ chối</button>

Screen 3-53 List Event Requests

UC ID and Name:	UC-55_List of event request		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Campus Manager	Secondary Actor:	None

Description:	This function allows the campus manager to view and manage request from event organizer
Preconditions:	User logged into the system as campus manager
Postconditions:	List request events displayed
Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as campus manager 2. The system checks permissions and redirects to homepage of campus manager 3. Go to “Quản lý yêu cầu” 4. System display list request event
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-07, BR-20, BR-78
Other Information:	N/A
Assumptions:	N/A

3.3.12 Campus Manager

UC-56_Create Manager Campus

Tạo Campus Manager X

Email:

Họ:

Tên:

Ngày sinh:

 dd/mm/yyyy

Giới tính:

Nam ▼

SĐT:

Campus:

Chọn Campus ▼

Tạo

Screen 3-54 Create campus manager

UC ID and Name:	UC-56_Create Manager Campus		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to create campus manager		
Preconditions:	User logged into the system as admin		
Postconditions:	A manager campus created		
Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as admin 2. The system checks permissions and redirects to dashboard. 3. Go to campus manager page and click to create 4. Enter gmail, name, birthdate, gender, phone, campus then click “Tạo” 5. System create new campus manager 		
Alternative Flows:	<ol style="list-style-type: none"> 1. System displays error message under input 2. Enter gmail, name, birthdate, gender, phone, campus again then click “Tạo” 3. Go to step 5 in normal flow 		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-02, BR-07, BR-08, BR-25, BR-75, BR-79, BR-80		
Other Information:	N/A		

Assumptions:	N/A
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UC-57_Update Manager Campus

Tạo Campus Manager

X

Email:

Họ:

Tên:

Ngày sinh:

 dd/mm/yyyy CALENDAR

Giới tính:

 Nam ▼

SĐT:

Campus:

 Chọn Campus ▼

Tạo

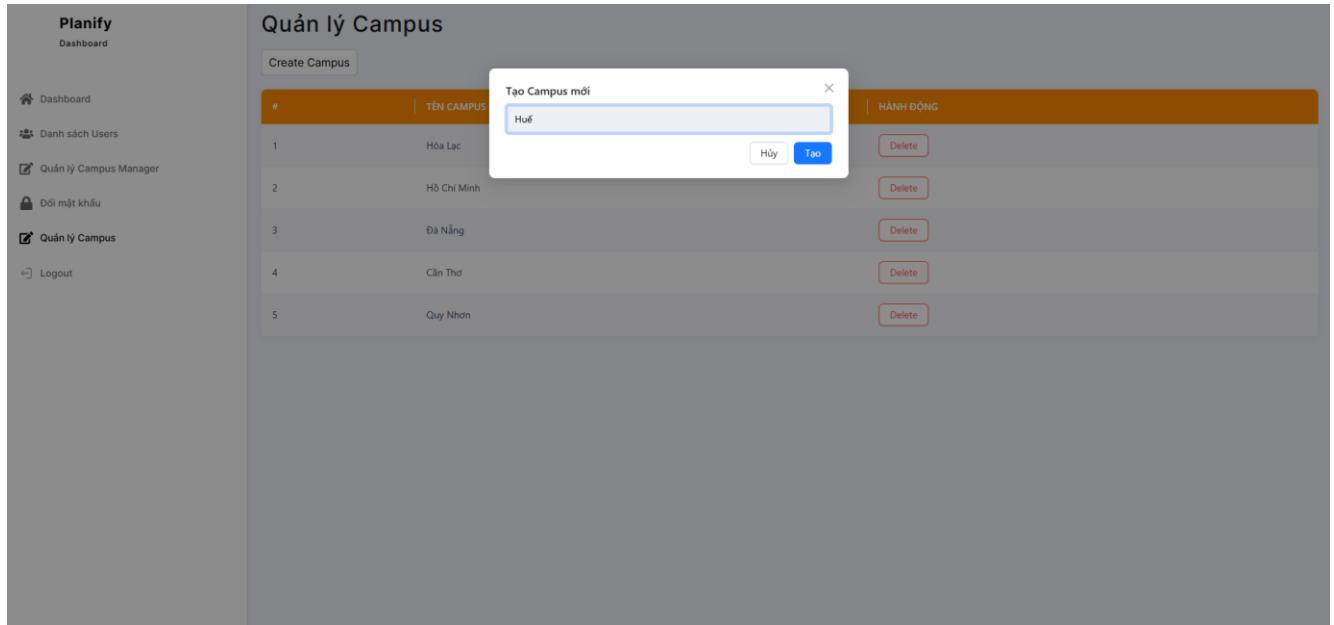
Screen 3-55 Update Campus Manager

UC ID and Name:	UC-57_Update Manager Campus		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to update campus manager		
Preconditions:	User logged into the system as admin		
Postconditions:	A manager campus information updated		
Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as admin 2. The system checks permissions and redirects to dashboard. 3. Go to campus manager page and click to update 4. Enter gmail, name, birthdate, gender, phone, campus then click “Cập nhật” 5. System update new campus manager 		
Alternative Flows:	<ol style="list-style-type: none"> 1. System displays error message under input 2. Enter gmail, name, birthdate, gender, phone, campus again then click “Tạo” 3. Go to step 5 in normal flow 		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-02, BR-07, BR-08, BR-25, BR-75, BR-81, BR-82		
Other Information:	N/A		

Assumptions:	N/A
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3.3.13 Campus Management

UC-58_Create Campus



Screen 3-56: Create Campus

UC ID and Name:	UC-58_Create Campus		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to create new campus to manager		
Preconditions:	User logged into the system as admin		
Postconditions:	New campus created		

Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as admin 2. The system checks permissions and redirects to homepage of admin 3. Go to “Quản lý cơ sở” and click to “Tạo cơ sở” 4. Enter information then click “Tạo” 5. New campus will display in list
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	BR-07, BR-75, BR-83, BR-84
Other Information:	N/A
Assumptions:	N/A

UC-59_Update Campus

The screenshot shows the Planify application's interface for managing campuses. On the left, there's a sidebar with navigation links like Dashboard, Danh sách Users, Quản lý Campus Manager, Quản lý Campus, and Logout. The main area is titled 'Quản lý Campus' and contains a table of existing campuses. A modal window titled 'Tạo Campus mới' (Create New Campus) is overlaid on the page, allowing a new campus to be added. The table in the background lists five campuses: Hòa Lạc, Hồ Chí Minh, Đà Nẵng, Cần Thơ, and Quy Nhơn.

#	TÊN CAMPUS	HÀNH ĐỘNG
1	Hòa Lạc	Delete
2	Hồ Chí Minh	Delete
3	Đà Nẵng	Delete
4	Cần Thơ	Delete
5	Quy Nhơn	Delete

Screen 3-57 Update Manager

UC ID and Name:	UC-59_Update Campus		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to update information of a campus		
Preconditions:	User logged into the system as admin		
Postconditions:	Campus updated		
Normal Flow	1. User login to the system as admin 2. The system checks permissions and redirects to homepage of admin 3. Go to “Quản lý cơ sở” and click to “Cập nhật cơ sở” 4. Change information then click “Cập nhật” 5. New information of campus will display in list		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Sometimes		
Business Rules:	BR-07, BR-75, BR-85, BR-86		
Other Information:	N/A		
Assumptions:	N/A		

3.3.14 Users Management

UC-60_View list user

Danh sách Users (15)

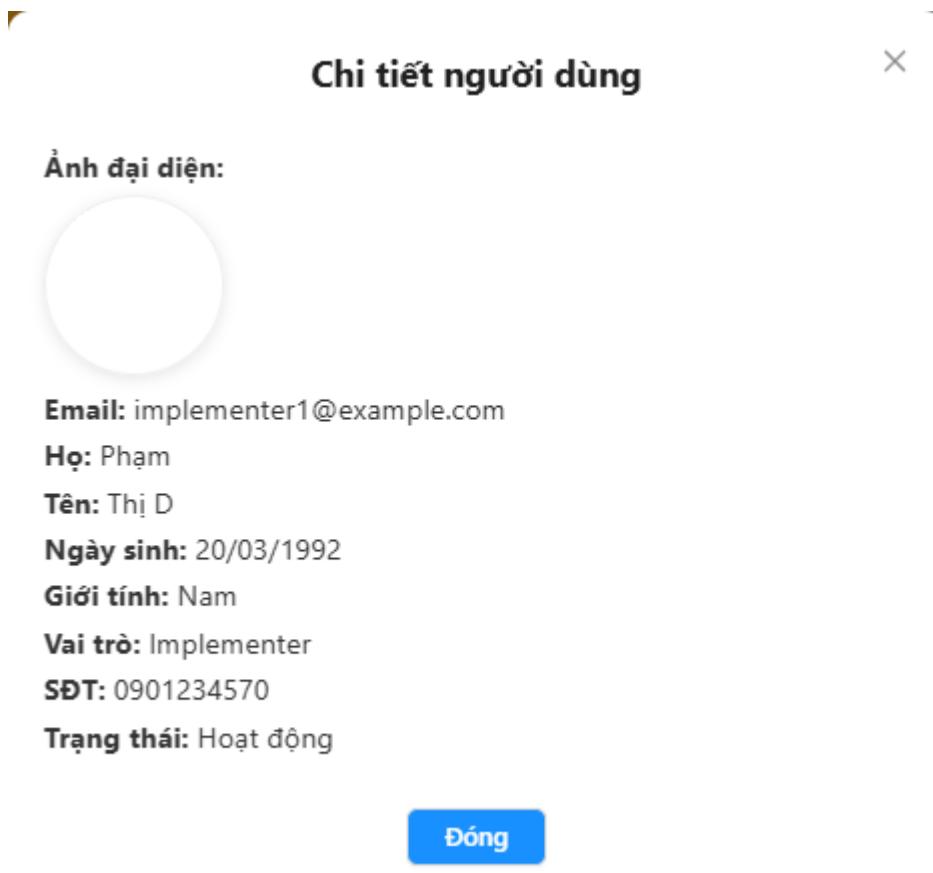
Tìm kiếm theo email hoặc tên		Tìm kiếm	Nhập Users	-- Chọn vai trò --					
#	ÁNH ĐẠI DIỆN	EMAIL	HỌ	TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÒ	SĐT	HÀNH ĐỘNG
1		test3@gmail.com	John	Bort	20/01/2002	Nữ	Campus Manager	0111111111	 
2		implementer1@example.com	Phạm	Thị D	20/03/1992	Nam	Implementer	0901234570	 
3		test4@gmail.com	John	Bort	11/11/2001	Nam	Campus Manager	0111111111	 
4		test@gmail.com	John	Bort	11/11/2000	Nam	Spectator	0379098889	 

Screen 3-58 List Users

UC ID and Name:	UC-60_View list users		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin view and manage users		
Preconditions:	User logged into the system as admin		
Postconditions:	The screen display all users in system		
Normal Flow	1. User login to the system as admin 2. The system checks permissions and redirects to dashboard. 3. Go to list users page		

Alternative Flows:	N/A
Exceptions:	If there are no users in the database, the screen will display "Không có dữ liệu"
Priority:	Medium
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-75, BR-87
Other Information:	N/A
Assumptions:	N/A

UC-61_View user detail



Screen 3-59 User Detail

UC ID and Name:	UC-61_View user detail		
Created By:	ThuNV	Date Created:	26/2/2025
Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin view user detail		
Preconditions:	User logged into the system as admin		
Postconditions:	The screen display information of a user		
Normal Flow	1. User login to the system as admin 2. The system checks permissions and redirects to dashboard. 3. Go to list users page 4. Click to a user		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Occasionally		
Business Rules:	BR-07, BR-75, BR-88		
Other Information:	N/A		
Assumptions:	N/A		

UC-62_Ban

Danh sách người dùng (14)

#	ẢNH ĐẠI DIỆN	EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÔ	SDT	HÀNH ĐỘNG
1		bson55444@gmail.com	Bui Son	9/3/2002	Nam	Campus Manager	0992730906	
2		implementer1@example.com	Phạm Thị D	20/3/1992	Nam	Implementer	0901234570	
3		admin1@example.com	Nguyễn Văn A	1/1/1990	Nam	Admin	0901234567	
4		vybuituan46@gmail.com	SON IMPL	10/5/1995	Nam	Implementer	0912345678	
5		minhvnt176043@fpt.edu.vn	Vũ Ngọc Tuệ Minh	27/11/2003	Nam	Spectator	0386312395	
6		nguyenthanhsang17102002@gmail.com	John Doe	10/5/1995	Nam	Campus Manager	0912345678	
7		bson55444@gmail.com	SON MANAGER	10/5/1995	Nam	Admin	0912345678	
8		manager1@example.com	Trần Thị B	10/5/1995	Nam		0901234568	
9		sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	Event Organizer	0912345678	
10		sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	Event Organizer	0912345678	

Screen 3-60: Ban User

Danh sách người dùng (14)

#	ẢNH ĐẠI DIỆN	EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÔ	SDT	HÀNH ĐỘNG
1		bson55444@gmail.com	Bui Son	9/3/2002	Nam	Campus Manager	0992730906	
2		implementer1@example.com	Phạm Thị D	20/3/1992	Nam	Implementer	0901234570	
3		admin1@example.com	Nguyễn Văn A	1/1/1990	Nam	Admin	0901234567	
4		vybuituan46@gmail.com	SON IMPL	10/5/1995	Nam	Implementer	0912345678	
5		minhvnt176043@fpt.edu.vn	Vũ Ngọc Tuệ Minh	27/11/2003	Nam	Spectator	0386312395	
6		nguyenthanhsang17102002@gmail.com	John Doe	10/5/1995	Nam	Campus Manager	0912345678	
7		bson55444@gmail.com	SON MANAGER	10/5/1995	Nam	Admin	0912345678	
8		manager1@example.com	Trần Thị B	10/5/1995	Nam		0901234568	
9		sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	Event Organizer	0912345678	
10		sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	Event Organizer	0912345678	

Screen 3-61 Confirm ban pop-up

UC ID and Name:	UC-62_Ban		
Created By:	ThuNV	Date Created:	26/2/2025

Primary Actor:	Admin	Secondary Actor:	None
Description:	This function allows the admin to ban a user from system		
Preconditions:	User logged into the system as admin		
Postconditions:	User is banned		
Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as admin 2. The system checks permissions and redirects to the dashboard. 3. Go to list user page 4. Click to “Cấm” in selected user 5. Confirm to ban then user cannot login to system 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Sometimes		
Business Rules:	BR-03, BR-07, BR-75, BR-89, BR-90, BR-91		
Other Information:	N/A		
Assumptions:	N/A		

UC-63_Unban

Danh sách người dùng (14)

Tìm kiếm theo email hoặc tên Nhập Users Chọn vai trò Tất cả campus

#	ẢNH ĐẠI DIỆN	EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÔ	SDT	HÀNH ĐỘNG
1	Avatar	bson55444@gmail.com	Bui Son	9/3/2002	Nam	Campus Manager	0392730906	
2	Avatar	implementer1@example.com	Phạm Thị D	20/3/1992	Nam	Implementer	0901234570	
3	Avatar	admin1@example.com	Nguyễn Văn A	1/1/1990	Nam	Admin	0901234567	
4	Avatar	vybuituan46@gmail.com	SON IMPL	10/5/1995	Nam	Implementer	0912345678	
5	Avatar	minhvnt176043@fpt.edu.vn	Vũ Ngọc Tuệ Minh	27/11/2003	Nam	Spectator	0386312395	
6	Avatar	nguyenthanhsang17102002@gmail.com	John Doe	10/5/1995	Nam	Campus Manager	0912345678	
7	Avatar	bson55444@gmail.com	SON MANAGER	10/5/1995	Nam	Admin	0912345678	
8	Avatar	manager1@example.com	Trần Thị B	10/5/1995	Nam		0901234568	
9	Avatar	sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	Event Organizer	0912345678	
10		sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	Event Organizer	0912345678	

Screen 3-62 Unban User

Danh sách người dùng (14)

Tìm kiếm theo email hoặc tên Nhập Users Chọn vai trò Tất cả campus

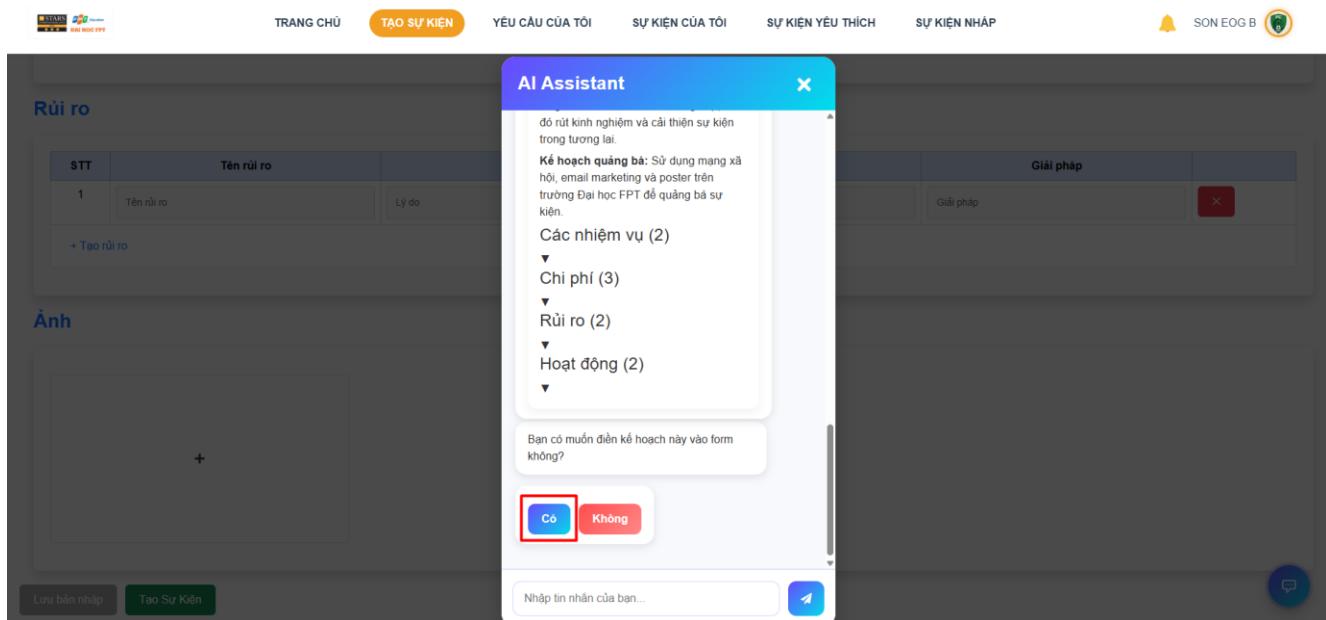
#	ẢNH ĐẠI DIỆN	EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÔ	SDT	HÀNH ĐỘNG
11	Avatar	heloo@gmail.com	Test	17/4/2025	Nam	Spectator	021381238	
12	Avatar	hatmamxanh.hmx@gmail.com	SON SPEC	10/5/1995	Nam	Spectator	0912345678	
13	Avatar	heloo@gmail.com	Test	17/4/2025	Nam	Event Organizer	021381238	
14	Avatar	spectator1@example.com	Hoàng Văn C	25/7/1998	Nam	Spectator	0901234571	

Screen 3-63 Confirm Unban Pop-up

UC ID and Name:	UC-63_Unban		
Created By:	ThuNV	Date Created:	26/2/2025

Primary Actor:	Admin	Secondary Actor:	<i>None</i>
Description:	This function allows the admin to unban a user from system		
Preconditions:	User logged into the system as admin		
Postconditions:	User is unbanned		
Normal Flow	<ol style="list-style-type: none"> 1. User login to the system as admin 2. The system checks permissions and redirects to dashboard. 3. Go to list user page 4. Click to “Bỏ cấm” in selected user 5. Confirm to unban then user can login to system 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Sometimes		
Business Rules:	BR-03, BR-07, BR-75, BR-92, BR-93, BR-94		
Other Information:	N/A		
Assumptions:	N/A		

UC-64_Event Suggestion



Screen 3-64: Event Suggestion Pop-up

UC ID and Name:	UC-64_Event Suggestion		
Created By:	ThanhDV	Date Created:	26/2/2025
Primary Actor:	Event Organizer	Secondary Actor:	<i>None</i>
Description:	This feature allows Event Organizer to use AI Chat Bot to suggest event planning		
Preconditions:	User logged into the system as Event Organizer		
Postconditions:	AI Chat Bot suggests event plans to user		
Normal Flow	<ol style="list-style-type: none"> 1. The user clicks to Create Event on the header of the logged in website. 2. The system displays fields for the user to enter information 3. The user clicks on message icon in bottom corner of screen 4. The system will display a chat bot to help you create an event plan 5. The user enters the information needed for planning 		

	6. The system will display a detailed event plan to the user and ask if the user wants to apply it to the form 7. User clicks on agree button
Alternative Flows:	N/A
Exceptions:	N/A
Priority:	High
Frequency of Use:	Occasionally
Business Rules:	BR-07, BR-11, BR-13, BR-14, BR-15, BR-17, BR-26, BR-27, BR-28, BR-59, BR-60, BR-61, BR-62
Other Information:	N/A
Assumptions:	N/A

3.4 Non-Functional Requirements

3.4.1 External Interfaces

- Description:

The system must successfully connect with users and external systems, such as software, hardware, or other system components.

- Requirements:

1. The system will use an external email server to send out email notifications for create, updates, delete, and password resets.
2. 92% of the time, the system will be accessible.
3. The system shall integrate with Amazon S3 for storing and retrieving images.

3.4.2 Quality Attributes

3.4.2.1 Asability

- Friendly interface, easy to use
- Check the validity of user input data, display errors if there are errors
- The buttons are clearly displayed with distinct text, and have easy-to-identify colors
- Content is displayed logically, not discretely
- Icons have descriptive tooltips
- Assign page access rights to each role

3.4.2.2 Security

- Each role of the user has a specific permission to interact with the system.
- Necessary APIs need to be authenticated and authorized according to standards
- Verify gmail for account

3.4.2.3 Performance

- The website is smooth, data is displayed no longer than 3 seconds
- A large number of users > 1000 at the same time needs to maintain stability

3.5 Requirement Appendix

3.5.1 Business Rules

ID	Rule Definition
BR-01	If the event has been sent to Campus Manager, it will not be updated
BR-02	Email address must be in the database
BR-03	Account must be activated to log in. Locked or disabled accounts will be denied login
BR-04	Users are not allowed to access pages without permission
BR-05	Confirm password must match new password
BR-06	Old password must be in the database
BR-07	The user must be successfully logged in
BR-08	Phone number must be 10 digits
BR-09	Users must enter full Province, District, Commune
BR-10	Users can only upload avatars in jpeg, png, jpg format with a maximum size of 5MB
BR-11	Event types can only select those in the database
BR-12	Start date of the event must be 2 months after the present
BR-13	Budgets are filled in with numbers only
BR-14	Unit price can only be entered in numbers
BR-15	Quantity can only be entered in numbers
BR-16	Upload image of event must be jpeg, png, jpg format with a maximum size of 5MB

BR-17	The event must have a title, start date, end date, location, event type, risks, tasks, costs, activities, images.
BR-18	Event must be in draft state
BR-19	The user must be the event creator.
BR-20	Log in as Campus manager.
BR-21	The reason field is required.
BR-22	Search event by event title
BR-23	Event must be in the database
BR-24	Log in as Implementer
BR-25	Email must be in correct format
BR-26	Log in as Event Organizer
BR-27	Start date must be after the present
BR-28	End date must be after the start date
BR-29	The task must exist in the event
BR-30	The sub-task must exist in the task
BR-31	Only the Event Organizer can delete sub-tasks
BR-32	The implementer must exist in the system
BR-33	The system must display a message if no tasks exist in the event
BR-34	The system must display a message if no sub-tasks exist in the task
BR-35	The system must display a message "Không có người tham gia nào" if no implementers are assigned to the event
BR-36	The implementer must not already be assigned to the event
BR-37	The implementer must be assigned to the event before deletion
BR-38	The user must not already be registered for the event
BR-39	The system must display a notification “Đăng ký thành công” upon successful registration
BR-40	The user must be registered for the event to cancel registration
BR-41	The system must display a notification “Huỷ đăng ký thành công” upon successful cancellation
BR-42	Log in as Spectator
BR-43	The user must have at least one registered event to view the registered events list
BR-44	The system must display a message “Không có sự kiện nào đã đăng ký” if the user has no registered events
BR-45	The system must display a message “Không có người đăng ký nào” if no users are registered for the event
BR-46	The system must display the total number of registered users for the event
BR-47	Risks can be added to an event during creation before it is saved to the database
BR-48	Risk information must include a non-empty description
BR-49	Risks must be associated with the specific event being created or edited
BR-50	The risk to be updated must exist in the event
BR-51	The event must not have been sent to the Campus Manager to allow risk updates

BR-52	The user must confirm the deletion of a risk before it is removed from the event
BR-53	The system must allow deletion of risks even if it results in no risks remaining for the event, provided the event remains in draft state
BR-54	The system must display a message “Không có rủi ro nào” if no risks remain in the event after deletion
BR-55	Cost information must include a non-empty description, unit price, and quantity
BR-56	Costs must be associated with the specific event being edited
BR-57	The system must display a message “Không có chi phí nào” if no costs exist in the event after adding
BR-58	The cost must exist in the event
BR-59	The AI Chat Bot must be accessed during the event creation process, not for draft events
BR-60	The user must provide non-empty input to the AI Chat Bot to generate an event plan
BR-61	The user must confirm the suggested event plan before it is applied to the event creation form
BR-62	The system must display a message “Không thể tạo kế hoạch sự kiện” if the AI Chat Bot fails to generate a plan due to insufficient or invalid input
BR-63	The user must confirm the deletion of a cost before it is removed from the event
BR-64	The system must allow deletion of costs even if it results in no costs remaining for the event, provided the event remains in draft state
BR-65	The event must have at least one cost to export to Excel
BR-66	The exported Excel file must include all cost details (description, unit price, quantity)
BR-67	The system must display a message “Không có loại sự kiện nào” if no event categories exist
BR-68	Event category information must include a non-empty name
BR-69	The system must display a notification “Tạo loại sự kiện thành công” upon successful creation
BR-70	The event category to be updated must exist in the system
BR-71	The system must display a notification “Cập nhật loại sự kiện thành công” upon successful update
BR-72	The event category to be deleted must exist in the system
BR-73	The user must confirm the deletion of an event category before it is removed
BR-74	The system must display a notification “Xoá loại sự kiện thành công” upon successful deletion
BR-75	User must log in as Admin
BR-76	The system must display a message “Không có dữ liệu thống kê” if no statistics are available
BR-77	The system must display a message “Không có yêu cầu nào” if no request events exist for the user
BR-78	The system must display a message “Không có yêu cầu sự kiện nào” if no event requests exist

BR-79	Campus manager information must include name, birthdate, gender, phone, campus
BR-80	The system must display a notification “Tạo quản lý cơ sở thành công” upon successful creation
BR-81	The campus manager to be updated must exist in the system
BR-82	The system must display a notification “Cập nhật quản lý cơ sở thành công” upon successful update
BR-83	Campus information must include a non-empty name and address
BR-84	The system must display a notification “Tạo cơ sở thành công” upon successful creation
BR-85	The campus to be updated must exist in the system
BR-86	The system must display a notification “Cập nhật cơ sở thành công” upon successful update
BR-87	The system must display a message “Không có dữ liệu” if no users exist in the database
BR-88	The user to be viewed must exist in the system
BR-89	The user to be banned must exist in the system
BR-90	The user must confirm the ban action before the user is banned
BR-91	The system must display a notification “Cấm người dùng thành công” upon successful ban
BR-92	The user to be unbanned must exist in the system and be currently banned
BR-93	The user must confirm the unban action before the user is unbanned
BR-94	The system must display a notification “Bỏ cấm người dùng thành công” upon successful unban

Table 3.5 Business Rules

3.5.2 System Messages

#	Message code	Message Type	Content
1	MSG01	Error message	Vui lòng nhập tên sự kiện
2	MSG02	Error message	Vui lòng nhập thời gian bắt đầu và kết thúc!
3	MSG03	Error message	Vui lòng chọn địa điểm!
4	MSG04	Error message	Phải có ít nhất một nhiệm vụ hợp lệ!
5	MSG05	Error message	Phải có ít nhất một dòng chi phí ước tính hợp lệ!
6	MSG06	Error message	Phải có ít nhất một rủi ro hợp lệ!
7	MSG07	Error message	Phải có ít nhất một hoạt động hợp lệ!
8	MSG08	Error message	Vui lòng tải lên ít nhất một ảnh cho sự kiện!
9	MSG09	Error message	Thời gian bắt đầu phải trước thời gian kết thúc!

10	MSG10	Error message	Thời gian bắt đầu phải cách thời gian hiện tại ít nhất 2 tháng.
11	MSG11	Confirm Pop-up	Sự kiện này sẽ được gửi đến Campus Manager để phê duyệt.
12	MSG12	Confirm Pop-up	Bạn có muốn lưu những thay đổi không?
13	MSG13	Pop-up error message	Những thay đổi chưa được lưu
14	MSG14	Pop-up success message	Đã lưu!
15	MSG15	Pop-up success message	Sự kiện của bạn được gửi thành công
16	MSG16	Pop-up error message	Lỗi xảy ra khi lấy dữ liệu.
17	MSG17	Pop-up success message	Cập nhật thành công
18	MSG18	In red, under text box	Vui lòng nhập tiêu đề
19	MSG19	In red, under text box	Vui lòng nhập vị trí
20	MSG20	In red, under text box	Vui lòng nhập ngân sách
21	MSG21	In red, under text box	Vui lòng nhập mô tả
22	MSG22	In red, under text box	Vui lòng nhập thước đo thành công
23	MSG23	In red, under text box	Vui lòng nhập số lượng người tham gia
24	MSG24	In red, under text box	Vui lòng nhập khẩu hiệu
25	MSG25	In red, under text box	Vui lòng nhập mục tiêu
26	MSG26	In red, under text box	Vui lòng nhập kế hoạch truyền thông
27	MSG27	In red, under text box	Vui lòng nhập đối tượng
28	MSG28	In red, under text box	Vui lòng nhập quá trình giám sát
29	MSG29	In red, under text box	Vui lòng upload hình ảnh sự kiện
30	MSG30	In red, under text box	Không được vượt quá 50 ký tự.
31	MSG31	In red, under text box	Không được vượt quá 255 ký tự.

32	MSG32	In red, under text box	Không được vượt quá 1000 ký tự.
33	MSG33	In red, under text box	Không được vượt quá 1500 ký tự.
34	MSG34	In red, under text box	Không được vượt quá 2000 ký tự.
35	MSG35	Confirm Pop-up	Bạn có chắc chắn muốn xóa ảnh này không? Ảnh sẽ bị xóa khỏi danh sách
36	MSG36	Pop-up error message	Có lỗi xảy ra khi cập nhật
37	MSG37	In red, under text box	Ngày kết thúc phải lớn hơn ngày bắt đầu
38	MSG38	In red, under text box	Vui lòng điền tiêu đề!
39	MSG39	In red, under text box	Vui lòng điền mô tả!
40	MSG40	In red, under text box	Hãy chọn ngày bắt đầu nhiệm vụ!
41	MSG41	In red, under text box	Hãy chọn hạn chót nhiệm vụ!
42	MSG42	In red, under text box	Hạn chót phải lớn hơn thời gian bắt đầu!
43	MSG43	In red, under text box	Vui lòng nhập tên rủi ro
44	MSG44	In red, under text box	Vui lòng nhập nguyên nhân
45	MSG45	In red, under text box	Vui lòng nhập giải pháp
46	MSG46	In red, under text box	Vui lòng nhập tên chi phí!
47	MSG47	Confirm Pop-up	Bạn sẽ không thể khôi phục lại dữ liệu này!
48	MSG48	Pop-up success message	Sự kiện của bạn đã được xóa thành công.
49	MSG49	In red, under text box	Email là bắt buộc
50	MSG50	In red, under text box	Họ là bắt buộc
51	MSG51	In red, under text box	Tên là bắt buộc
52	MSG52	In red, under text box	Ngày sinh là bắt buộc
53	MSG53	In red, under text box	Số điện thoại là bắt buộc
54	MSG54	In red, under text box	Vui lòng chọn một cơ sở

55	MSG55	In red, under text box	Bạn phải ít nhất 18 tuổi
56	MSG56	In red, under text box	Tên loại sự kiện không được chứa ký tự đặc biệt
57	MSG57	Success message	Tạo người tổ chức sự kiện thành công!
58	MSG58	In red, under text box	Số điện thoại phải có 10 số và bắt đầu bằng 0
59	MSG59	Error message	Email đã tồn tại!
60	MSG60	Success message	Xóa người tổ chức sự kiện thành công!
61	MSG61	In red, under text box	Vui lòng nhập tên loại sự kiện
62	MSG62	Pop-up error message	Dữ liệu không hợp lệ
63	MSG63	In red, under text box	Tên loại sự kiện không được vượt quá 255 ký tự
64	MSG64	Pop-up success message	Loại sự kiện mới được tạo thành công
65	MSG65	Pop-up error message	Loại sự kiện này đã tồn tại
66	MSG66	Confirm Pop-up	Hành động này không thể hoàn tác!
67	MSG67	Pop-up success message	Xóa thành công!
68	MSG68	Pop-up success message	Yêu cầu đã được xử lý và phê duyệt thành công.
69	MSG69	Pop-up error message	Vui lòng nhập lý do từ chối yêu cầu.
70	MSG70	Pop-up success message	Yêu cầu đã được xử lý và từ chối thành công.
70	MSG70	In red, under text box	Email không được để trống
71	MSG71	In red, under text box	Họ không được để trống
72	MSG72	In red, under text box	Tên không được để trống
73	MSG73	Error message	Ngày sinh không được để trống
74	MSG74	Success message	Số điện thoại không được để trống
75	MSG75	Error message	Vui lòng chọn campus
76	MSG76	In red, under text box	Tạo Campus Manager thành công!

77	MSG77	Success message	Lỗi khi tạo Campus Manager!
78	MSG78	In red, under text box	Mật khẩu mới phải có ít nhất 6 ký tự!
79	MSG79	In red, under text box	Mật khẩu xác nhận không khớp!
80	MSG80	In red, under text box	Mật khẩu cũ không chính xác.
81	MSG81	Error message	Đổi mật khẩu thành công.
82	MSG82	Success message	Không tìm thấy thông báo nào!
83	MSG83	Pop-up success message	Đăng ký thành công!
84	MSG84	Pop-up success message	Hủy đăng ký thành công!

Table 3.6 System Messages

IV. Software Design Description

4.1 Purpose

This chapter presents the overall design of the software system, describing both high-level architecture and detailed component design. It includes the system architecture, technology stack, package diagrams, database schema, and the class and sequence diagrams for each key function. The objective is to provide a clear and structured technical blueprint that guides the implementation phase and ensures consistency across all development activities.

4.2 System Design

4.2.1 System Architecture

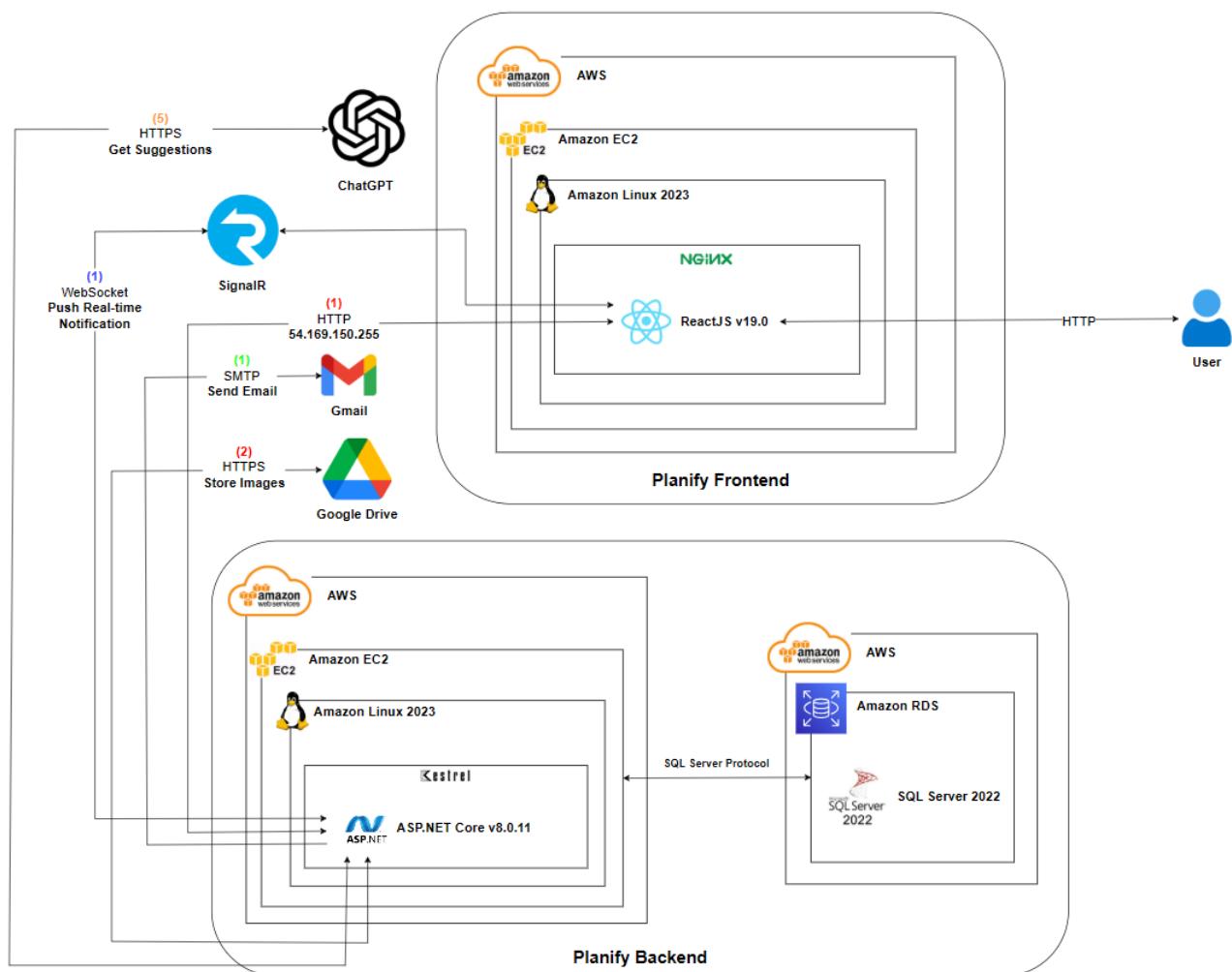


Figure 4.1 Planify System Architecture

4.2.1.1 ASP.NET Core



Figure 4.2 ASP.NET Core

ASP.NET Core is an open-source web application development framework by Microsoft. **We need it to build APIs, handle business logic, and communicate with the database.**

4.2.1.2 SQL Server



Figure 4.3 SQL Server

SQL Server is a relational database management system (RDBMS) developed by Microsoft. **We need it to manage the operational data of the Planify system.**

4.2.1.3 ReactJS

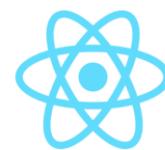


Figure 4.4 ReactJS

React is an open-source JavaScript library for building user interfaces, enabling developers to create dynamic web applications that update data without reloading the page. **We need it to build the website interface, making it easy for users to access and use.**

4.2.1.4 Nginx



Figure 4.5 Nginx

Nginx is an open-source web server used to serve static files and proxy requests to backend services. It handles client requests, routes API calls, and ensures cross-origin resource sharing (CORS) compliance for secure communication between frontend and backend.

4.2.1.5 Gmail



Figure 4.6 Gmail

Gmail is an external system that helps the application send emails to users. We need it to send notifications and promotional information to users.

4.2.1.6 AWS (Amazon Web Services)



Figure 4.7 Amazon Web Services

Amazon Web Services (AWS) is a cloud computing platform by Amazon. It provides a wide range of cloud computing services, including computing, storage, databases, networking, Internet of Things (IoT), artificial intelligence (AI), machine learning (ML), and more. We need it to deploy the website on a virtual machine and store images.

4.2.1.7 AWS EC2



Figure 4.8 AWS EC2

Amazon Elastic Compute Cloud (EC2) is a cloud-based virtual machine service that allows users to rent virtual servers for running applications and computing tasks. **We need it to deploy the website on virtual machines.**

4.2.1.8 Kestrel



Figure 4.9 Kestrel

Kestrel is an open-source, lightweight web server integrated into ASP.NET Core. **It handles incoming HTTP requests for the backend, processes them, and serves responses, enabling efficient communication between the web application and clients.**

4.2.1.9 AWS RDS



Figure 4.10 AWS RDS

Amazon Relational Database Service (RDS) is a relational database management service that simplifies database management for systems such as MySQL, PostgreSQL, Oracle, and SQL Server. **We need it to manage and store the database of the Planify system.**

4.2.1.10 SignalR



Figure 4.12 SignalR

SignalR is an open-source library by Microsoft that enables real-time communication between server and client. It uses **WebSocket** to push notifications and updates to users instantly.

4.2.1.11 Google Drive



Figure 4.13 Google Drive

Google Drive is an external cloud storage service that provides secure file storage and retrieval. It is used to store and manage files such as documents and images for web applications.

4.2.1.12 Amazon Linux 2023



Figure 4.14 Amazon Linux 2023

Amazon Linux 2023 is an open-source Linux-based operating system optimized for AWS. It serves as the foundation for running web servers, applications, and services on virtual machines in the cloud.

4.2.1.13 ChatGPT



Figure 4.15 ChatGPT

ChatGPT is an AI-powered conversational model developed by OpenAI, based on the GPT architecture. It enables natural language processing for interactive dialogues, answering queries, and assisting users with tasks. **We need it to provide intelligent customer support, automate responses, and enhance user interactions within the Planify system.**

4.2.2 Package Diagram

4.2.2.1 Front-end Package Diagram

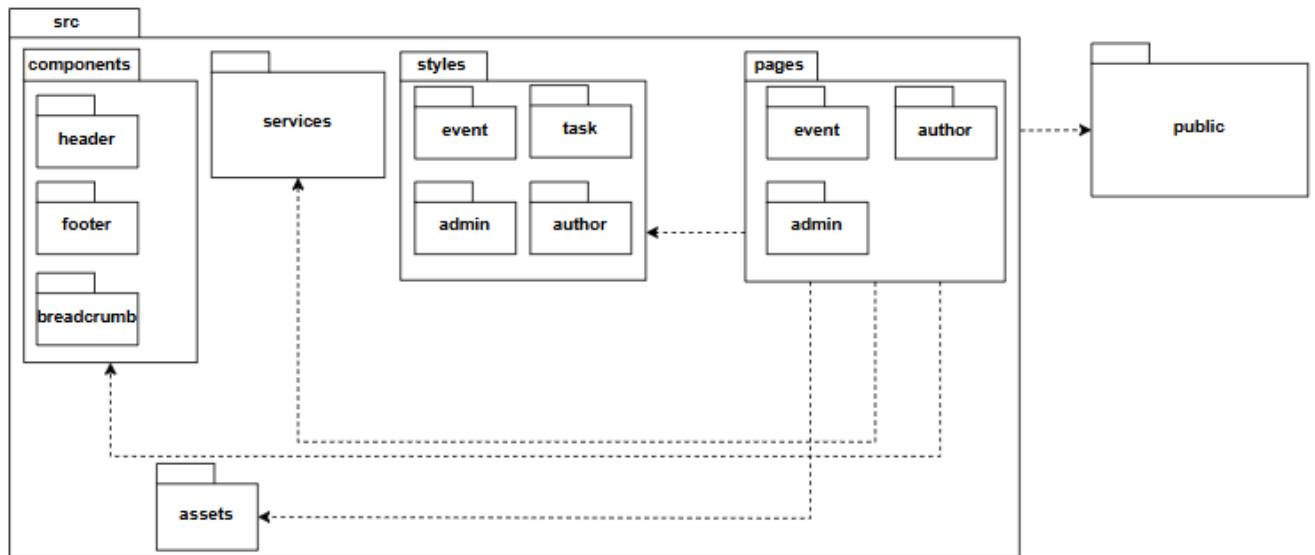


Figure 4.15 Planify Front-end Package Diagram

Package descriptions

No	Package	Description
1	public	Contains static files such as the main HTML file, favicon, and other publicly accessible assets
2	components	This package contains components that compose the user interface

		interface and can be reusable
3	src	The core source code of the frontend application, containing multiple sub-packages
4	header	This package contains components use for header
5	footer	This package contains components use for footer
6	assets	Stores images, icons, fonts, and other static resources used in the application.
7	services	Manages API calls, handling data fetching and communication with the backend
8	styles	Organizes stylesheets, ensuring separation of concerns between styling and component logic.
9	styles.event	This package contains all style event related files
10	styles.task	This package contains all style task related files
11	styles.admin	This package contains all style admin related files
12	styles.author	This package contains all style author related files
13	styles.sub-task	This package contains all style sub-task related files
14	styles.group	This package contains all style group related files
15	pages	Defines the main views/screens of the application. Each page corresponds to a specific feature/module.
16	pages.event	This package contains all pages related to the event
17	pages.task	This package contains all pages related to the task
18	pages.admin	This package contains all pages related to the admin
19	pages.author	This package contains all pages related to the author
20	pages.sub-task	This package contains all pages related to the sub-task
21	pages.group	This package contains all pages related to the group

Table 4.1 Front-end Package Description

4.2.2.2 Back-end Package Diagram

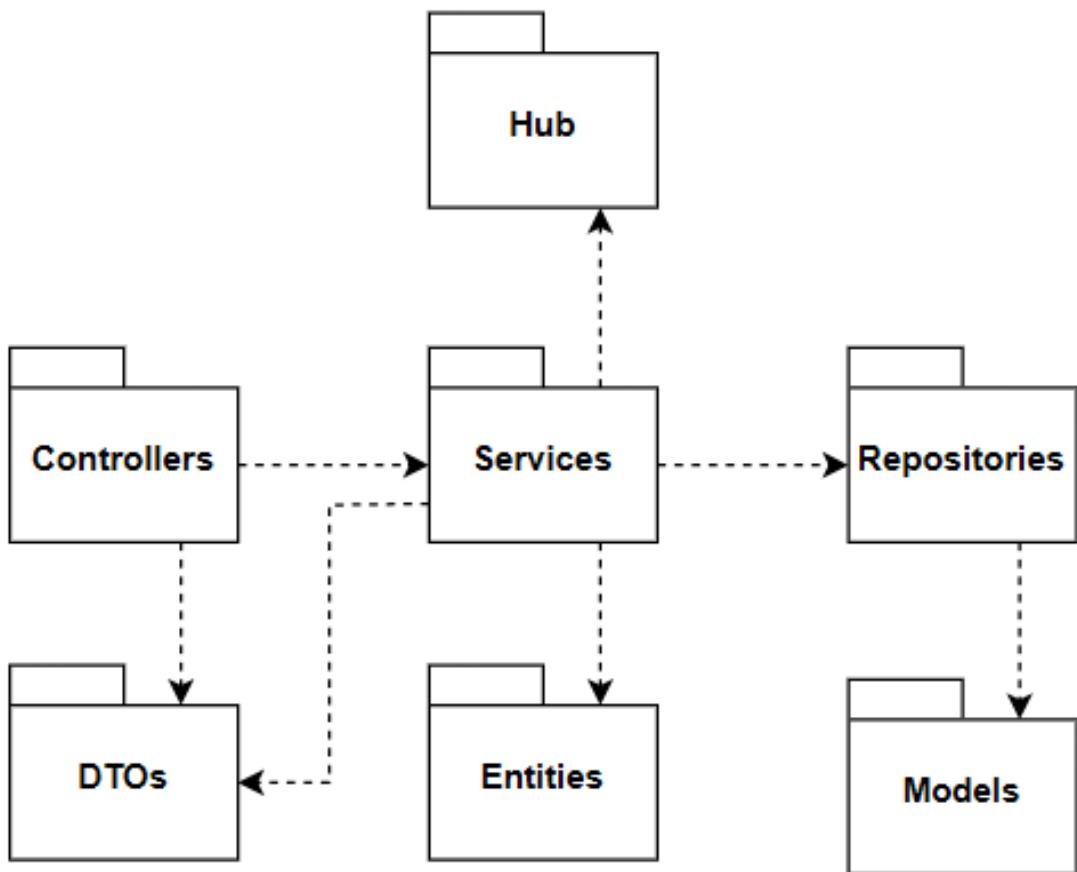


Figure 4.16 Planify Back-end Package Diagram

Package descriptions

No	Package	Description
1	Controllers	This package contains controllers to define API paths and their request parameters
2	Services	This package contains for handle business logic
3	Repositories	This package contains classes which interact with database
4	Models	This package contains entity classes in database
5	DTOs	This package contains objects used to transfer data between layers
6	Entities	This package contains entity classes not in database
7	Hub	This package contains classes related to real-time communication

Table 4.2 Back-end Package Description

4.3 Database Design

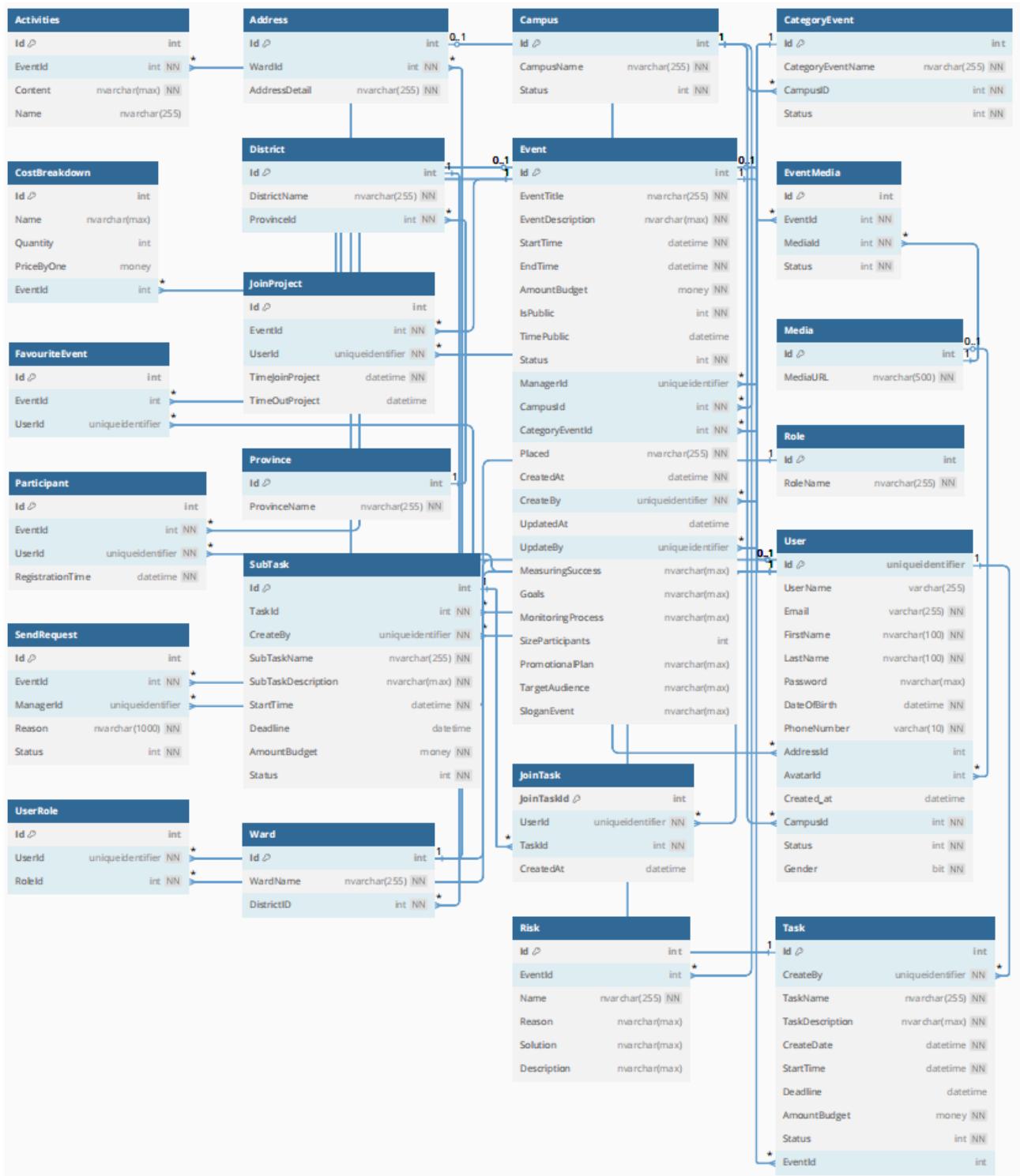


Figure 4.13 Database Design

4.3.1 Table Role

Filed Name	Data Type	Data Format	Field Size	Description
------------	-----------	-------------	------------	-------------

Id	integer			PK, Automatic
RoleName	nvarchar		255	

4.3.2 Table Province

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
ProvinceName	nvarchar		255	

4.3.3 Table Event

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
EventTitle	nvarchar		255	
EventDescription	nvarchar		MAX	
StartTime	datetime	dd/MM/yyyy		
EndTime	datetime	dd/MM/yyyy		
AmountBudget	money			
IsPublic	integer			
TimePublic	datetime			
Status	integer			
ManagerId	uniqueidentifier			FK
CampusId	integer			FK
CategoryEventId	integer			FK
Placed	nvarchar		255	
CreatedAt	datetime	dd/MM/yyyy		
CreateBy	uniqueidentifier			FK
UpdatedAt	datetime	dd/MM/yyyy		

UpdateBy	uniqueidentifier			FK
MeasuringSuccess	nvarchar		MAX	
Goals	nvarchar		MAX	
MonitoringProcess	nvarchar		MAX	
SizeParticipants	integer			
PromotionalPlan	nvarchar		MAX	
TargetAudience	nvarchar		MAX	
SloganEvent	nvarchar		MAX	

4.3.4 Table CategoryEvent

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
CategoryEventName	nvarchar		255	
CampusId	integer			FK
Status	integer			

4.3.5 Table Ward

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
WardName	nvarchar		255	
DistrictId	integer			FK

4.3.6 Table SendRequest

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
EventId	integer			FK

ManagerId	uniqueid entifier			FK
Reason	nvarchar		1000	
Status	integer			

4.3.7 Table SubTask

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
TaskId	integer			FK
CreateBy	uniqueide ntifier			FK
SubTaskName	nvarchar		255	
SubTaskDescriptio n	nvarchar		MAX	
StartTime	datetime	dd/MM/yyyy		
Deadline	datetime	dd/MM/yyyy		
AmountBudget	money			
Status	integer			

4.3.8 Table Campus

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
CampusName	nvarchar		255	
Status	integer			

4.3.9 Table Activities

Filed Name	Data Type	Data Format	Field Size	Description

Id	integer			PK, Automatic
EventId	integer			FK
Content	nvarchar		MAX	FK
Name	nvarchar		255	

4.3.10 Table CostBreakdown

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
Name	nvarchar		MAX	FK
Quantity	integer			FK
PriceByOne	money			
EventId	integer			

4.3.11 Table FavouriteEvent

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
EventId	integer			FK
UserId	uniqueidentifier			FK

4.3.12 Table JoinTask

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
SubTaskId	integer			FK
InvoicelimageUrl	nvarchar		500	
ActualBudgetAmou	money			

nt				
Status	integer			

4.3.13 Table Risk

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
EventId	integer			FK
Name	nvarchar		255	
Reason	nvarchar		MAX	
Solution	nvarchar		MAX	
Description	nvarchar		MAX	

4.3.14 Table District

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
DistrictName	nvarchar		255	
ProvincId	integer			FK

4.3.15 Table EventMedia

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
EventId	integer			FK
MediaId	integer			FK
Status	integer			

4.3.16 Table Task

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
CreateBy	uniqueidentifier			FK
TaskName	nvarchar		255	
TaskDescription	nvarchar		MAX	
CreateDate	datetime	dd/MM/yyyy		
StartTime	datetime	dd/MM/yyyy		
Deadline	datetime	dd/MM/yyyy		
EventId	integer			FK
AmountBudget	money			
Progress	double			
Status	integer			

4.3.17 Table Address

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
WardId	integer			FK
Address Detail	nvarchar		255	

4.3.18 Table Participant

Filed Name	Data Type	Data Format	Field Size	Description

Id	integer			PK, Automatic
TaskId	integer			FK
InvoicelimageUrl	nvarchar		500	
ActualBudgetAmou nt	money			
Status	integer			

4.3.19 Table User

Filed Name	Data Type	Data Format	Field Size	Description
Id	uuid			PK
UserName	varchar		255	
Email	varchar		255	
FirstName	nvarchar		100	
LastName	nvarchar		100	
Password	text			
DateOfBirth	datetime			
PhoneNumber	varchar		10	
AddressId	integer			FK
Avatar	integer			
CreatedAt	datetime	dd/MM/yyyy		
Gender	bit			
CampusId	integer			FK
Status	integer			

4.3.20 Table JoinProject

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic

EventId	integer			FK
UserId	uniqueidentifier			FK
TimeJoinProject	datetime	dd/MM/yyyy		
TimeOutProject	datetime	dd/MM/yyyy		

4.3.21 Table Media

Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
MediaURL	nvarchar		500	

4.3.22 Table UserRole

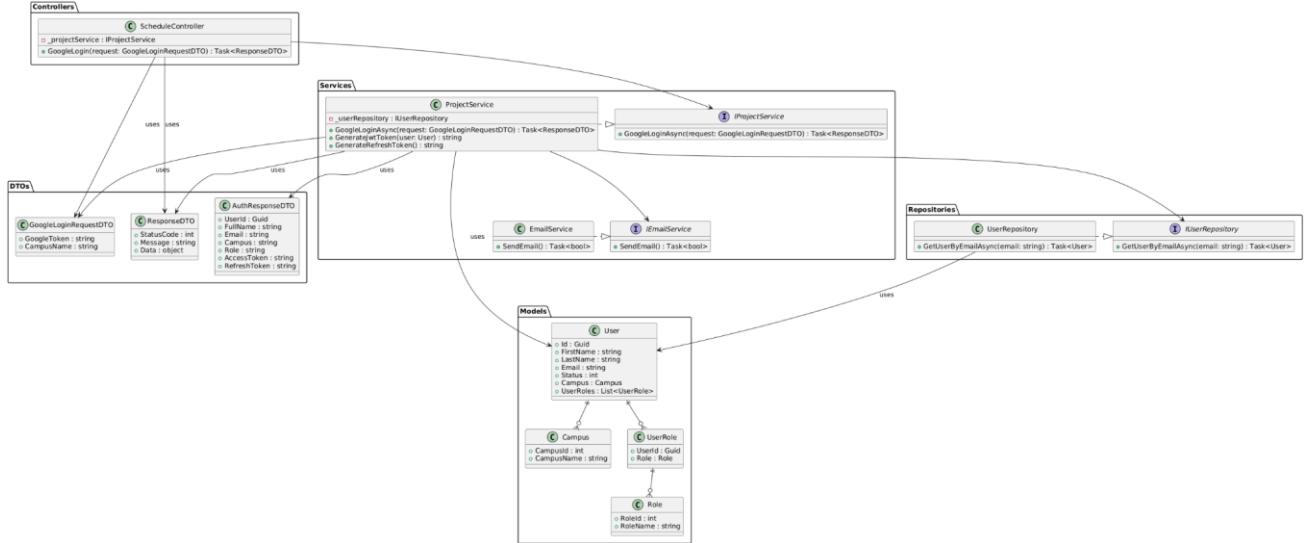
Filed Name	Data Type	Data Format	Field Size	Description
Id	integer			PK, Automatic
UserId	uniqueidentifier			FK
RoleId	integer			FK

4.4 Detailed Design

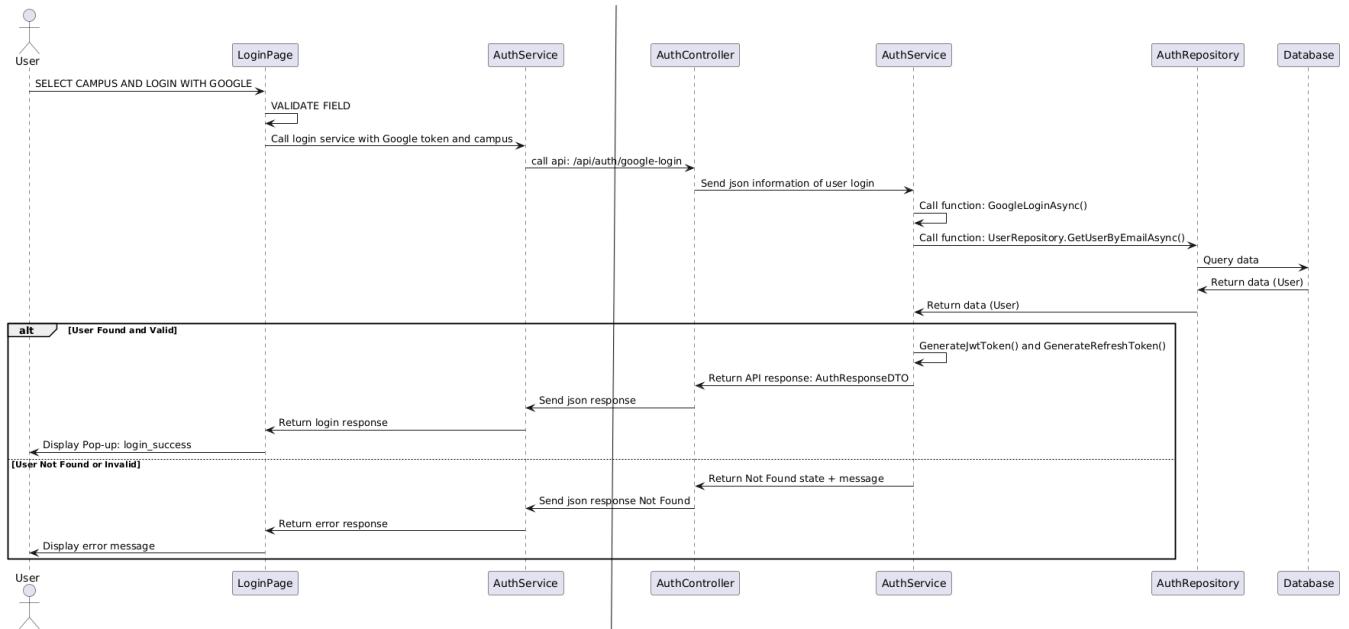
4.4.1 Authentication

4.4.1.1 Login

4.4.1.1.1 Class diagram

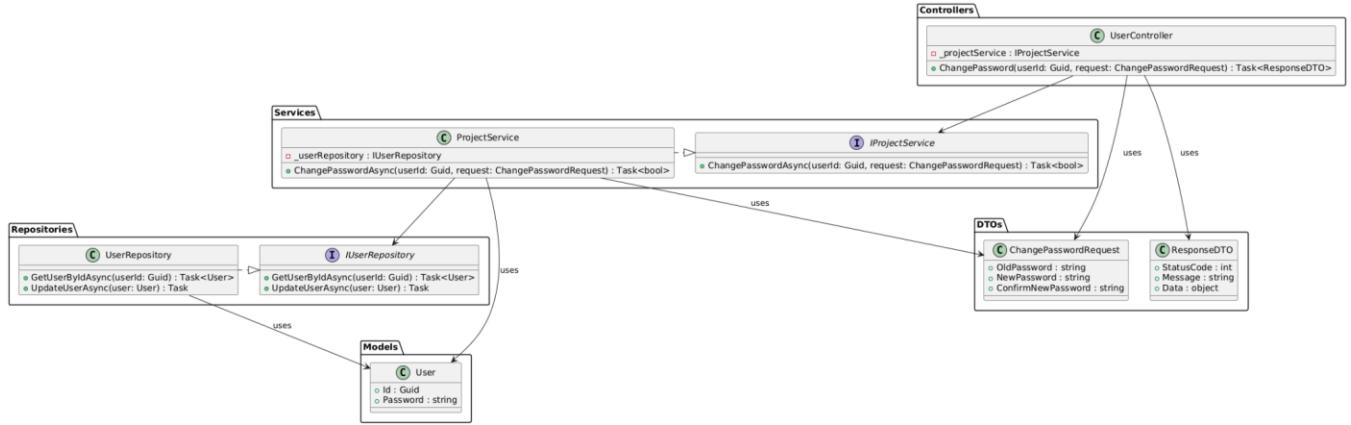


4.4.1.1.2 Sequence diagram

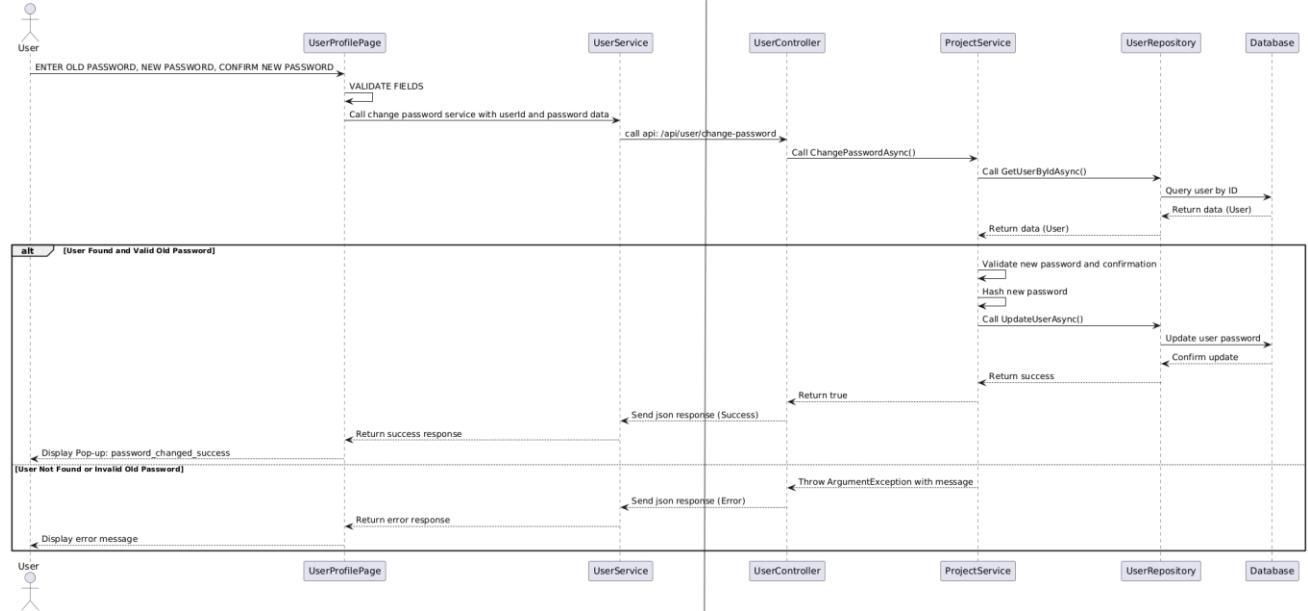


4.4.1.2 Change password admin

4.4.1.2.1 Class diagram



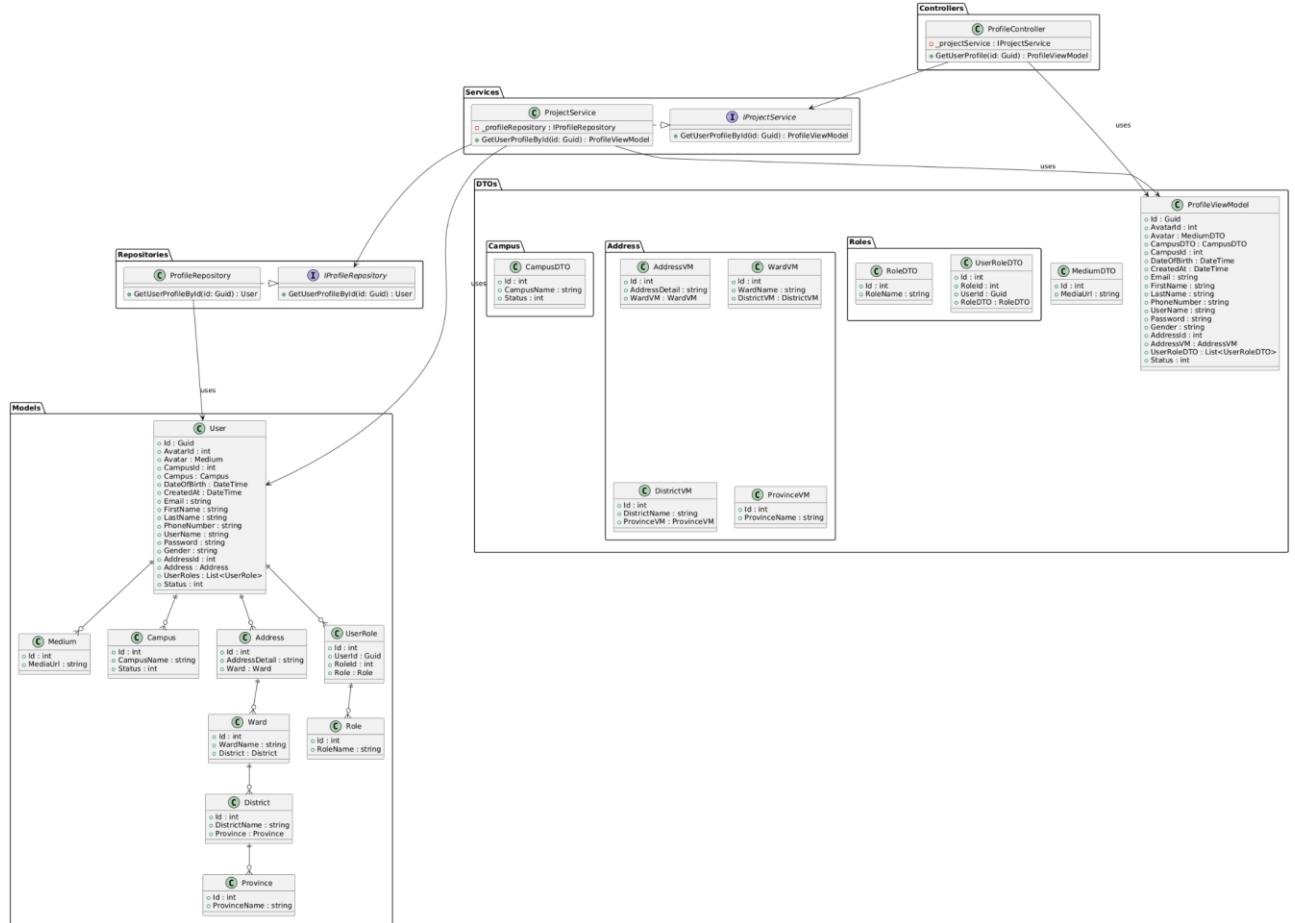
4.4.1.2.2 Sequence diagram



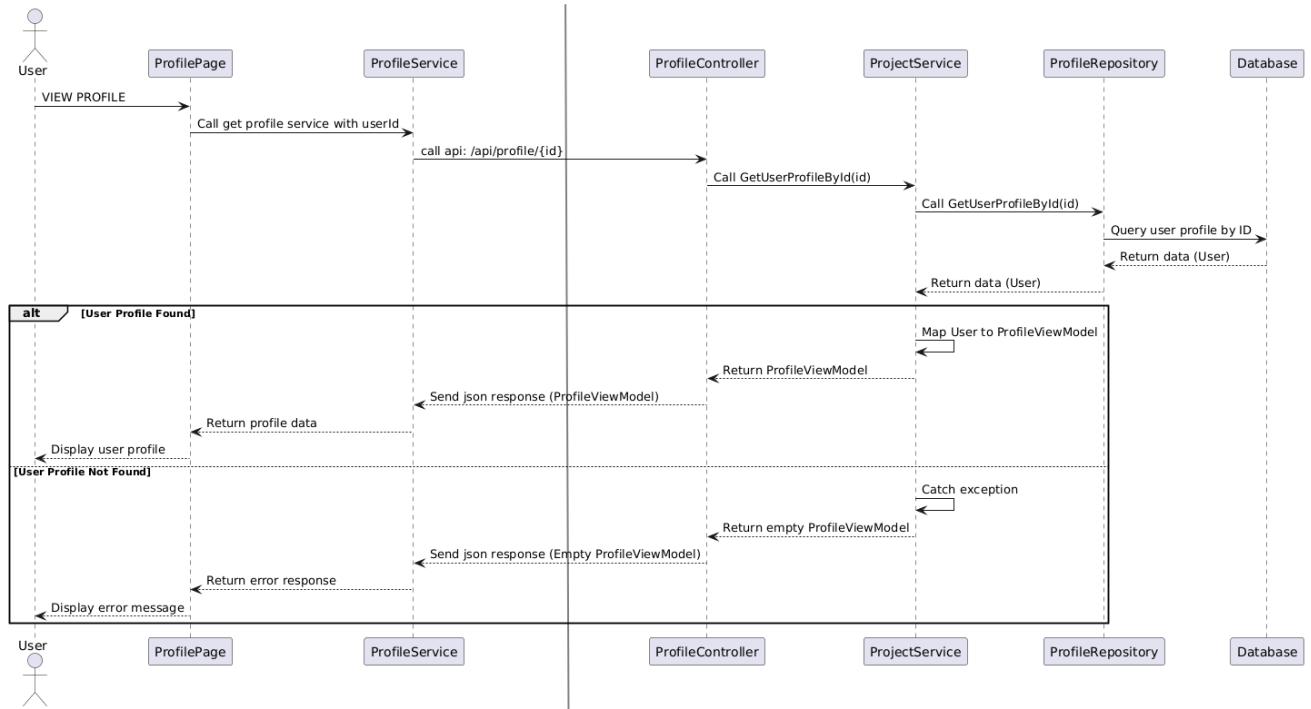
4.4.2 User Profile

4.4.2.1 View Profile

4.4.2.1.1 Class diagram

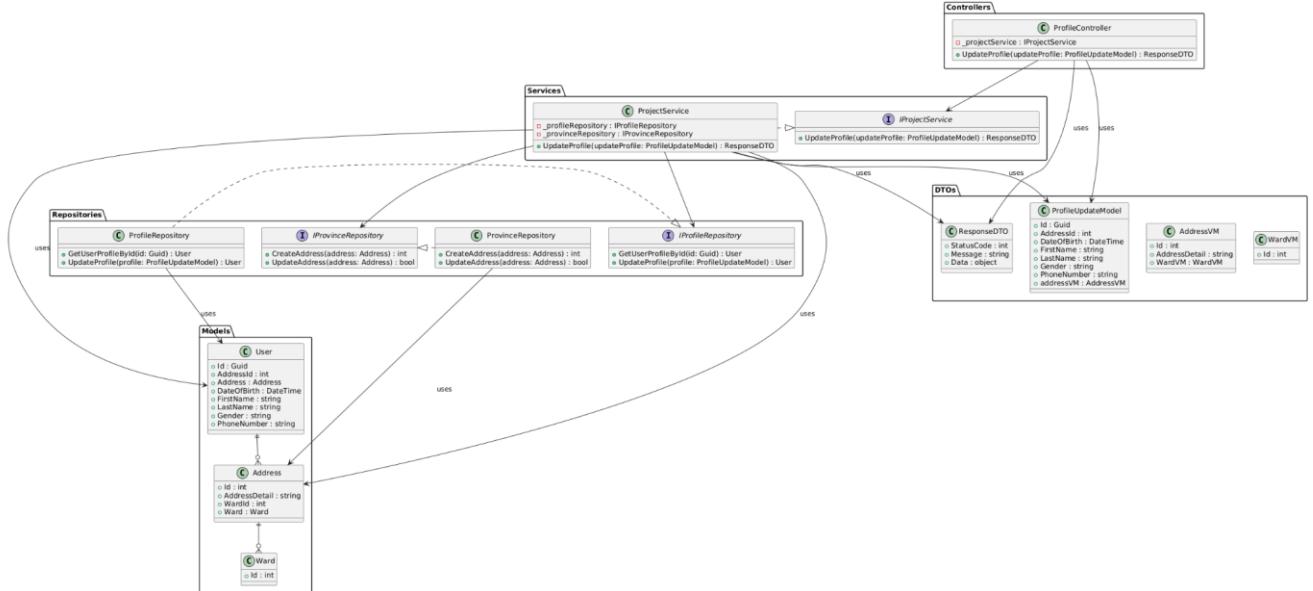


4.4.2.1.2 Sequence diagram

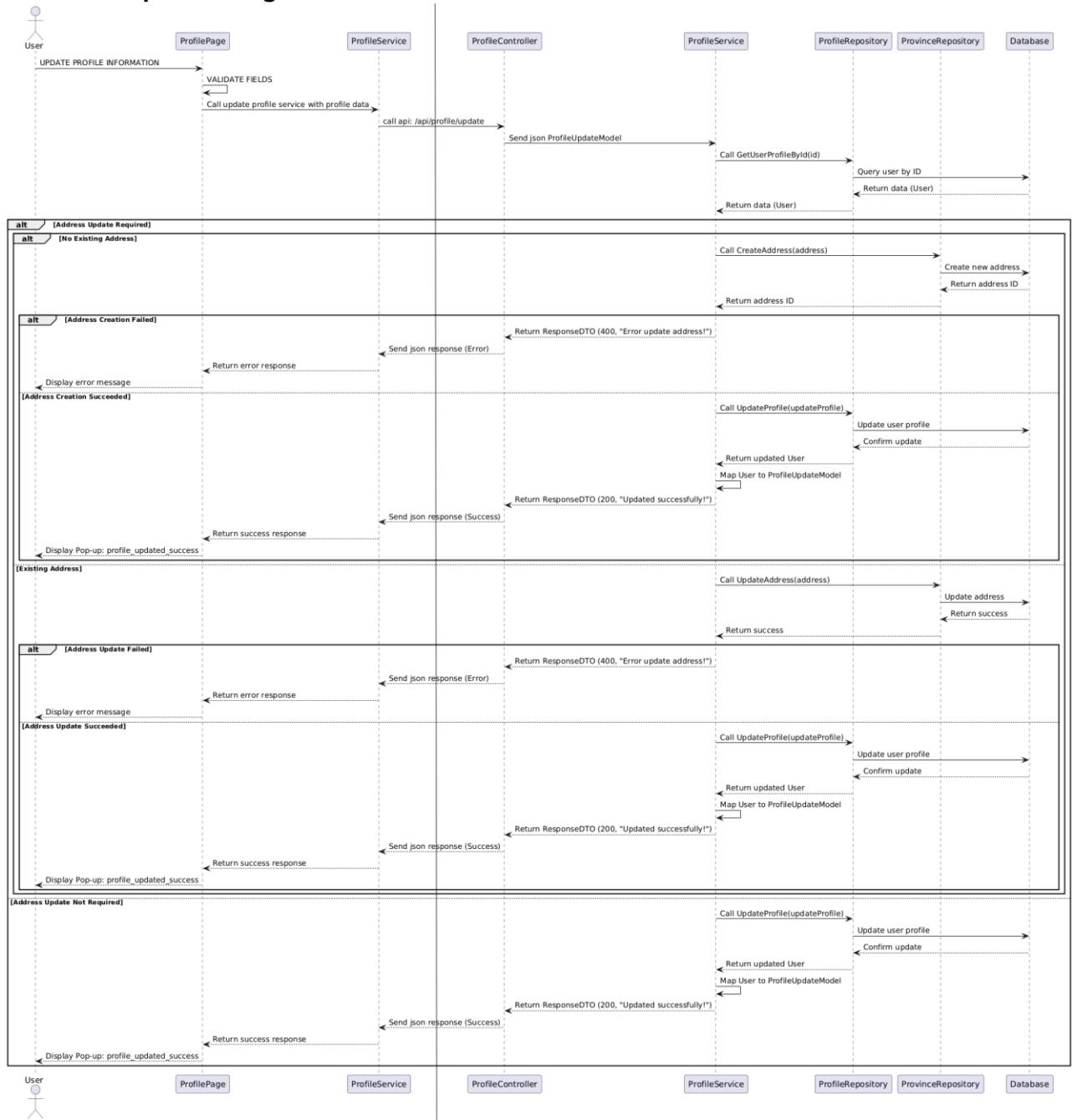


4.4.2.2 Update Profile

4.4.2.2.1 Class diagram

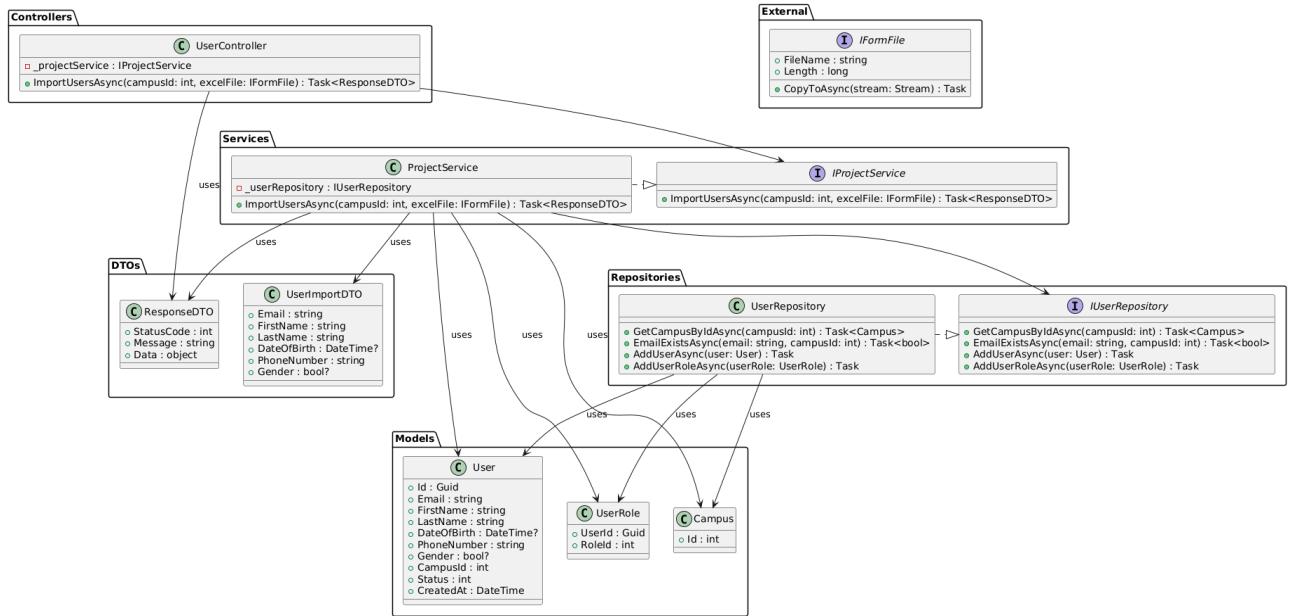


4.4.2.2.2 Sequence diagram

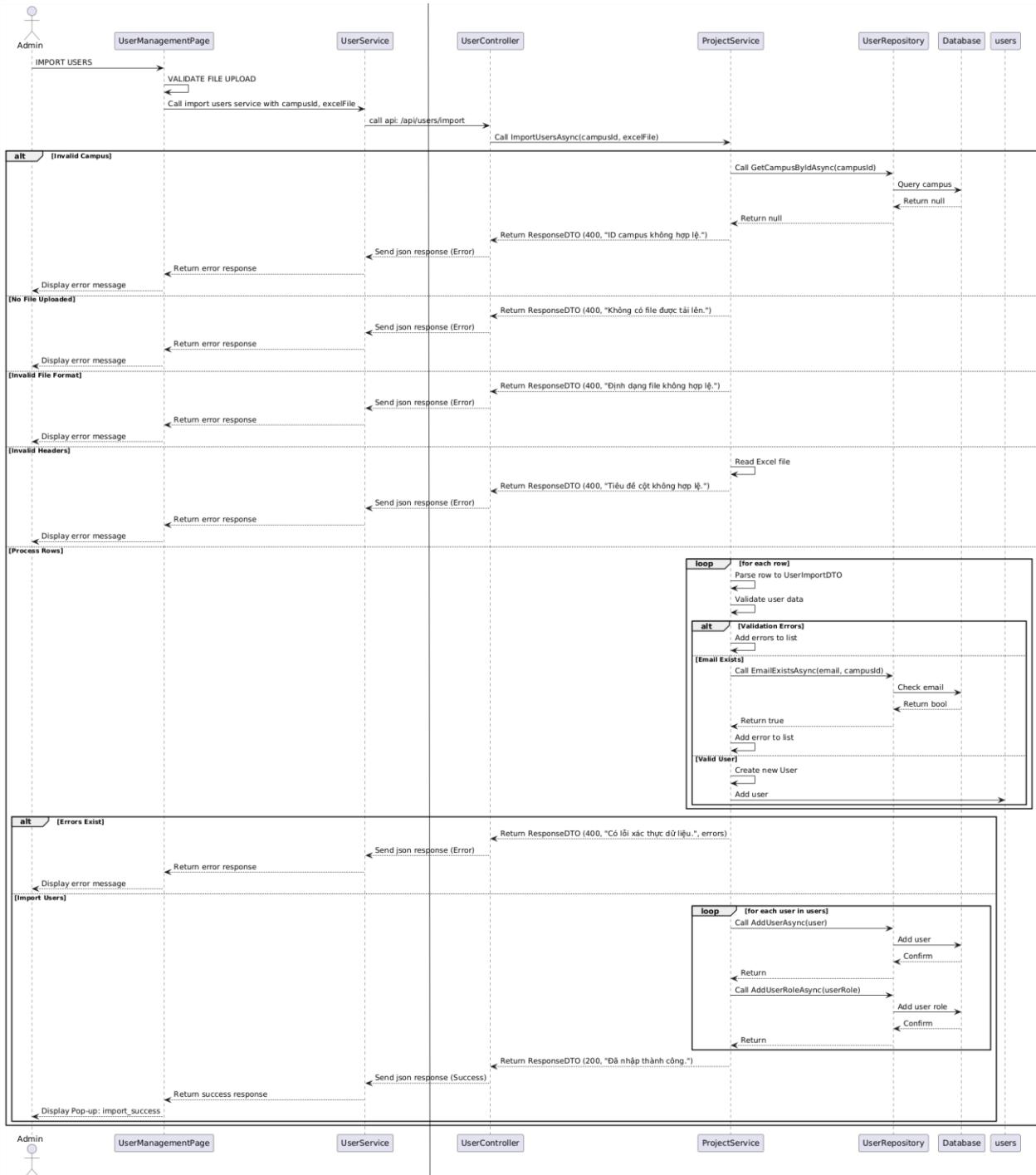


4.4.2.3 Import Users from Excel

4.4.2.3.1 Class diagram

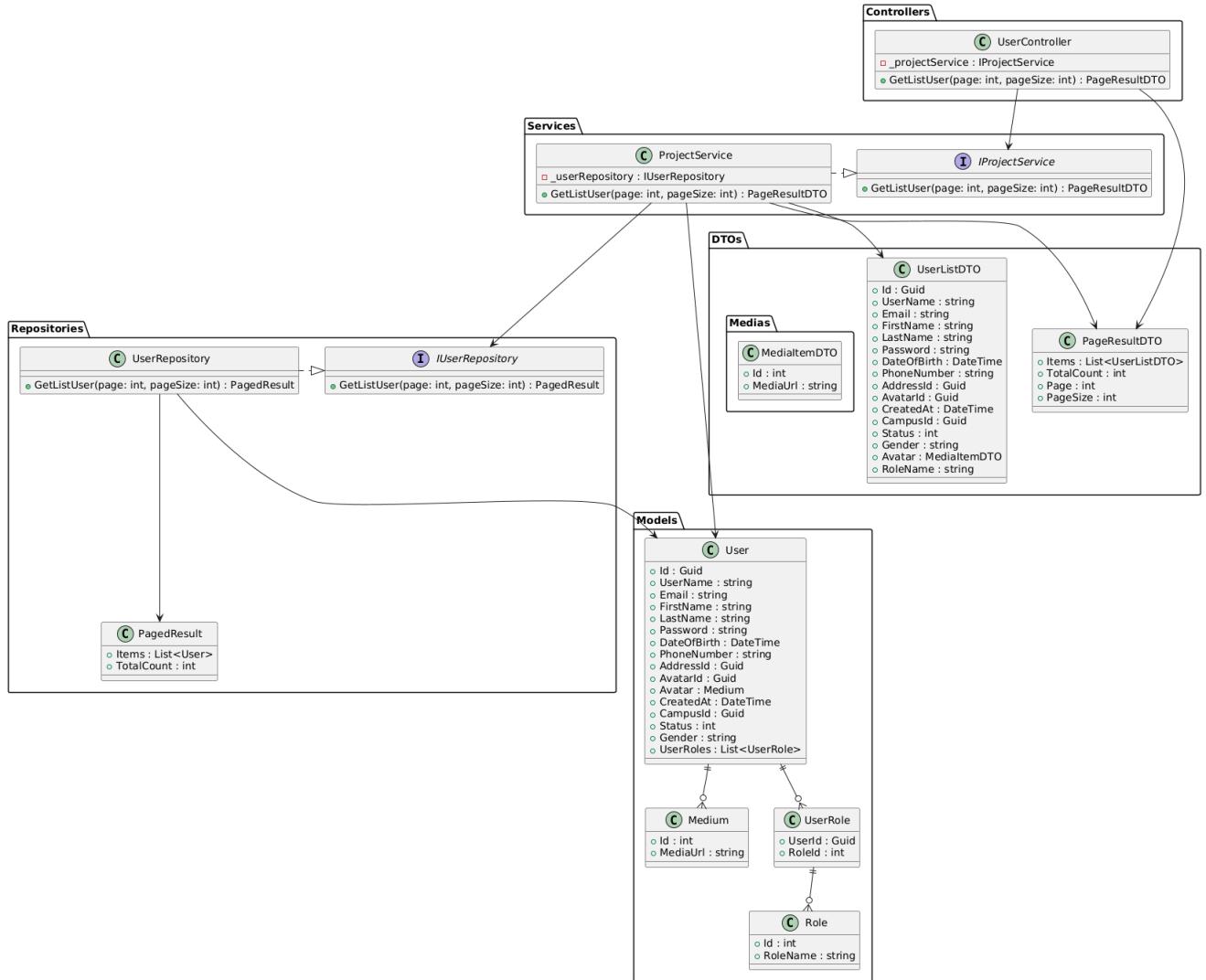


4.4.2.3.2 Sequence diagram

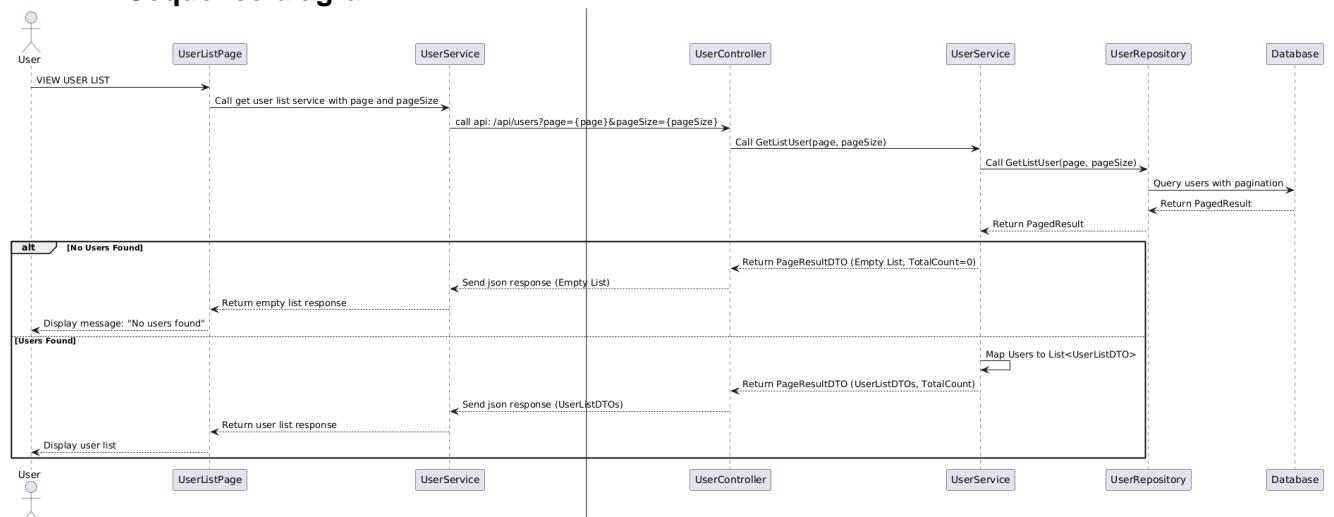


4.4.2.4 View list user

4.4.2.4.1 Class diagram

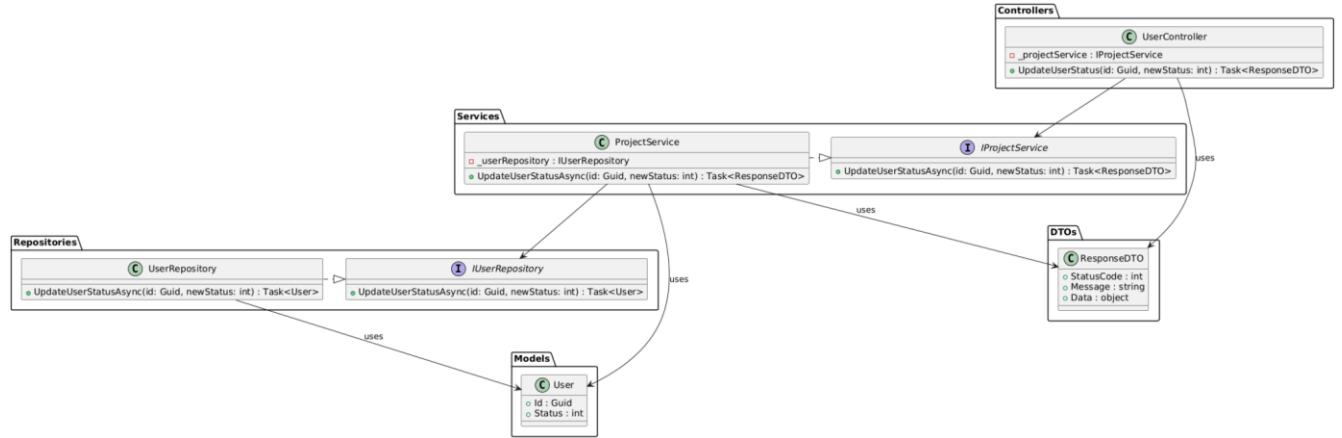


4.4.2.4.2 Sequence diagram

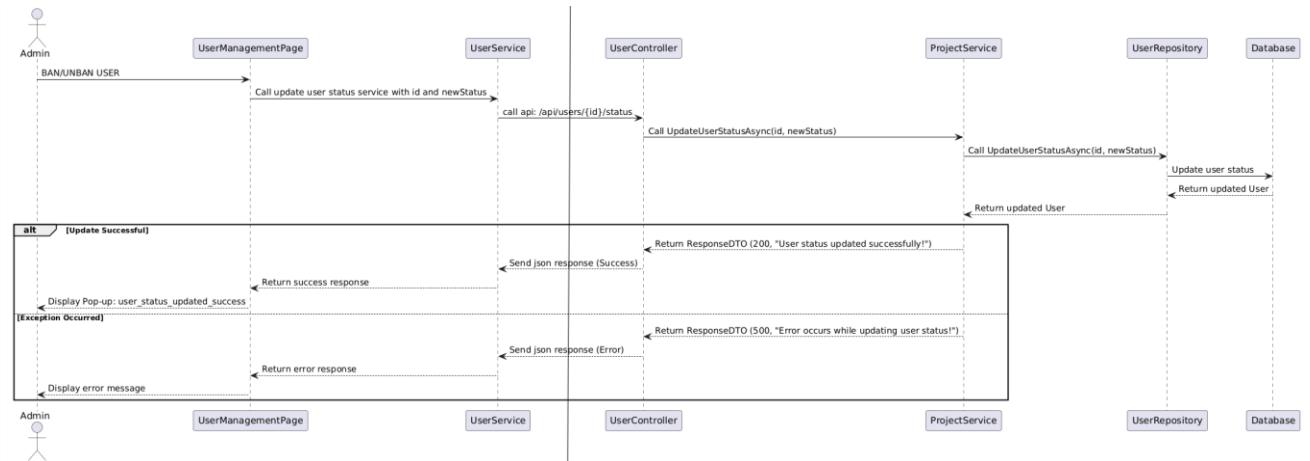


4.4.2.5 Ban/UnBan Users

4.4.2.5.1 Class diagram



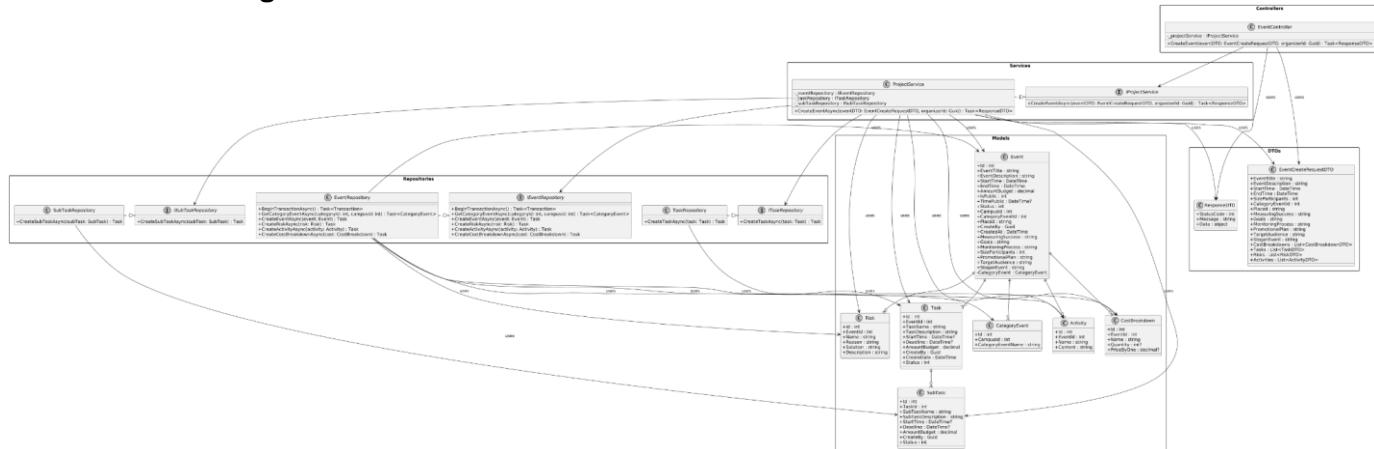
4.4.2.5.2 Sequence diagram



4.4.3 Event Management

4.4.3.1 Create Event

4.4.3.1.1 Class diagram

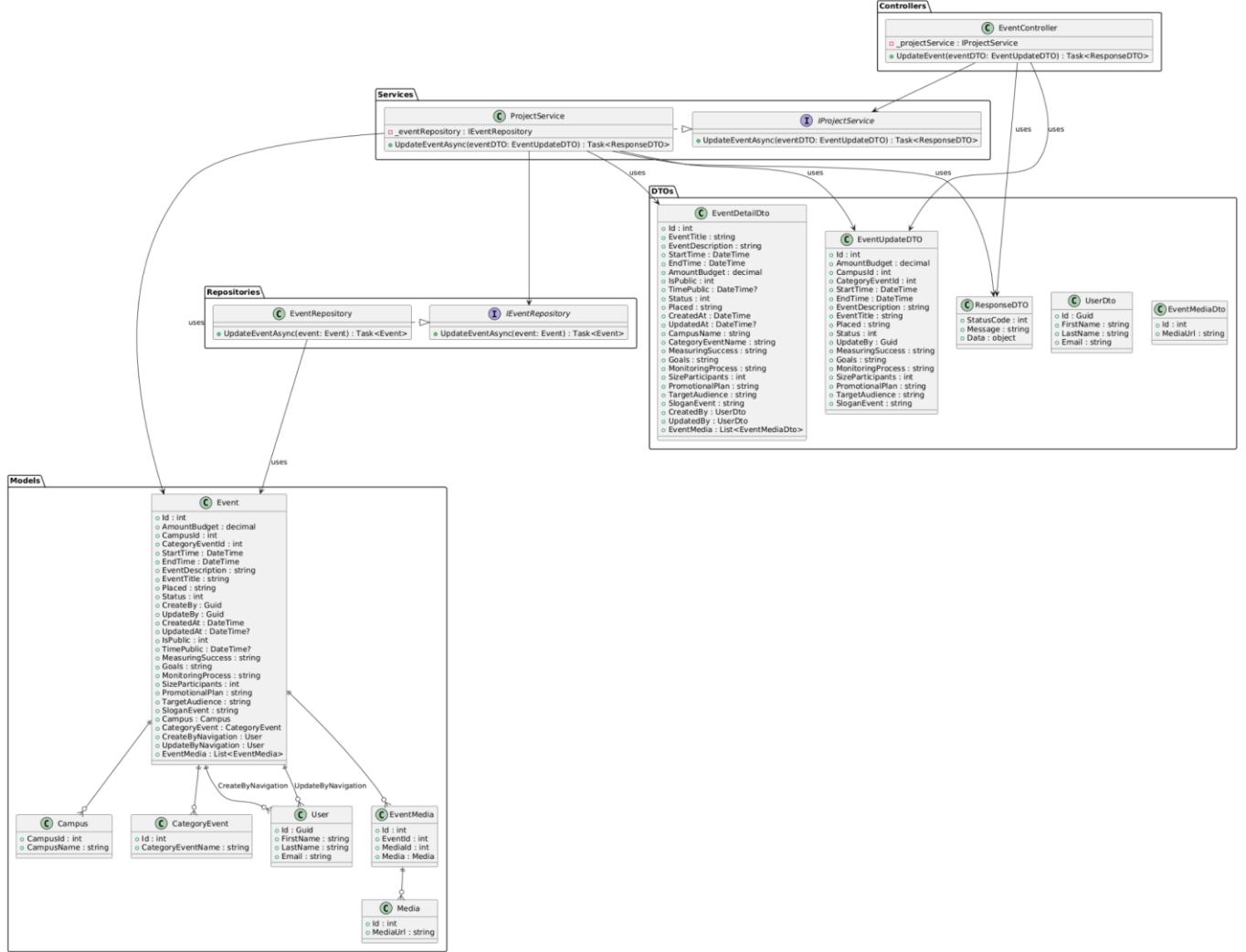


4.4.3.1.2 Sequence diagram

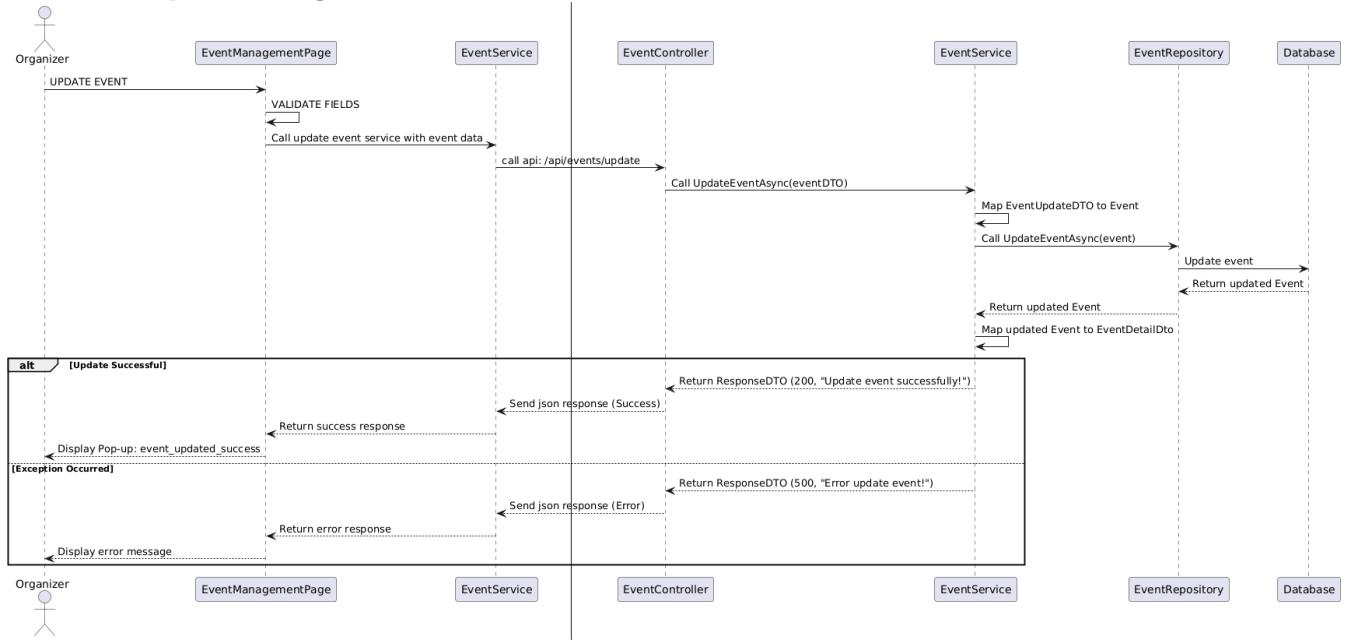


4.4.3.2 Update Event

4.4.3.2.1 Class diagram

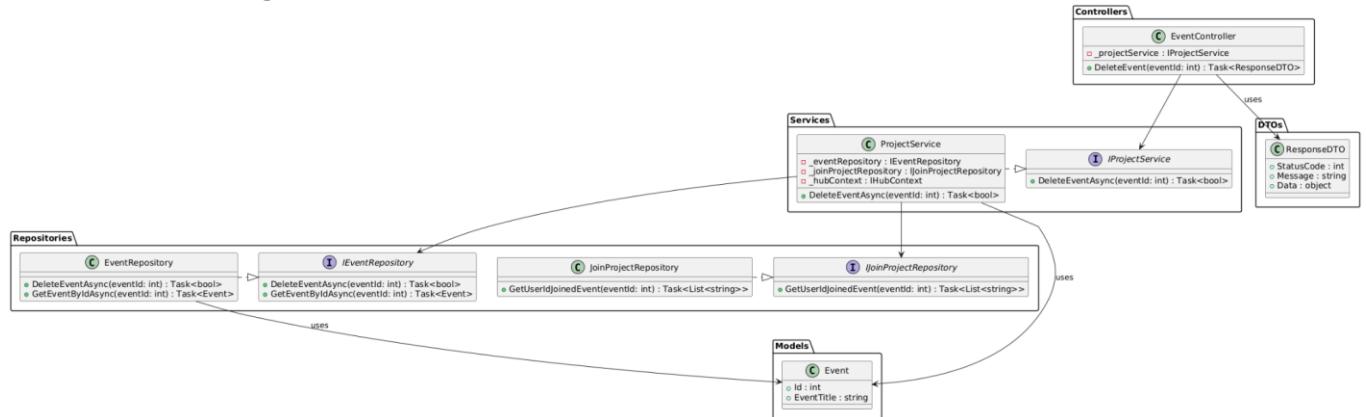


4.4.3.2.2 Sequence diagram

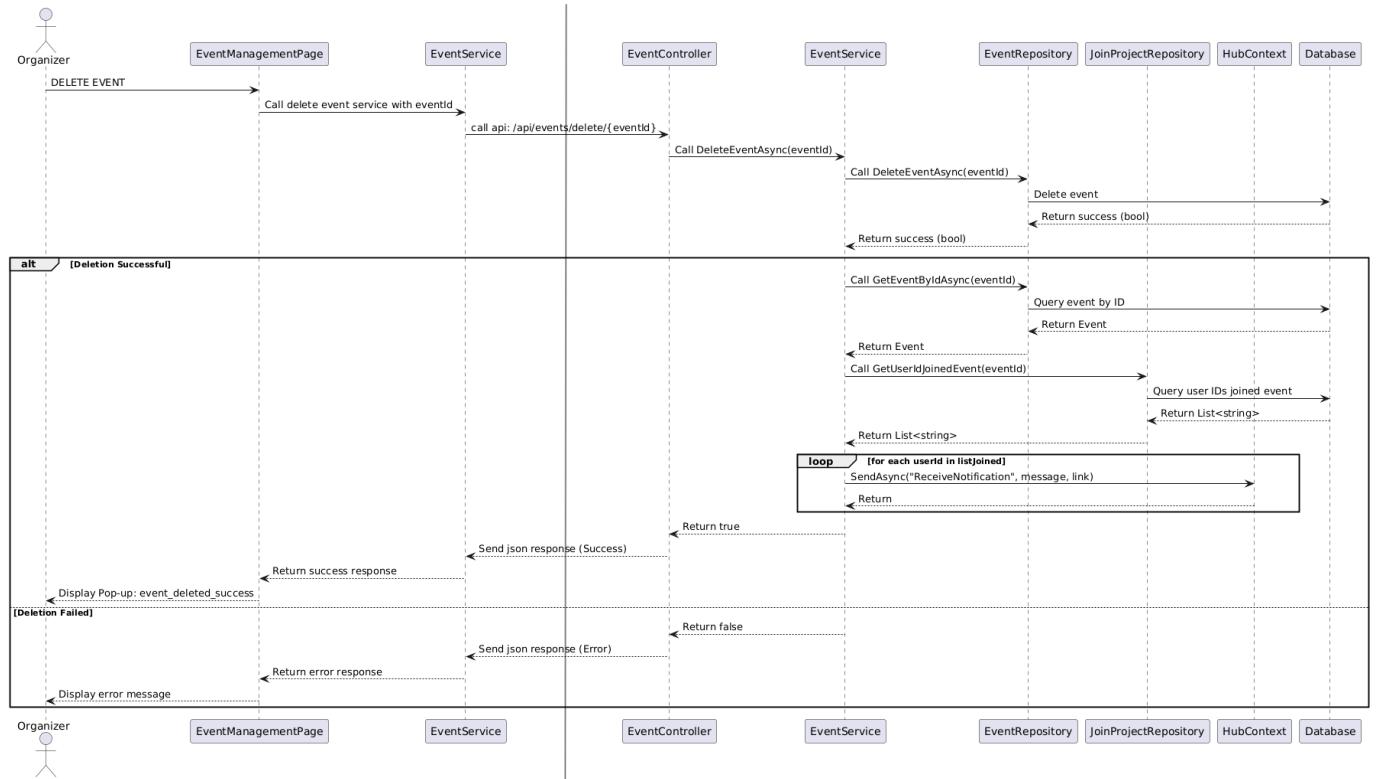


4.4.3.3 Delete Event

4.4.3.3.1 Class diagram

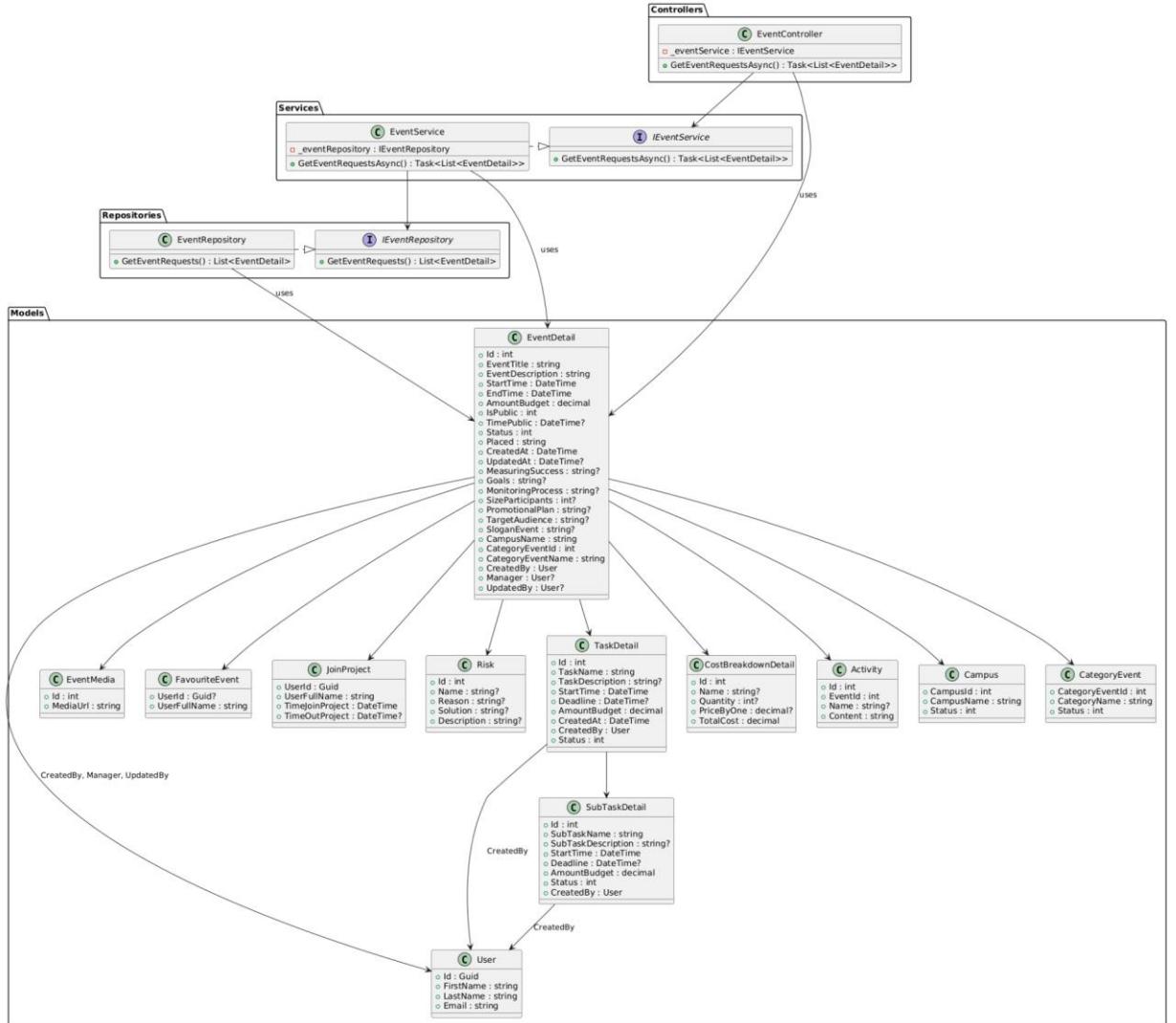


4.4.3.3.2 Sequence diagram

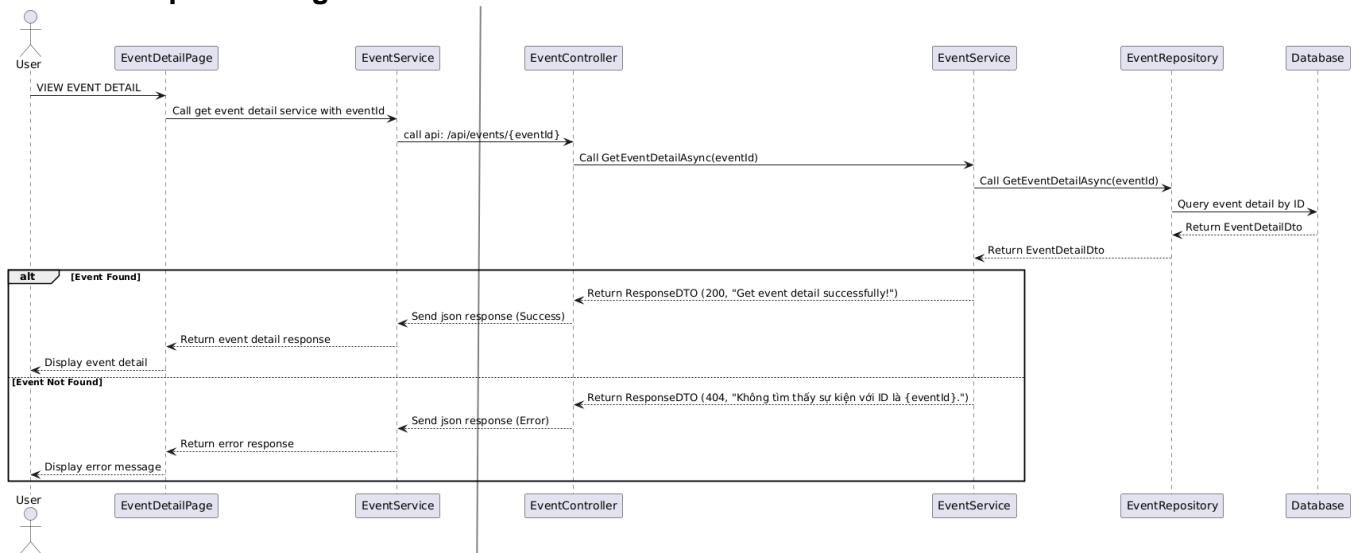


4.4.3.4 View Event Detail

4.4.3.4.1 Class diagram

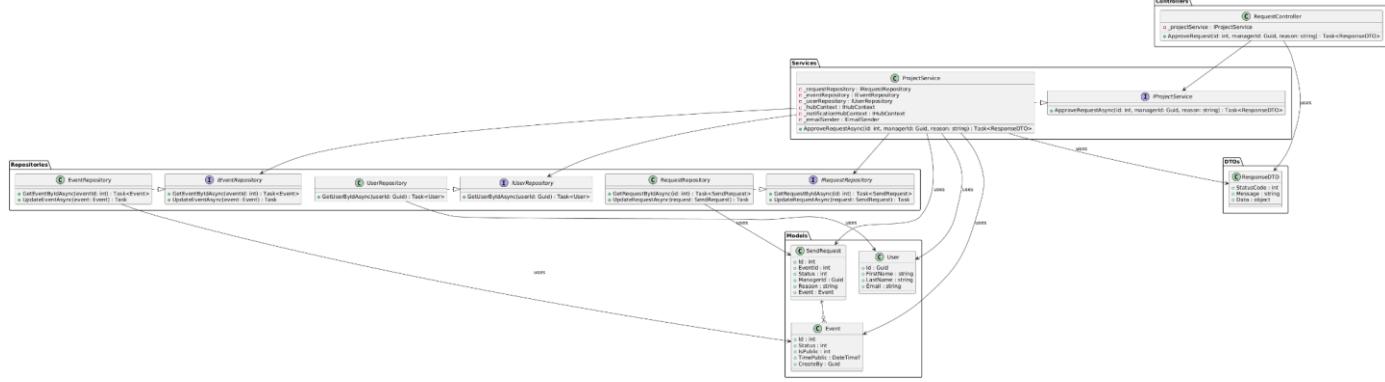


4.4.3.4.2 Sequence diagram

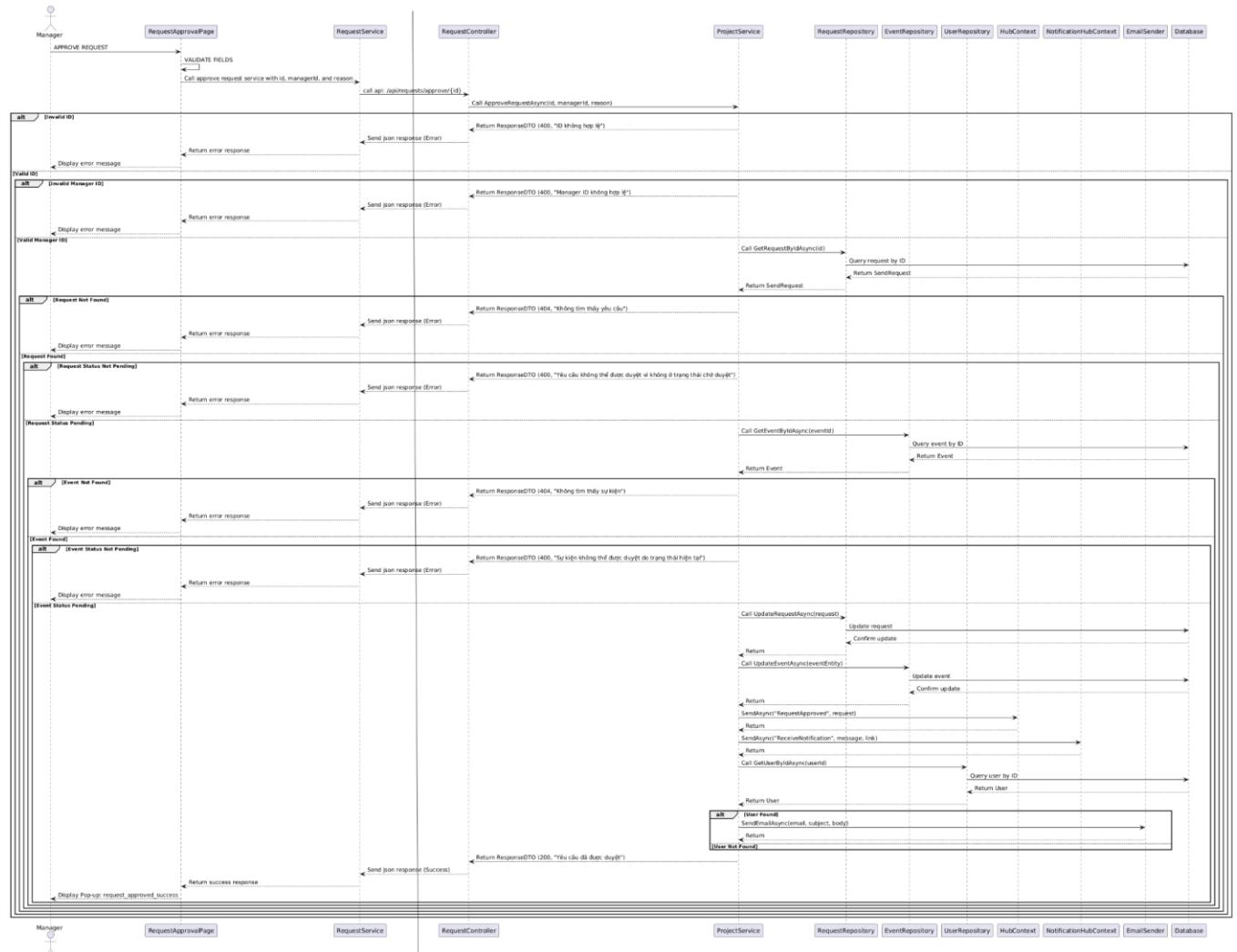


4.4.3.5 Approve Event

4.4.3.5.1 Class diagram

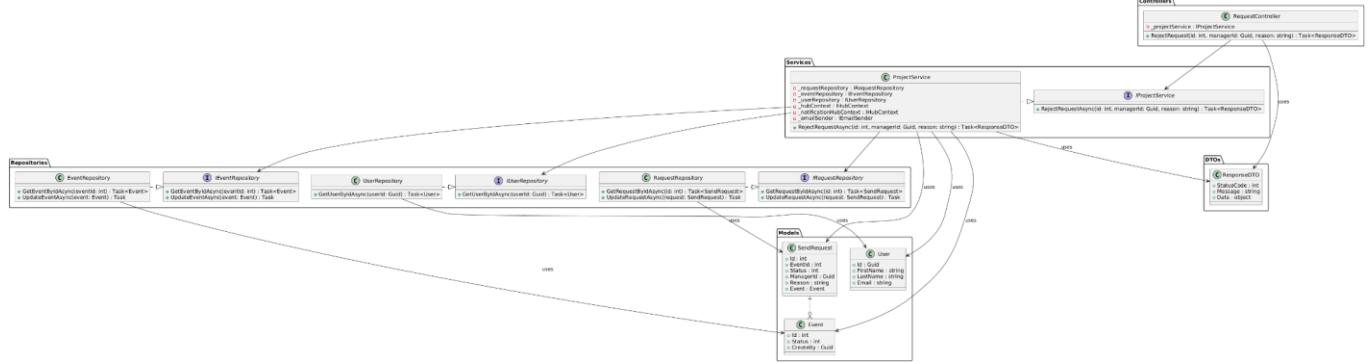


4.4.3.5.2 Sequence diagram

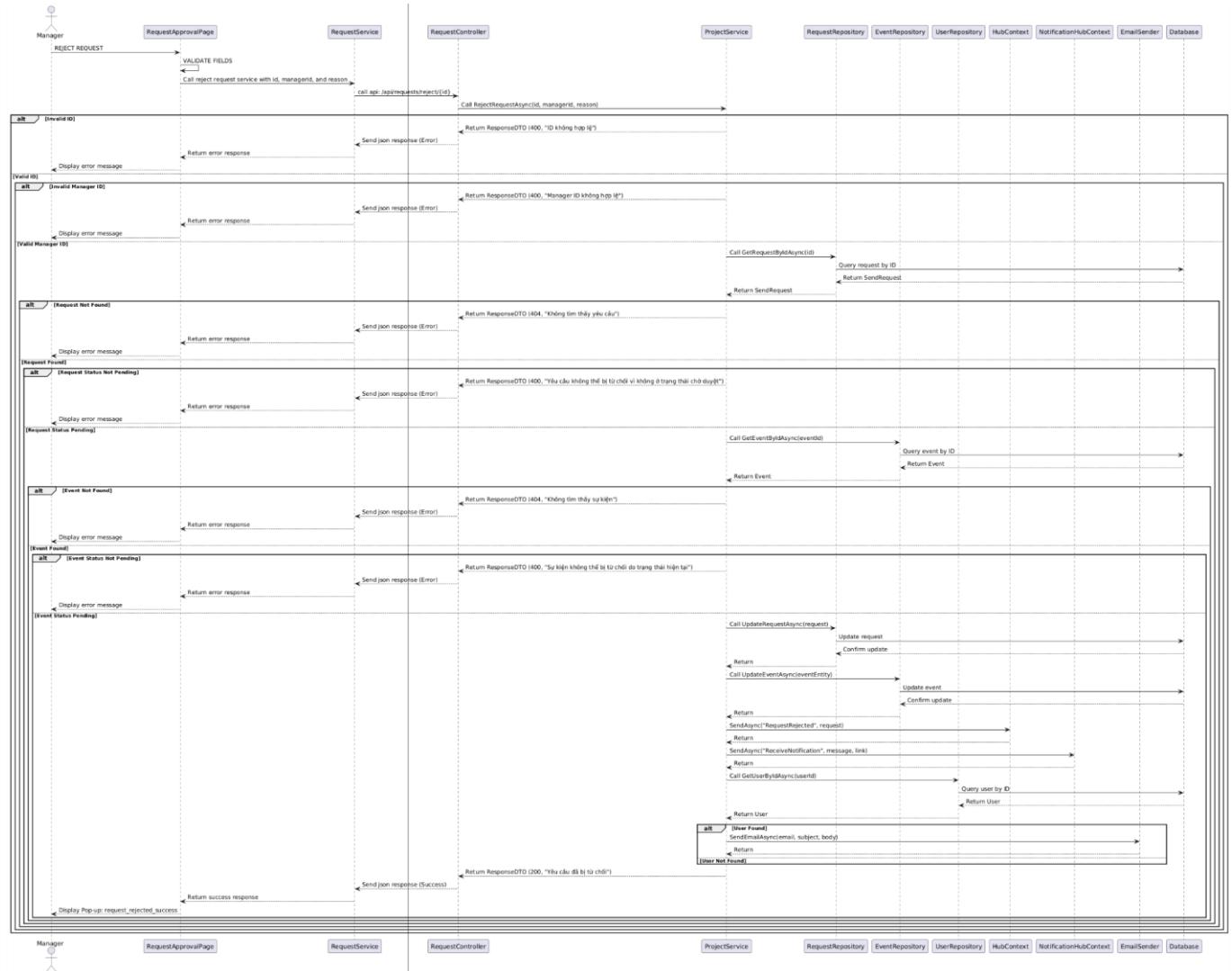


4.4.3.6 Reject Event

4.4.3.6.1 Class diagram

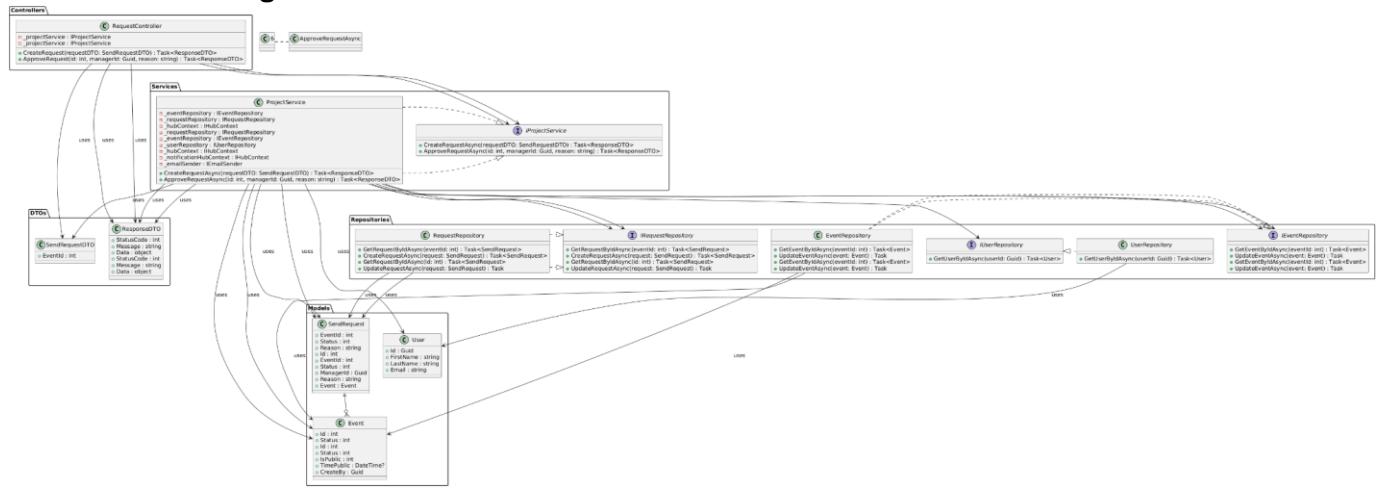


4.4.3.6.2 Sequence diagram

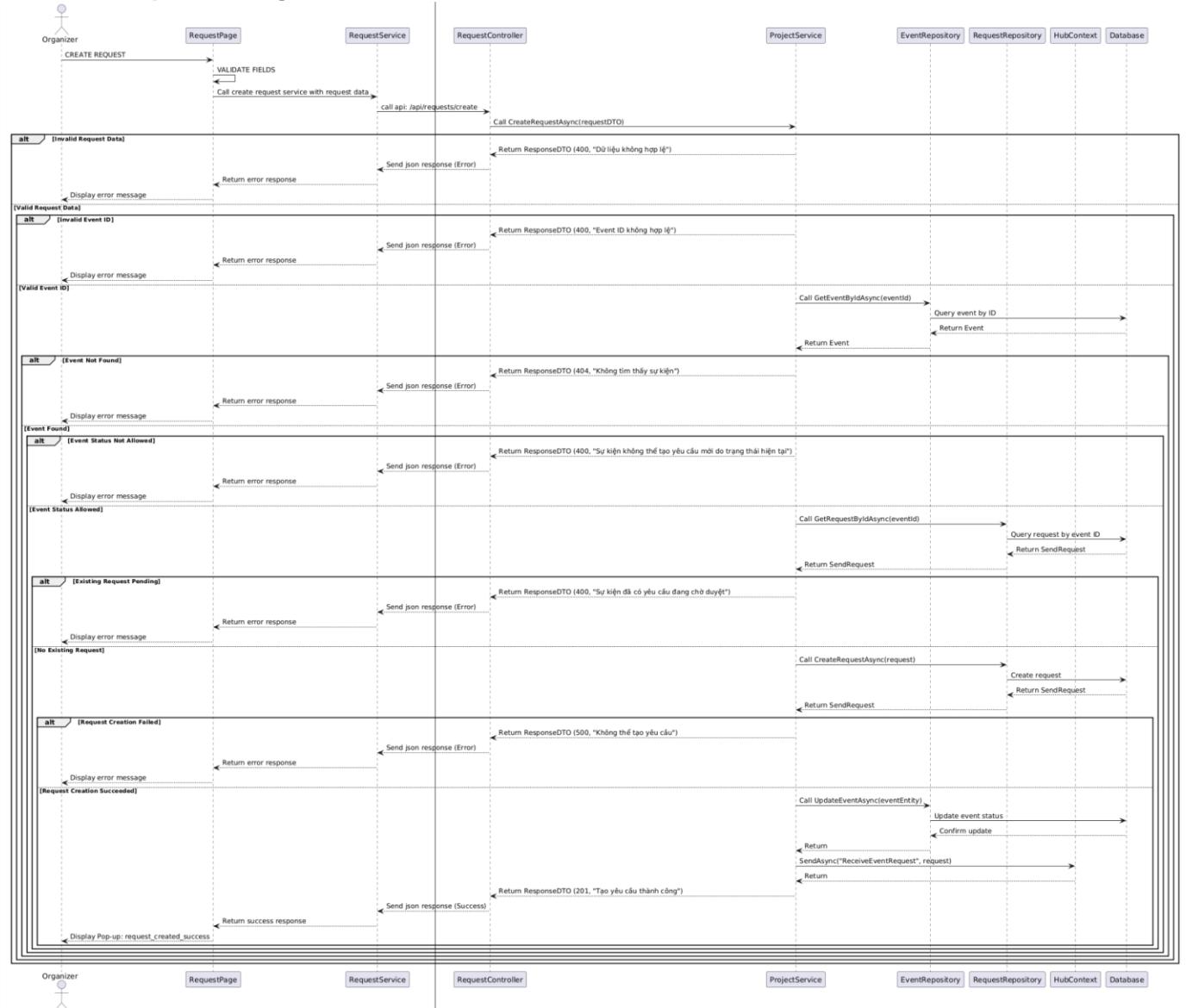


4.4.3.7 Send Request

4.4.3.7.1 Class diagram

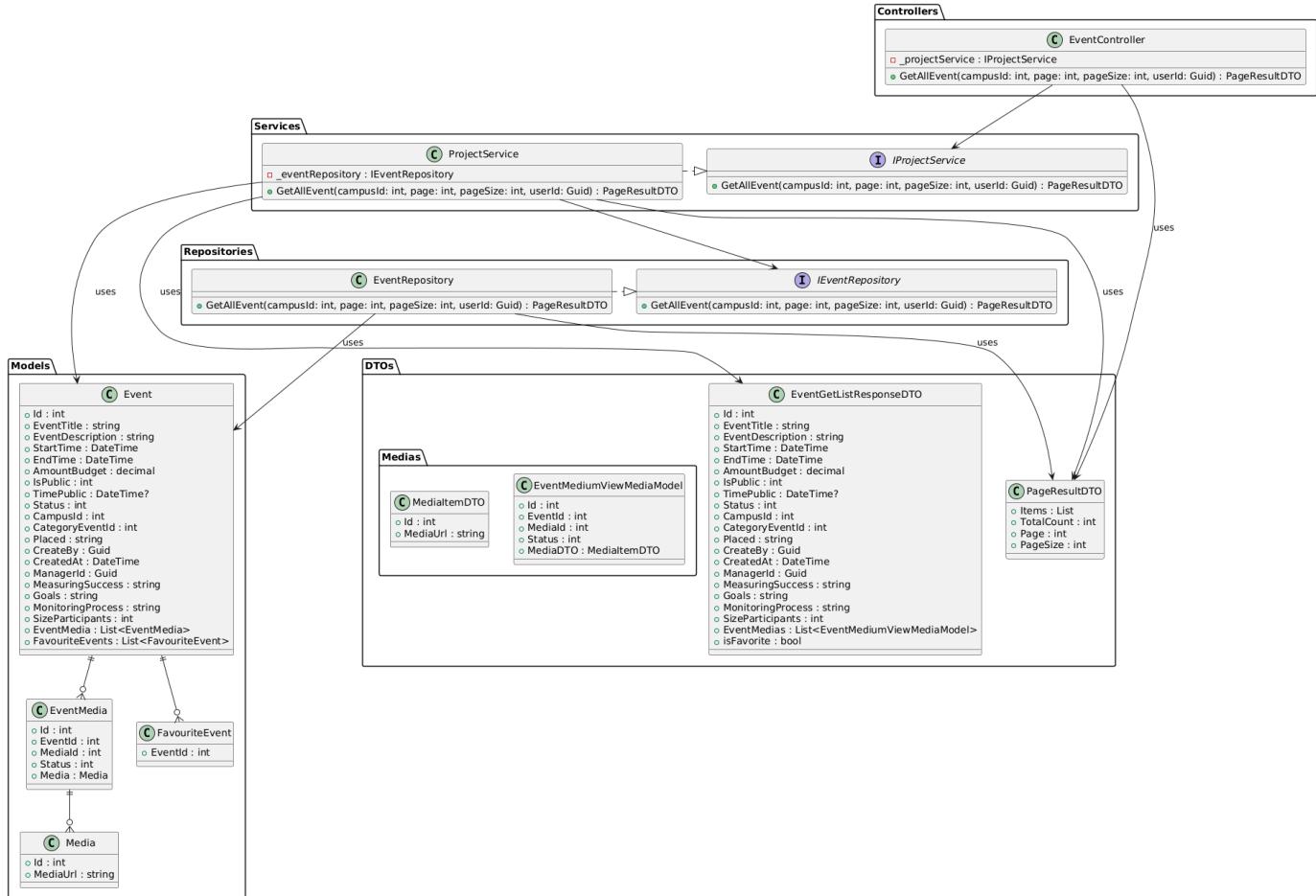


4.4.3.7.2 Sequence diagram



4.4.3.8 View All Events

4.4.3.8.1 Class diagram



4.4.3.8.2 Sequence diagram



4.4.3.9 Search Events

4.4.3.9.1 Class diagram

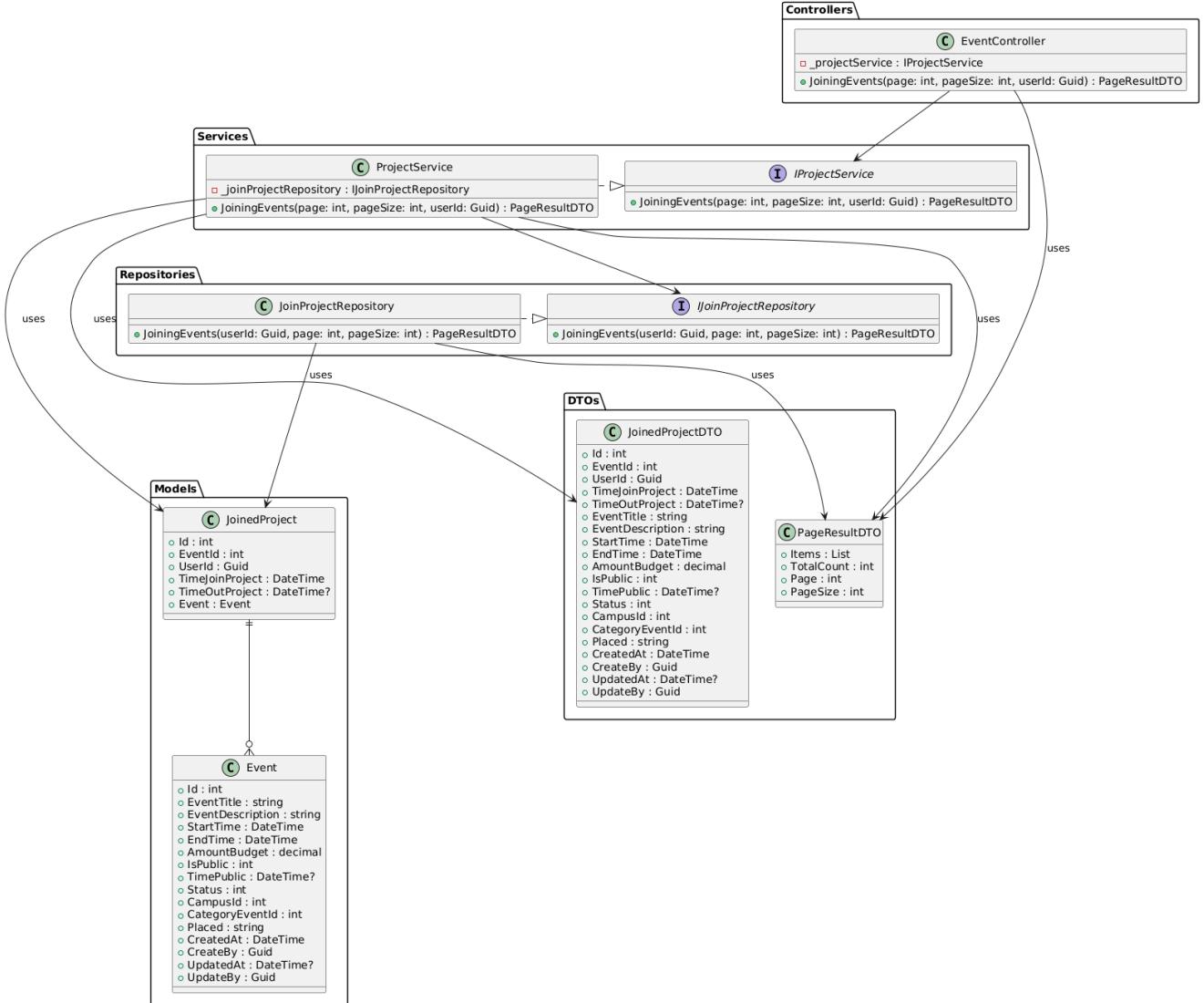


4.4.3.9.2 Sequence diagram

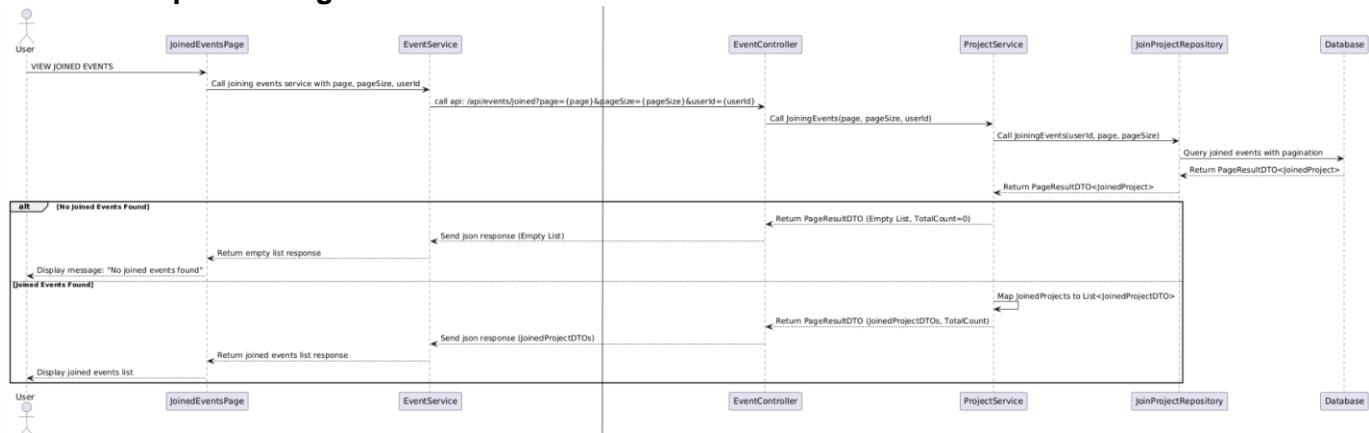


4.4.3.10 View List Event Joined Events

4.4.3.10.1 Class diagram

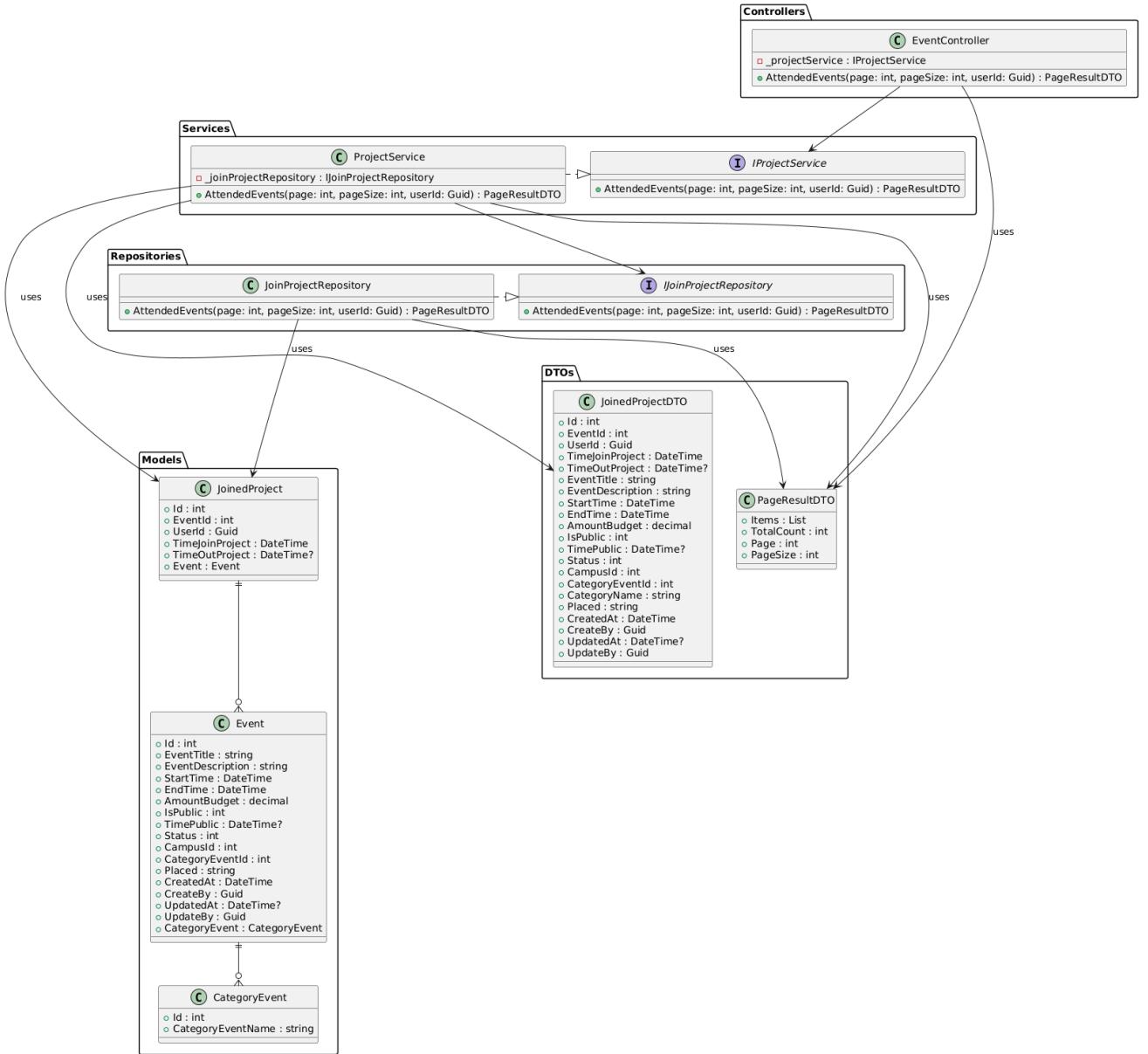


4.4.3.8.2 Sequence diagram



4.4.3.11 View Attended Event History

4.4.3.11.1 Class diagram

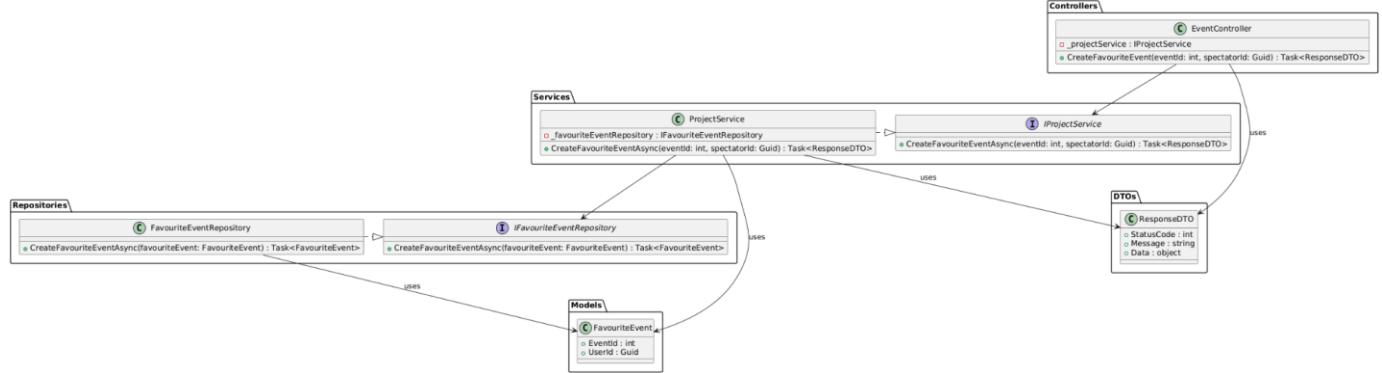


4.4.3.11.2 Sequence diagram

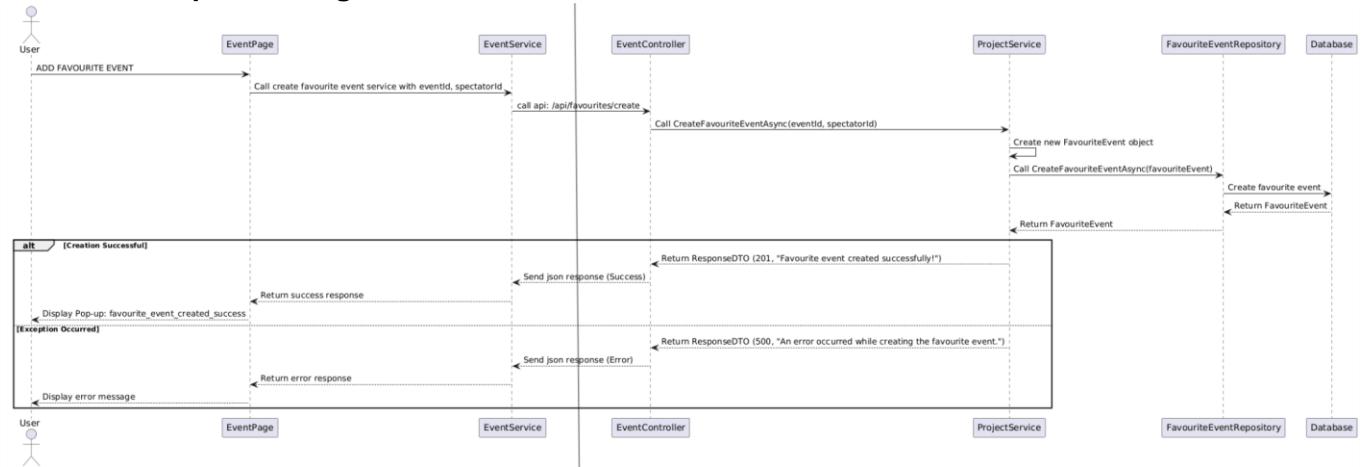


4.4.3.12 Add Favorite Event

4.4.3.12.1 Class diagram

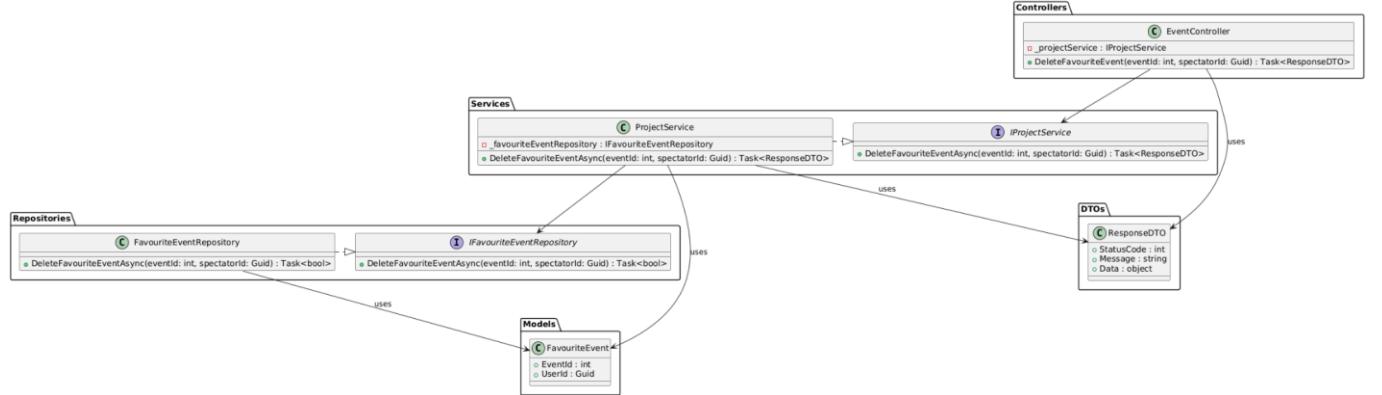


4.4.3.12.2 Sequence diagram

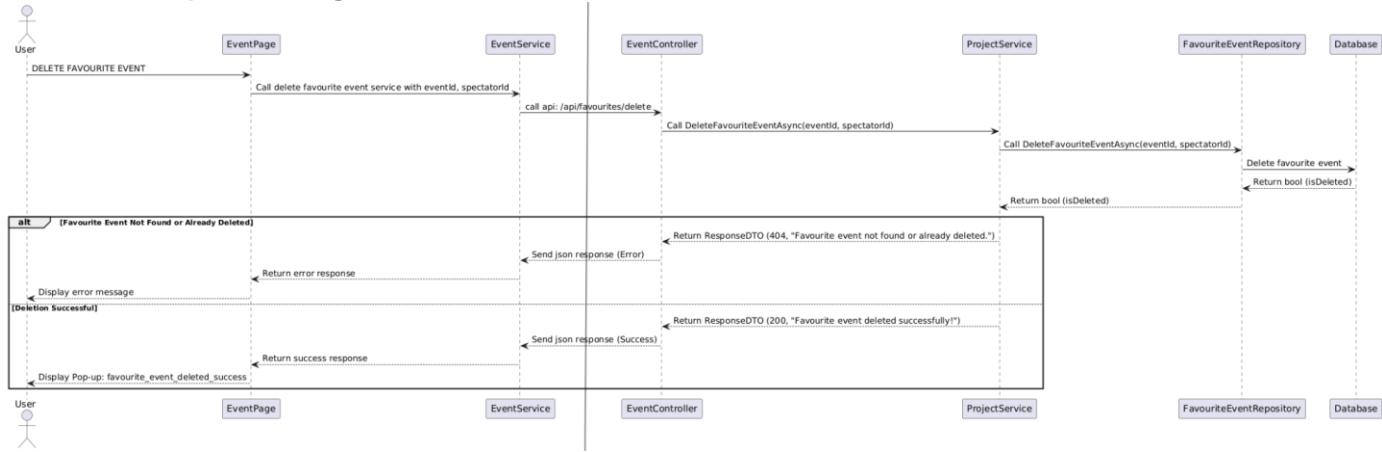


4.4.3.13 Delete Favorite Event

4.4.3.13.1 Class diagram

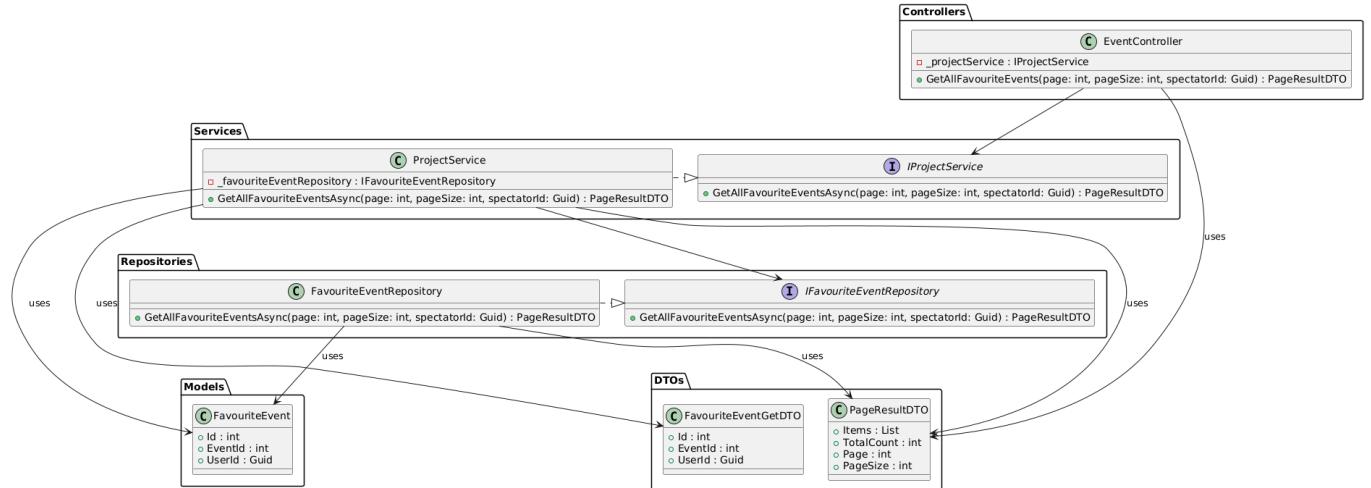


4.4.3.13.2 Sequence diagram

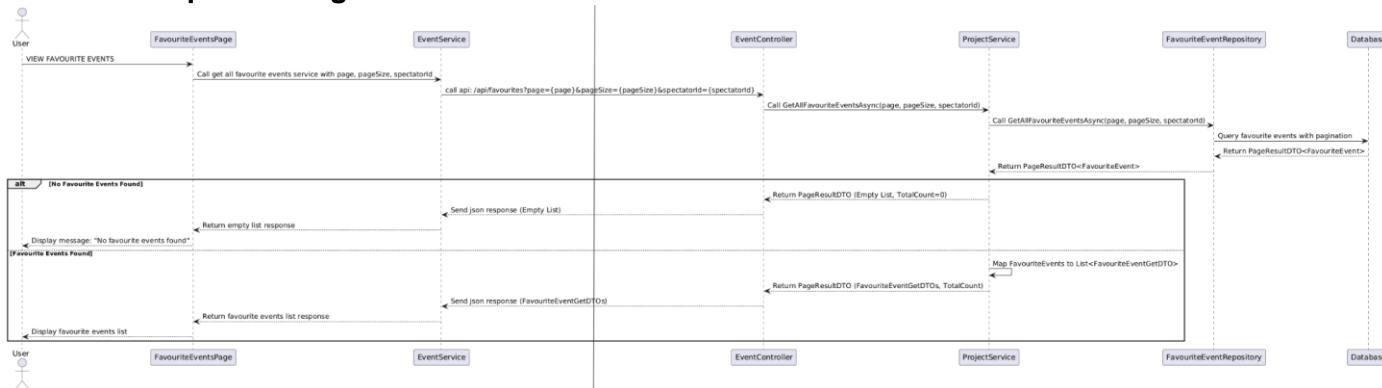


4.4.3.14 View Favorite Events

4.4.3.14.1 Class diagram



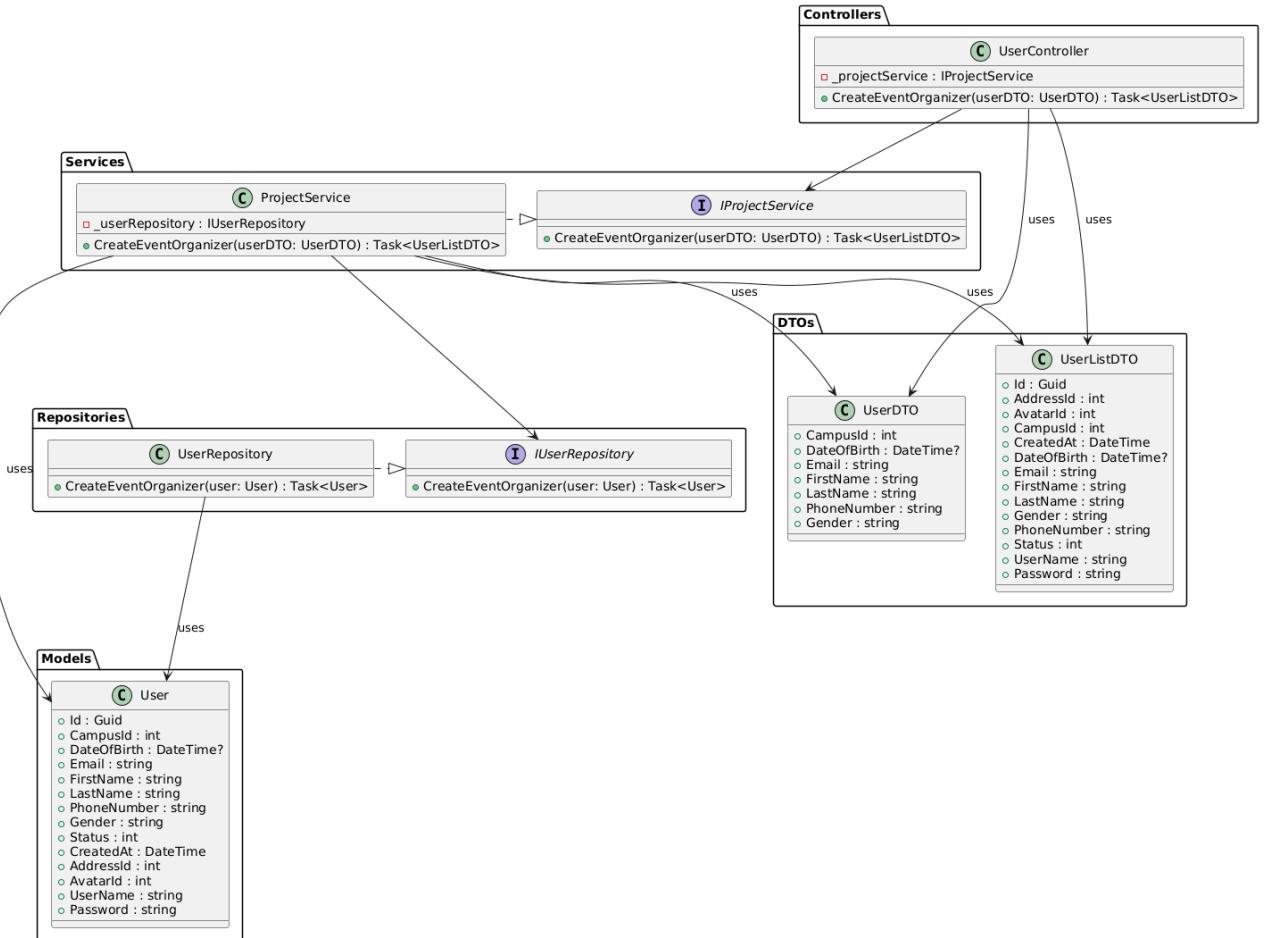
4.4.3.14.2 Sequence diagram



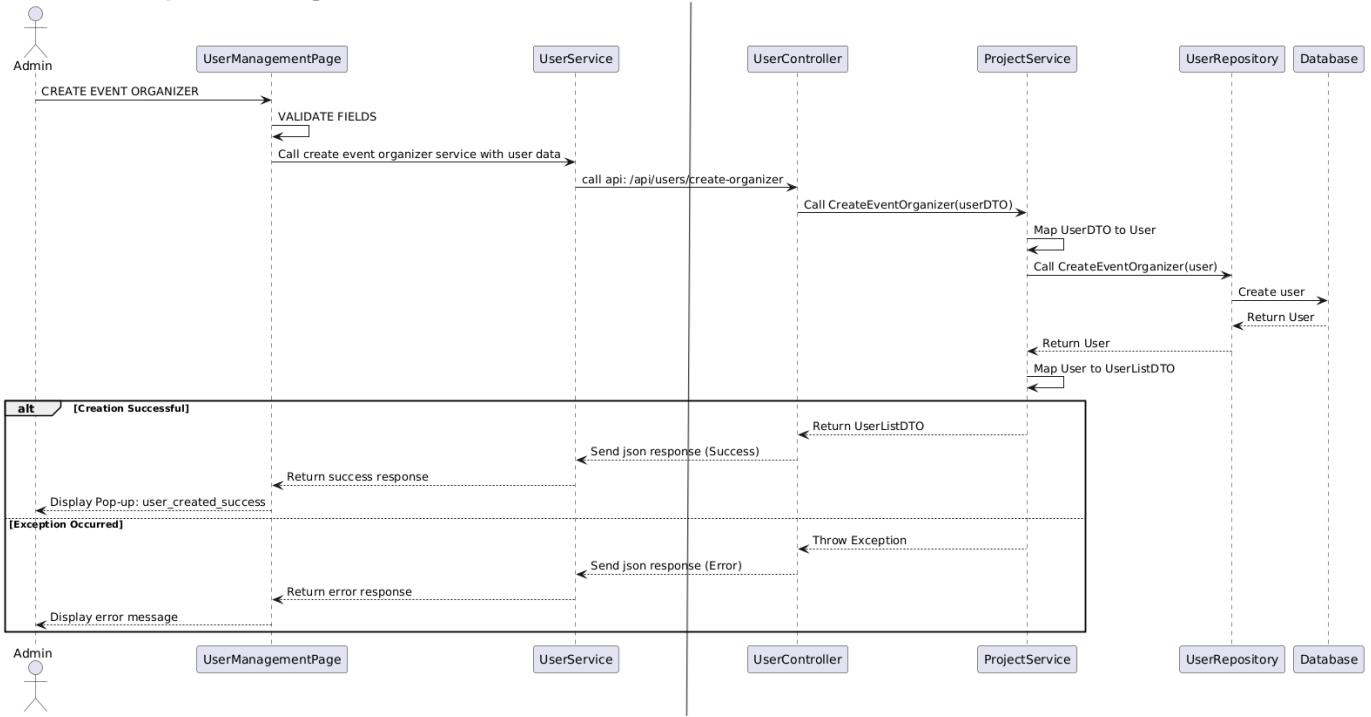
4.4.4 Event Organizer Management

4.4.4.1 Create Event Organizer

4.4.4.1.1 Class diagram

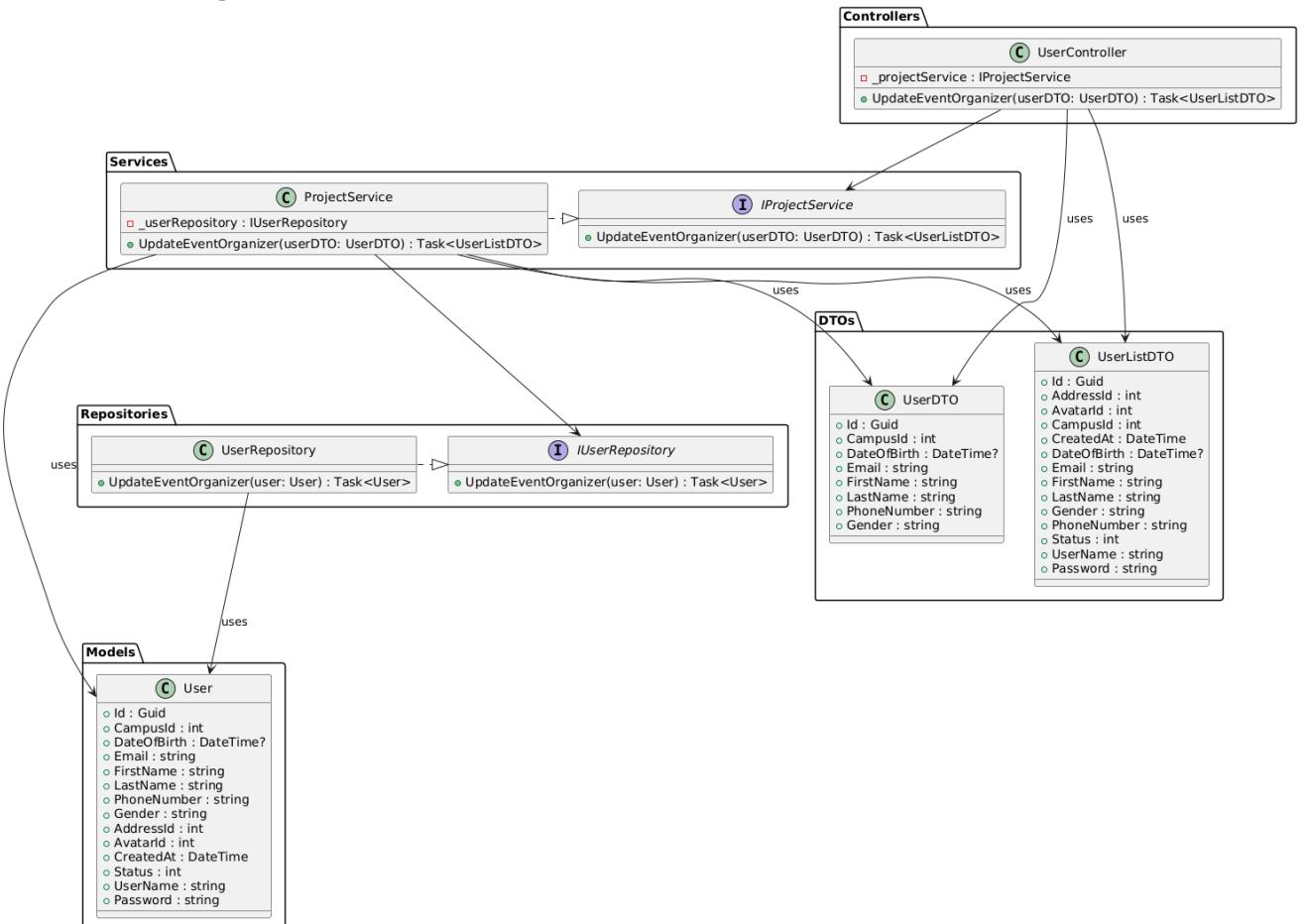


4.4.4.1.2 Sequence diagram

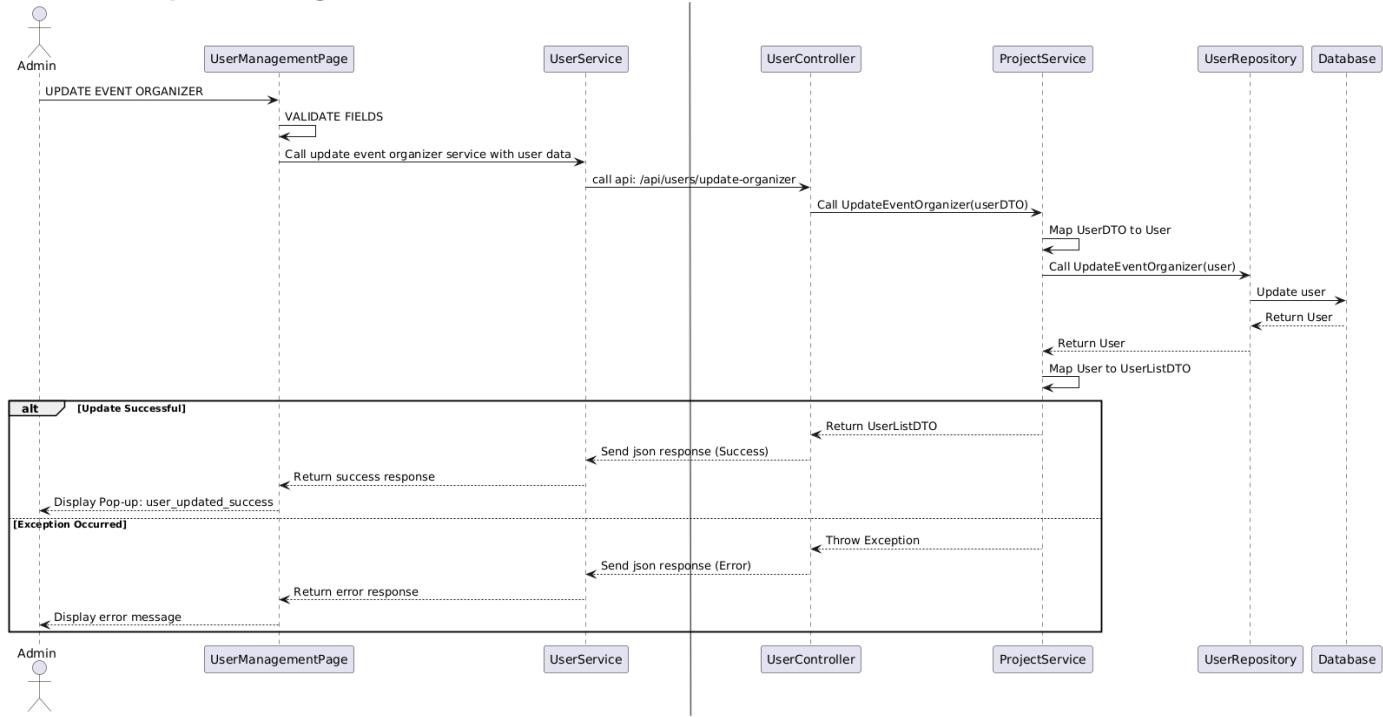


4.4.4.2 Update Event Organizer

4.4.4.2.1 Class diagram

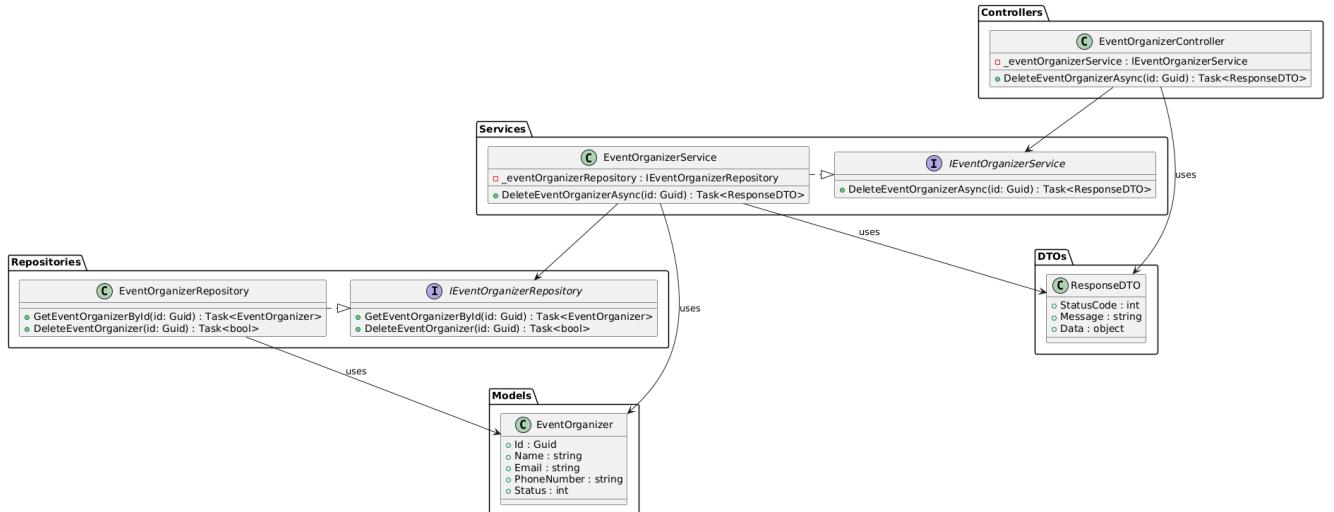


4.4.4.2.2 Sequence diagram

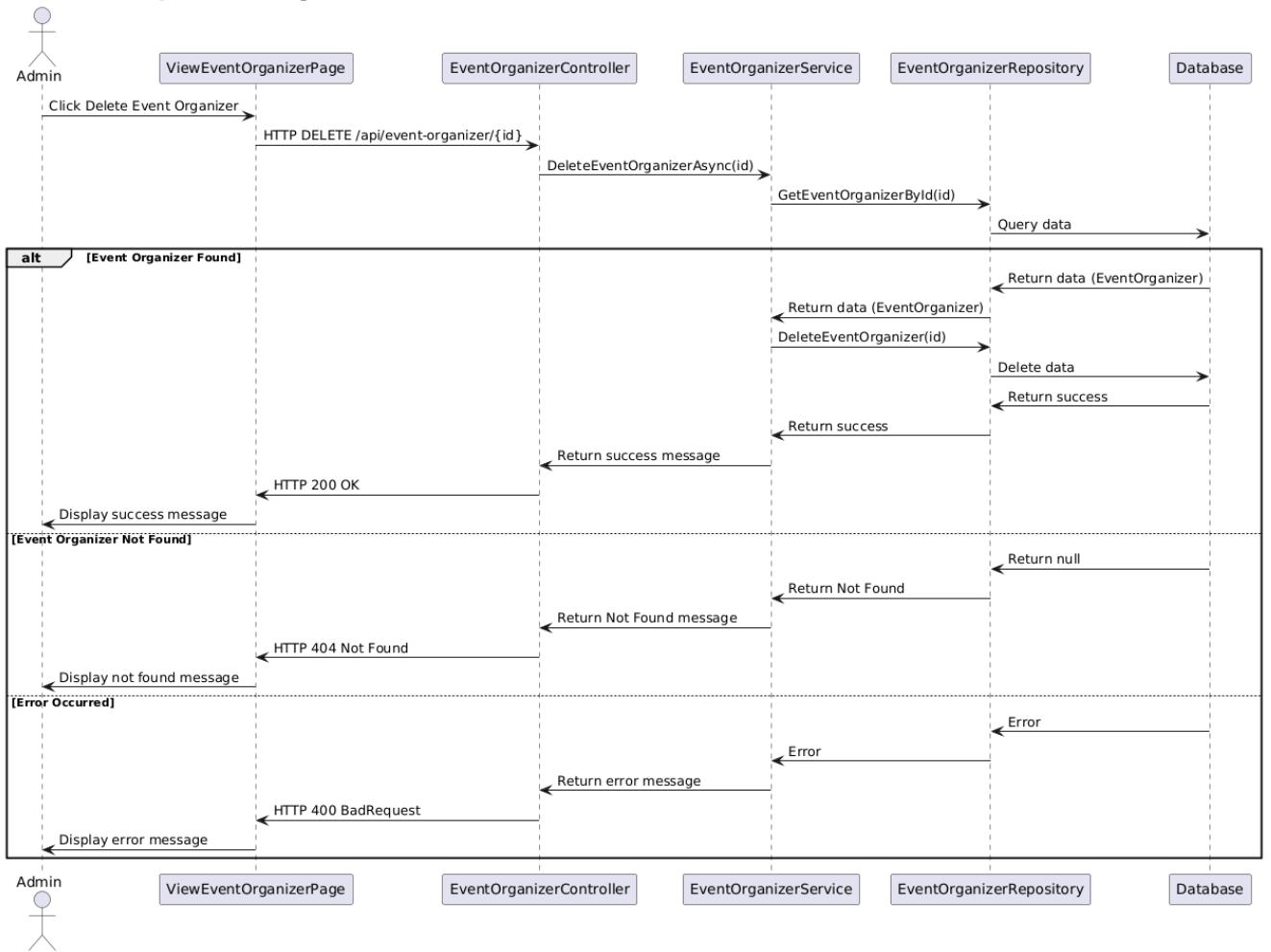


4.4.4.3 Delete Event Organizer

4.4.4.3.1 Class diagram



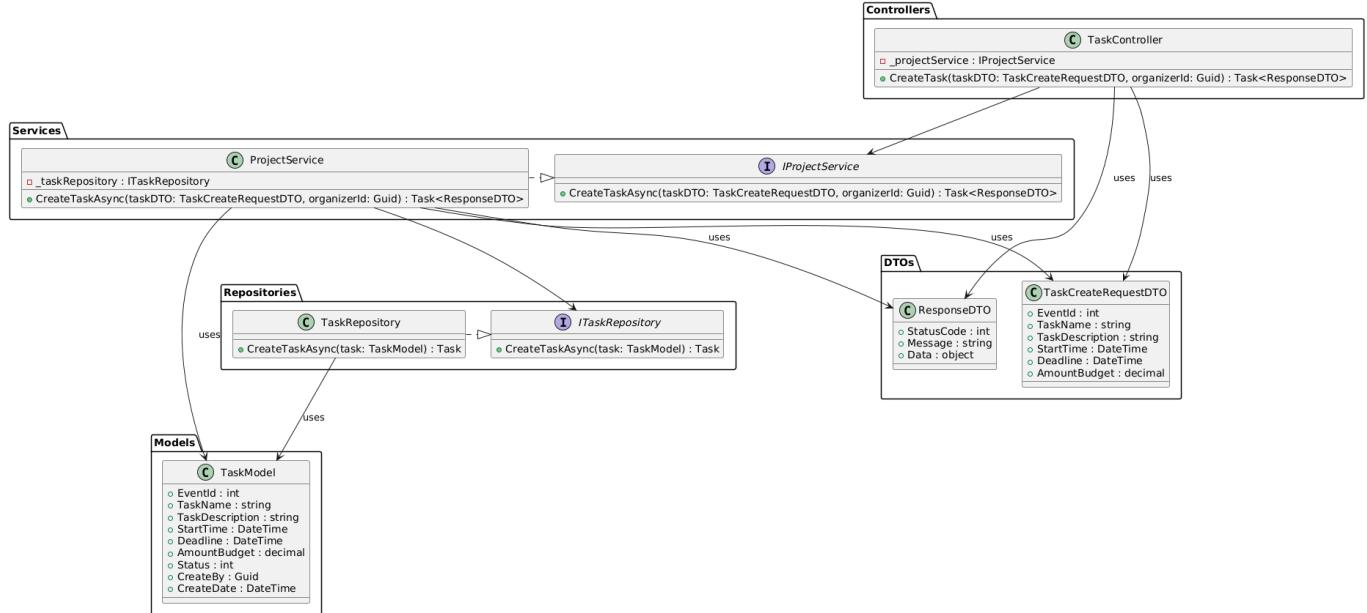
4.4.4.3.2 Sequence diagram



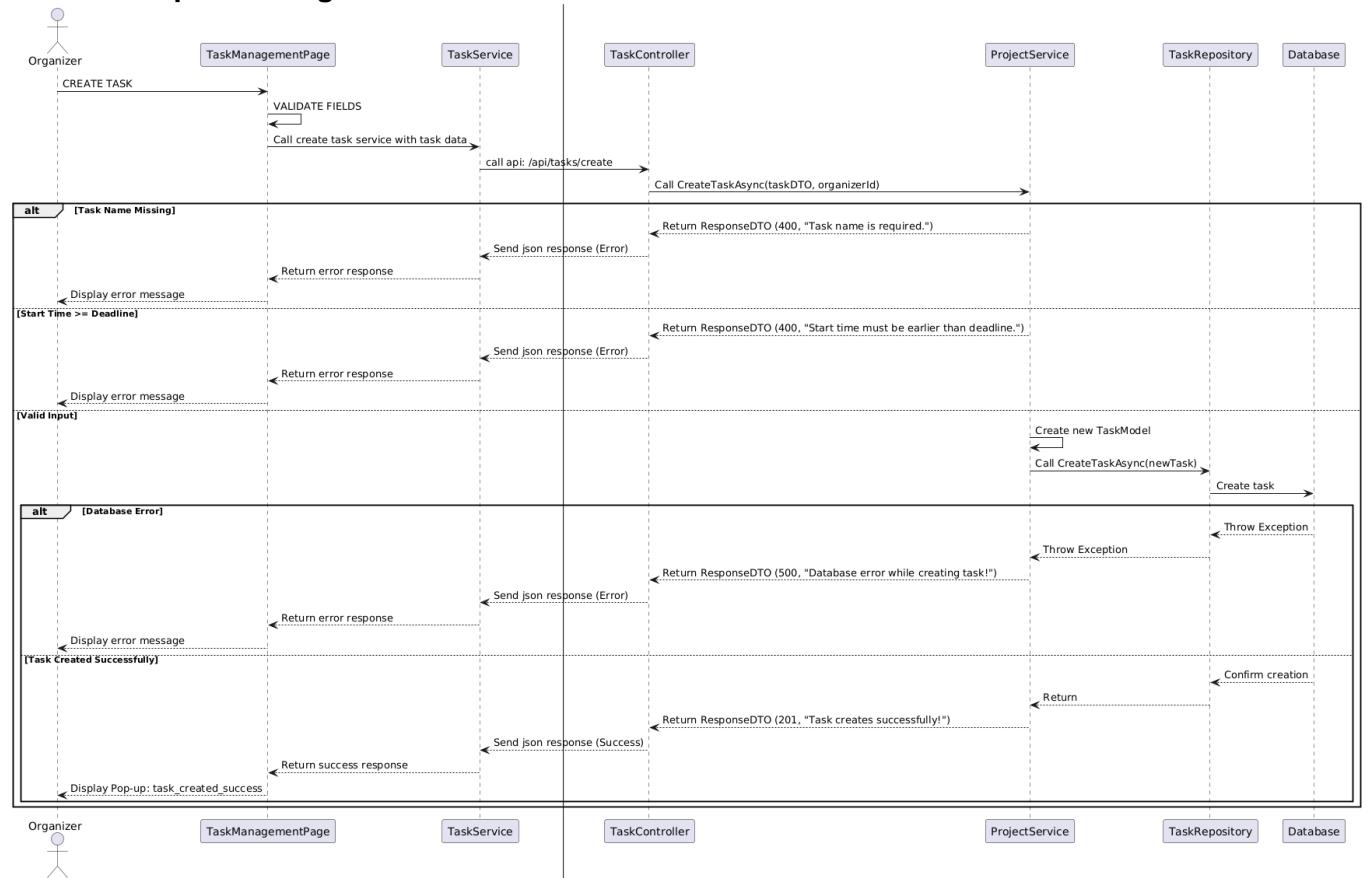
4.4.5 Task & Sub-task Management

4.4.5.1 Create Task

4.4.5.1.1 Class diagram

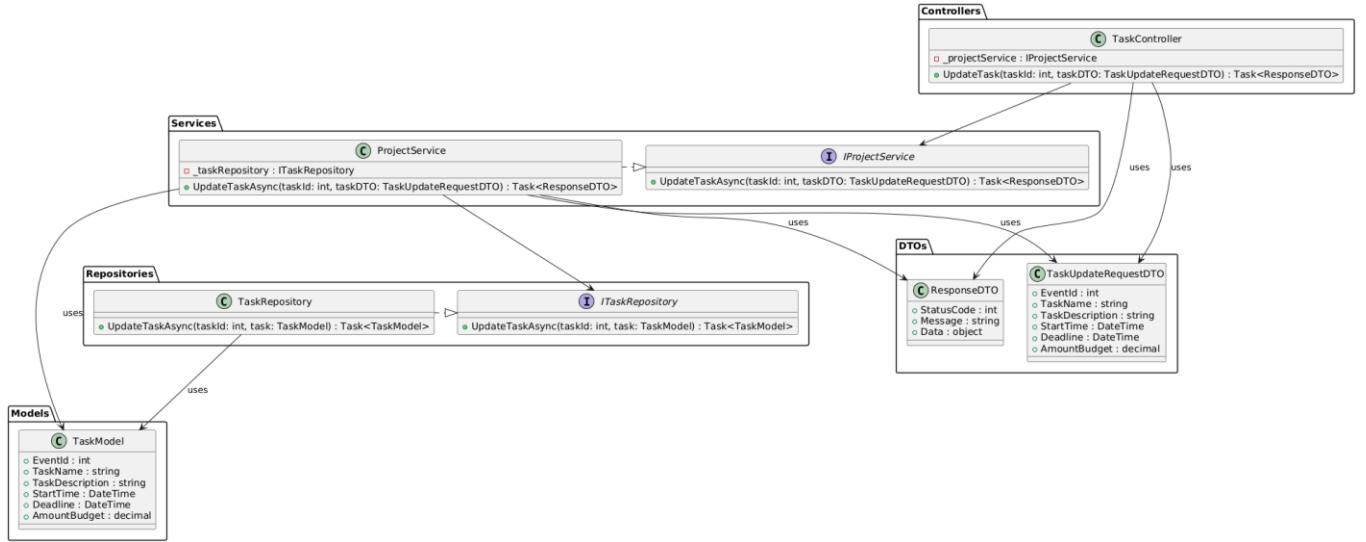


4.4.5.1.2 Sequence diagram

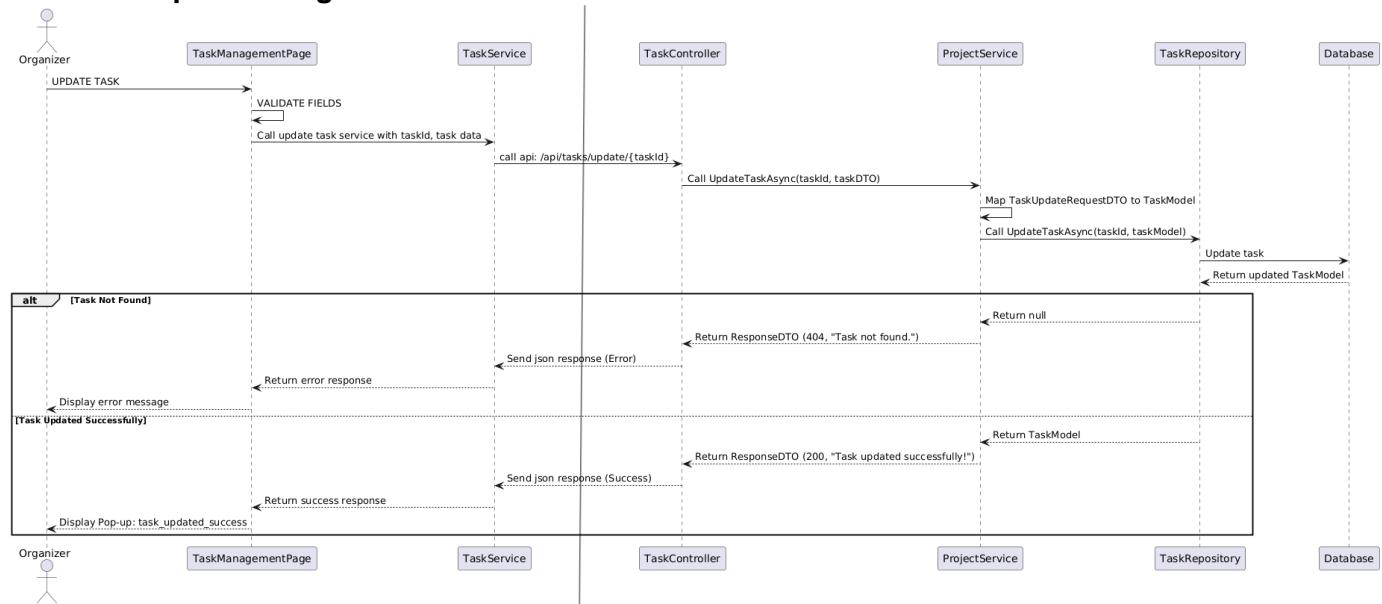


4.4.5.2 Update Task

4.4.5.2.1 Class diagram

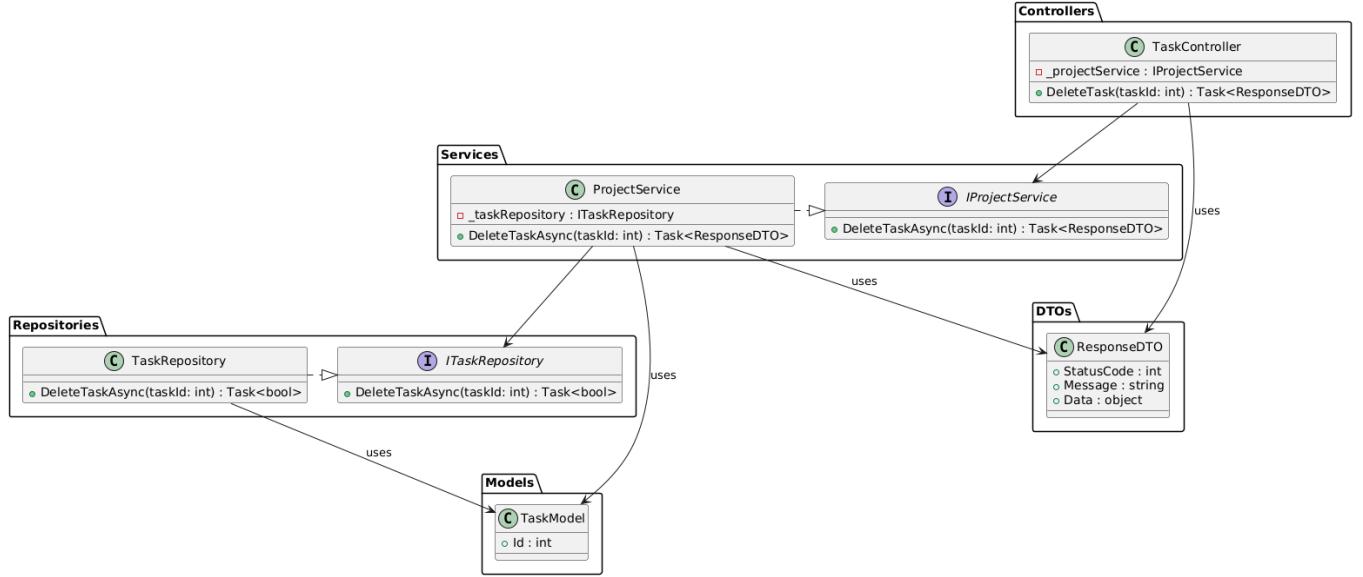


4.4.5.2.2 Sequence diagram

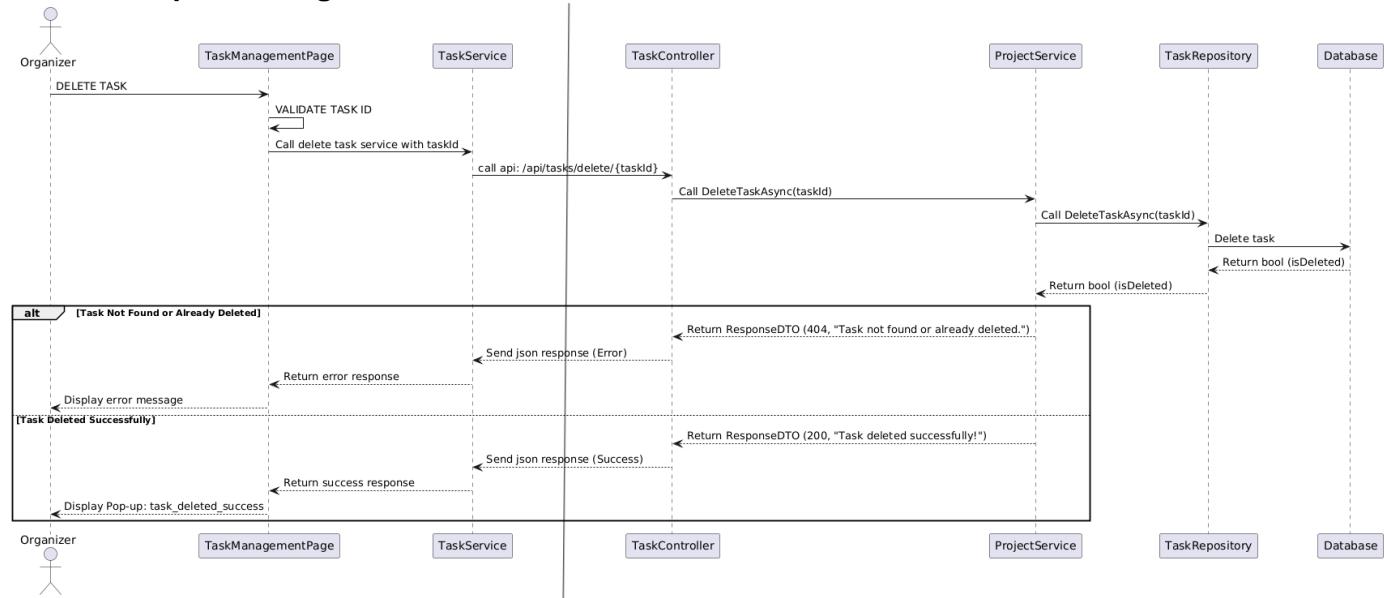


4.4.5.3 Delete Task

4.4.5.3.1 Class diagram

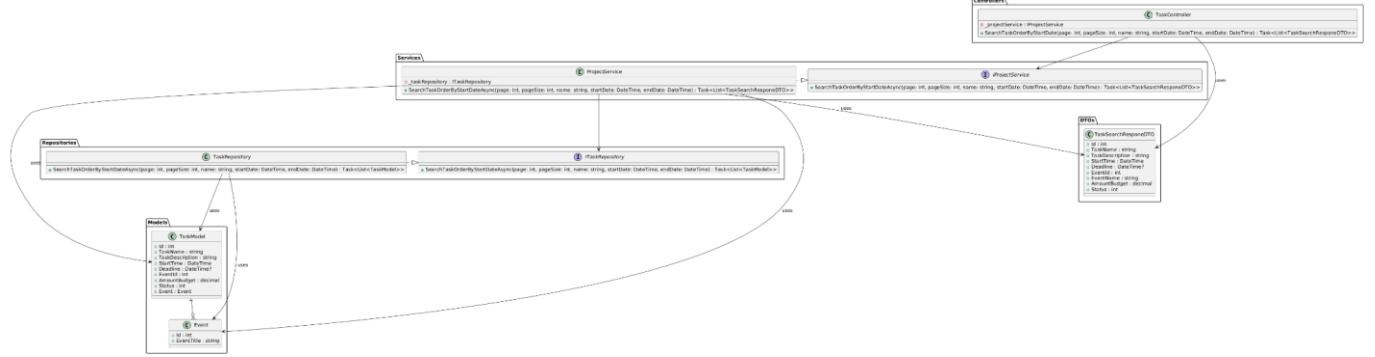


4.4.5.3.2 Sequence diagram

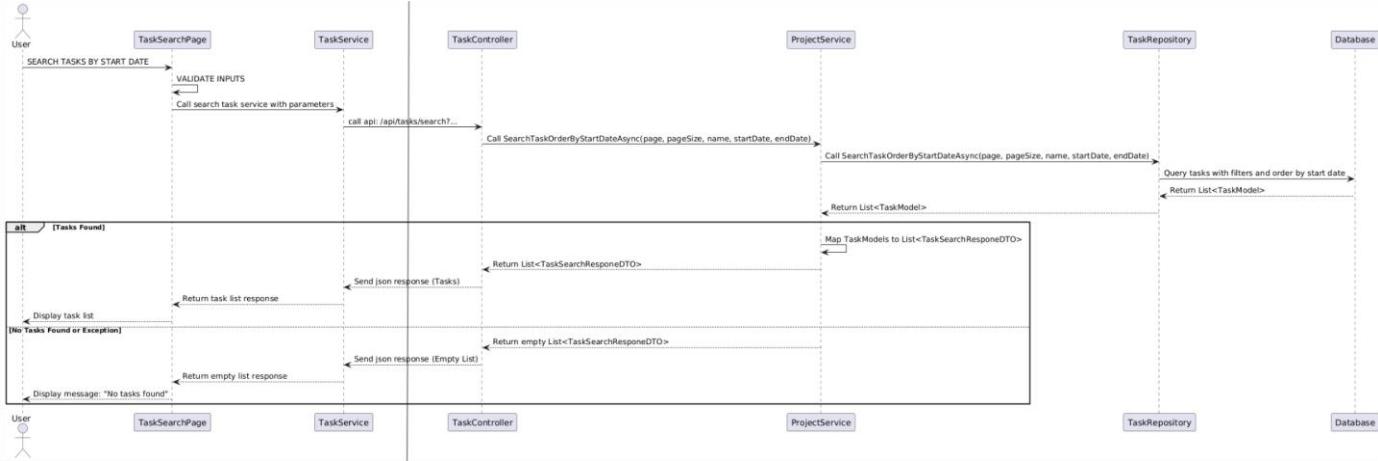


4.4.5.4 Search Task

4.4.5.4.1 Class diagram

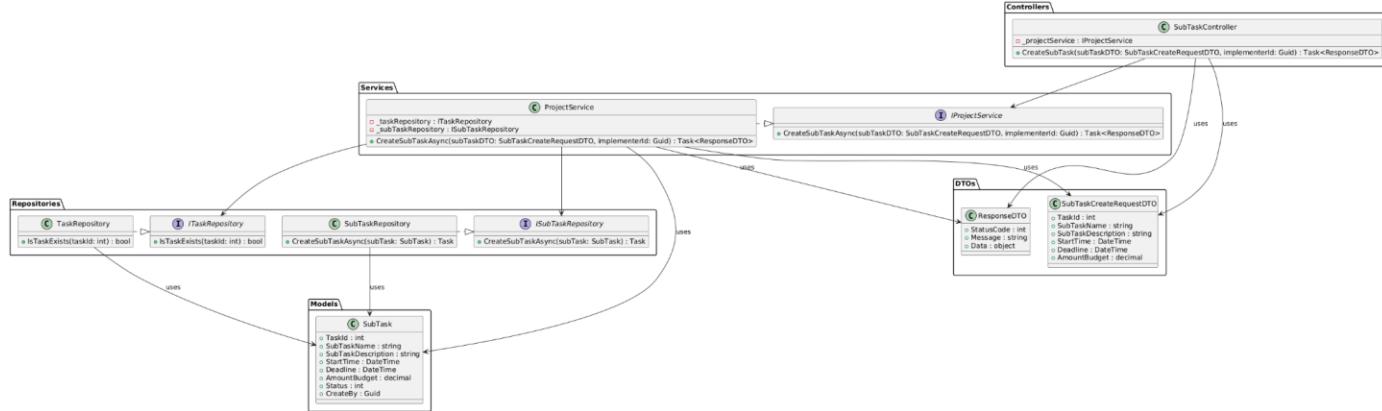


4.4.5.4.2 Sequence diagram

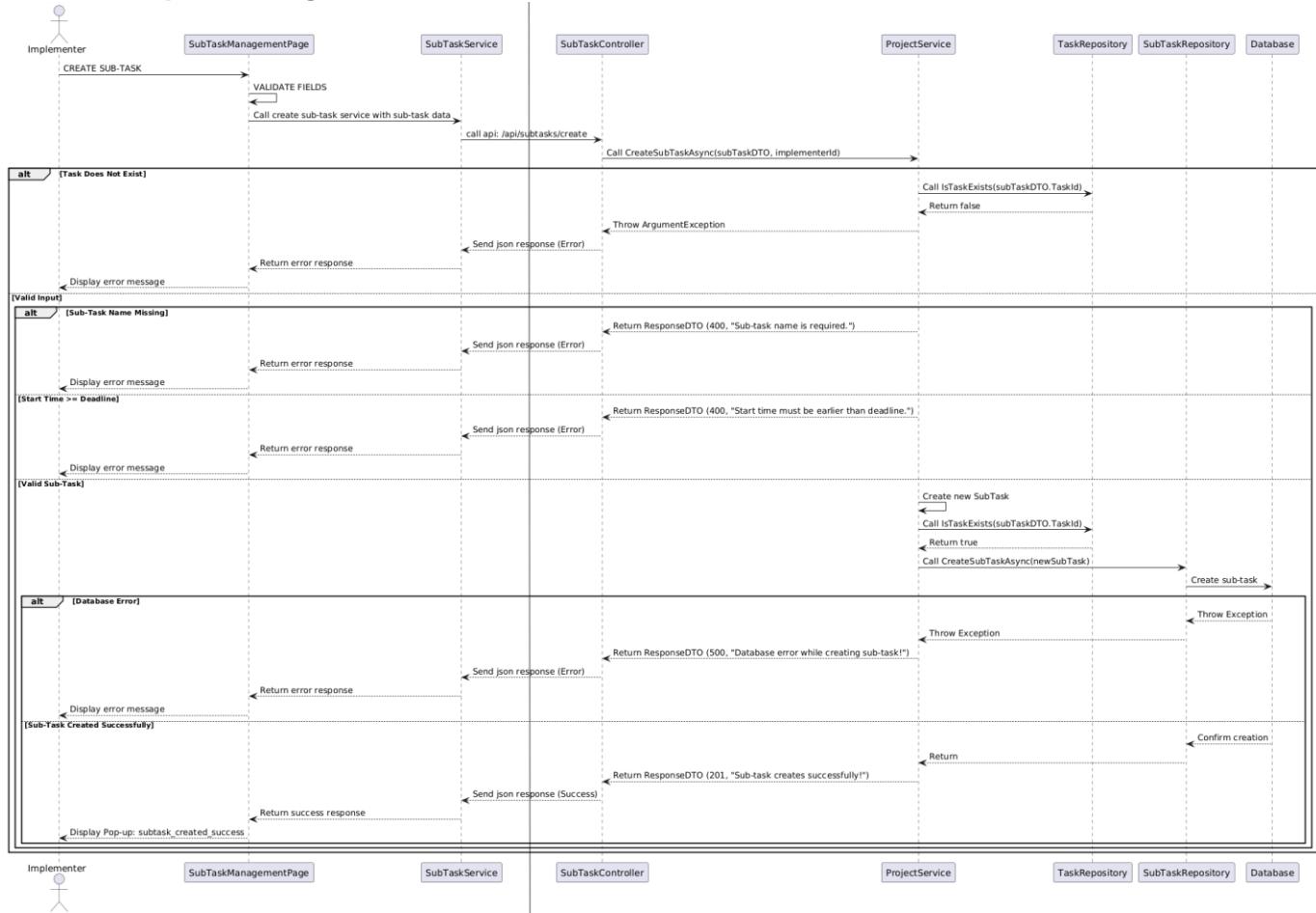


4.4.5.5 Create Sub-task

4.4.5.5.1 Class diagram

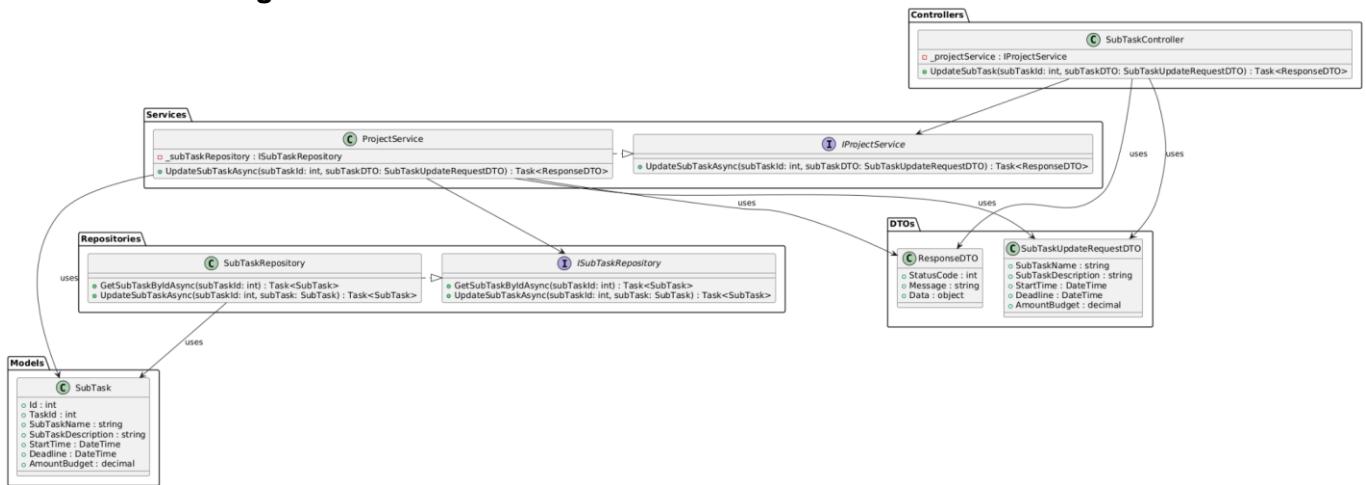


4.4.5.5.2 Sequence diagram

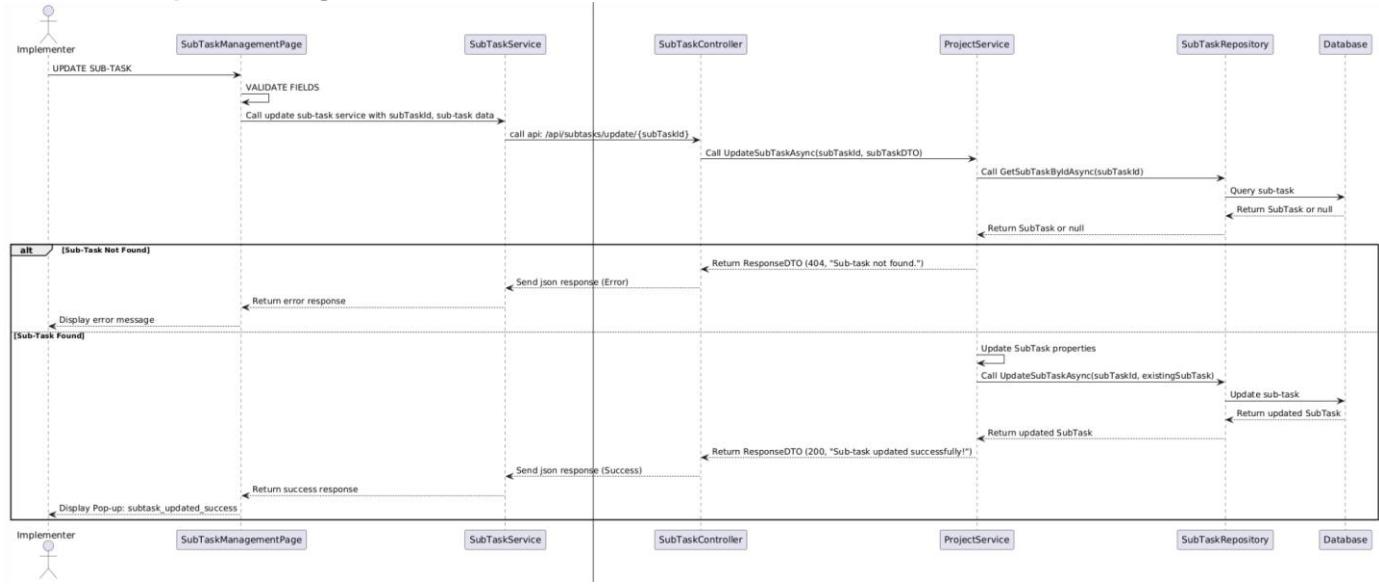


4.4.5.6 Update Sub-task

4.4.5.6.1 Class diagram

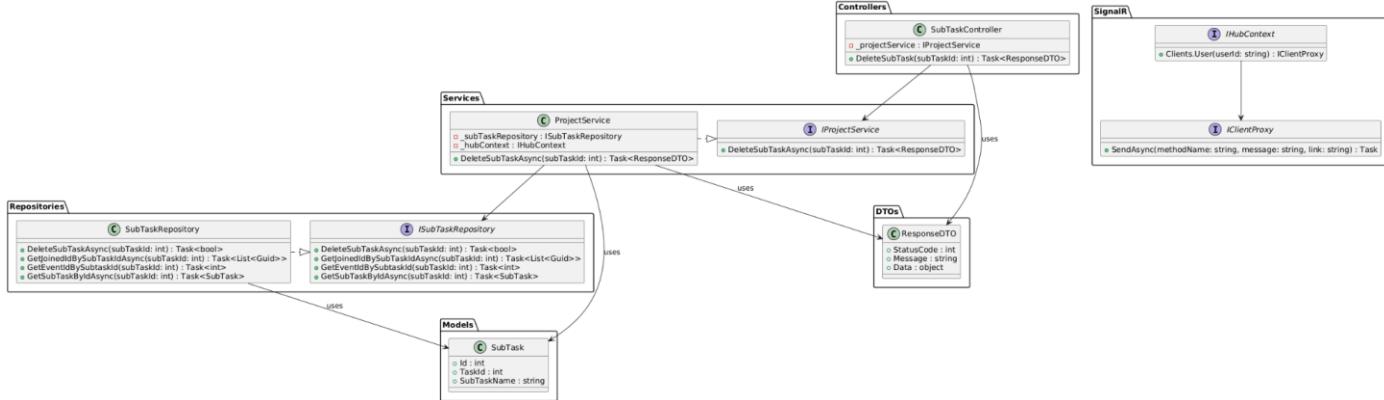


4.4.5.6.2 Sequence diagram

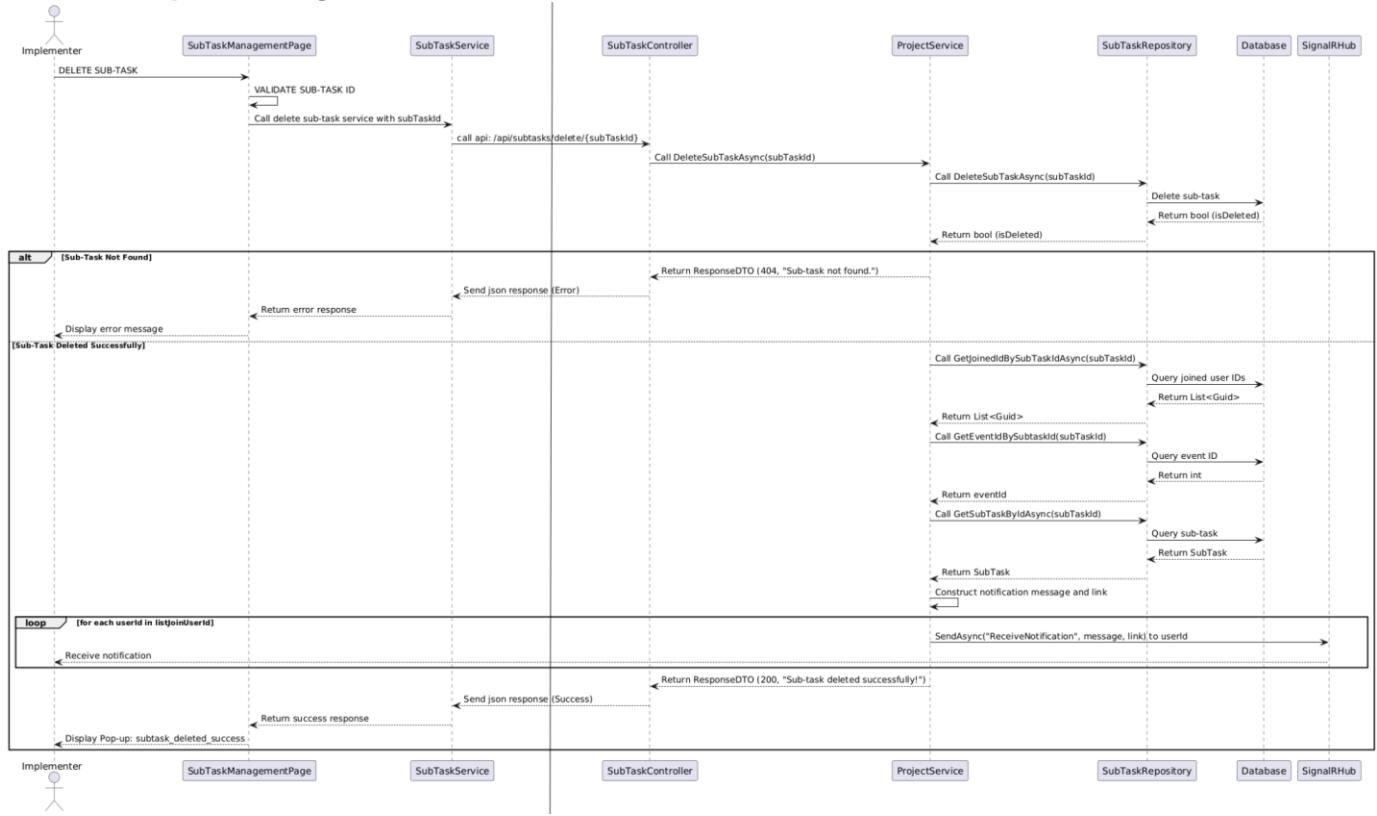


4.4.5.7 Delete Sub-task

4.4.5.7.1 Class diagram

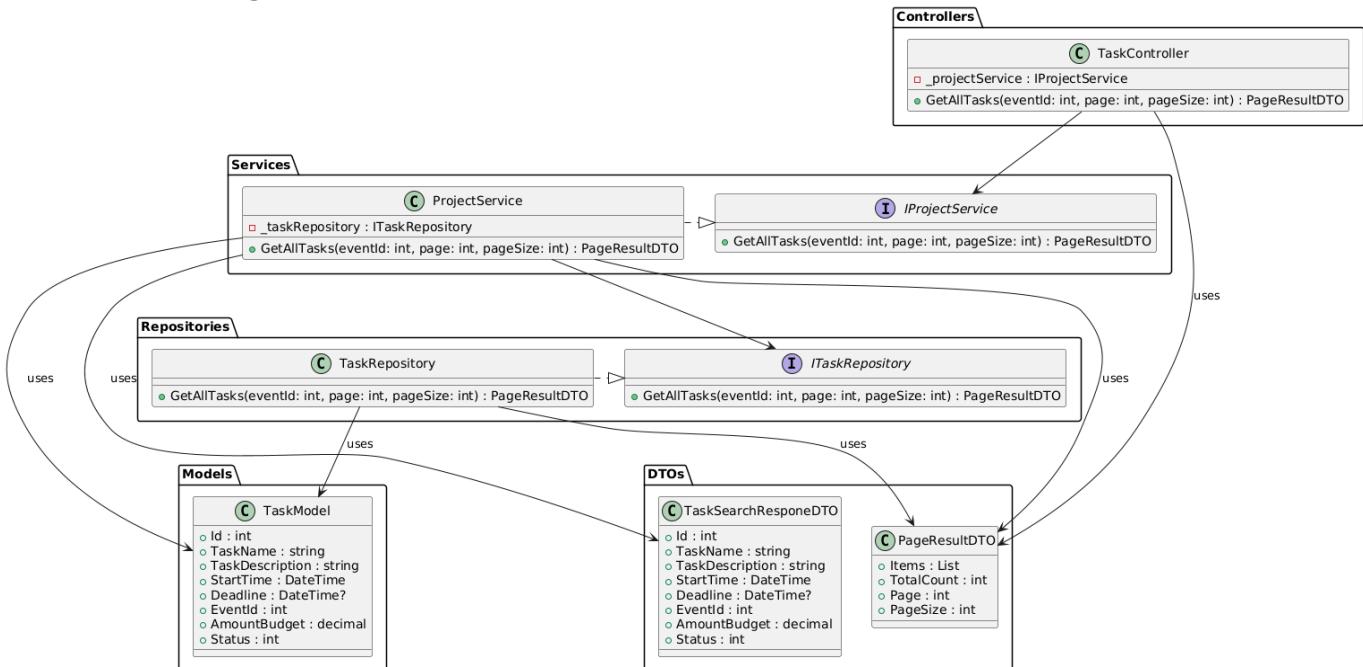


4.4.5.7.2 Sequence diagram

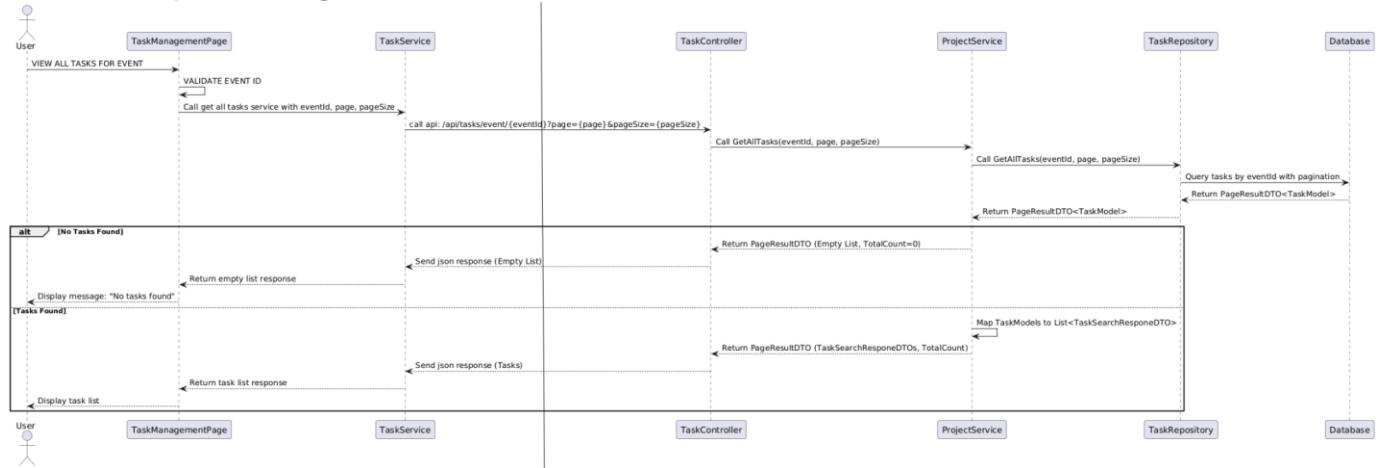


4.4.5.8 View Task List

4.4.5.8.1 Class diagram



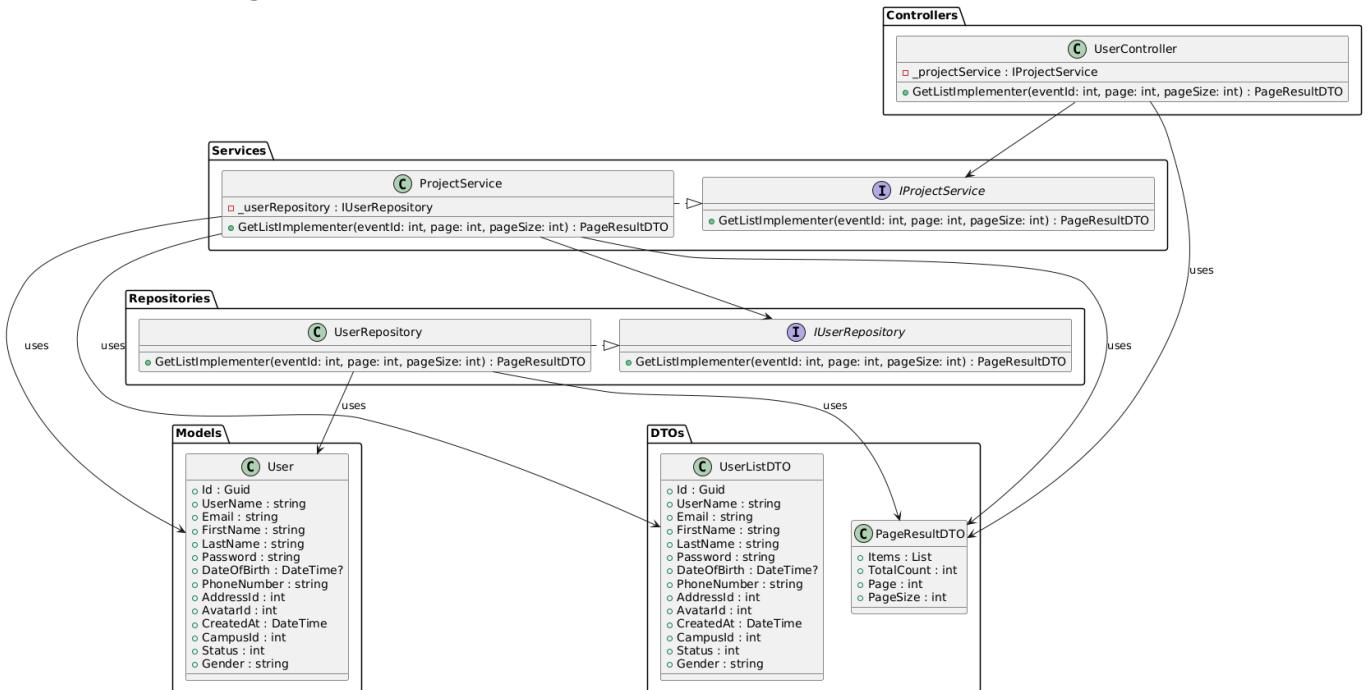
4.4.5.8.2 Sequence diagram



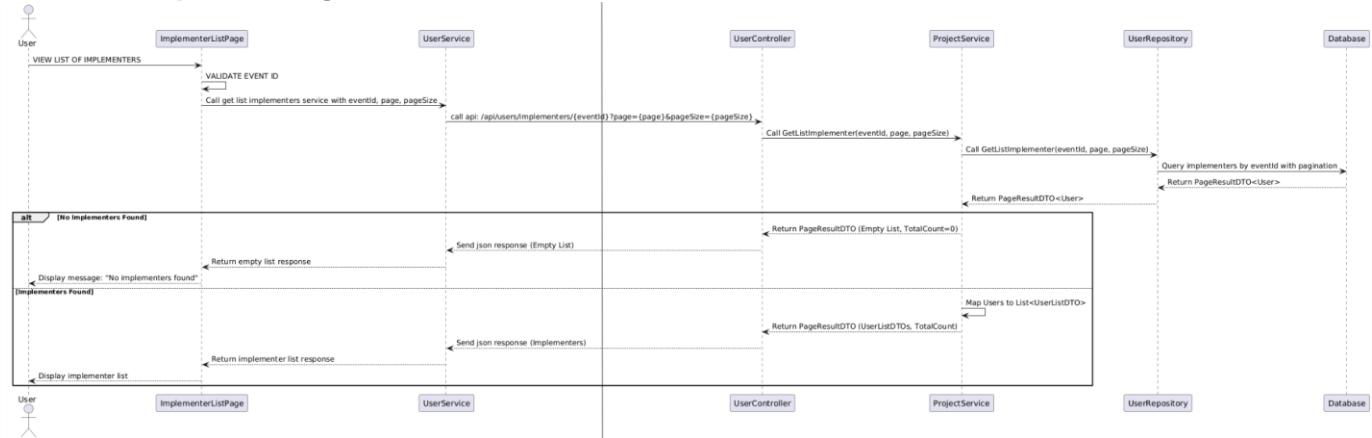
4.4.6 Implementer Management

4.4.6.1 View List Implementer

4.4.6.1.1 Class diagram

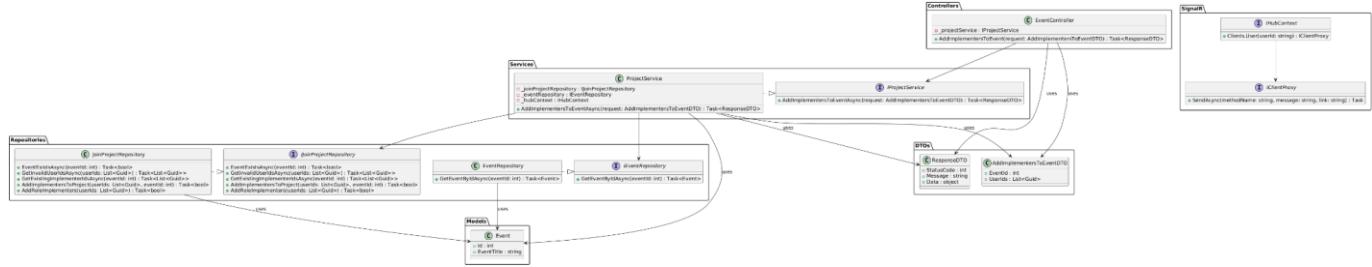


4.4.5.1.2 Sequence diagram

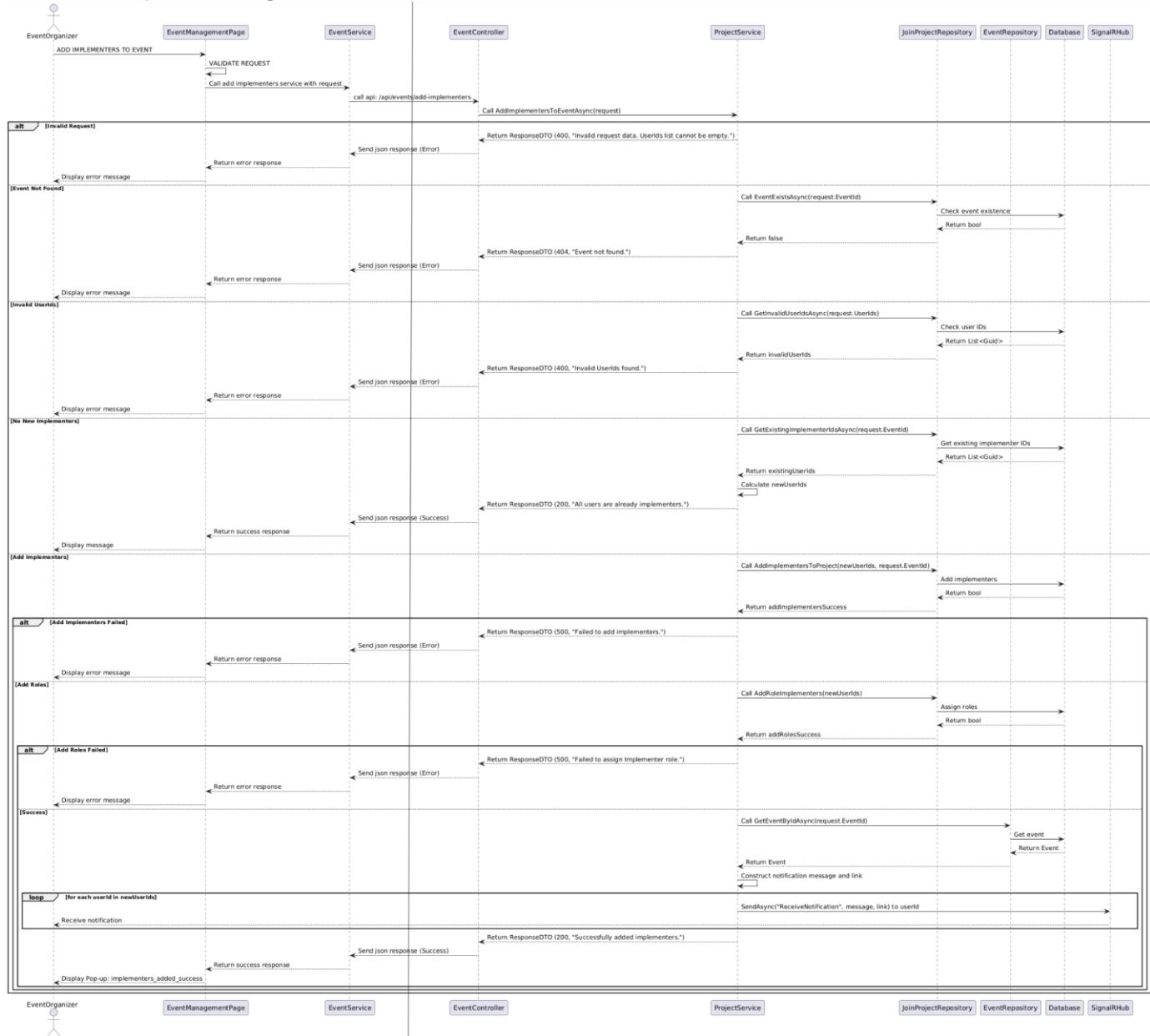


4.4.6.2 Add Implementer

4.4.6.2.1 Class diagram

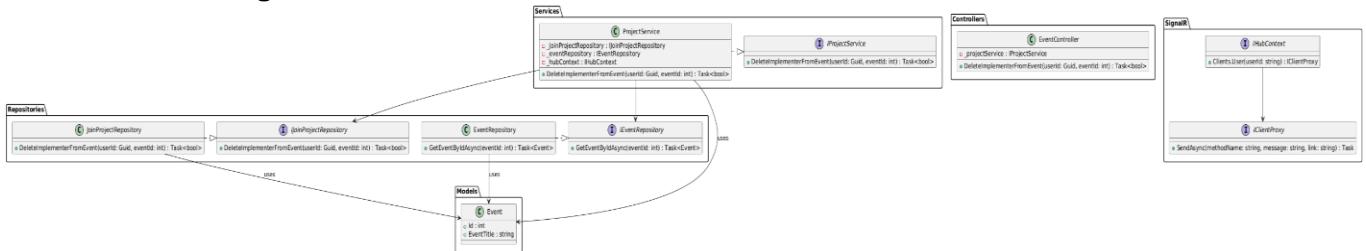


4.4.5.2.2 Sequence diagram

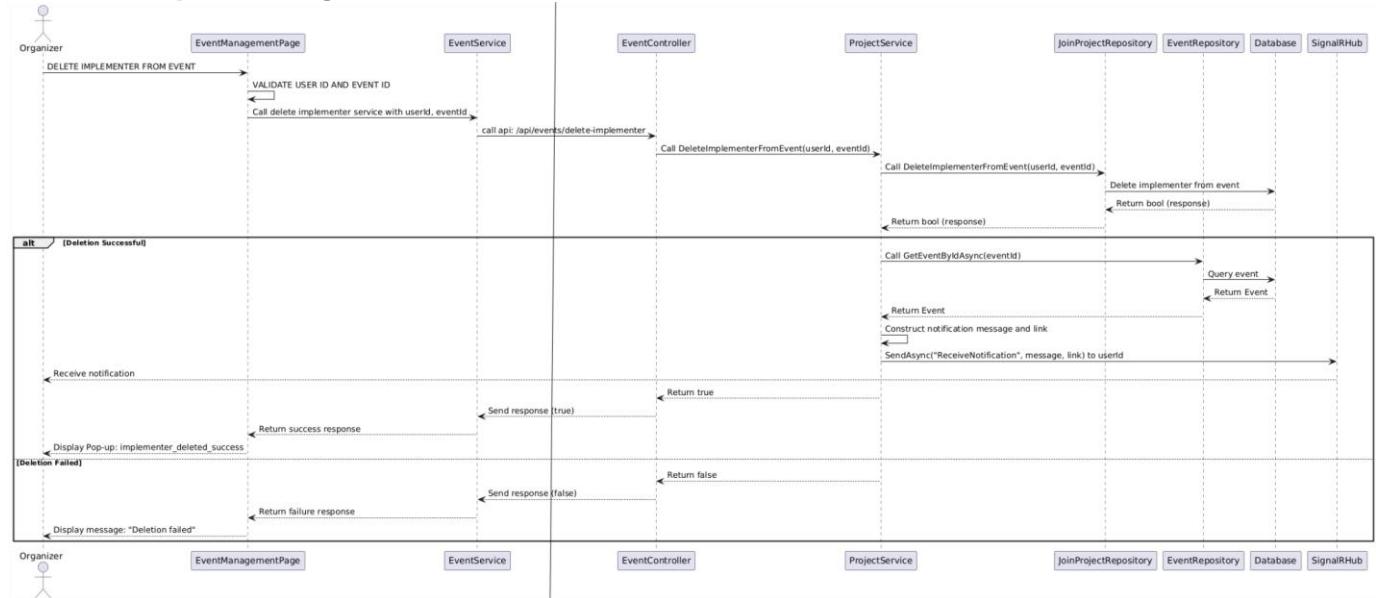


4.4.6.3 Delete Implementer

4.4.6.3.1 Class diagram



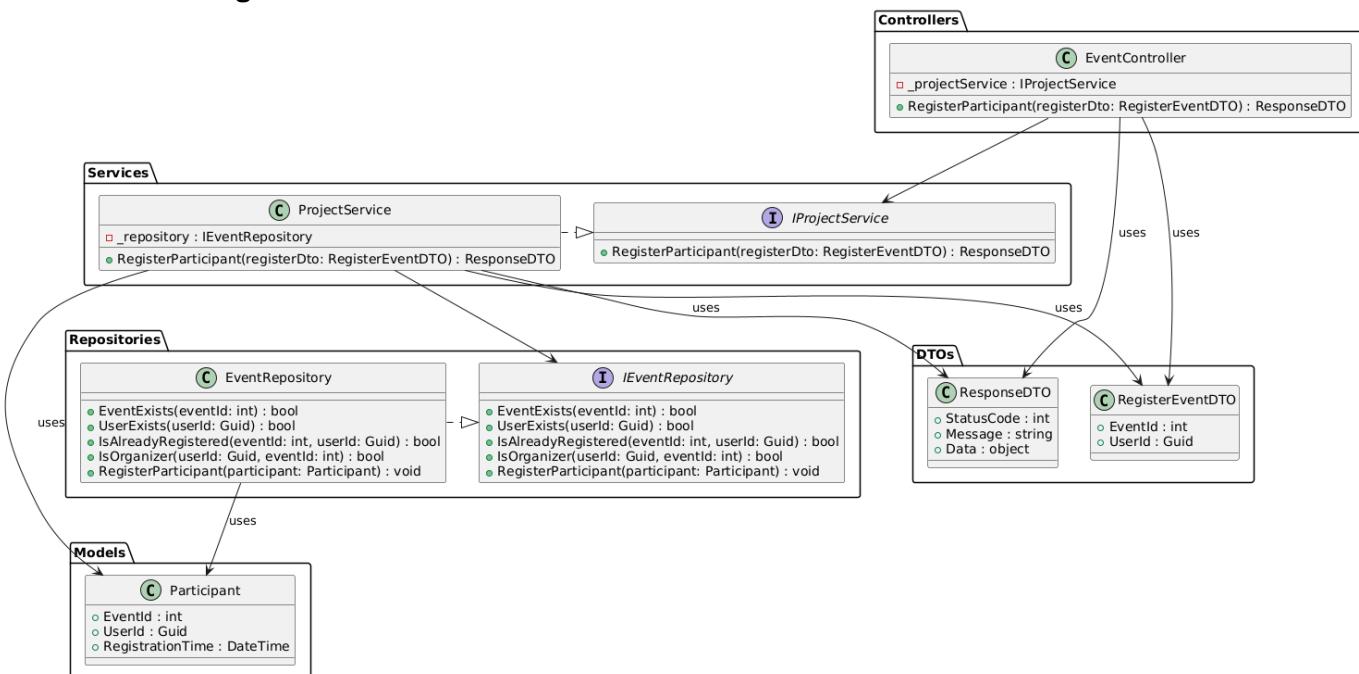
4.4.5.3.2 Sequence diagram



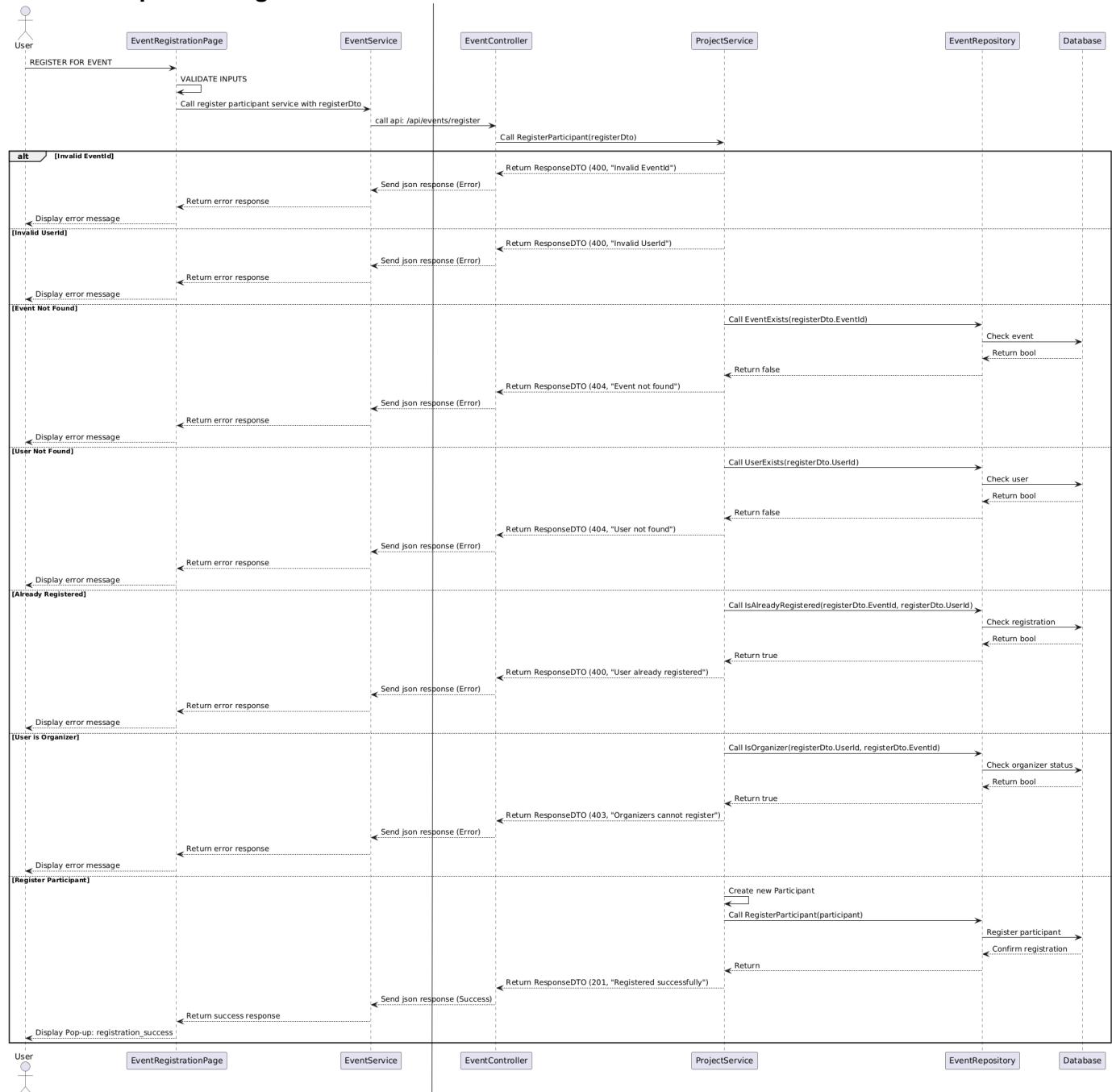
4.4.7 Registration & Participants

4.4.7.1 Register for Event

4.4.7.1.1 Class diagram

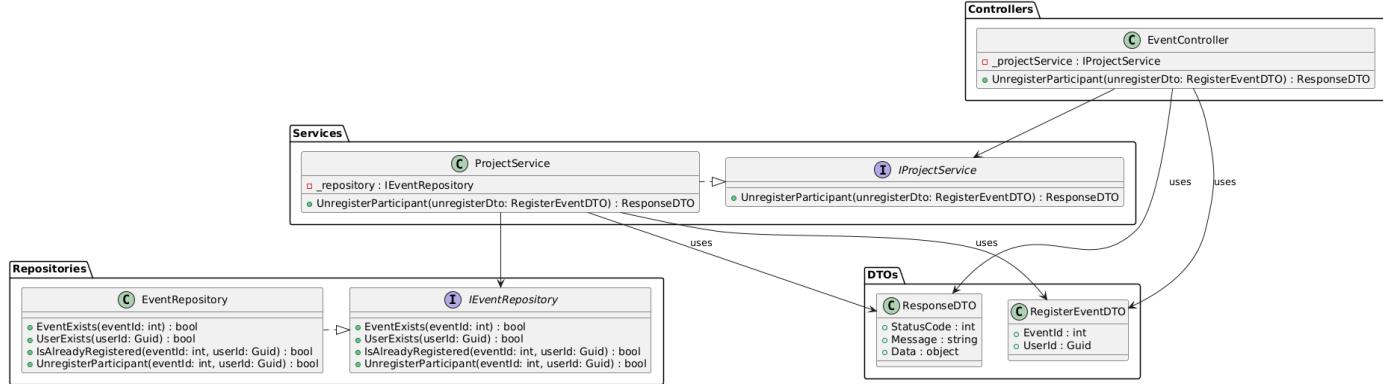


4.4.7.1.2 Sequence diagram

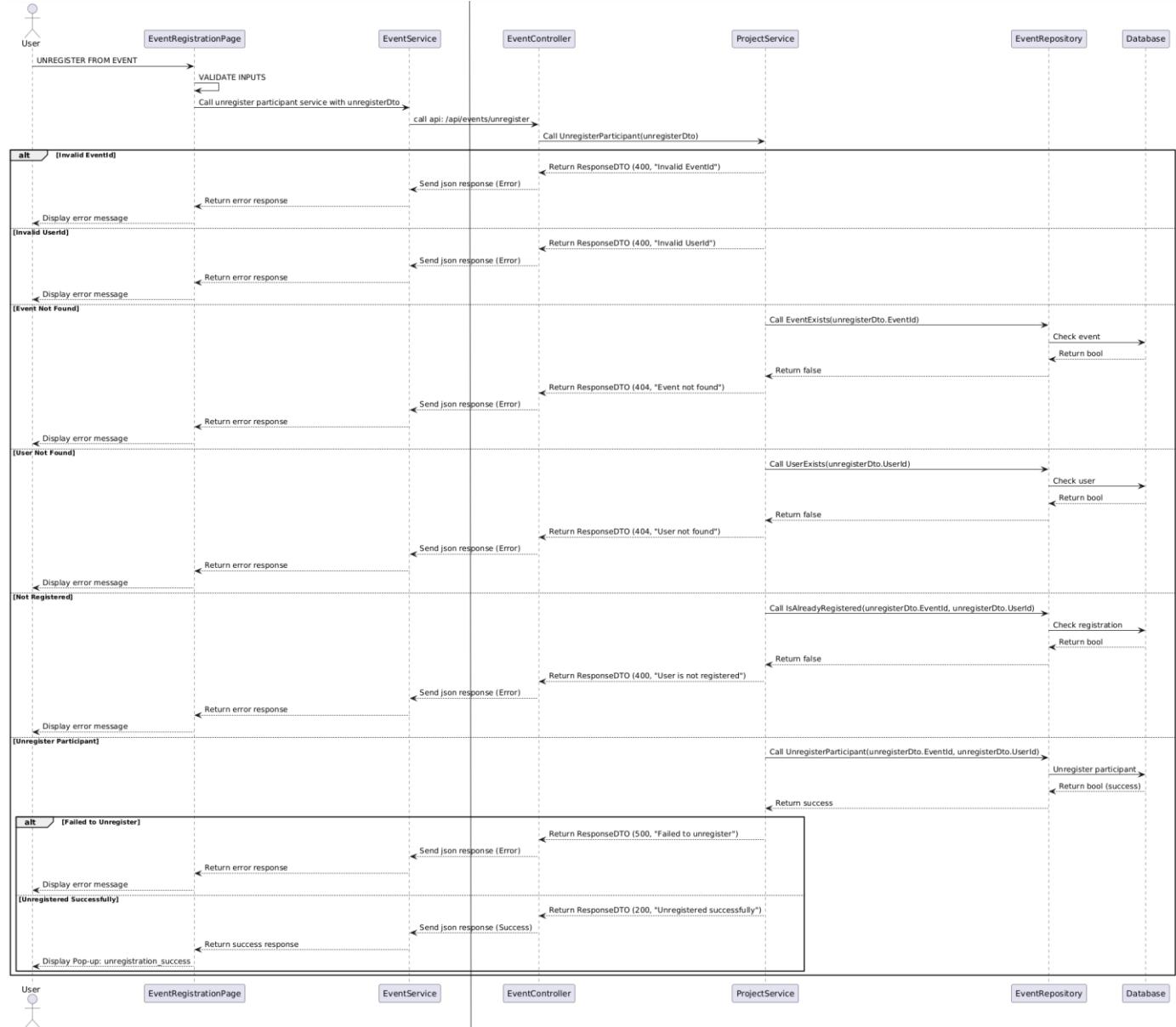


4.4.7.2 Cancel Registration

4.4.7.2.1 Class diagram

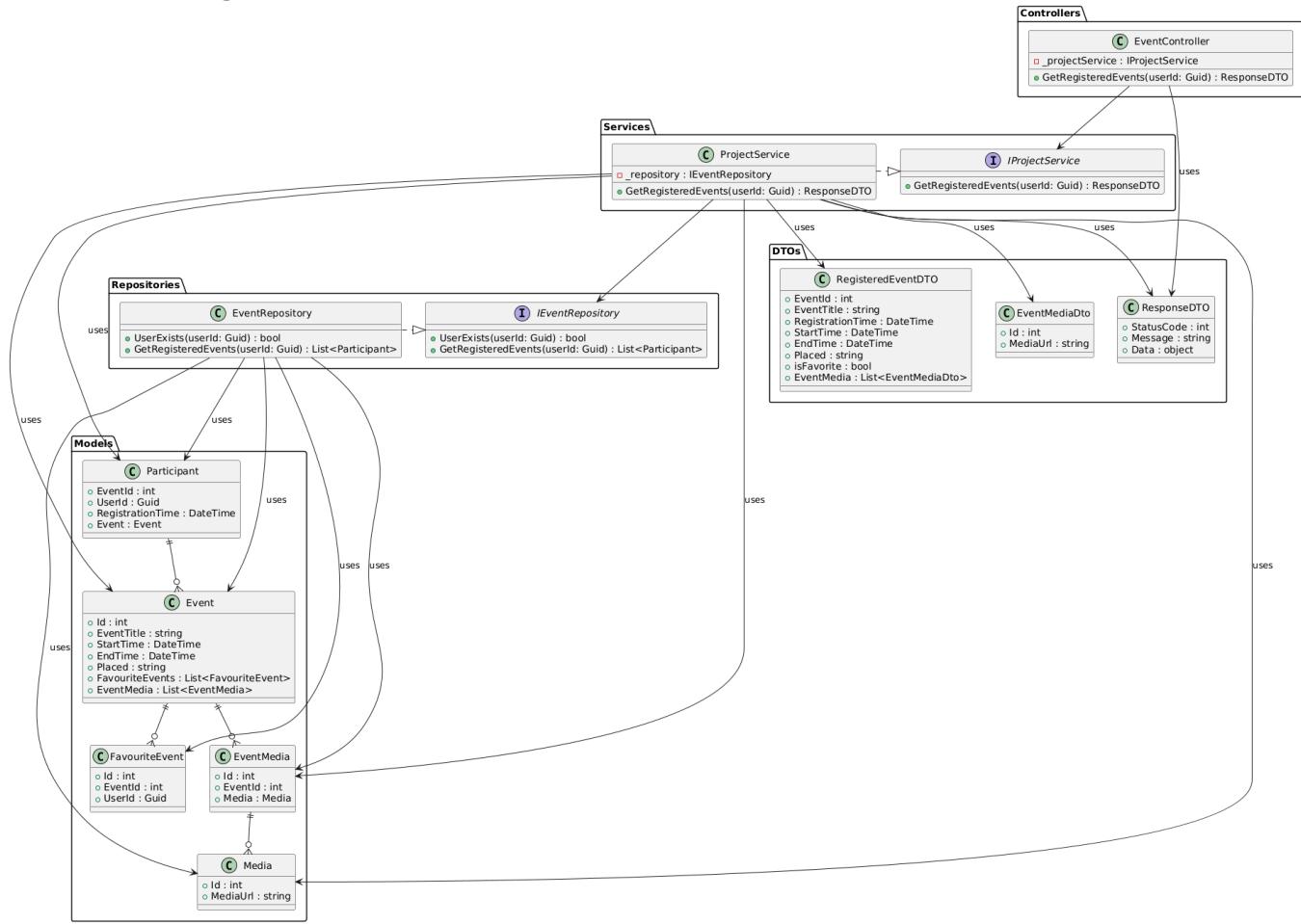


4.4.7.2.2 Sequence diagram

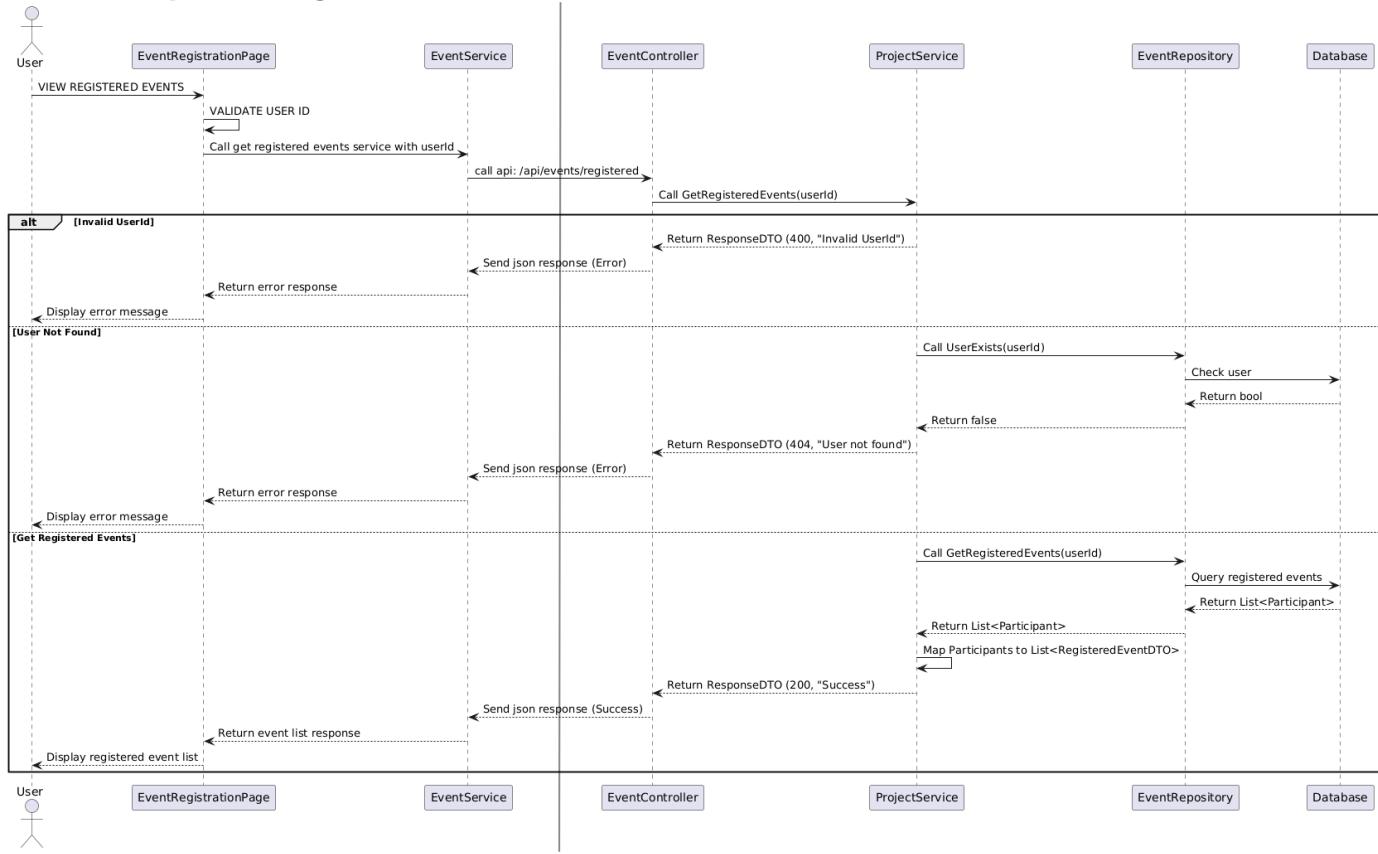


4.4.7.3 View Registered Events

4.4.7.3.1 Class diagram

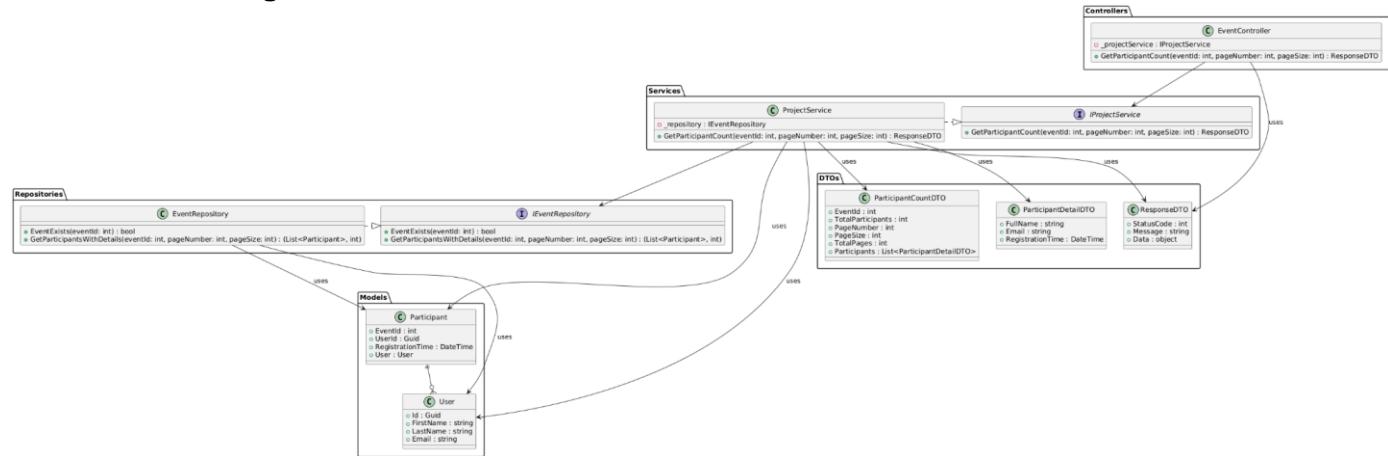


4.4.7.3.2 Sequence diagram

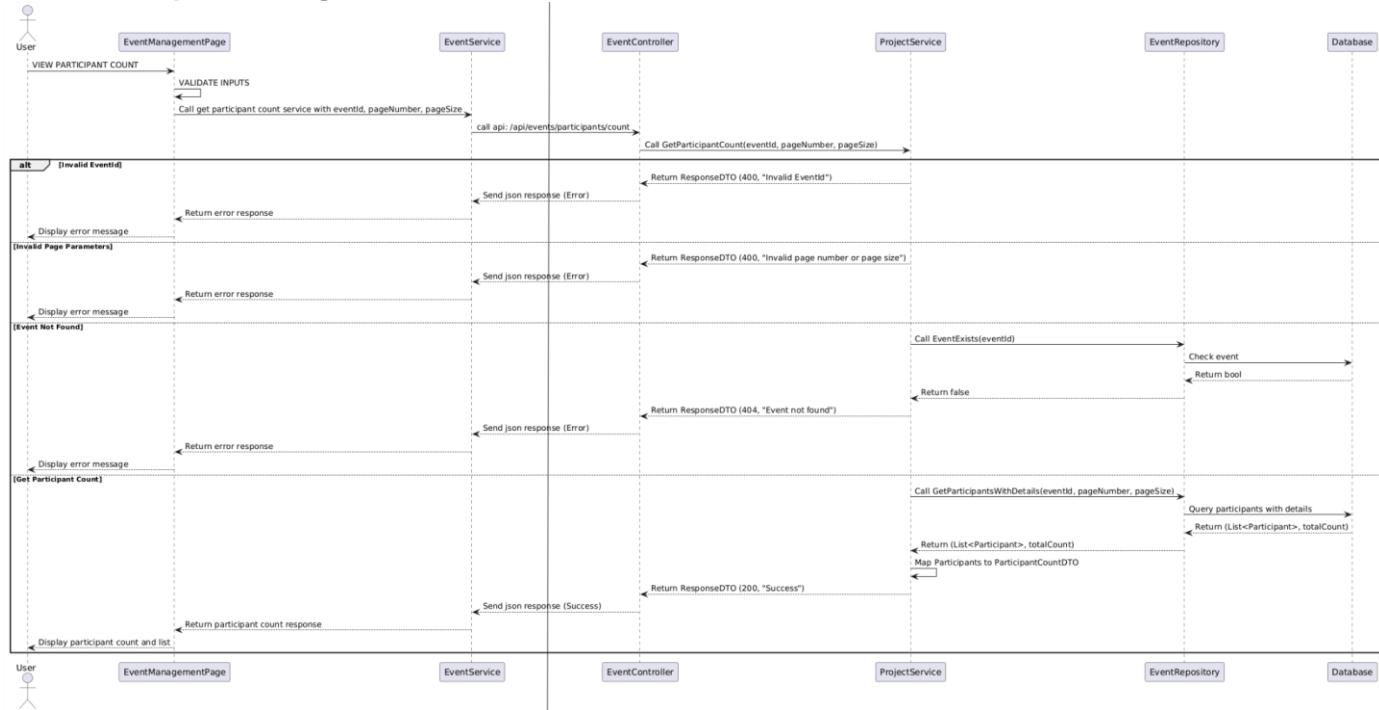


4.4.7.4 View Number of Registrants

4.4.7.4.1 Class diagram



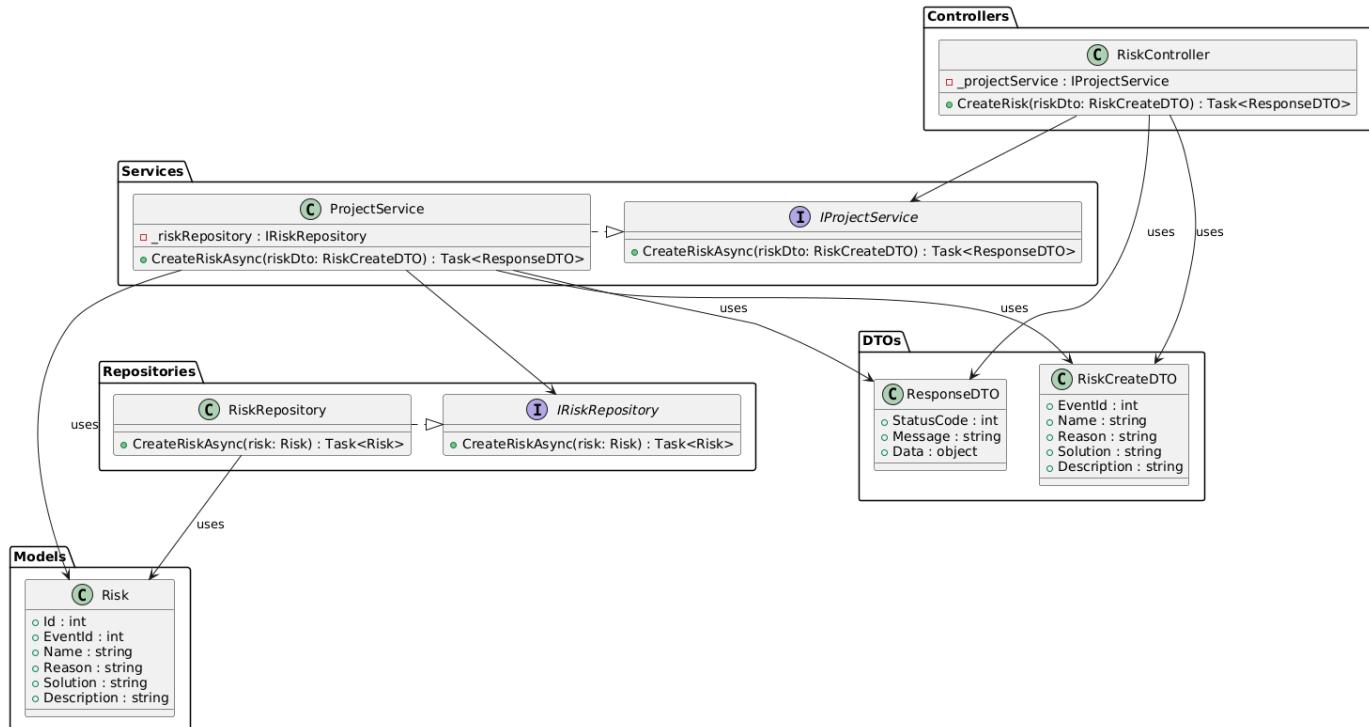
4.4.7.4.2 Sequence diagram



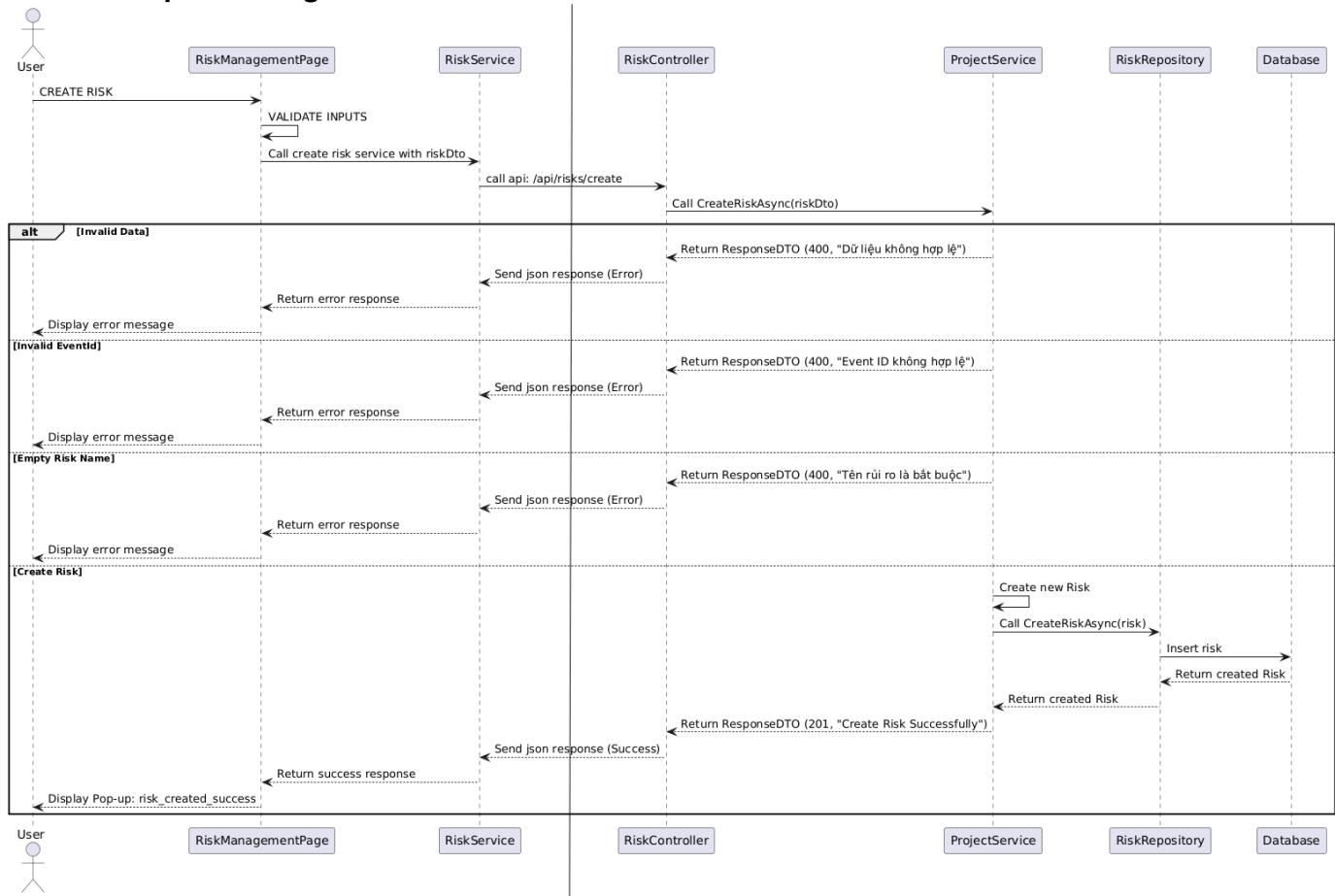
4.4.8 Risk & Cost Management

4.4.8.1 Create Risk

4.4.8.1.1 Class diagram

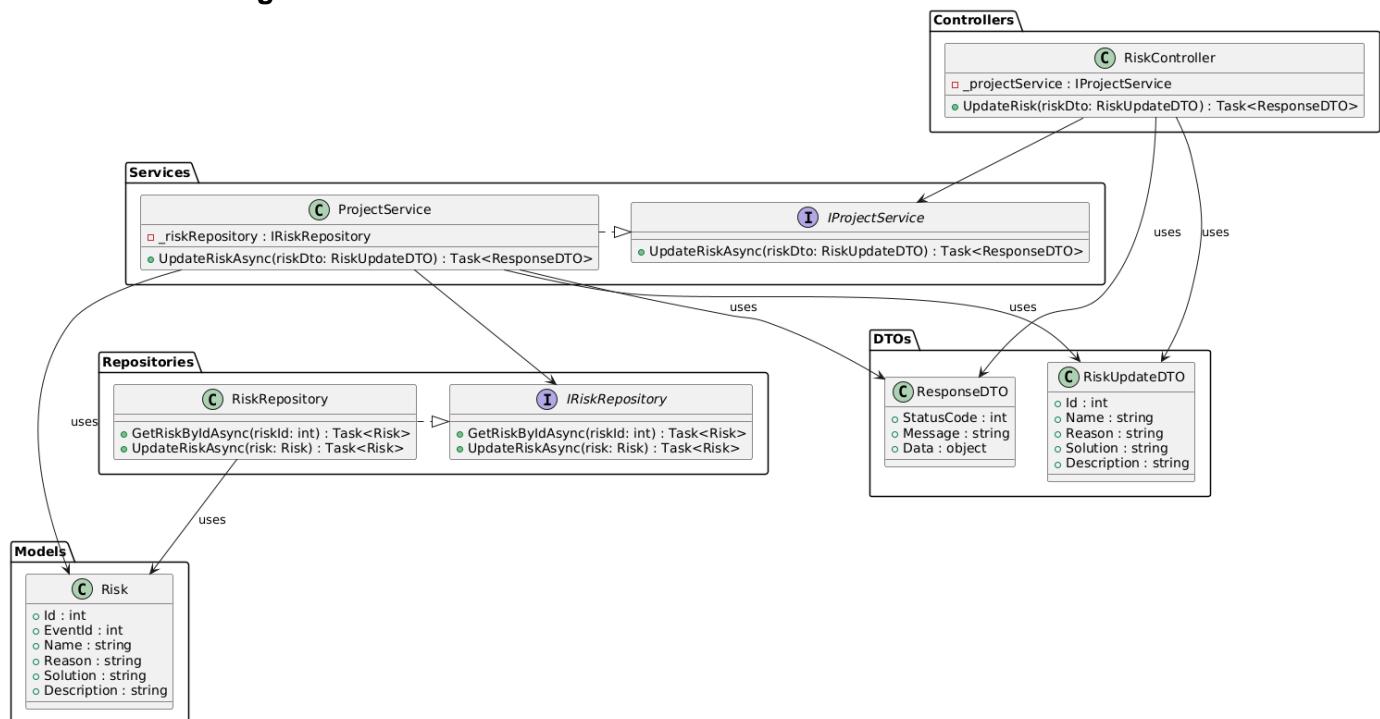


4.4.8.1.2 Sequence diagram

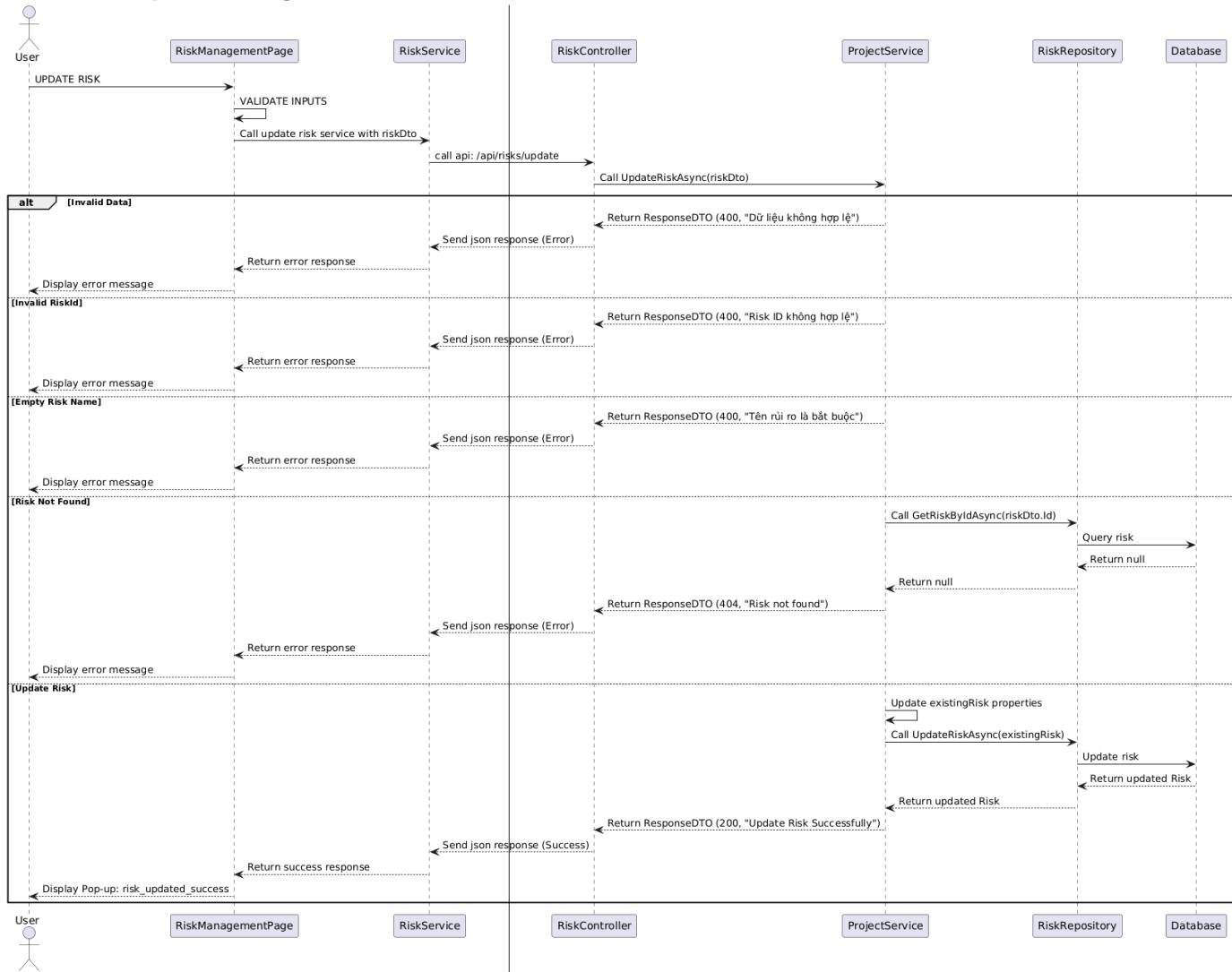


4.4.8.2 Update Risk

4.4.8.2.1 Class diagram

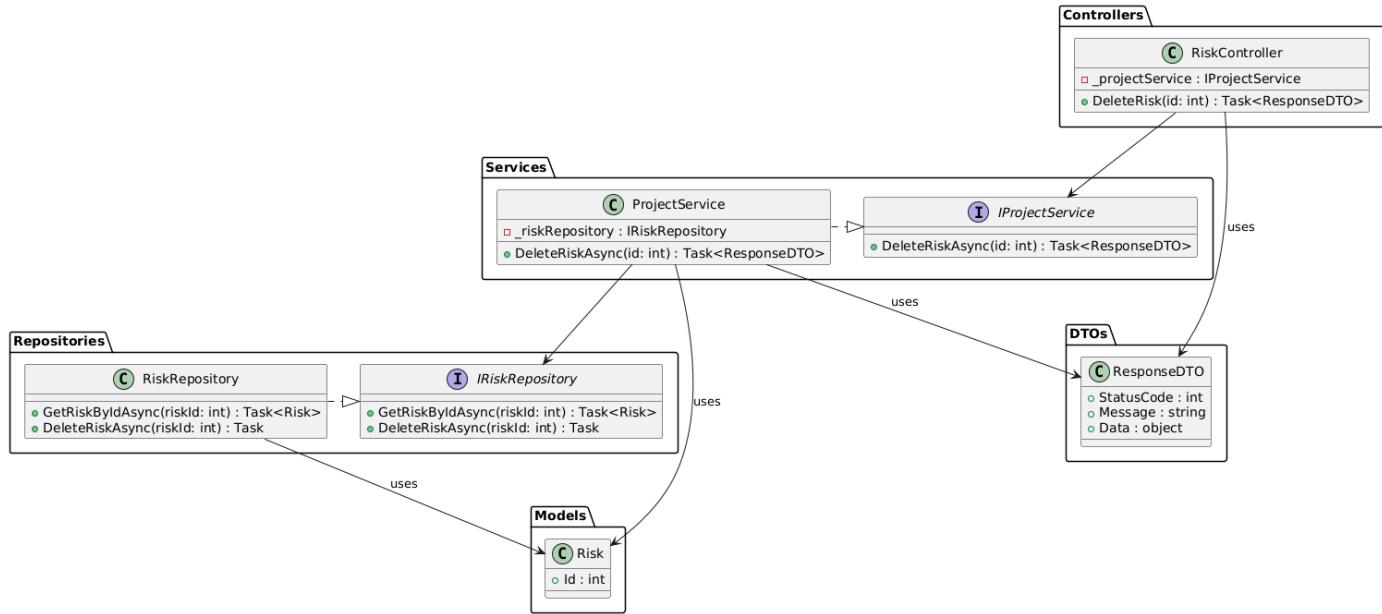


4.4.8.2.2 Sequence diagram

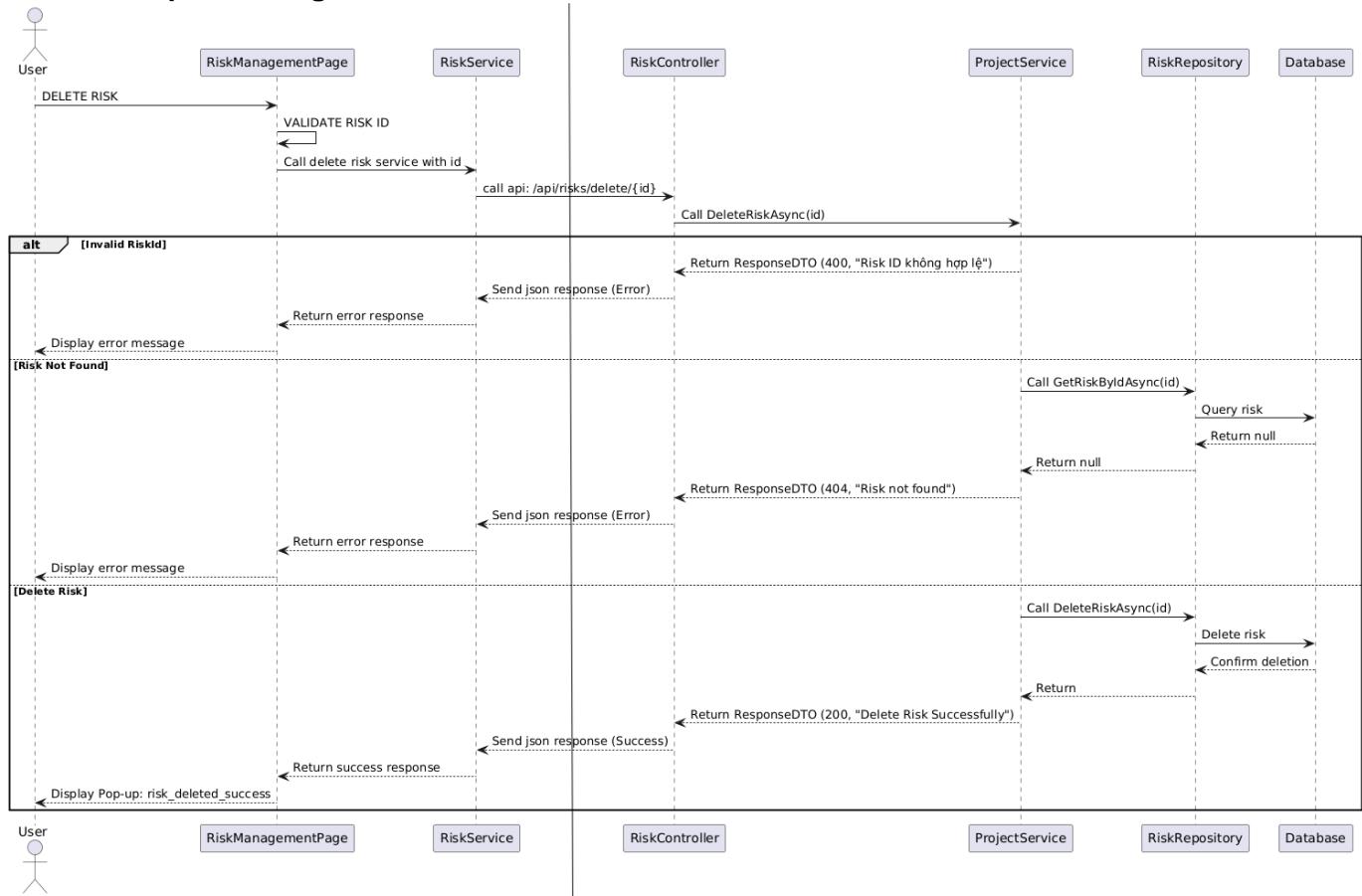


4.4.8.3 Delete Risk

4.4.8.3.1 Class diagram

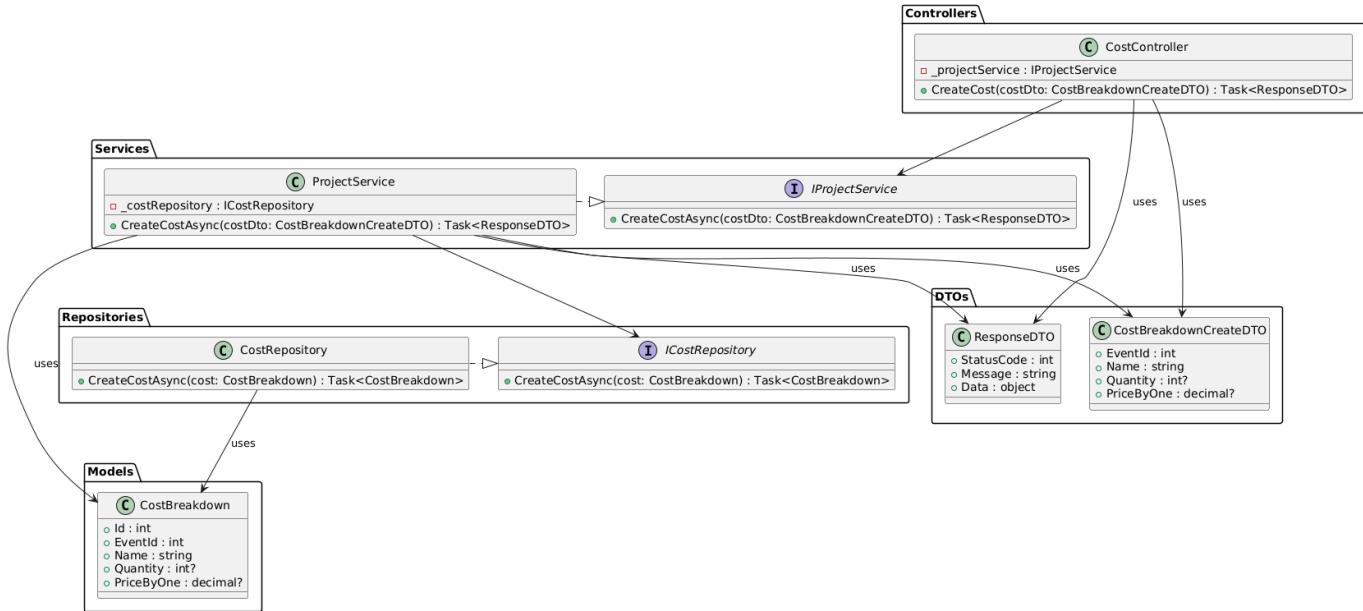


4.4.8.3.2 Sequence diagram

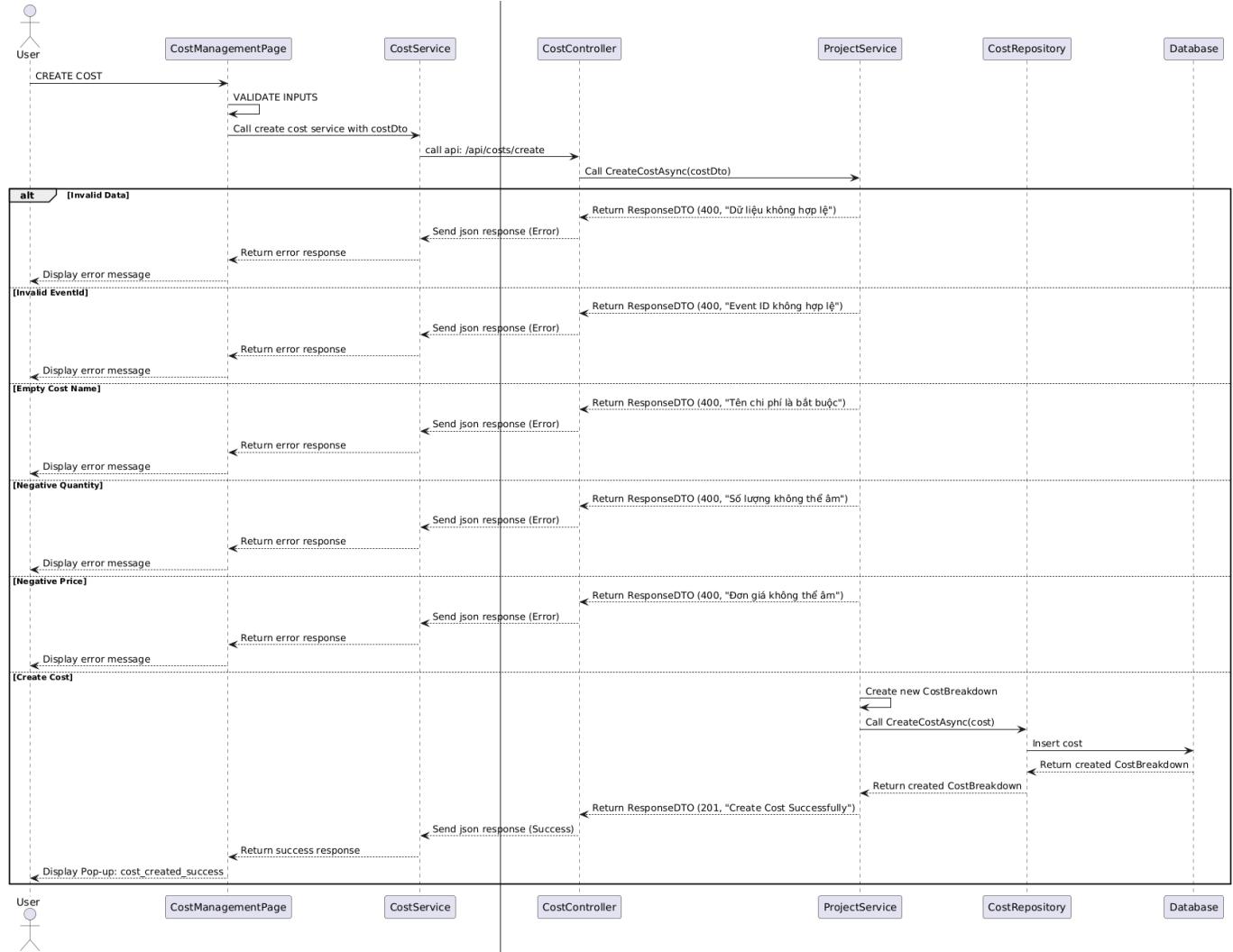


4.4.8.4 Create Cost

4.4.8.4.1 Class diagram

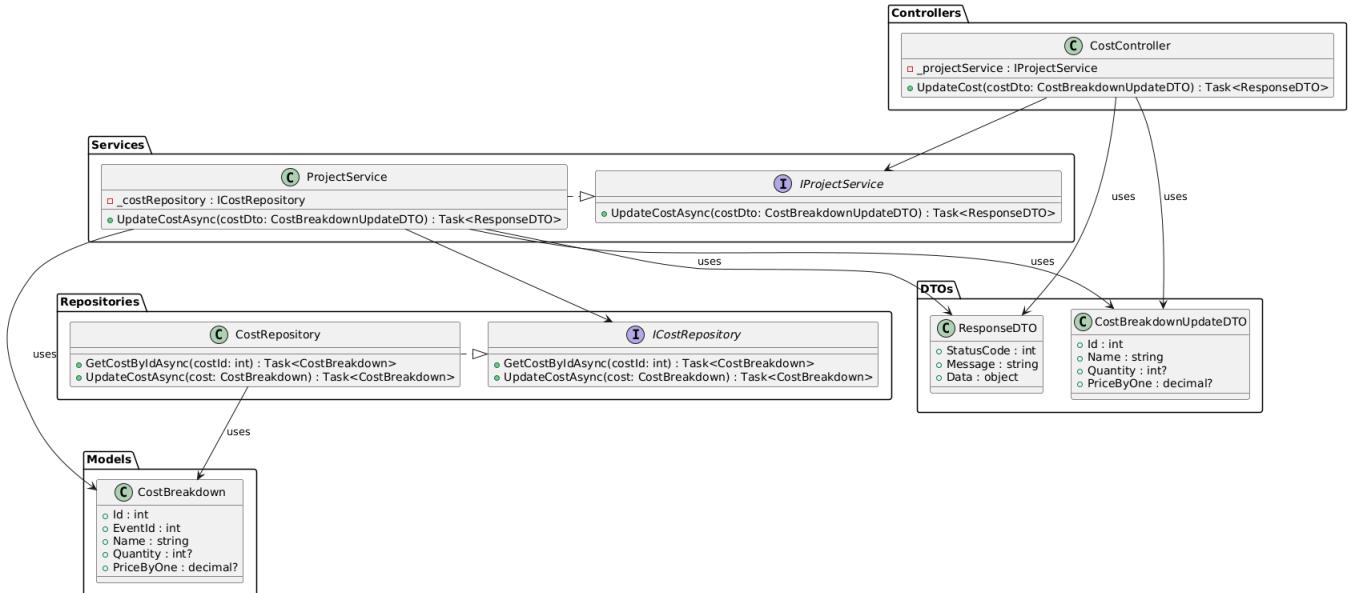


4.4.8.4.2 Sequence diagram

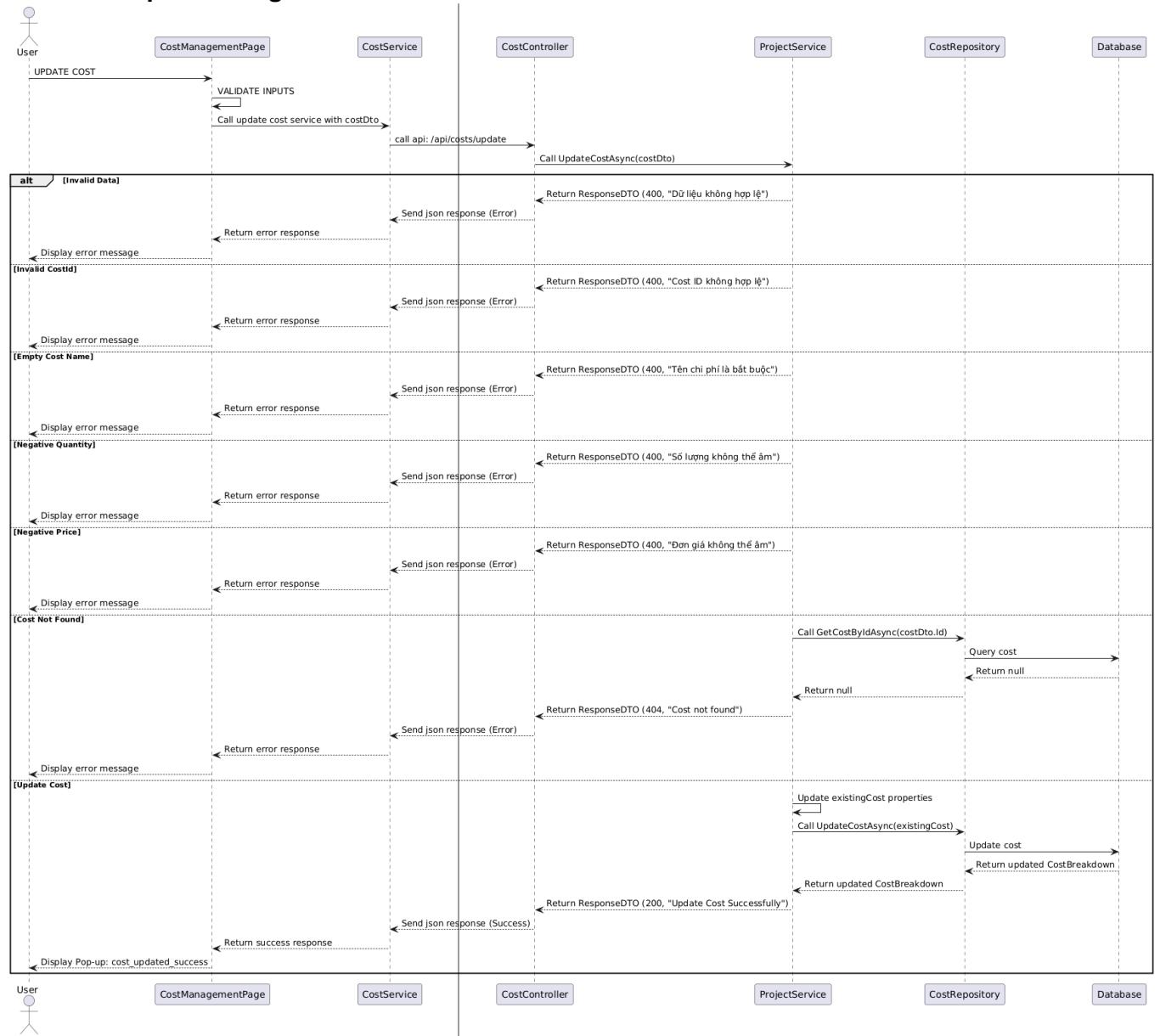


4.4.8.5 Update Cost

4.4.8.5.1 Class diagram

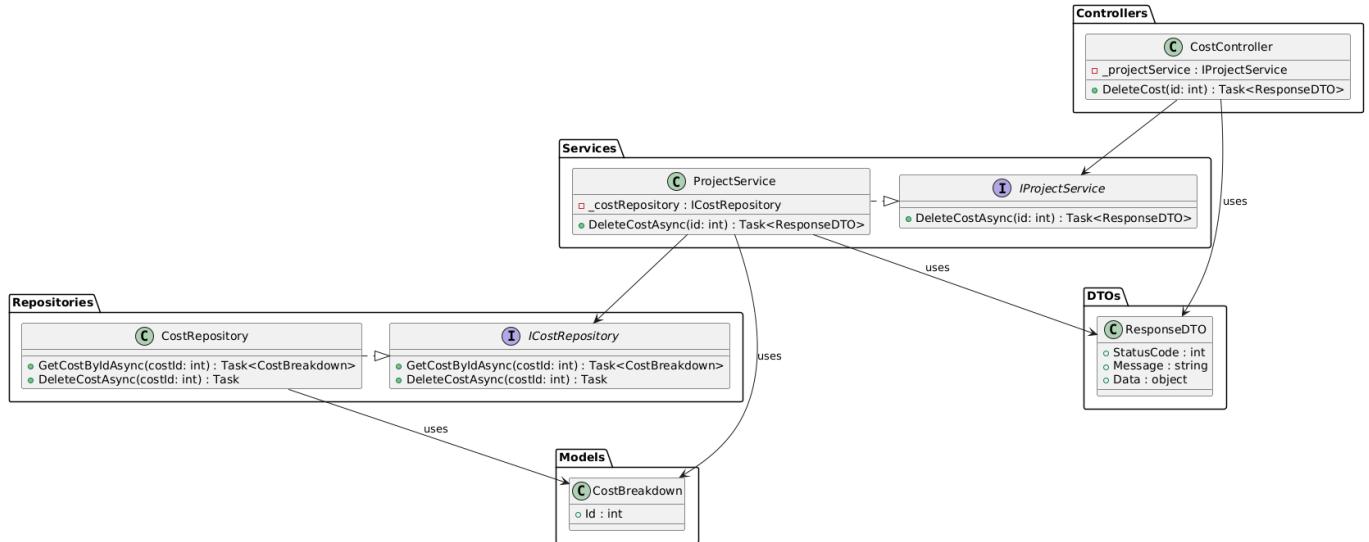


4.4.8.5.2 Sequence diagram

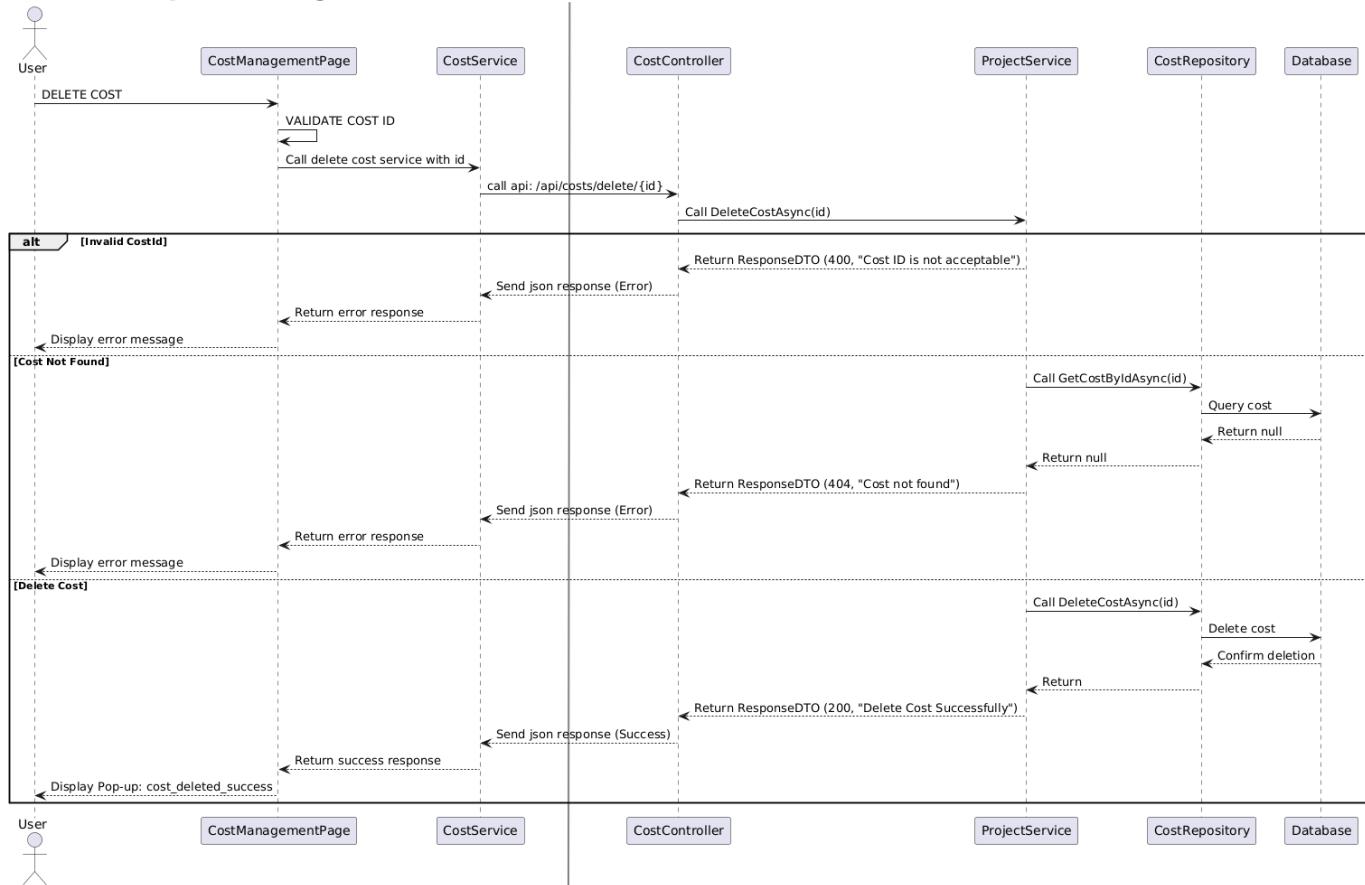


4.4.8.6 Delete Cost

4.4.8.6.1 Class diagram



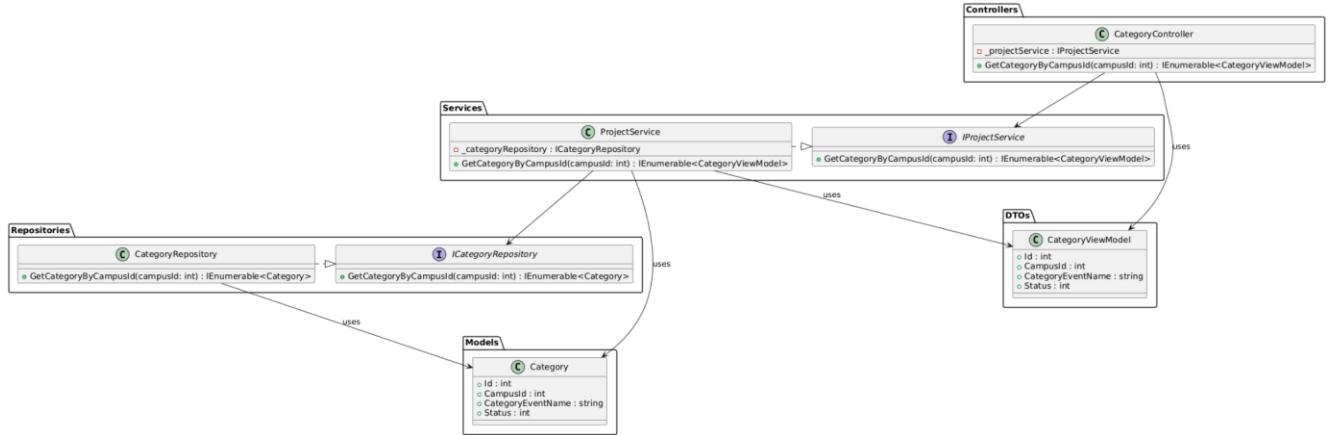
4.4.8.6.2 Sequence diagram



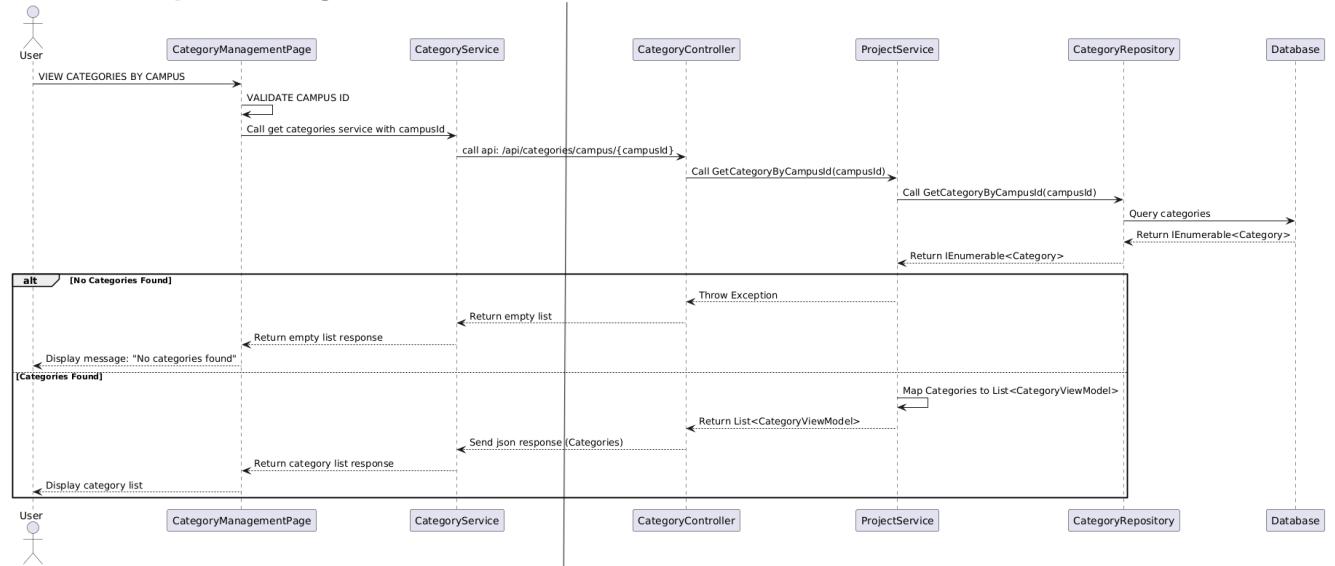
4.4.9 Event Category Management

4.4.9.1 List Category

4.4.9.1.1 Class diagram

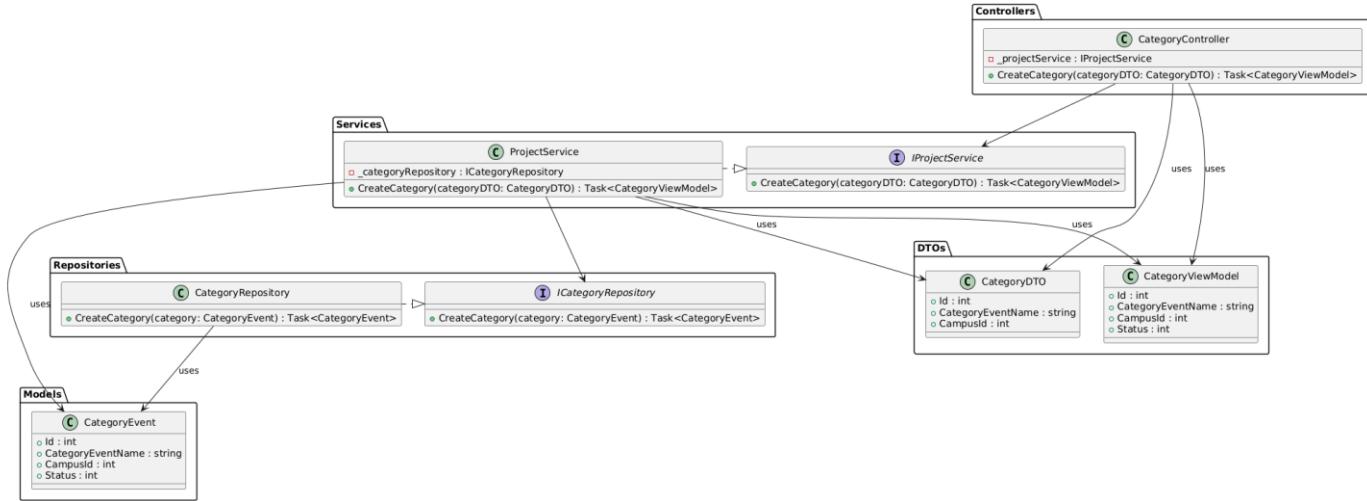


4.4.9.1.2 Sequence diagram

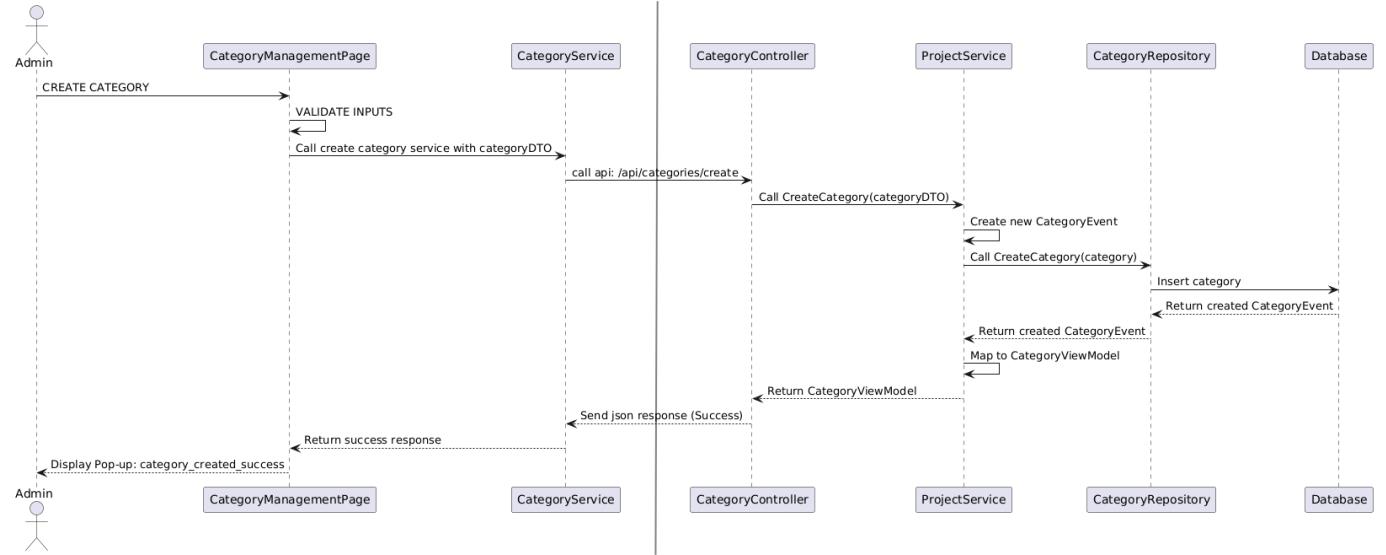


4.4.9.2 Create Category

4.4.9.2.1 Class diagram

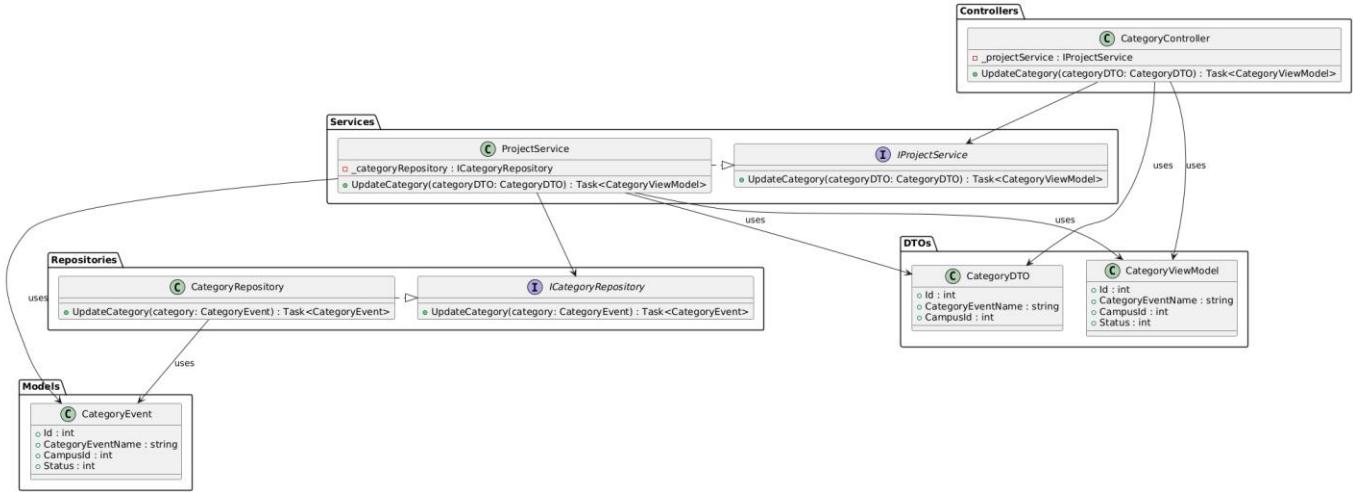


4.4.9.2.2 Sequence diagram

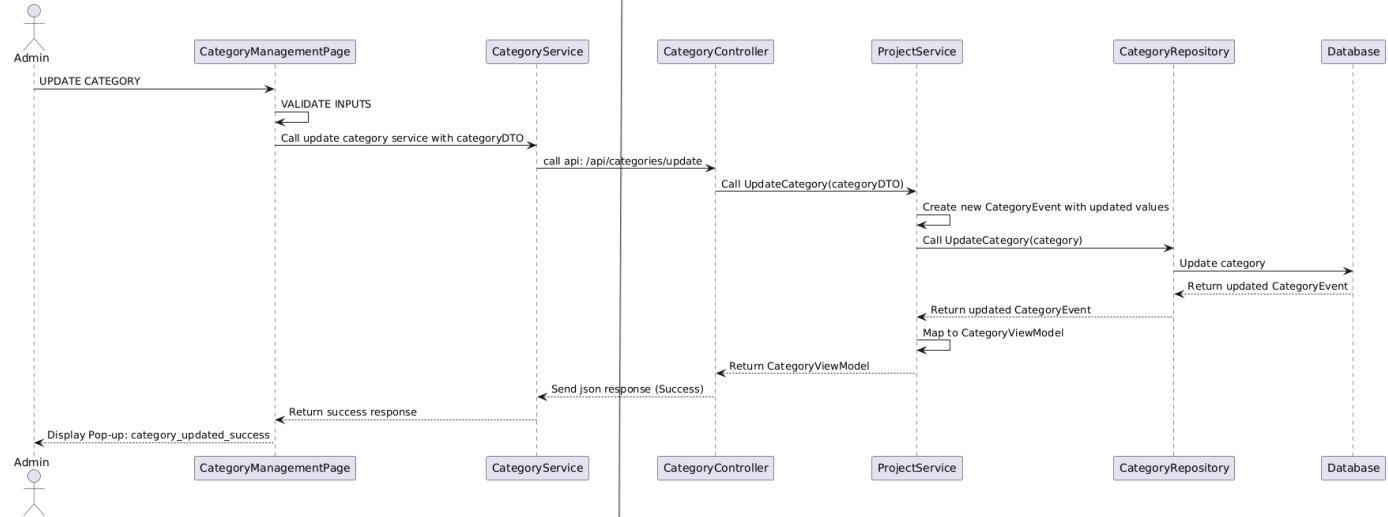


4.4.9.3 Update Category

4.4.9.3.1 Class diagram

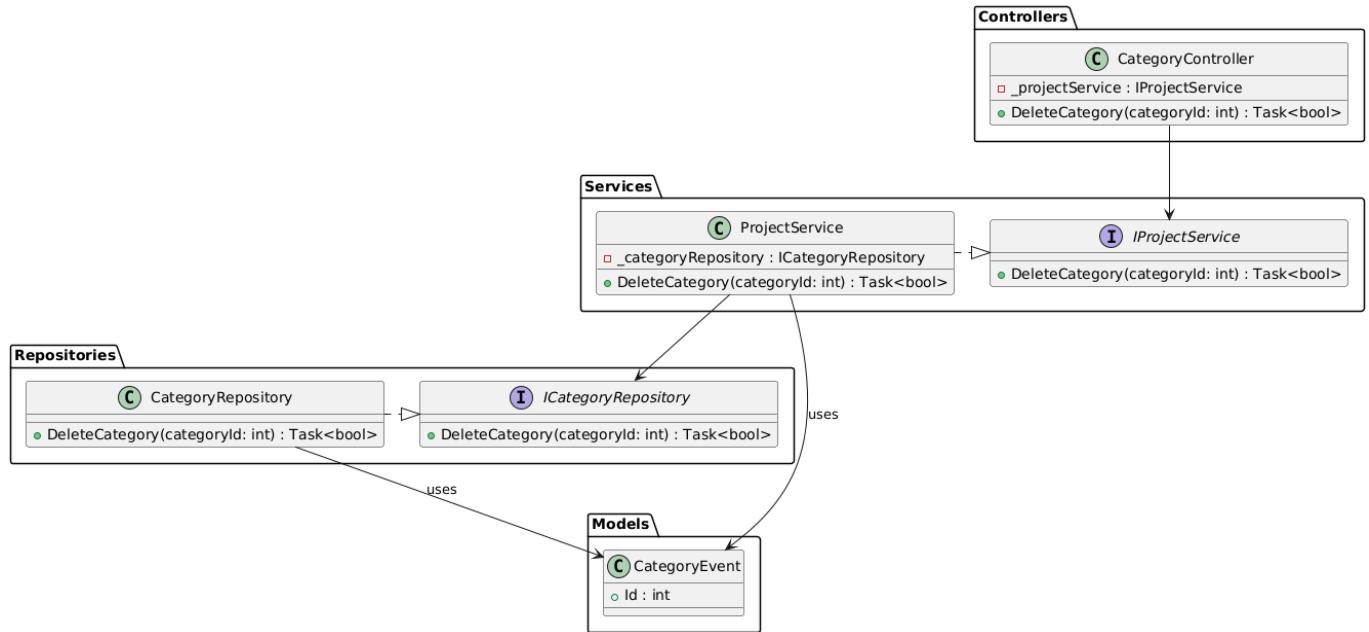


4.4.9.3.2 Sequence diagram

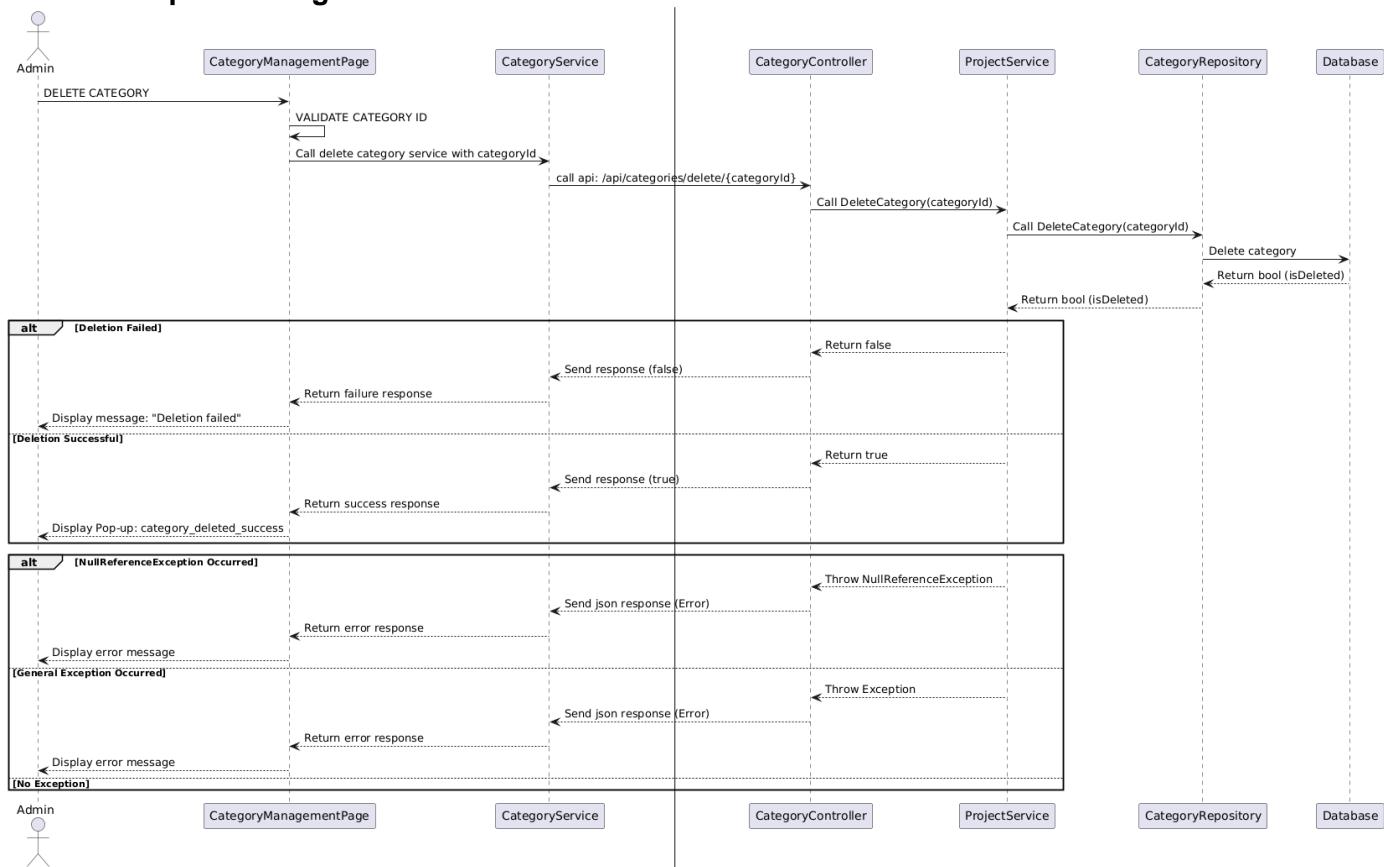


4.4.9.4 Delete Category

4.4.9.4.1 Class diagram



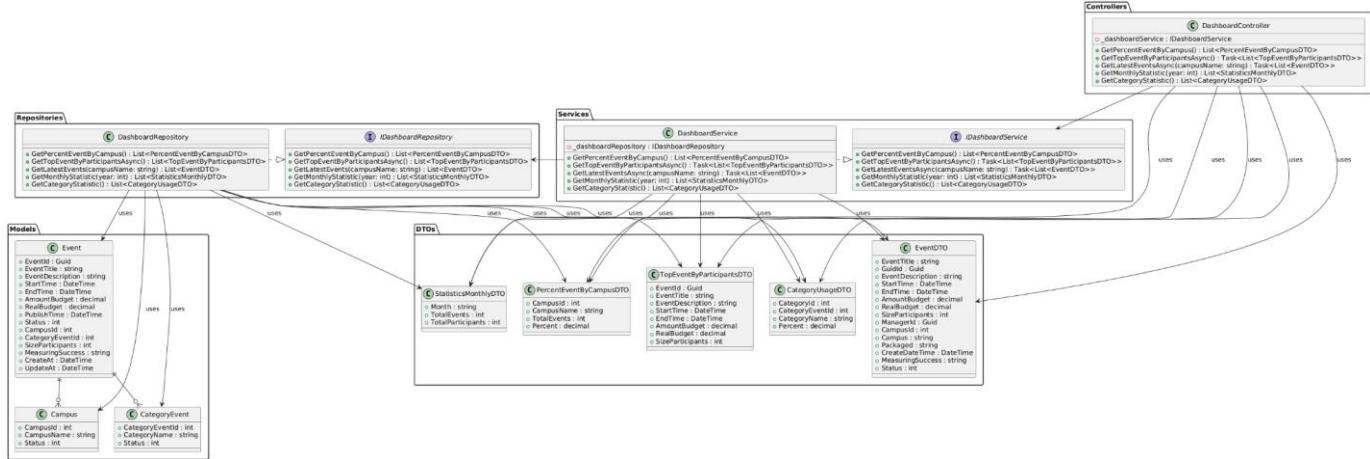
4.4.9.4.2 Sequence diagram



4.4.10 Dashboard

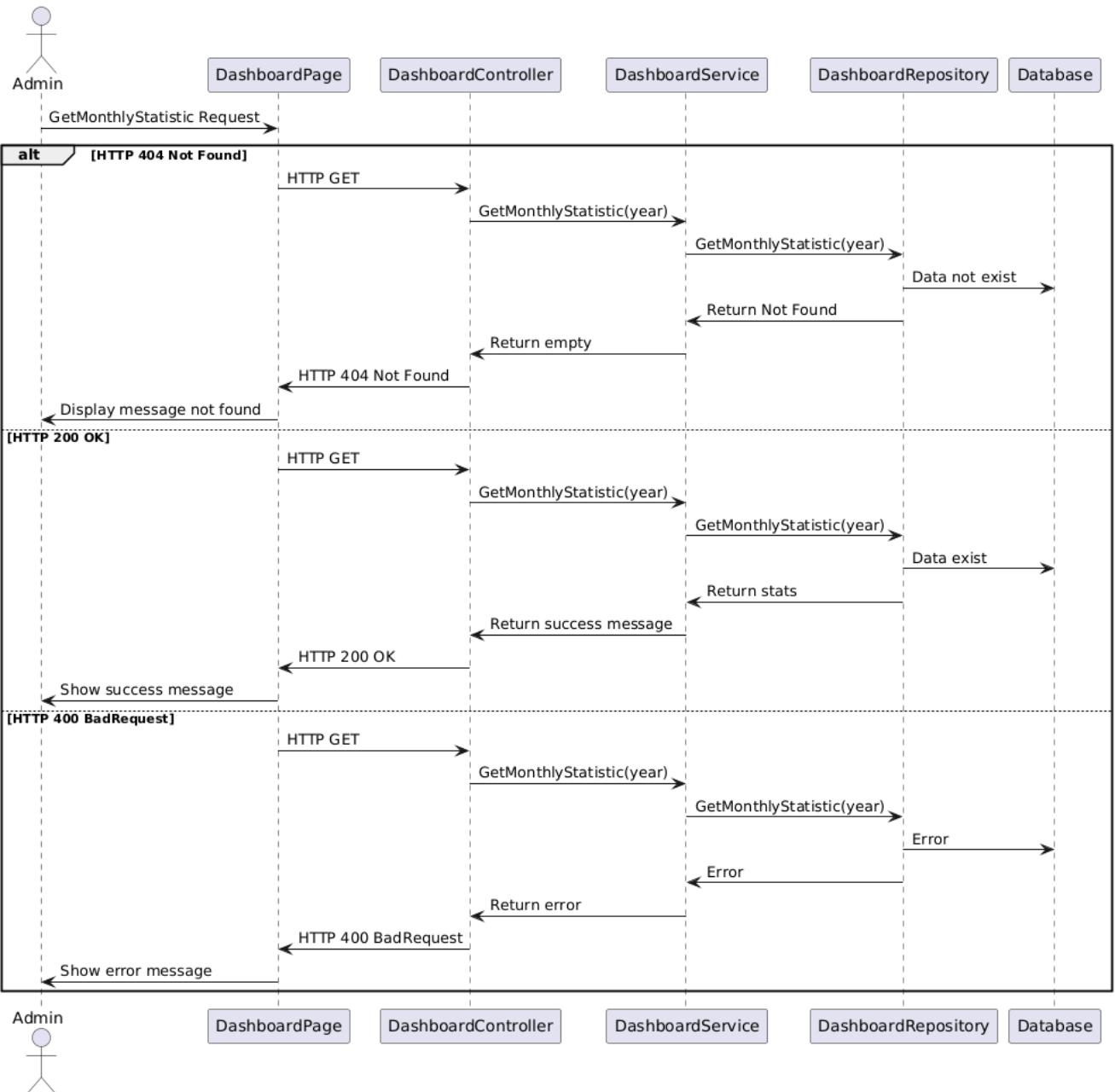
4.4.10.1 View Dashboard

4.4.10.1.1 Class diagram

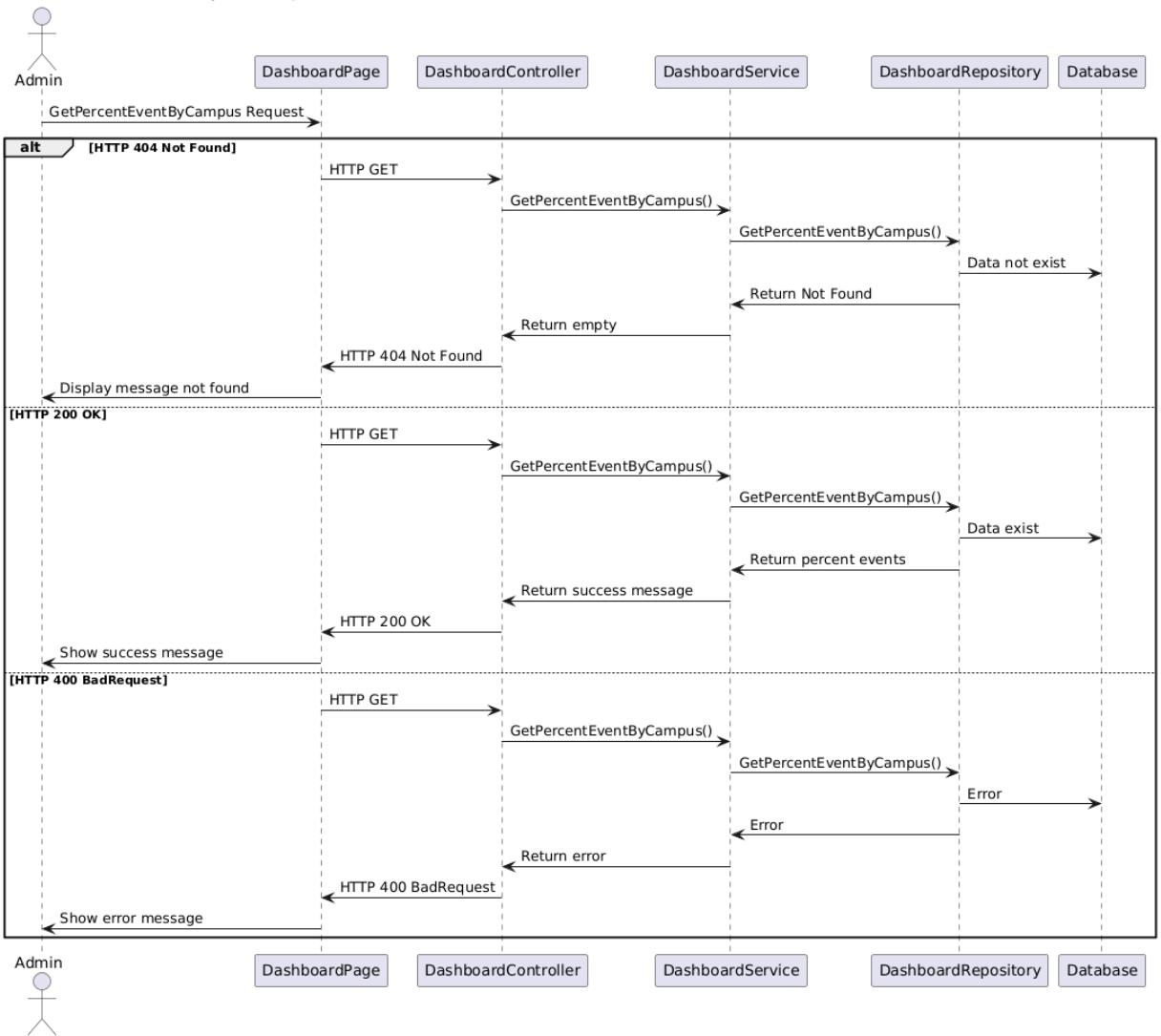


4.4.10.1.2 Sequence diagram

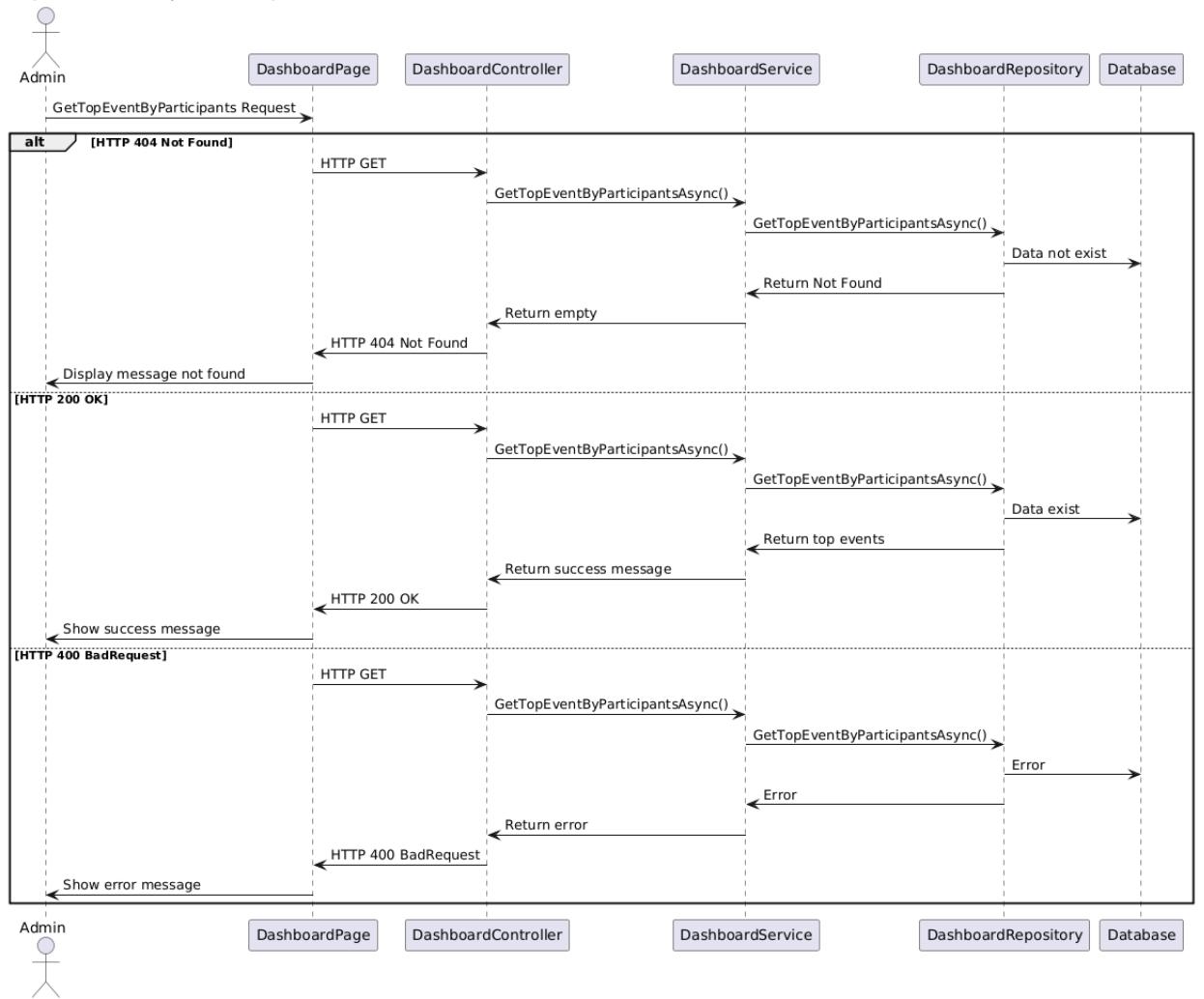
a. MonthLy Event Statistics



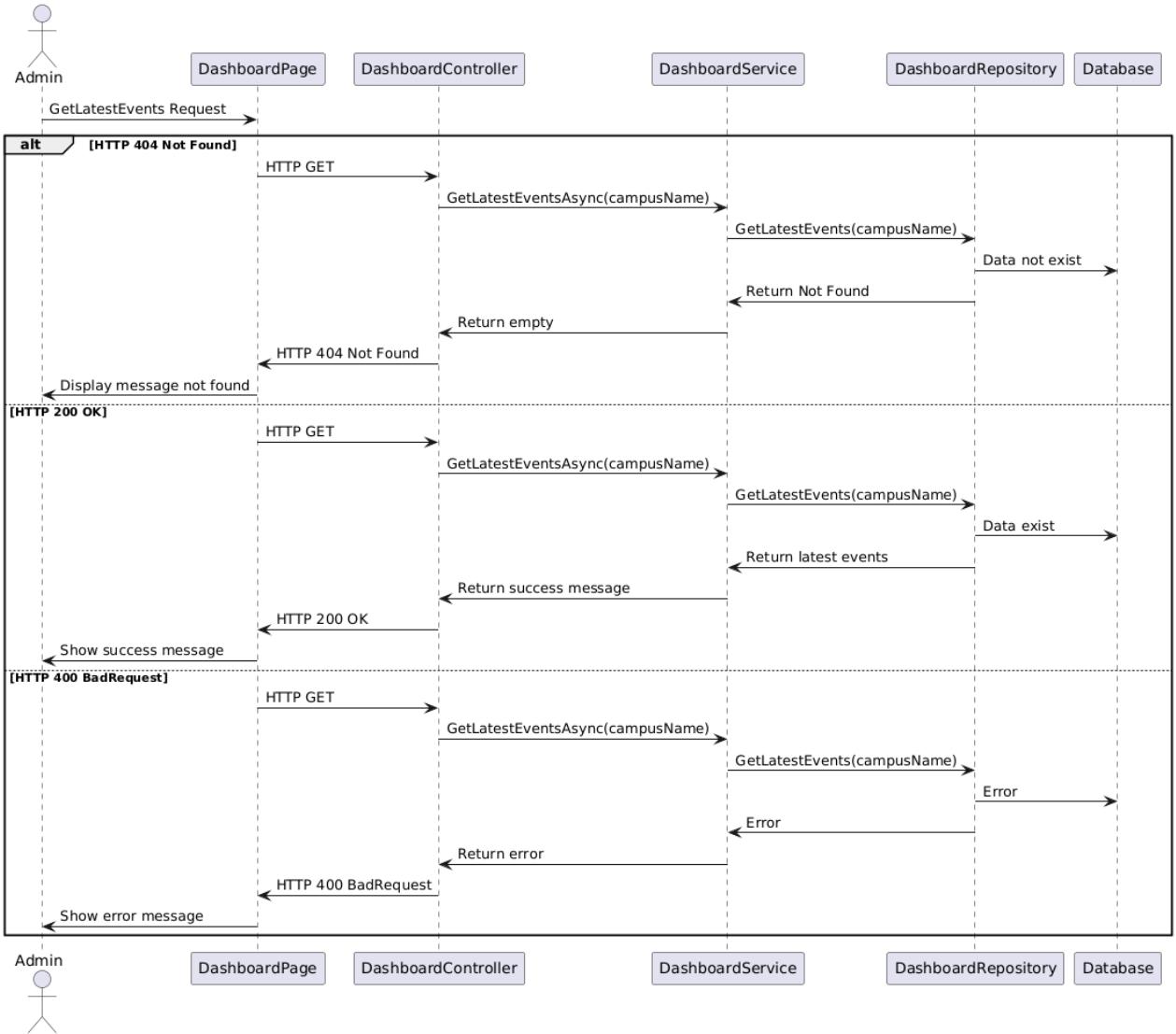
b. Percent Events By Campus



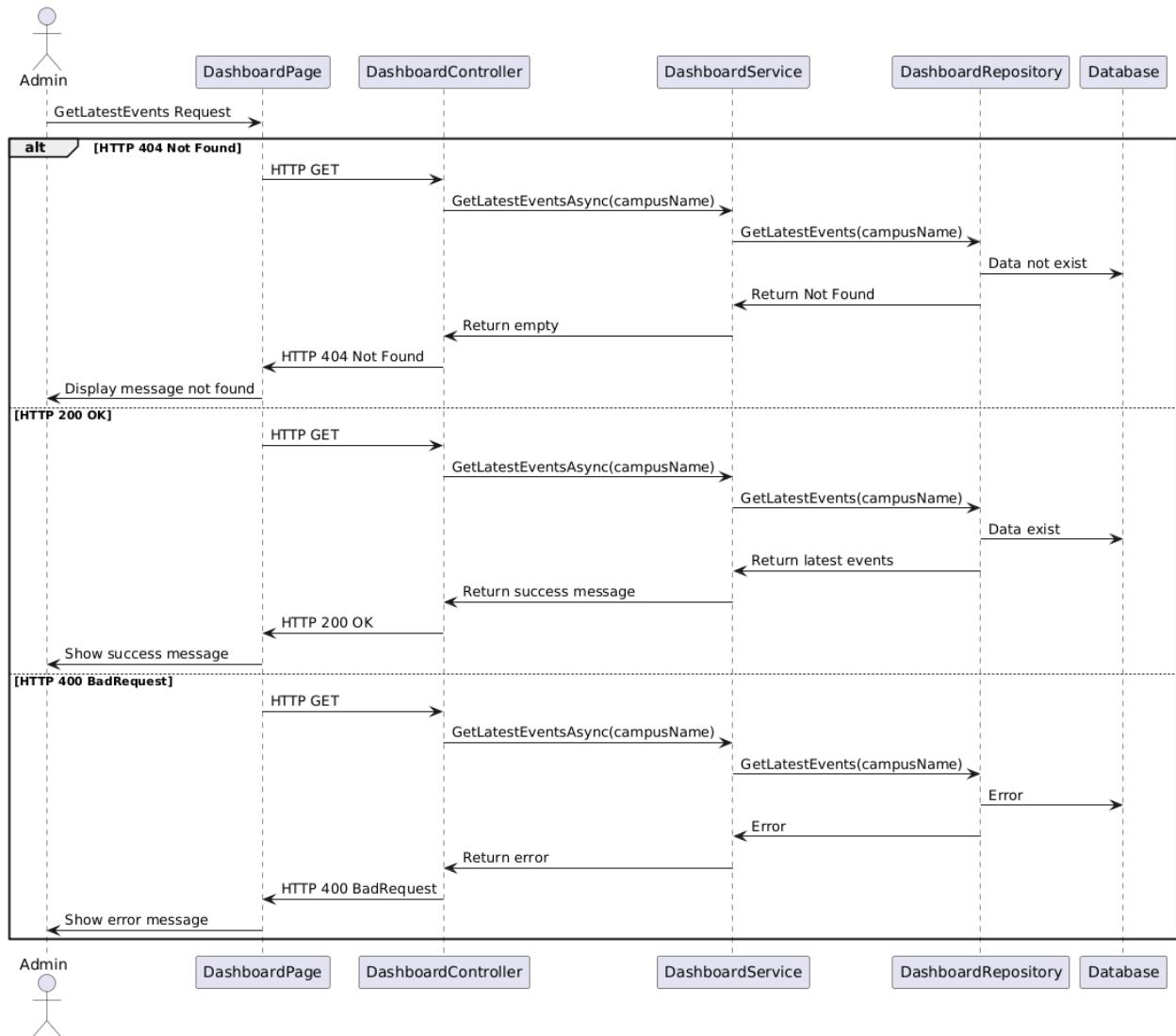
c. Top Events By Participants



d. Used Categories Of Events



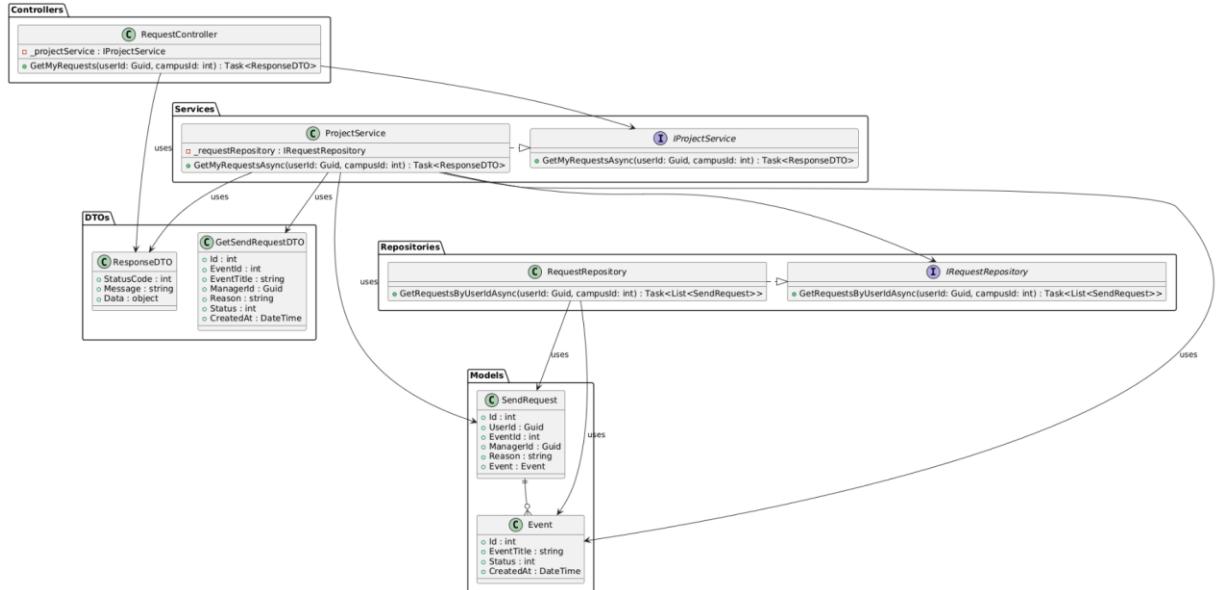
e. Last Events



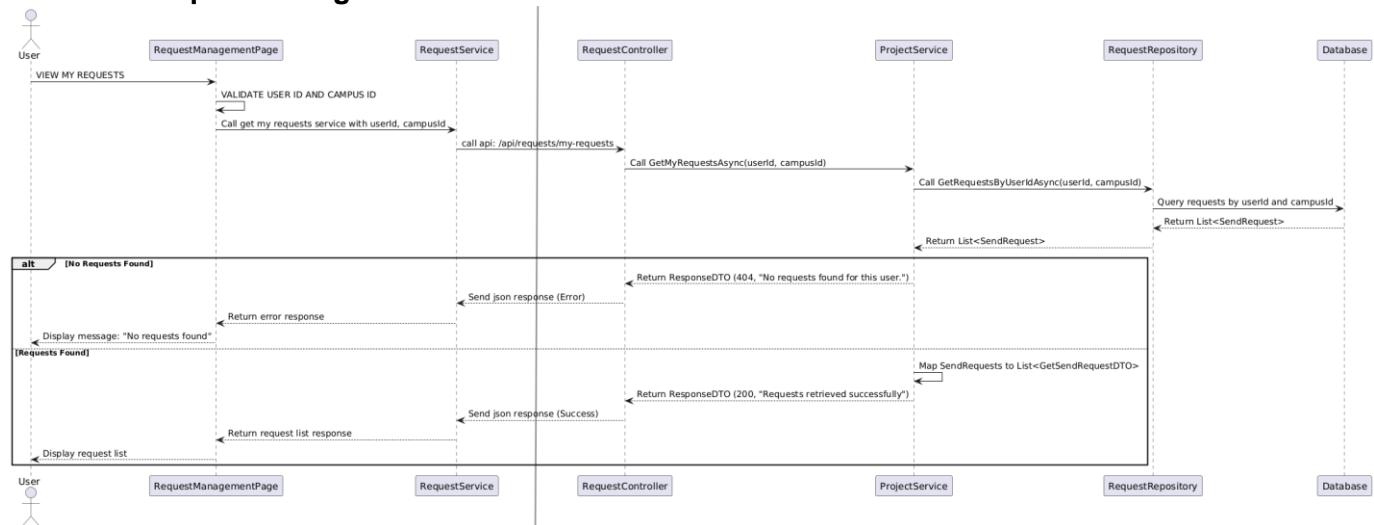
4.4.11 Request Management

4.4.11.1 My Request

4.4.11.1.1 Class diagram

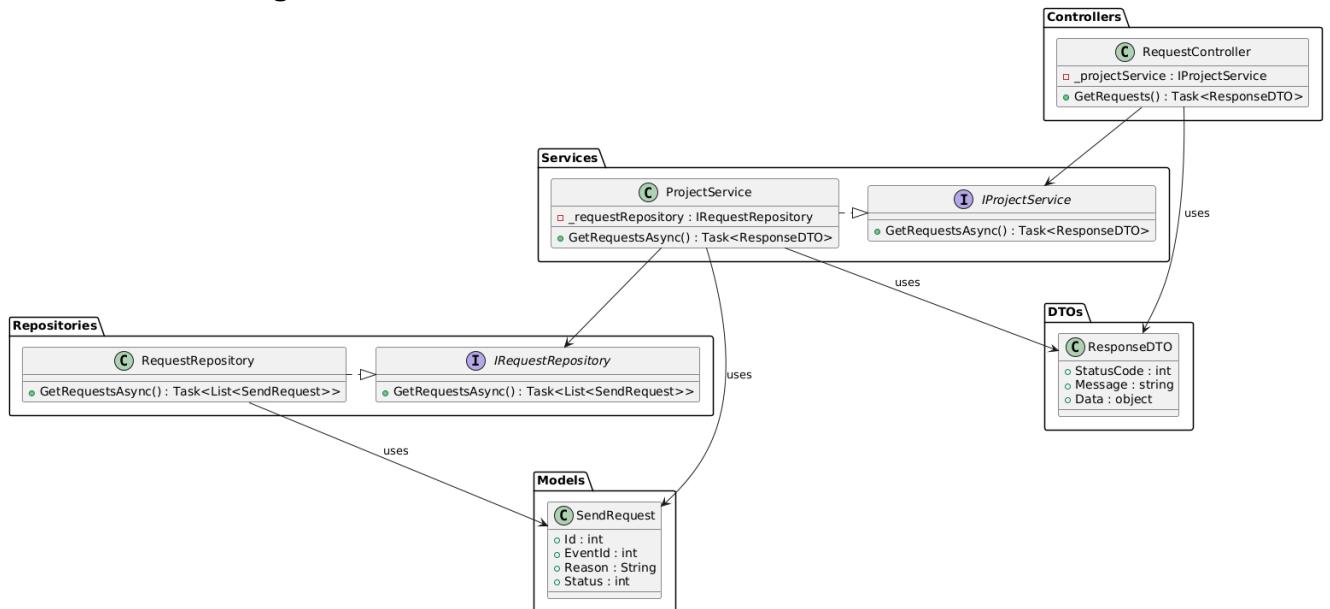


4.4.11.1.2 Sequence diagram

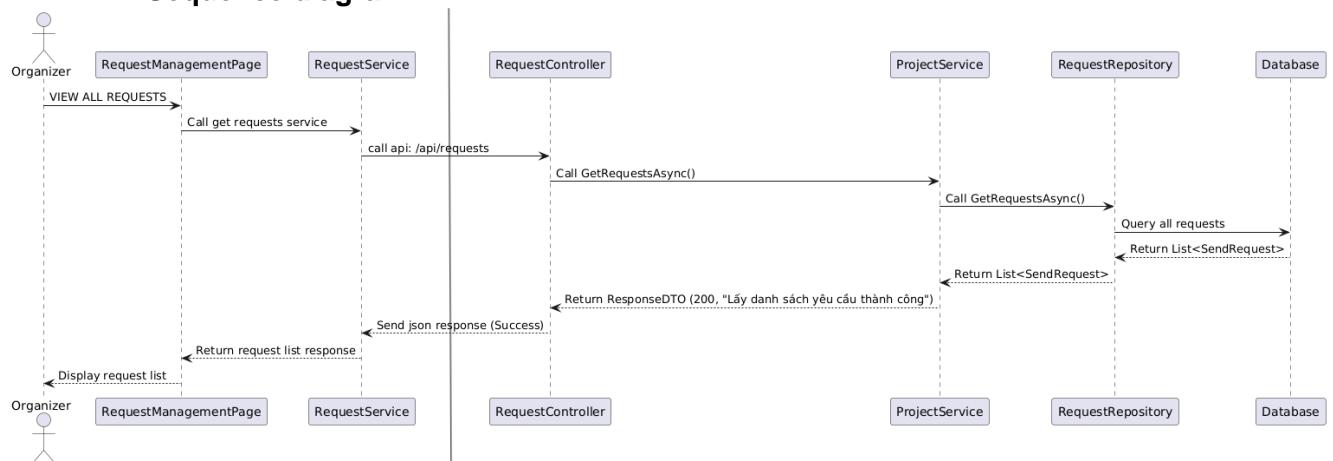


4.4.11.2 List of Request Events

4.4.11.2.1 Class diagram



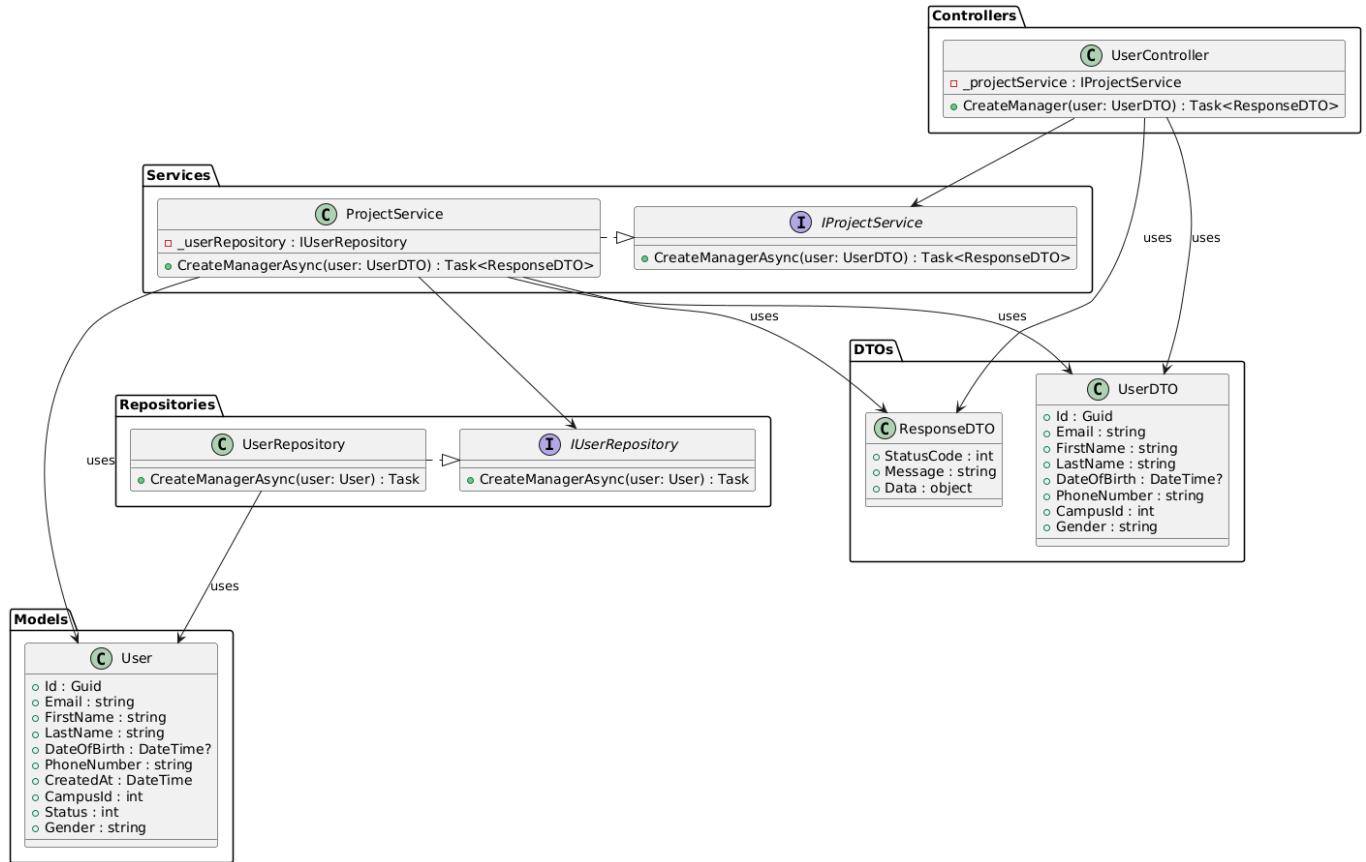
4.4.11.2.2 Sequence diagram



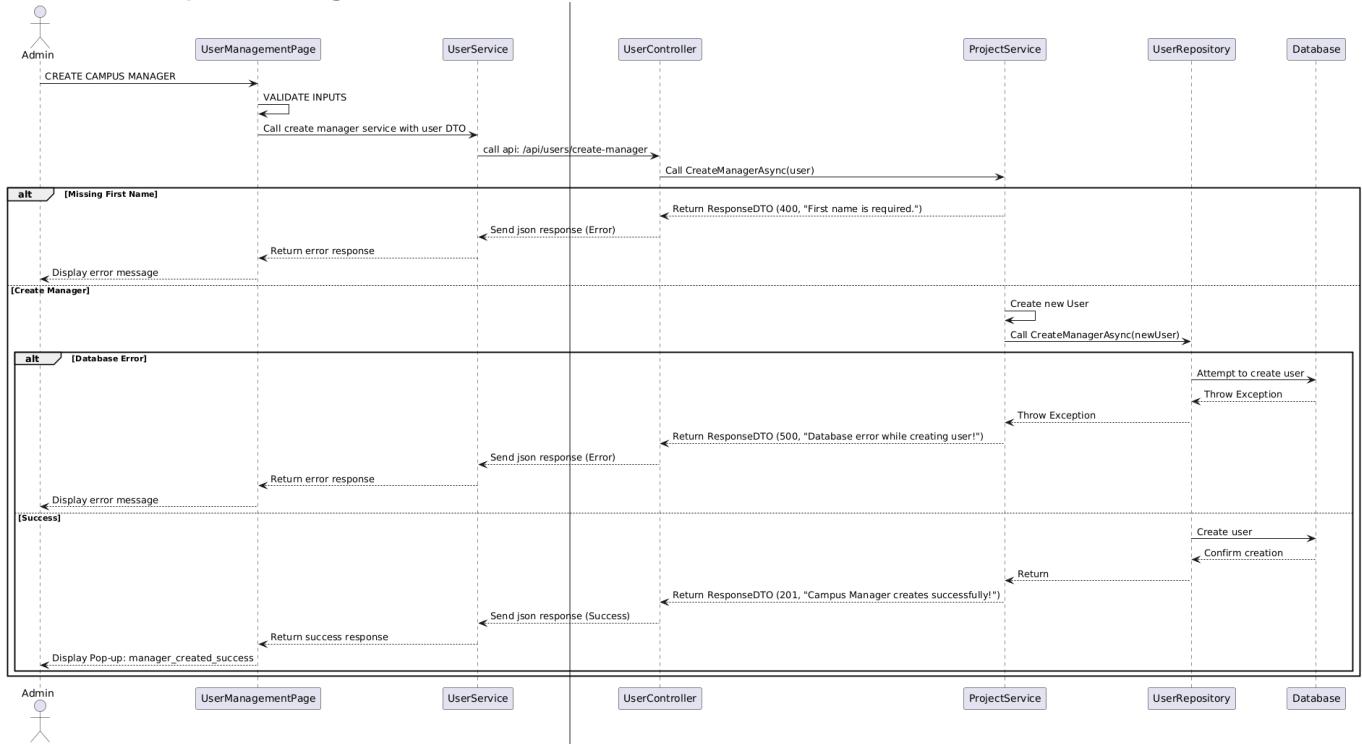
4.4.12 Campus Management

4.4.12.1 Create Campus Management

4.4.12.1.1 Class diagram

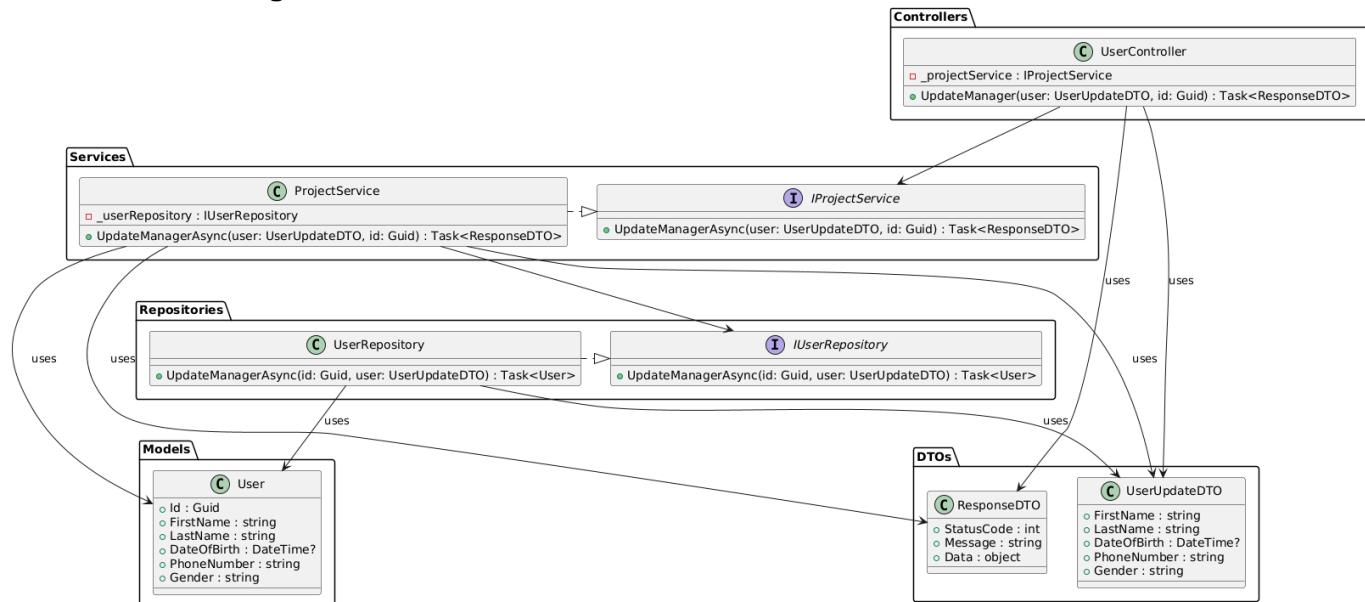


4.4.12.1.2 Sequence diagram

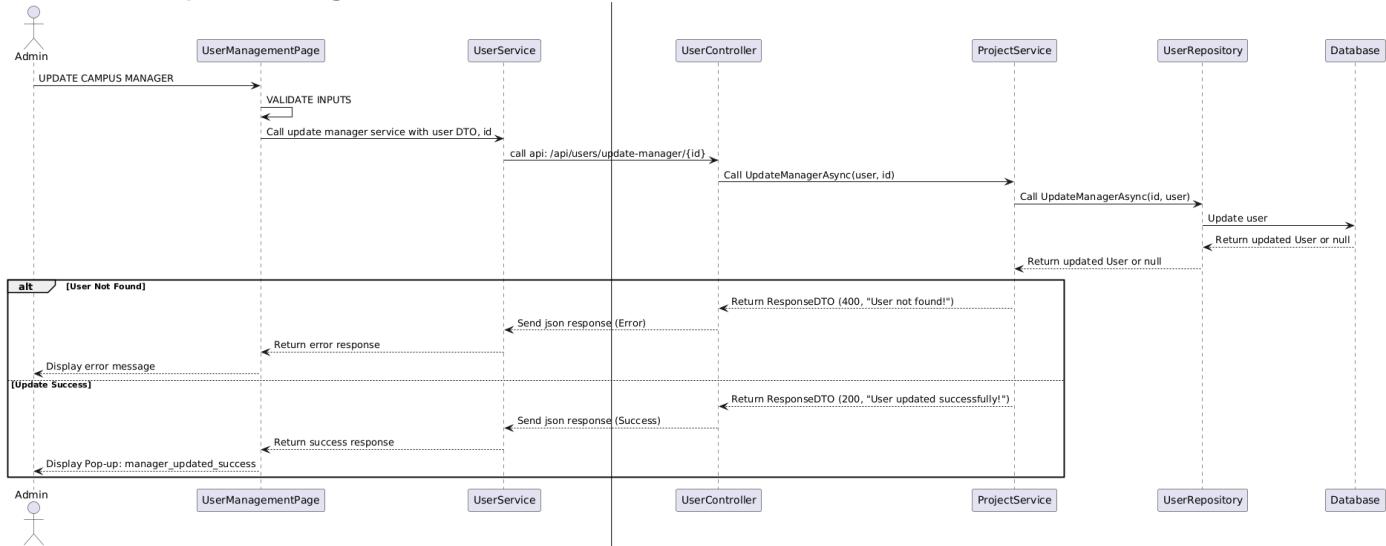


4.4.12.2 Update Campus Management

4.4.12.2.1 Class diagram



4.4.12.2.2 Sequence diagram



V. Software Testing Documentation

5.1 Purpose

This chapter describes the software testing documentation that ensures the system meets its quality standards and functional requirements. It covers the scope, strategy, types and levels of testing, testing tools, detailed test plans, test cases, and test reports. The objective is to validate that the system functions as intended and is free from critical defects before deployment.

5.2 Scope of Testing

- **Testing phases**

There are 4 phases in the Testing Process: Unit testing, Integration testing, System testing and Acceptance testing.

ID	Testing Phase	Description
1	Unit testing	The main aim of this endeavor is to determine whether the application functions as designed. In this phase, a unit can refer to a function, individual program or even a procedure, and a White-box Testing method is usually used to get the job done.
2	Integration testing	Integration testing allows individuals the opportunity to combine all of the units within a program and test them as a group. This testing level is designed to find interface defects between the modules/functions. This is particularly beneficial because it determines how efficiently the units are running together.
3	System testing	System testing is the first level in which the complete application is tested as a whole. The goal at this level is to evaluate whether the system has complied with all of the outlined requirements and to see that it meets Quality Standards.
4	Acceptance testing	Acceptance testing (or User Acceptance Testing), is conducted to determine whether the system is ready for release. During this phase, the tester and some alpha test users will test the system to find out whether the application meets their business' needs.

Table 5.1 Testing Phase

- **Testing range**

Team performs all functions defined in the SRS based on the approved version.

5.3 Test Strategy

5.3.1 Testing Types

Types	Description
Functional Testing	Verifies each function works according to requirements without checking internal code.

White-box Testing	Tests internal structures and logic of the code, primarily used for unit testing.
UI/UX Testing	Ensures that the user interface is intuitive, visually correct, and accessible.
API Testing	Validates API responses, error handling, and data integrity.

Table 5.2 Testing Types

5.3.2 Test Levels

Type of Tests	Test Level			
	Unit Test	Integration	System	Acceptance
Function testing	X	X	X	X
White-box Testing	X	X	X	
UI/UX Testing		X	X	X
API Testing	X	X		

Table 5.3 Test Levels

5.2.3 Supporting Tools

Purpose	Tool	Vendor	Version
API test	Swagger	Swagger	Lastest
Integration & System test	Google Chrome	Google	Lastest
Unit test	Visual Studio	Microsoft	2022
Document	Google Docs, Google Sheet	Google	Lastest

Table 5.4 Tool Support

5.4 Test Plan

5.4.1 Human Resources

Worker/Doer	Role	Specific Responsibilities/Comments
Đồng Văn Thanh	Tester	<ul style="list-style-type: none"> - Manage test resources and assign test tasks - Create a test plan - Create test cases - Create test reports - Execute test
Nguyễn Việt Thu	Developer	<ul style="list-style-type: none"> - Create unit test - Execute test - Fix bugs - Create unit test
Nguyễn Cao Tùng	Developer	<ul style="list-style-type: none"> - Fix bugs
Bùi Tuấn Sơn	Developer	<ul style="list-style-type: none"> - Fix bugs
Vũ Ngọc Tuệ Minh	Developer	<ul style="list-style-type: none"> - Create unit test - Execute test - Fix bugs - Create unit test

Table 5.5 Human Resources

5.4.2 Test Environment

Purpose	Tool	Provider	Version
Setup and configuration for test frontend website	Google Chrome	Google	Lastest
Tracking any database transaction (evaluate the performance of the SQL queries)	Microsoft SQL Server	Microsoft	2020
Setup and configuration for test front end code	Visual Studio 2022	Microsoft	2022

5.4.3 Test Milestones

Milestone Task	Start Date	End Date
Create Test plan	07/04/2025	08/04/2024
Review and update Test plan	09/04/2025	09/04/2025
Create and Execute Unit Test	10/04/2025	16/04/2025
Create and Execute Integration Test	17/04/2025	23/04/2025
Create and Execute System Test	24/04/2025	26/04/2025

5.5 Test Cases

5.5.1 Unit Test

Functional testing will be done on the server development side by the backend developer:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Code Module	<i>Event Management</i>	Method										CreateEvent				
Created By	<i>Vũ Ngọc Tuệ Minh</i>	Executed By										<i>Nguyễn Việt Thu</i>				
Test requirement																
Passed		Failed		Untested				N/A/B			Total Test Cases					
		12			0			0			1	3	8			12
				UTCID01	UTCID02	UTCID03	UTCID04	UTCID05	UTCID06	UTCID07	UTCID08	UTCID09	UTCID10	UTCID11	UTCID12	
Condition	EventDTO			~	~	~	~	~	~	~	~	~	~	~	~	~
	null	O	~	~	~	~	~	~	~	~	~	~	~	~	~	~
			~	~	~	~	~	~	~	~	~	~	~	~	~	~
	EventTitle			" "	O	~	~	~	~	~	~	~	~	~	~	~
		A	~	~	~	~	~	~	~	~	~	~	O	~	~	~
	AA..A (255)		~	~	~	~	~	~	~	~	~	~	O	~	~	~
	Test		~	O	O	O	O	O	O	O	O	O	O	O	O	O
	StartTime				~	~	~	~	~	~	~	~	~	~	~	~
	2025-06-18				O	~	~	~	~	~	~	~	~	~	~	~
	2025-06-19					O	~	~	~	~	~	~	~	~	~	~
	2025-07-01						O	O	O	O	O	O	O	O	O	O
	EndTime						~	~	~	~	~	~	~	~	~	~
	2025-06-30						O	~	~	~	~	~	~	~	~	~
	2025-07-02							O	O	O	O	O	O	O	O	O
	SizeParticipants						~	~	~	~	~	~	~	~	~	~
	-1							~	~	O	~	~	~	~	~	~
	0							O	~	~	O	~	~	~	~	~
	10								O	O	O	~	~	O	O	O
	2,147,483,647									O	~	~	O	~	~	~
	CampusId															
	abc								O	~	~	~	~	~	~	~
	1		C	C	O	O	~	~	O	O	O	O	O	O	O	O
			~	~	~	~	~	~	~	~	~	~	~	~	~	~
Confirm	Return			~	~	~	~	~	~	~	~	~	~	~	~	~
	StatusCode			~	~	~	~	~	~	~	~	~	~	~	~	~
	201		C	~	~	~	~	~	O	~	O	O	O	O	O	O
	400	O	O	~	O	O	~	O	O	O	O	~	~	~	~	~
	Message			~	~	~	~	~	~	~	~	~	~	~	~	~

[Figure 5.1 Unit Test](#)

5.5.2 Integration Test

Integration testing will involve incorporating the API into the app's interface to assess the data representation for users. The tester will select test cases from the Test Report wherein actions are performed between functions or data is exchanged between modules. Subsequently, users will utilize swagger to test the input-output data. If any errors occur during testing, specifically concerning unexpected data, testers will log defects and track the failed test case until it is addressed and resolved by developers.

	A	B	C	D	E	F	G	H	I	J	K
1	Feature	Authentication and Authorization									
2	Number of TCs	35									
3	Create By	ThanhDV									
4	Creation Date	10-04-2025									
5	Testing Round	<i>Passed</i>	<i>Failed</i>	<i>Pending</i>	<i>N/A</i>						
6	Round 1	34	1	0	0						
7	Round 2	35	0	0	0						
8											
9											
10											
11	Test Case ID	Test Case Description	Test Steps	Pre-conditions	Test Data	Post Condition	Expected Result	Actual Result	Status	Executed By	Executed Date
12	Login										
13	TC_PEP_Login_001	Select valid campus & valid gmail	1. Select valid campus 2. Click on "Đăng nhập với Google" button 3. Select valid gmail	Valid URL Test data	Campus: Hà Nội Gmail: thanhduyen160422@bit.edu.vn	User should able to see the home page	Successful login				
14	TC_PEP_Login_002	Select valid campus & invalid gmail	1. Select valid campus 2. Click on "Đăng nhập với Google" button 3. Select invalid gmail	Valid URL Test data	Campus: Hà Nội Gmail: donghanh112001@gmail.com	User is not logged in. Error message displayed on login page	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Pass	ThanhDV	10-04-2025
15	TC_PEP_Login_003	Select invalid campus & invalid gmail	1. Select invalid campus 2. Click on "Đăng nhập với Google" button 3. Select invalid gmail	Valid URL Test data	Campus: Hồ Chí Minh Gmail: donghanh112001@gmail.com	User is not logged in. Error message displayed on login page	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Pass	ThanhDV	10-04-2025
16	TC_PEP_Login_004	Select invalid campus & valid gmail	1. Select invalid campus 2. Click on "Đăng nhập với Google" button 3. Select valid gmail	Valid URL Test data	Campus: Đà Nẵng Gmail: thanhduyen160422@bit.edu.vn	User is not logged in. Error message displayed on login page	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Error message "Tài khoản của bạn không được phép đăng nhập vào hệ thống."	Pass	ThanhDV	10-04-2025
17	Login Admin										
18	TC_PEP_Login_005	Enter valid username & valid password	1. Enter valid username 2. Enter valid password 3. Click on "Đăng nhập" button	Valid URL Test data	username: admin1 password: admin123	User should able to see the dashboard	Successful login	User is redirected to the dashboard	Pass	ThanhDV	10-04-2025
19	TC_PEP_Login_006	Enter valid username & invalid password	1. Enter valid username 2. Enter invalid password 3. Click on "Đăng nhập" button	Valid URL Test data	username: admin1 password: 123	User is not logged in. Error message displayed on login page	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Pass	ThanhDV	10-04-2025
20	TC_PEP_Login_007	Enter invalid username & valid password	1. Enter invalid username 2. Enter valid password 3. Click on "Đăng nhập" button	Valid URL Test data	username: admin123 password: admin123	User is not logged in. Error message displayed on login page	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Pass	ThanhDV	10-04-2025
21	TC_PEP_Login_008	Enter invalid username & invalid password	1. Enter invalid username 2. Enter invalid password 3. Click on "Đăng nhập" button	Valid URL Test data	username: admin123 password: 123	User is not logged in. Error message displayed on login page	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Error message "Sai tên đăng nhập hoặc mật khẩu. Vui lòng thử lại."	Pass	ThanhDV	10-04-2025
22	TC_PEP_Login_009	Empty username & valid password	1. Leave username field blank 2. Enter valid password 3. Click on "Đăng nhập" button	Valid URL Test data	username: blank password: admin123	User is not logged in. Error message displayed on login page	Error message "Vui lòng nhập tên người dùng"	Error message "Vui lòng nhập tên người dùng"	Pass	ThanhDV	10-04-2025
23		1. Enter valid username 2. Leave password field blank	Valid URL	username: admin1	User is not logged in. Error message "Vui lòng nhập mật khẩu"	Error message "Vui lòng nhập mật khẩu"	Error message "Vui lòng nhập mật khẩu"				

Figure 5.2 Integration test

5.5.3 System Test

This testing phase occurs after the functionalities outlined in the requirements have been fully implemented. We will conduct testing and deploy to the website. The main goal of this testing phase is to evaluate the performance of the application when the Learner operates on the device, evaluating how the Learner interacts with the application in different situations.

	A	B	C	D	E	F	G	H	I	J	K
1	Workflow	Authentication									
2	Test requirement										
3	Number of TCs	9									
4	Testing Round	<i>Passed</i>	<i>Failed</i>	<i>Pending</i>	<i>N/A</i>						
5	Round 1	9	1	0	0						
6	Round 2	9	1	0	0						
7											
8											
9	Test Case ID	Test Case Description	Test Case Procedure	Expected Results	Pre-conditions	Round 1	Test date	Tester	Round 2	Test date	Tester
10			2. Click on "Đăng nhập với Google" button								
11											
12	TC_Login_002	Test the flow: - User logs into the wrong campus system	Users using with Event Organizer account 1. On the login screen, the user selects invalid campus 2. Click on "Đăng nhập với Google" button	1. The Login screen is displayed 2. Home Screen is displayed 3. Displays error message	- Campus is valid - Login valid account - Valid URL	Failed	✓	23/04/2025	ThanhDV	Passed	✓
13	Login for Admin										
14	TC_LoginAdmin_001	Test the flow: - Admin logs into the system with an existing account	Users using with Admin account 1. On the login screen, the admin enter URL login admin 2. On the login admin, the admin enter information - tên đăng nhập - mật khẩu	1. The Login screen is displayed 2. Dashboard screen is displayed	- Campus is valid - Login valid account - Valid URL	Passed	✓	23/04/2025	ThanhDV	Passed	✓
15	TC_LoginAdmin_002	Test the flow: - Administrator logs into the system with incorrect password	Users using with Admin account 1. On the login screen, the admin enter URL login admin 2. On the login admin, the admin enter information - tên đăng nhập - mật khẩu incorrect	1. The Login screen is displayed 2. Displays error message	- Campus is valid - Login valid account - Valid URL	Passed	✓	23/04/2025	ThanhDV	Passed	✓

Figure 5.3 System test

5.5.4 Defect Log

The Planify project is used to manage defects.

The PM creates the Planify project in Trello and adds other members' emails to allow the team to participate in activities such as controlling bugs, fixing bugs, re-testing bugs, and closing bugs. Bugs are logged by testers or developers during the development process.

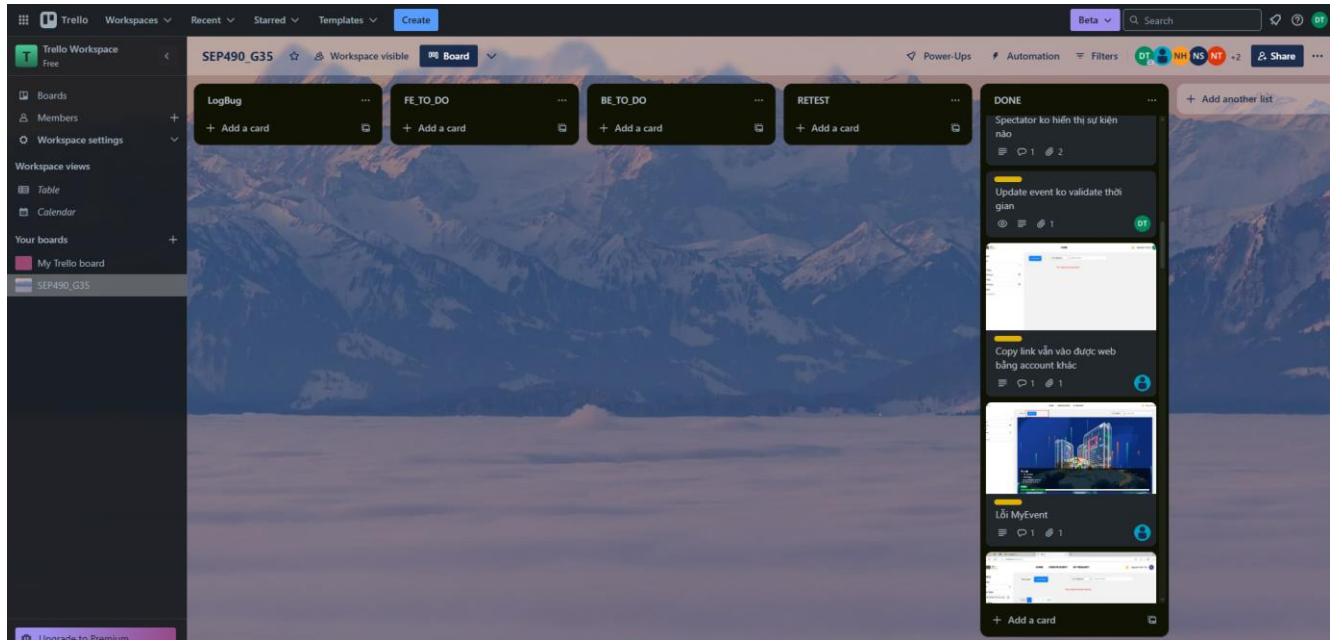
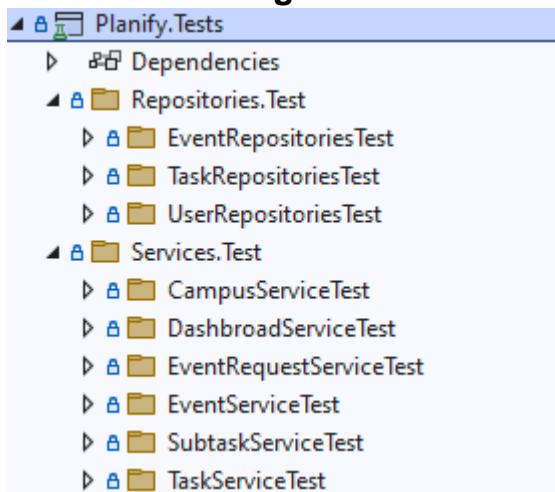


Figure 5.4 Control bug with Trello

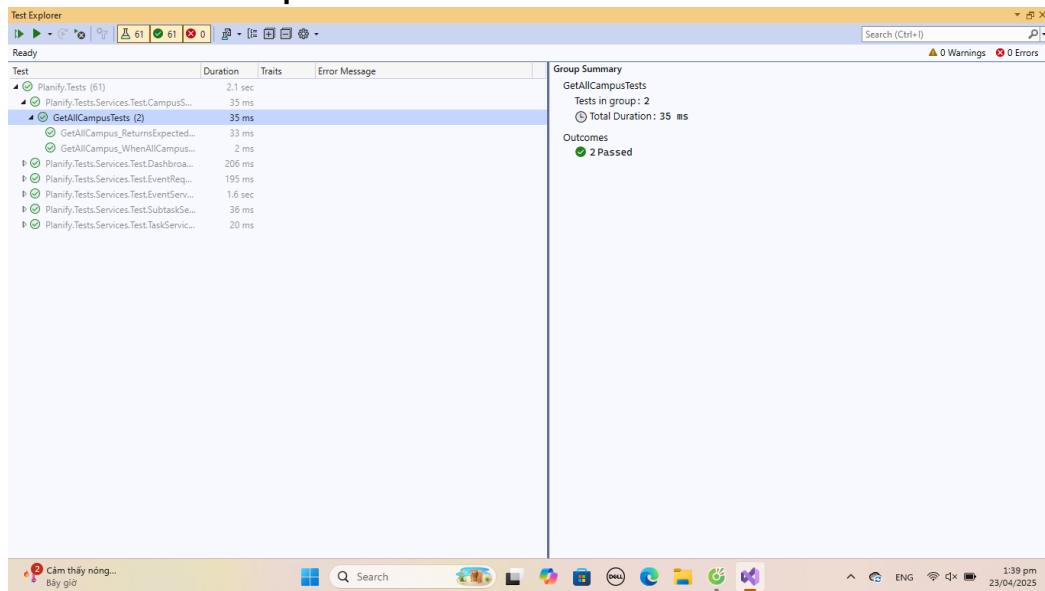
5.6 Test Reports

5.6.1 Unit Testing



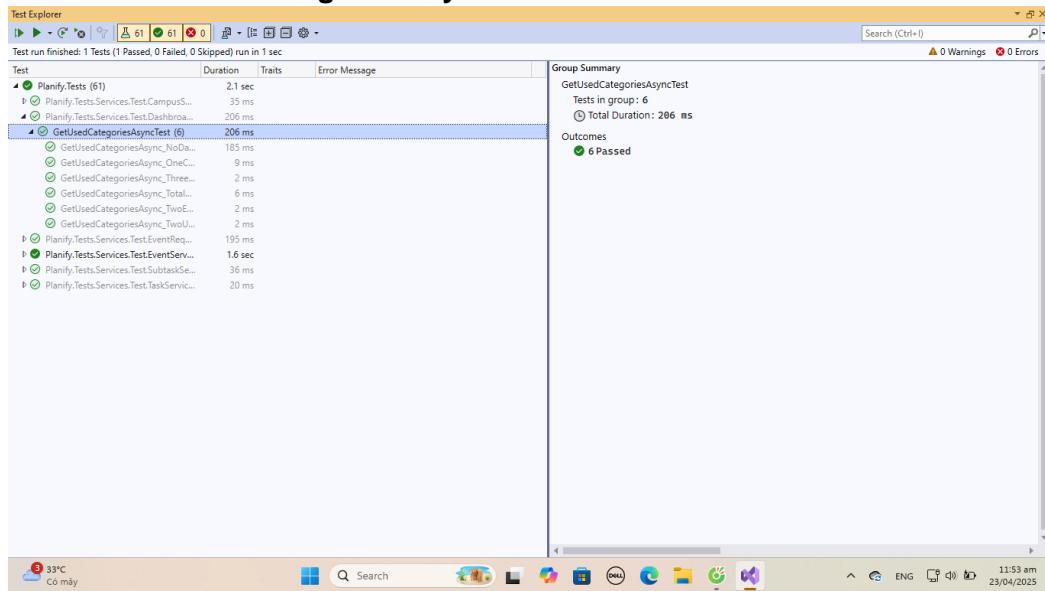
5.6.1.1 CampusServiceTest

5.6.1.1.1 GetAllCampus

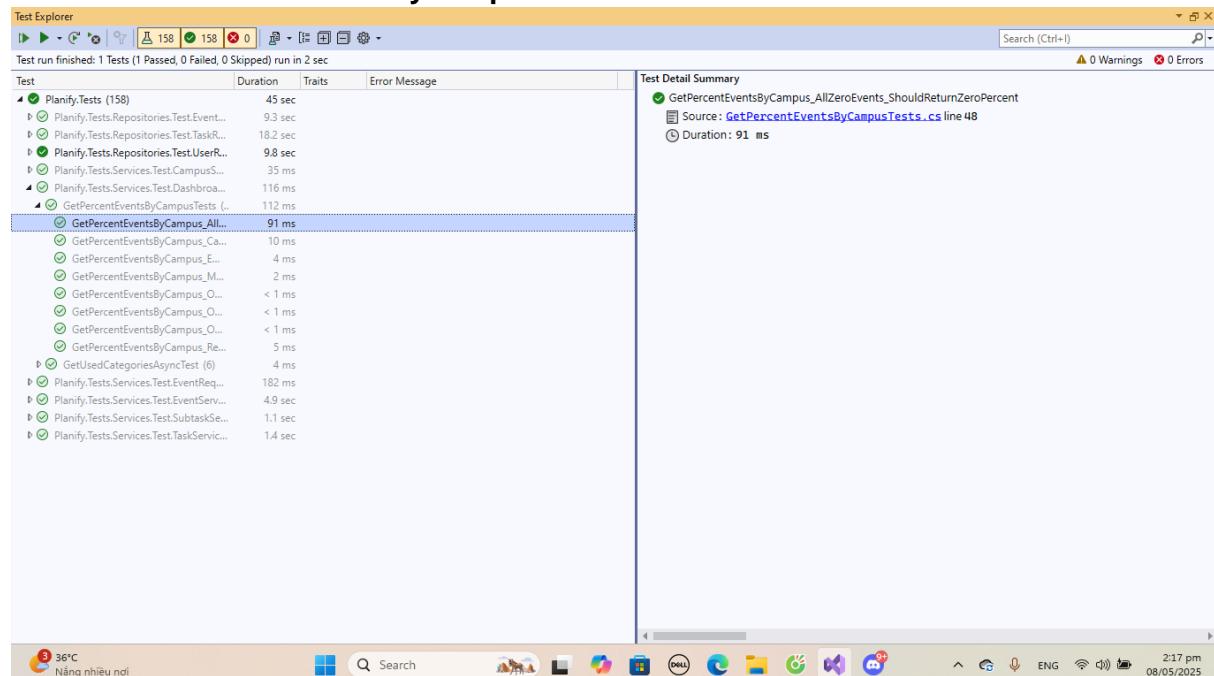


5.6.1.2 DashboardServiceTest

5.6.1.2.1 GetUsedCategoriesAsync

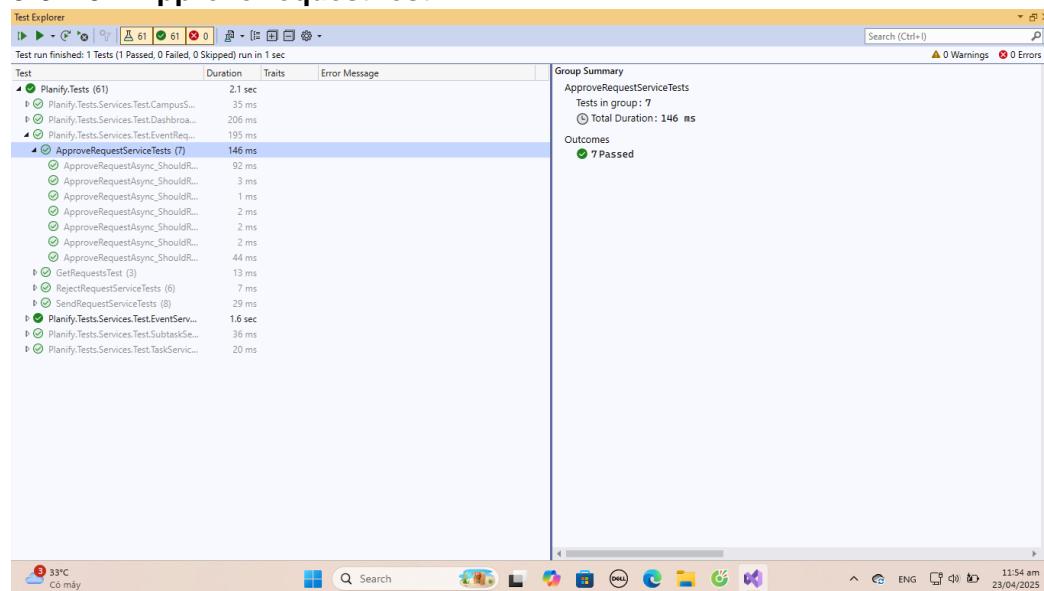


5.6.1.2.2 GetPercentEventsByCampus

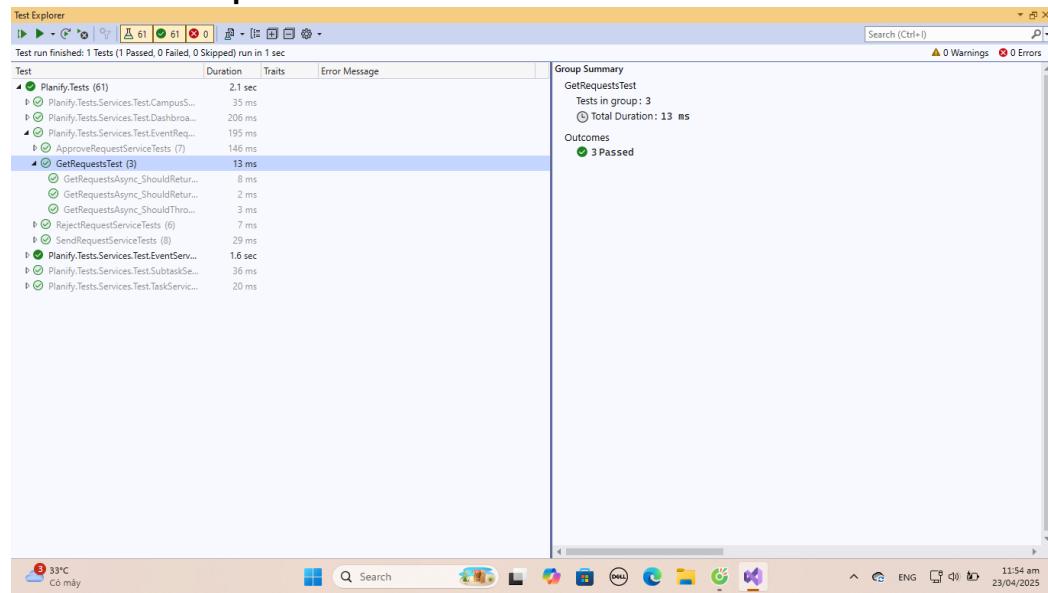


5.6.1.3 EventRequestServiceTest

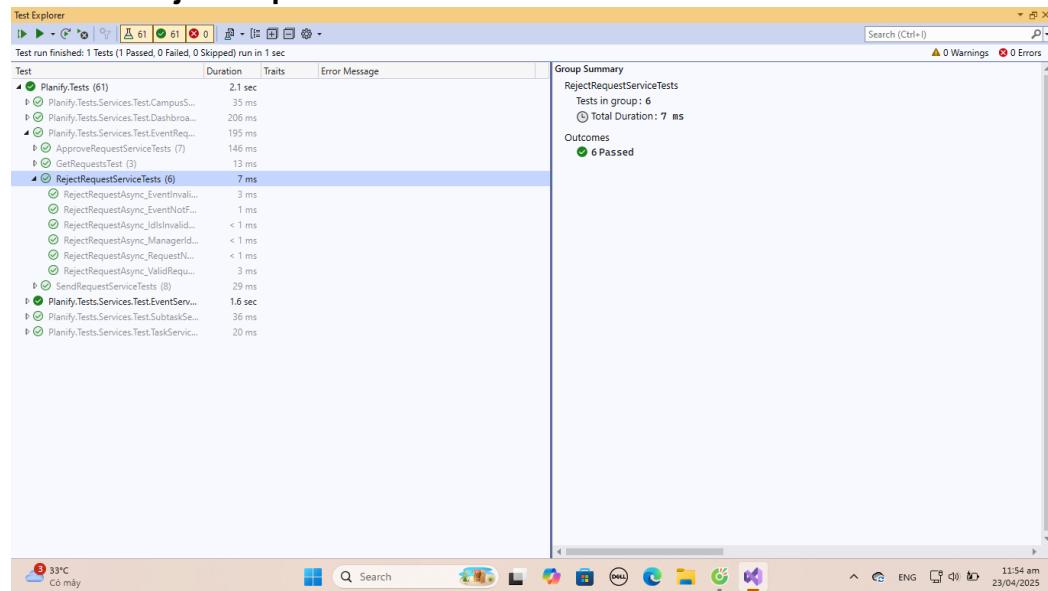
5.6.1.3.1 ApproveRequestTest



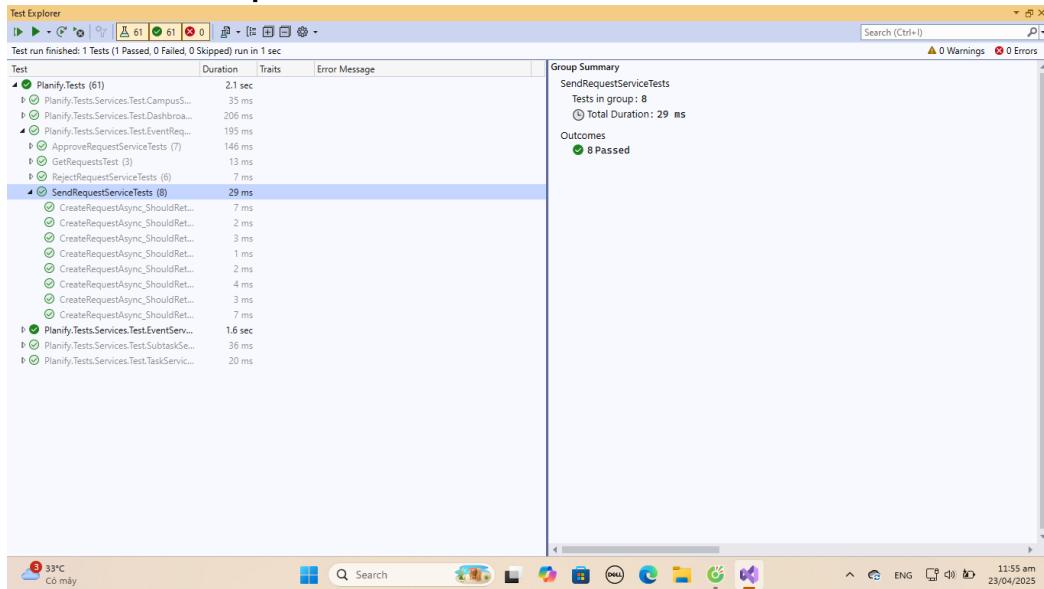
5.6.1.3.2 GetRequestsTest



5.6.1.3.3 RejectRequestTest

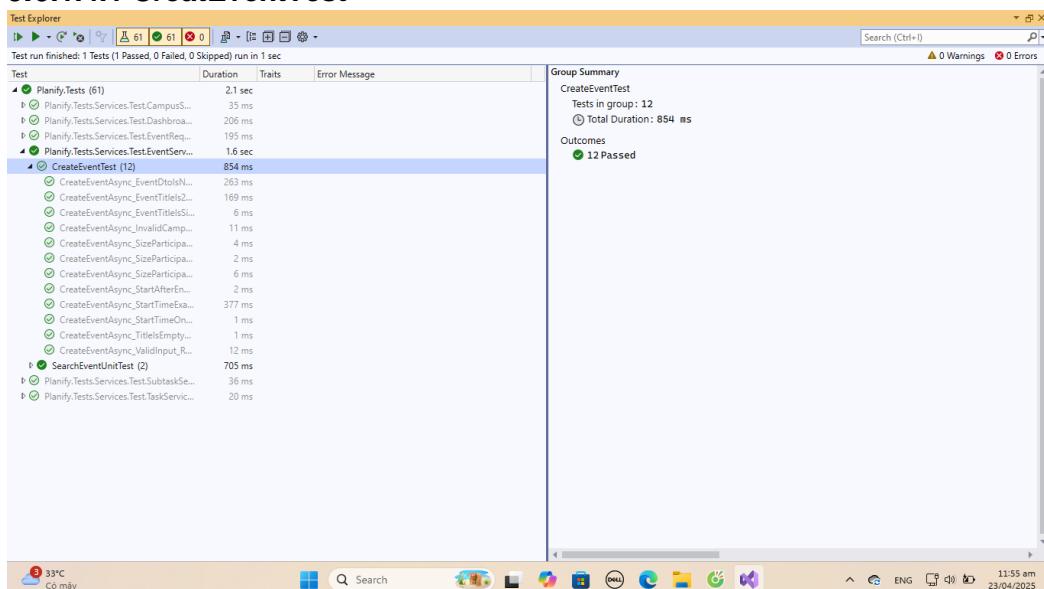


5.6.1.3.4 SendRequestTest

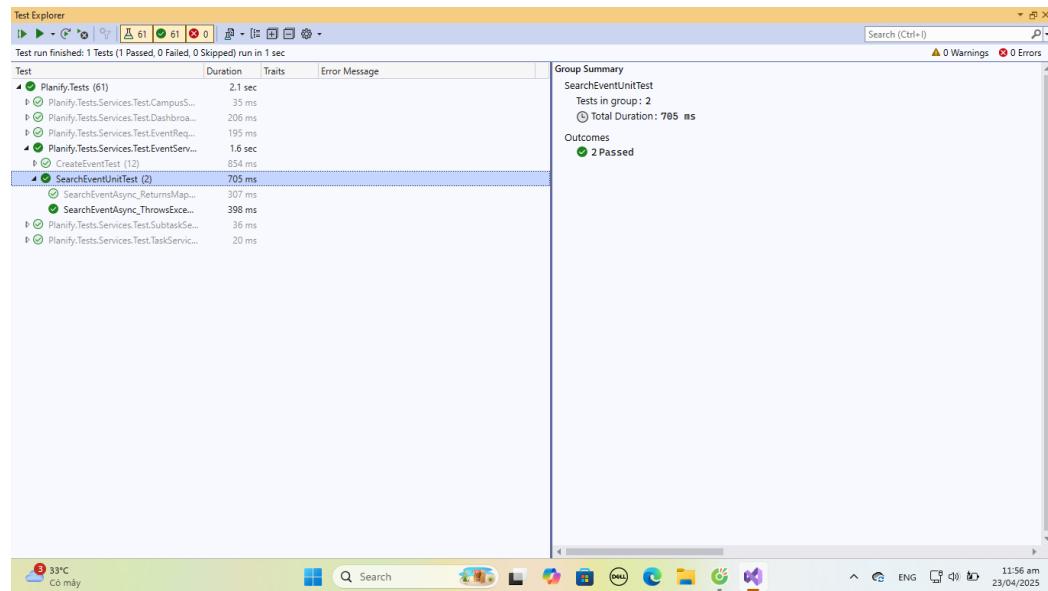


5.6.1.4 EventServiceTest

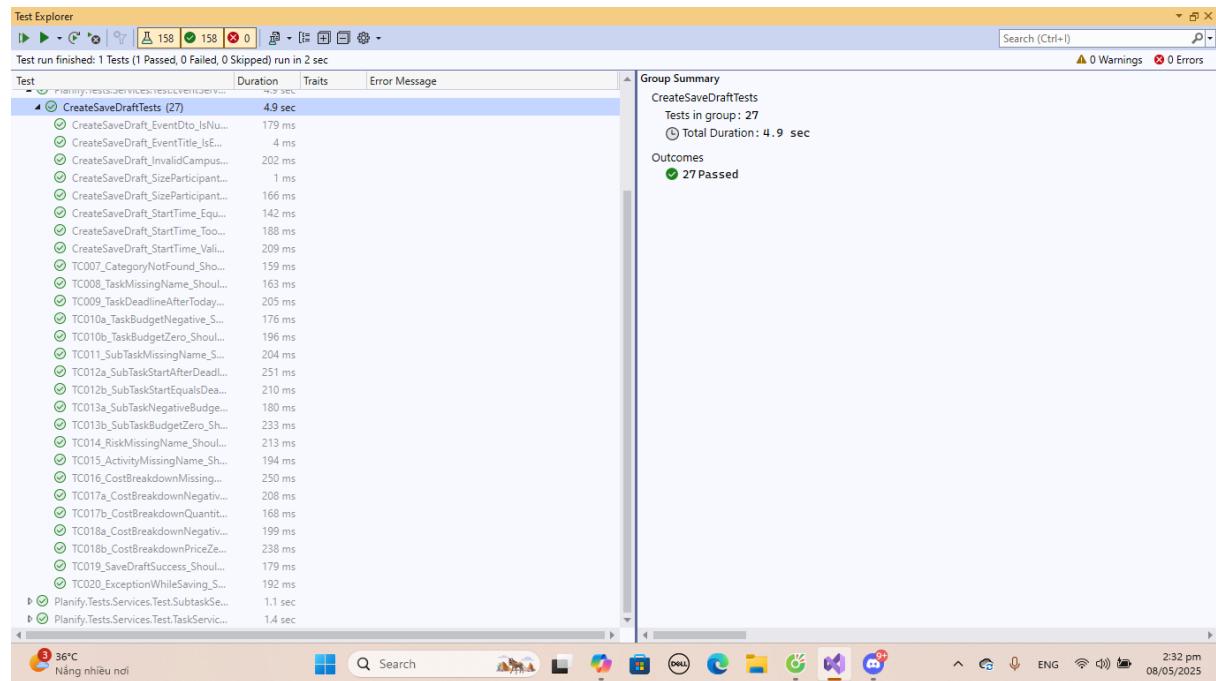
5.6.1.4.1 CreatEventTest



5.6.1.4.2 SearchEventTest



5.6.1.4.3 CreateSaveDraft



5.6.1.5 SubtaskServiceTest

5.6.1.5.1 CreateSubtaskServiceTest

Test Explorer

Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 1 sec

Test	Duration	Traits	Error Message
Planyfy.Tests (61)	2.1 sec		
Planyfy.Tests.Services.Test.CampusS...	35 ms		
Planyfy.Tests.Services.Test.Dashboard...	206 ms		
Planyfy.Tests.Services.Test.EventReq...	195 ms		
Planyfy.Tests.Services.Test.EventServ...	1.6 sec		
Planyfy.Tests.Services.Test.SubtaskSe...	36 ms		
CreateSubTaskAsyncTests (8)	36 ms		
CreateSubTaskAsync_NullReque...	12 ms		
CreateSubTaskAsync_Repository...	9 ms		
CreateSubTaskAsync_StartTime...	2 ms		
CreateSubTaskAsync_StartTime...	2 ms		
CreateSubTaskAsync_SubTaskN...	4 ms		
CreateSubTaskAsync_SubTaskN...	2 ms		
CreateSubTaskAsync_TaskNotEx...	2 ms		
CreateSubTaskAsync_ValidateInp...	3 ms		
Planyfy.Tests.Services.Test.TaskServic...	20 ms		

Group Summary

CreateSubTaskAsyncTests

Tests in group : 8

Total Duration: 36 ms

Outcomes

8 Passed

Search (Ctrl+I)

0 Warnings 0 Errors

33°C Cố máy

Search

11:56 am 23/04/2025

5.6.1.5.2 GetSubTaskByIdAsync

Test Explorer

Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec

Test	Duration	Traits	Error Message
Planyfy.Tests (158)	45 sec		
Planyfy.Tests.Repositories.Test.Event...	9.3 sec		
Planyfy.Tests.Repositories.Test.TaskR...	18.2 sec		
Planyfy.Tests.Repositories.Test.UserR...	9.8 sec		
Planyfy.Tests.Services.Test.CampusS...	35 ms		
Planyfy.Tests.Services.Test.Dashboard...	116 ms		
Planyfy.Tests.Services.Test.EventReq...	182 ms		
Planyfy.Tests.Services.Test.EventServ...	4.9 sec		
Planyfy.Tests.Services.Test.SubtaskSe...	1.1 sec		
CreateSubTaskAsyncTests (8)	36 ms		
SubTaskService_AssignSubTaskTes...	188 ms		
SubTaskService_DeleteTests (3)	114 ms		
SubTaskService_GetByTaskIdTests ...	224 ms		
GetSubTasksByTaskIdAsync_Exc...	206 ms		
GetSubTasksByTaskIdAsync_No...	7 ms		
GetSubTasksByTaskIdAsync_Sub...	11 ms		
SubTaskService_UpdateTests (3)	331 ms		
SubTaskServiceTests (3)	178 ms		
Planyfy.Tests.Services.Test.TaskServic...	1.4 sec		

Test Detail Summary

GetSubTasksByTaskIdAsync_ExceptionThrown_Returns500

Source : [GetSubTasksByTaskIdAsyncTests.cs](#) line 95

Duration: 206 ms

Search (Ctrl+I)

0 Warnings 0 Errors

36°C Nắng nhiều nơi

Search

2:20 pm 08/05/2025

5.6.1.5.3 UpdateSubTaskAsync

The screenshot shows the Visual Studio Test Explorer window. The status bar at the top indicates "Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec". The main area displays a table of tests with columns: Test, Duration, Traits, and Error Message. One test, "UpdateSubTaskAsync_ExceptionThrown_ReturnsError", is highlighted in blue. A "Test Detail Summary" pane on the right provides details for this specific test, including its source code location ("Source: UpdateSubTaskAsyncTests.cs line 126") and duration ("Duration: 311 ms"). The taskbar at the bottom shows various application icons and the system clock.

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
Planify.Tests.Repositories.Test.UserR...	9.8 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashboard...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		
Planify.Tests.Services.Test.SubtaskSe...	1.1 sec		
CreateSubTaskAsyncTests (8)	36 ms		
SubTaskService_AssignSubTaskTes...	188 ms		
SubTaskService_DeleteTests (3)	114 ms		
SubTaskService_GetByTaskIdTests ...	224 ms		
SubTaskService_UpdateTests (3)	331 ms		
UpdateSubTaskAsync_ExceptionThro... UpdateSubTaskAsync_SubTaskE...	311 ms		
UpdateSubTaskAsync_SubTask...	17 ms		
SubTaskServiceTests (3)	178 ms		
Planify.Tests.Services.Test.TaskServic...	1.4 sec		

5.6.1.5.4 DeleteSubTaskAsync

The screenshot shows the Visual Studio Test Explorer window. The status bar at the top indicates "Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec". The main area displays a table of tests with columns: Test, Duration, Traits, and Error Message. One test, "DeleteSubTaskAsync_DeletedSu...", is highlighted in blue. The taskbar at the bottom shows various application icons and the system clock.

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
Planify.Tests.Repositories.Test.UserR...	9.8 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashboard...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		
Planify.Tests.Services.Test.SubtaskSe...	1.1 sec		
CreateSubTaskAsyncTests (8)	36 ms		
SubTaskService_AssignSubTaskTes...	188 ms		
SubTaskService_DeleteTests (3)	114 ms		
DeleteSubTaskAsync_DeletedSu...	110 ms		
DeleteSubTaskAsync_Repositor...	3 ms		
DeleteSubTaskAsync_SubTaskN...	1 ms		
SubTaskService_GetByTaskIdTests ...	224 ms		
SubTaskService_UpdateTests (3)	331 ms		
SubTaskServiceTests (3)	178 ms		
GetSubTaskByIdAsync_Exception...	163 ms		
GetSubTaskByIdSync_SubTaskE...	13 ms		
GetSubTaskByIdAsync_SubTask...	2 ms		
Planify.Tests.Services.Test.TaskServic...	1.4 sec		

5.6.1.5.5 GetSubTasksByTaskIdAsync

Test Explorer

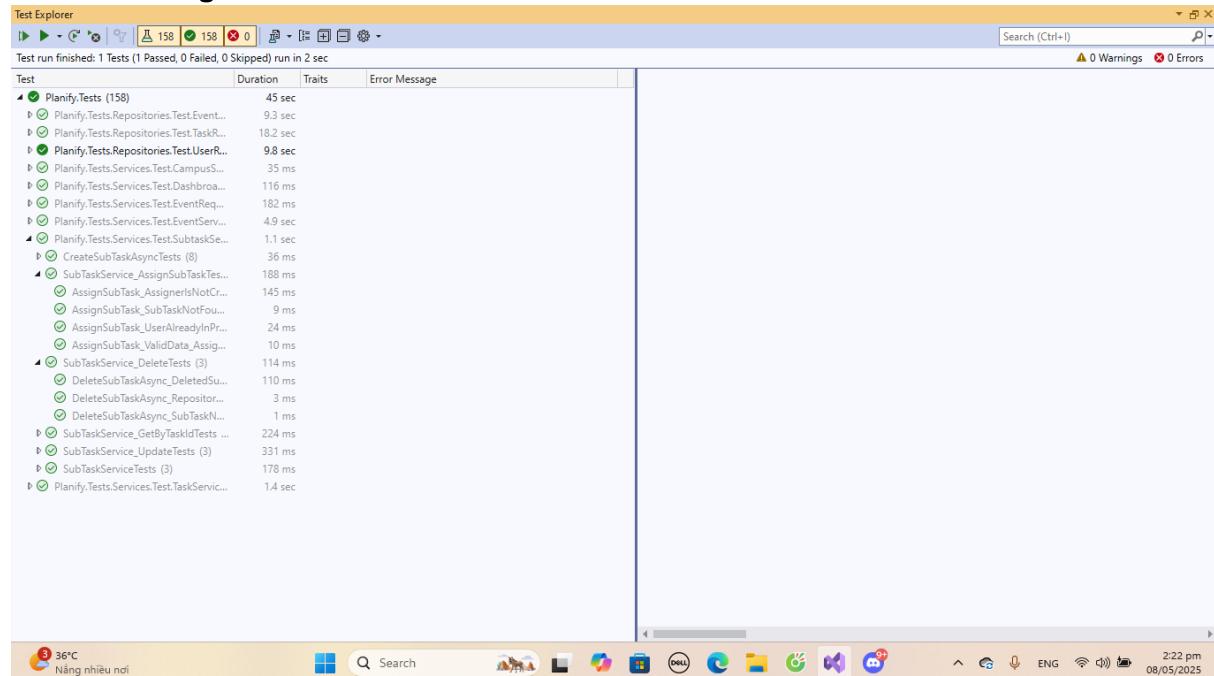
Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
Planify.Tests.Repositories.Test.UserR...	9.8 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashboard...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		
Planify.Tests.Services.Test.SubtaskSe...	1.1 sec		
CreateSubTaskAsyncTests (8)	36 ms		
SubTaskService_AssignSubTaskTes...	188 ms		
SubTaskService_DeleteTests (3)	114 ms		
DeleteSubTaskAsync_DeletedSu...	110 ms		
DeleteSubTaskAsync_Repositor...	3 ms		
DeleteSubTaskAsync_SubTaskN...	1 ms		
SubTaskService_GetByIdTests ...	224 ms		
SubTaskService_UpdateTests (3)	331 ms		
SubTaskServiceTests (3)	178 ms		
GetSubTaskByIdAsync_Exception...	163 ms		
GetSubTaskByIdAsync_SubTaskE...	13 ms		
GetSubTaskByIdAsync_SubTask...	2 ms		
Planify.Tests.Services.Test.TaskServic...	1.4 sec		

36°C Nắng nhiều nơi

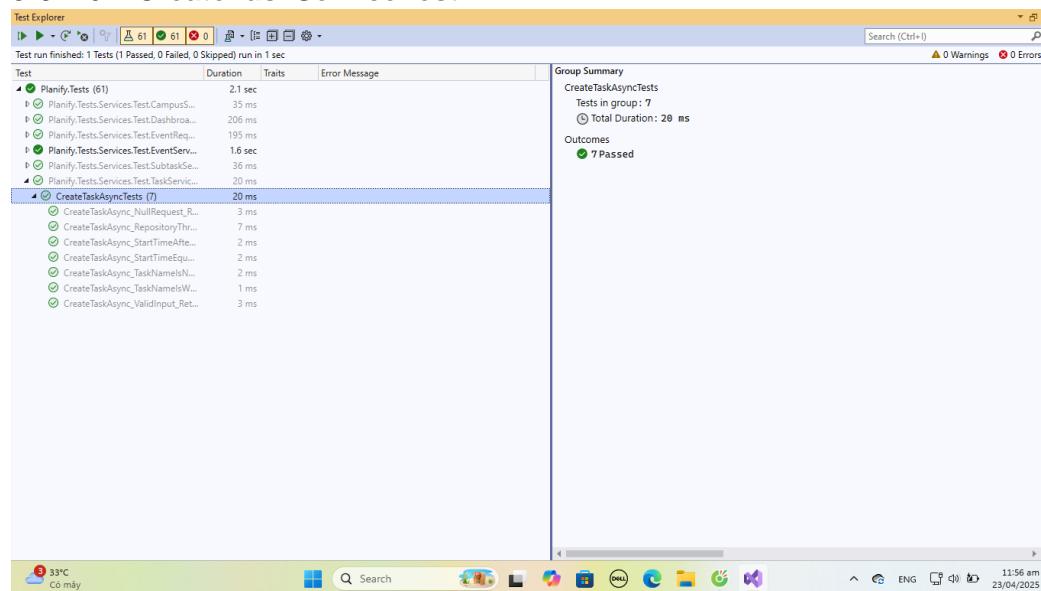
Search DELL 2:21 pm 08/05/2025

5.6.1.5.6 AssignSubTask



5.6.1.6 TaskServiceTest

5.6.1.6.1 CreateTaskServiceTest



5.6.1.6.2 UpdateTaskAsync

The screenshot shows the Visual Studio Test Explorer window. The status bar at the top indicates "Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec". The results table shows 158 tests passed. The Group Summary section for "Planify.Tests" shows 158 tests in group and a total duration of 45 sec. The Outcomes section shows 158 Passed. The taskbar at the bottom shows the date as 08/05/2025 and the time as 2:23 pm.

5.6.1.6.3 DeleteTaskAsync

The screenshot shows the Visual Studio Test Explorer window. The status bar at the top indicates "Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec". The results table shows 158 tests passed. The Group Summary section for "Planify.Tests" shows 158 tests in group and a total duration of 45 sec. The Outcomes section shows 158 Passed. The taskbar at the bottom shows the date as 08/05/2025 and the time as 2:23 pm.

5.6.1.7 EventRepositoriesTest

5.6.1.7.1 SearchEventAsyncRepository

The screenshot shows the Visual Studio Test Explorer interface. The title bar says "Test Explorer". The status bar at the bottom right shows "2:26 pm 08/05/2025". The main area displays a table of test results:

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
GetAllEventRepositoryTest (7)	3 sec		
SearchEventAsyncRepository (20)	6.2 sec		
TC001_SearchEventAsync_NoFil...	386 ms		
TC002_SearchEventAsync_Filter...	16 ms		
TC003_SearchEventAsync_Filter...	9 ms		
TC004_SearchEventAsync_Filter...	15 ms		
TC005_SearchEventAsync_Filter...	12 ms		
TC006_SearchEventAsync_Filter...	20 ms		
TC007_SearchEventAsync_Filter...	345 ms		
TC008_SearchEventAsync_Filter...	443 ms		
TC009_SearchEventAsync_Filter...	9 ms		
TC010_SearchEventAsync_Pagin...	9 ms		
TC011_SearchEventAsync_Filter...	393 ms		
TC012_SearchEventAsync_Filter...	387 ms		
TC013_SearchEventAsync_Filter...	506 ms		
TC014_SearchEventAsync_Filter...	504 ms		
TC015_SearchEventAsync_Filter...	1.4 sec		
TC016_SearchEventAsync_Filter...	365 ms		
TC017_SearchEventAsync_Filter...	323 ms		
TC018_SearchEventAsync_Filter...	366 ms		
TC019_SearchEventAsync_Filter...	373 ms		
TC020_SearchEventAsync_Filter...	399 ms		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
Planify.Tests.Repositories.Test.UserR...	9.8 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashbroa...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		

The summary on the right shows "158 Passed". The status bar at the bottom right shows "2:26 pm 08/05/2025".

5.6.1.7.2 GetAllEventRepository

The screenshot shows the Visual Studio Test Explorer interface. The title bar says "Test Explorer". The status bar at the bottom right shows "2:26 pm 08/05/2025". The main area displays a table of test results:

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
GetAllEventRepositoryTest (7)	3 sec		
SearchEventAsyncRepository (20)	6.3 sec		
TC001_SearchEventAsync_NoFil...	386 ms		
TC002_SearchEventAsync_Filter...	16 ms		
TC003_SearchEventAsync_Filter...	9 ms		
TC004_SearchEventAsync_Filter...	15 ms		
TC005_SearchEventAsync_Filter...	12 ms		
TC006_SearchEventAsync_Filter...	20 ms		
TC007_SearchEventAsync_Filter...	345 ms		
TC008_SearchEventAsync_Filter...	443 ms		
TC009_SearchEventAsync_Filter...	9 ms		
TC010_SearchEventAsync_Pagin...	9 ms		
TC011_SearchEventAsync_Filter...	393 ms		
TC012_SearchEventAsync_Filter...	387 ms		
TC013_SearchEventAsync_Filter...	506 ms		
TC014_SearchEventAsync_Filter...	504 ms		
TC015_SearchEventAsync_Filter...	1.4 sec		
TC016_SearchEventAsync_Filter...	365 ms		
TC017_SearchEventAsync_Filter...	323 ms		
TC018_SearchEventAsync_Filter...	366 ms		
TC019_SearchEventAsync_Filter...	373 ms		

The summary on the right shows "158 Passed". The status bar at the bottom right shows "2:26 pm 08/05/2025".

5.6.1.8 TaskRepositoriesTest

5.6.1.8.1 SearchTaskOrderByStartDateAsync

The screenshot shows the Visual Studio Test Explorer interface. The title bar indicates "5.6.1.8.1 SearchTaskOrderByStartDateAsync". The test run summary at the top right shows 158 tests passed, 0 failed, and 0 skipped, completed in 2 seconds. The Group Summary panel on the right shows "Planify.Tests" with 158 tests in total and a total duration of 45 seconds. The Outcomes section shows 158 Passed. The main pane displays a detailed list of 158 test cases under the "Planify.Tests" group, all of which have passed. The test names include various suffixes like _ShouldThrowException, _ShouldReturnFalse, and _ShouldReturnTrue, corresponding to different test scenarios for ordering tasks by start date.

5.6.1.8.2 GetAllTasksRepository

This screenshot is identical to the one above, showing the Visual Studio Test Explorer for the "5.6.1.8.2 GetAllTasksRepository" test. It displays the same 158 test cases all passing, with a total duration of 45 seconds. The Group Summary and Outcomes panels show the same information: 158 tests in the Planify.Tests group, all passed.

5.6.1.8.3 SearchSubTaskByImplementerId

Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
GetAllTasksRepositoryTest (7)	7.7 sec		
TC01_PageZero_ShouldThrowEx...	885 ms		
TC02_PageOne_ShouldReturnF...	1.2 sec		
TC03_PageSizeZero_ShouldThr...	1 sec		
TC04_PageSizeOne_ShouldRetu...	1 sec		
TC05_NoMatchingTasks_Should...	1.1 sec		
TC06_PageOutOfRange_Should...	1.3 sec		
TC07_FullPage_ShouldReturnCo...	1.2 sec		
SearchSubTaskByImplementerIdT...	311 ms		
SearchSubTaskByImplementerId...	306 ms		
SearchSubTaskByImplementerId...	5 ms		
SearchTaskOrderByStartDateAsyn...	10.2 sec		
TC01_PageZero_ShouldThrowEx...	959 ms		
TC02_PageOne_ShouldReturnF...	1.3 sec		
TC03_PageSizeZero_ShouldThr...	1.3 sec		
TC04_PageSizeOne_ShouldRetu...	4 ms		
TC05_NamesNull_ShouldRetur...	1 ms		
TC06_NamesIsEmpty_ShouldRetu...	1 ms		
TC07_StartDateEqualEndDate...	1 sec		
TC08_StartDateAndEndDateClos...	1.2 sec		
TC09_StartDateAfterEndDate_S...	1.1 sec		
TC10_NoMatchingTask_ShouldR...	1.1 sec		
TC11_NameBoundaryValues_Sh...	1.1 sec		
TC12_MinMaxDateRange_Shoul...	1.1 sec		
Planify.Tests.Repositories.Test.UserR...	9.8 sec		
GetListUserRepositoryTest (9)	9.8 sec		
GetListUser_ShouldReturnEmpt...	35 ms		
GetListUser_ShouldReturnNull...	1.1 sec		
GetListUser_ShouldReturnNull_...	1.3 sec		
GetListUser_ShouldReturnNull_...	1.5 sec		
GetListUser_ShouldReturnPartia...	1.7 sec		
GetListUser_ShouldReturnSorte...	2 ms		
GetListUser_ShouldReturnValid...	1.2 sec		
GetListUser_ShouldReturnValid...	1.5 sec		
GetListUser_ShouldReturnValid...	1.4 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashbroa...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		
Planify.Tests.Services.Test.SubtaskSe...	1.1 sec		
Planify.Tests.Services.Test.TaskServic...	1.4 sec		

Group Summary
Planify.Tests
Tests in group: 158
Total Duration: 45 sec

Outcomes
158 Passed

5.6.1.9 UserRepositoriesTest

5.6.1.9.1 GetListUser

Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 2 sec

Test	Duration	Traits	Error Message
Planify.Tests (158)	45 sec		
Planify.Tests.Repositories.Test.Event...	9.3 sec		
Planify.Tests.Repositories.Test.TaskR...	18.2 sec		
GetListUserRepositoryTest (9)	9.8 sec		
GetListUser_ShouldReturnEmpt...	54 ms		
GetListUser_ShouldReturnNull...	1.1 sec		
GetListUser_ShouldReturnNull_...	1.3 sec		
GetListUser_ShouldReturnNull_...	1.5 sec		
GetListUser_ShouldReturnPartia...	1.7 sec		
GetListUser_ShouldReturnSorte...	2 ms		
GetListUser_ShouldReturnValid...	1.2 sec		
GetListUser_ShouldReturnValid...	1.5 sec		
GetListUser_ShouldReturnValid...	1.4 sec		
Planify.Tests.Services.Test.CampusS...	35 ms		
Planify.Tests.Services.Test.Dashbroa...	116 ms		
Planify.Tests.Services.Test.EventReq...	182 ms		
Planify.Tests.Services.Test.EventServ...	4.9 sec		
Planify.Tests.Services.Test.SubtaskSe...	1.1 sec		
Planify.Tests.Services.Test.TaskServic...	1.4 sec		

Group Summary
Planify.Tests
Tests in group: 158
Total Duration: 45 sec

Outcomes
158 Passed

5.6.2 Integration Testing

A	B	C	D	E	F	G	H	I																																																																							
TEST STATISTICS																																																																															
Project Name	<i>Planify - Easy Event Planning Platform</i>		Creator	Đỗ Văn Thành																																																																											
Project Code	<i>PEP</i>		Reviewer/Approvers																																																																												
Document Code	<i>PEP Test Report v1.0</i>		Issue Date	17/04/2025																																																																											
Notes																																																																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No</th><th>Module code</th><th>Passed</th><th>Failed</th><th>Pending</th><th>N/A</th><th>Number of test cases</th></tr> </thead> <tbody> <tr><td>1</td><td>Authentication</td><td>35</td><td>0</td><td>0</td><td>0</td><td>35</td></tr> <tr><td>2</td><td>Event Management</td><td>94</td><td>0</td><td>0</td><td>0</td><td>94</td></tr> <tr><td>3</td><td>Implementer Management</td><td>6</td><td>0</td><td>0</td><td>0</td><td>6</td></tr> <tr><td>4</td><td>Registration</td><td>6</td><td>0</td><td>0</td><td>0</td><td>6</td></tr> <tr><td>5</td><td>Risk Management</td><td>24</td><td>0</td><td>0</td><td>0</td><td>24</td></tr> <tr><td>6</td><td>Cost Management</td><td>25</td><td>0</td><td>0</td><td>0</td><td>25</td></tr> <tr><td>7</td><td>Category Management</td><td>17</td><td>0</td><td>0</td><td>0</td><td>17</td></tr> <tr><td>8</td><td>Admin Management</td><td>35</td><td>0</td><td>0</td><td>0</td><td>35</td></tr> <tr> <td colspan="2">Sub total</td><td>242</td><td>0</td><td>0</td><td>0</td><td>242</td><td colspan="2" rowspan="3"></td></tr> </tbody> </table>								No	Module code	Passed	Failed	Pending	N/A	Number of test cases	1	Authentication	35	0	0	0	35	2	Event Management	94	0	0	0	94	3	Implementer Management	6	0	0	0	6	4	Registration	6	0	0	0	6	5	Risk Management	24	0	0	0	24	6	Cost Management	25	0	0	0	25	7	Category Management	17	0	0	0	17	8	Admin Management	35	0	0	0	35	Sub total		242	0	0	0	242		
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Test coverage			100,00 %																																																																												
Test successful coverage			100,00 %																																																																												

5.6.3 System Testing

A	B	C	D	E	F	G	H	I																																																									
TEST STATISTICS																																																																	
Project Name	<i>Planify - Easy Event Planning Platform</i>		Creator	ThanhDV																																																													
Project Code	<i>PEP</i>		Reviewer/Approvers																																																														
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Sub total		79	1	0	0	80																																																											
Test coverage			100,00 %																																																														
Test successful coverage			98,75 %																																																														

VI. Release Package & User Guides

6.1 Purpose

This chapter provides the release package and comprehensive user guides to ensure successful deployment and proper usage of the system. It includes detailed installation instructions, system requirements, and environment setup, as well as step-by-step user manuals for key features. The purpose is to support both technical teams during deployment and end-users in operating the system effectively.

6.2 Deliverable Package

No.	Deliverable Item	Description
1	Source Codes (Back-End)	Back-end API code
2	Source Codes (Front-End)	Front-end code interface calls api to get data to display
3	Database	Database containing project data
4	Report 7	Final Project Report
5	Unit test	Unit Test
6	Integration Test	Integration Test
7	System Test	System Test
8	Presentation Slide	SEP490_G35_Slide

6.3 Installation Guides

6.3.1 System Requirements

- Minimum system requirements:
 - Server operating system: Window 10 or greater, 64-bit, MacOS Ventura 13.2.
 - VM operating system: Ubuntu 20.04 (2 cores - 4 GB RAM - 50 GB ROM).
- Minimum software version requirements
 - NodeJS v22.11.0
 - React v19.0
 - .NET Core v8.0.114
 - SQL Server 2022 v16.0.1000.6
 - GitHub
 - Visual Studio 2022
 - Visual Studio Code

6.3.2 Installation Instruction

6.3.2.1 Install SQL Server Management Studio

- Download SQL Server Management Studio 20: [Link download](#)

Or, download a free specialized edition



Figure 6.1: Download SQL Server Management

- Open the installation package when the download is complete. Click the "Install" button.

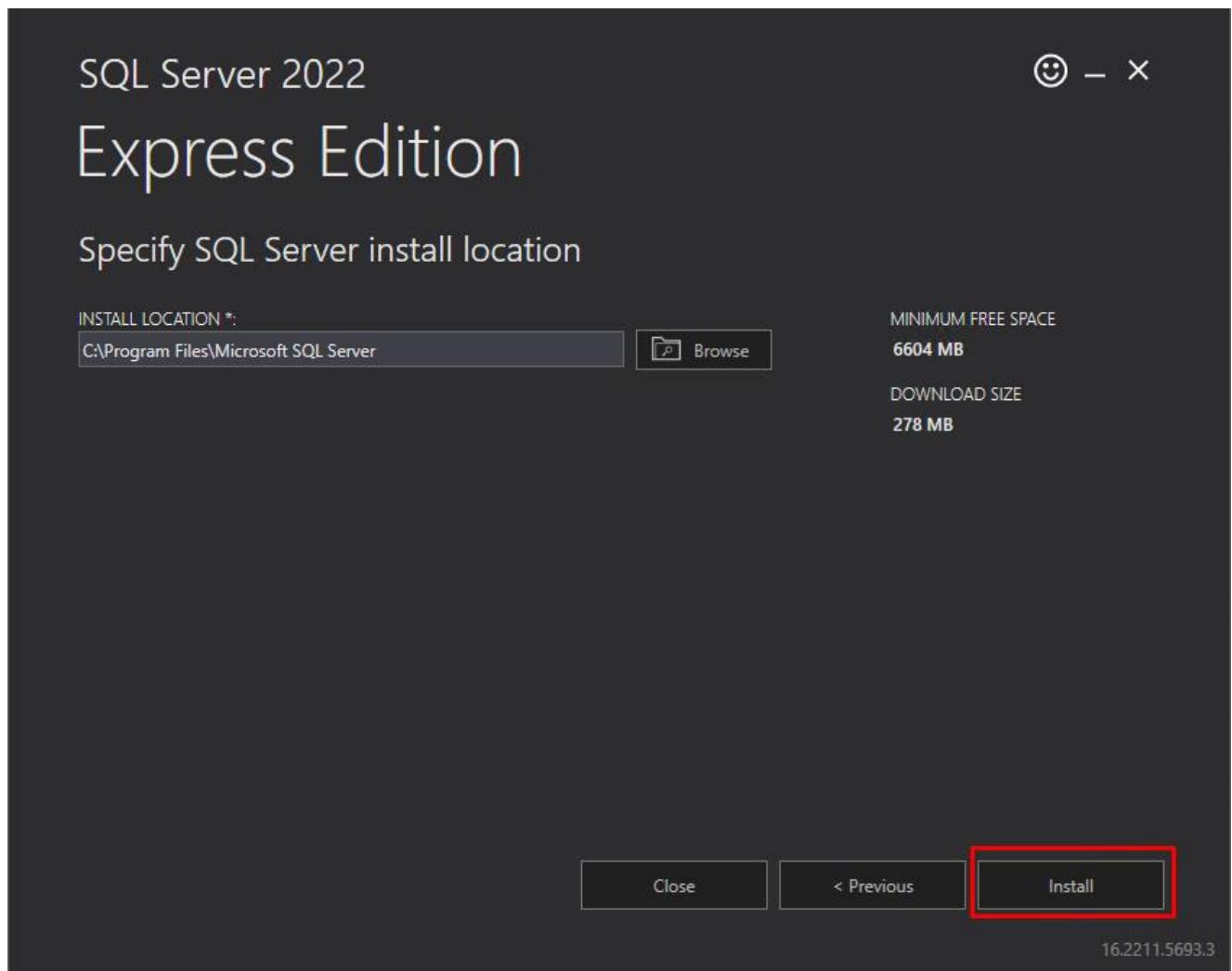


Figure 6.2: Select location to install

After completing the installation process, launch the SSMS application.

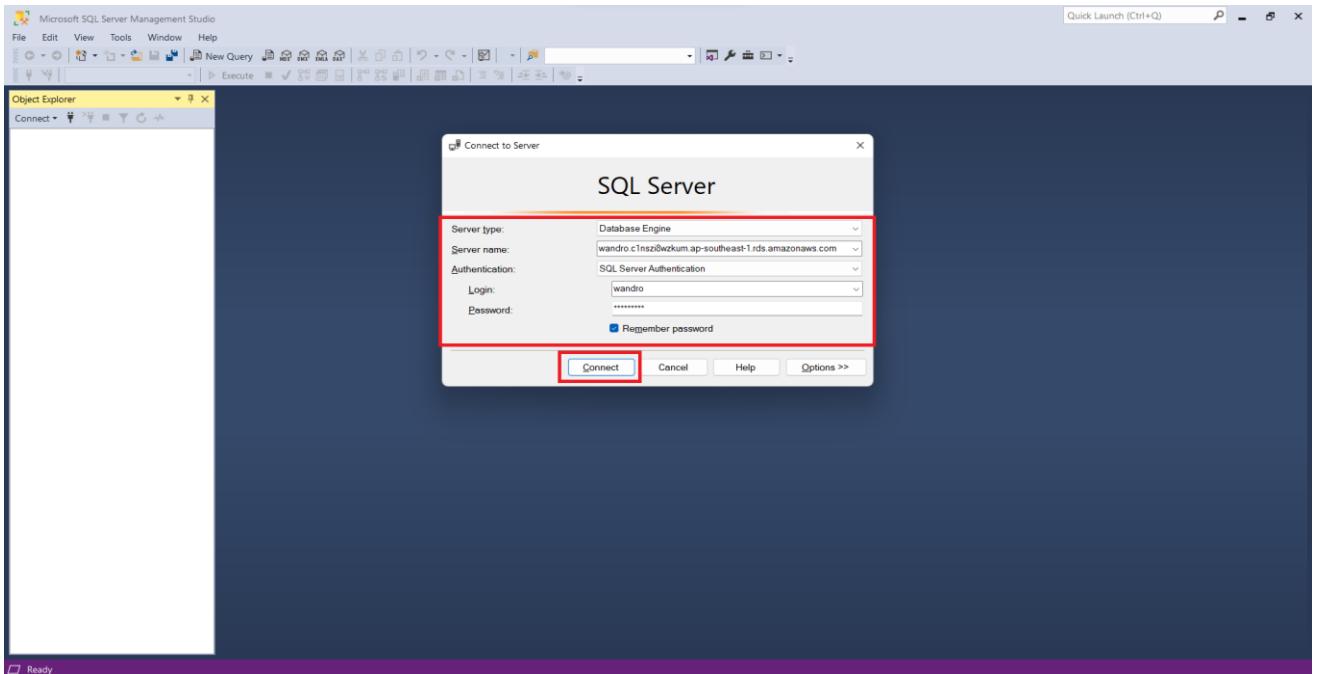


Figure 6.3: Connect to database server

- After a successful connection, create a new database by right-clicking on "Database" and selecting "New database...".

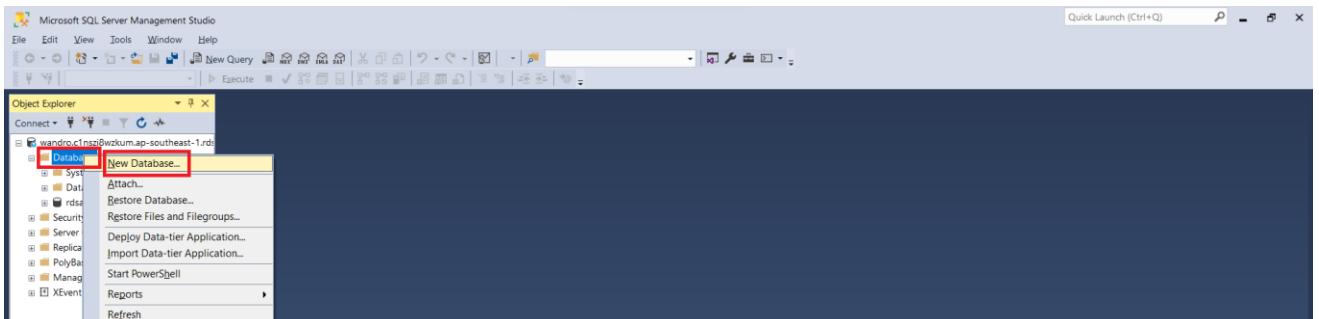


Figure 6.4: Create new database

- Set the "Database name" and click the "OK" button.

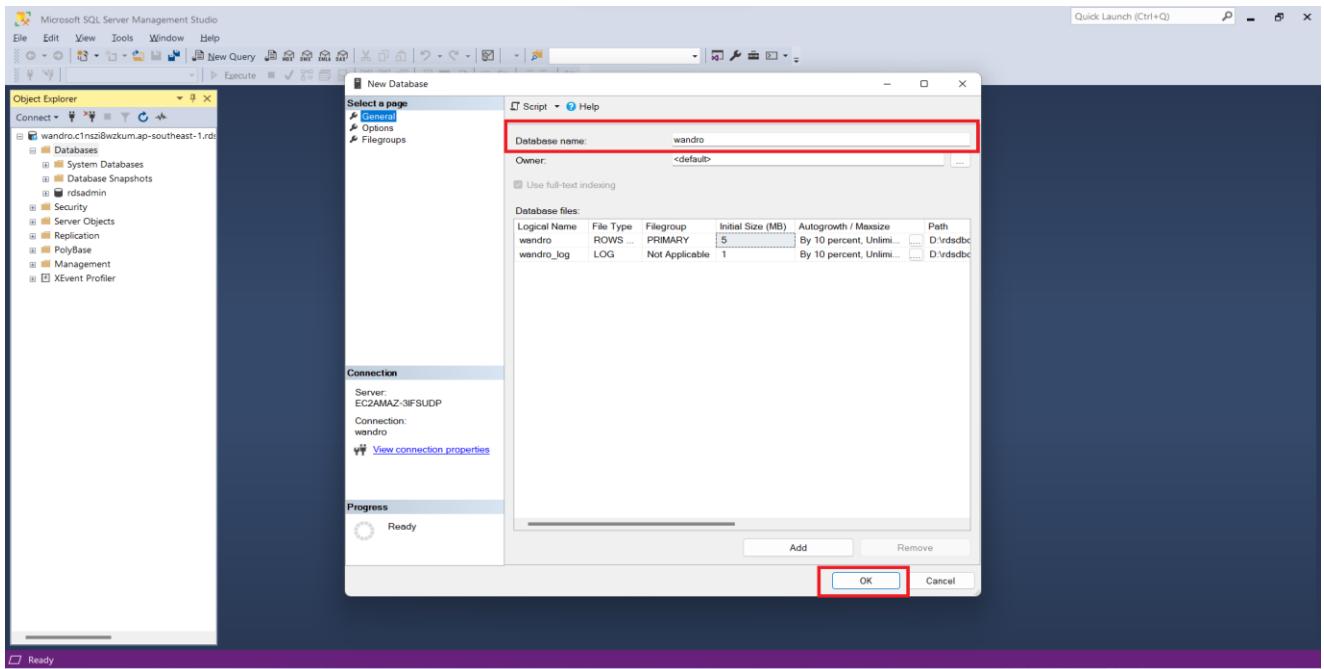


Figure 6.5: Create new database name

- After creating a database, right-click on the database you just created and select "New Query".

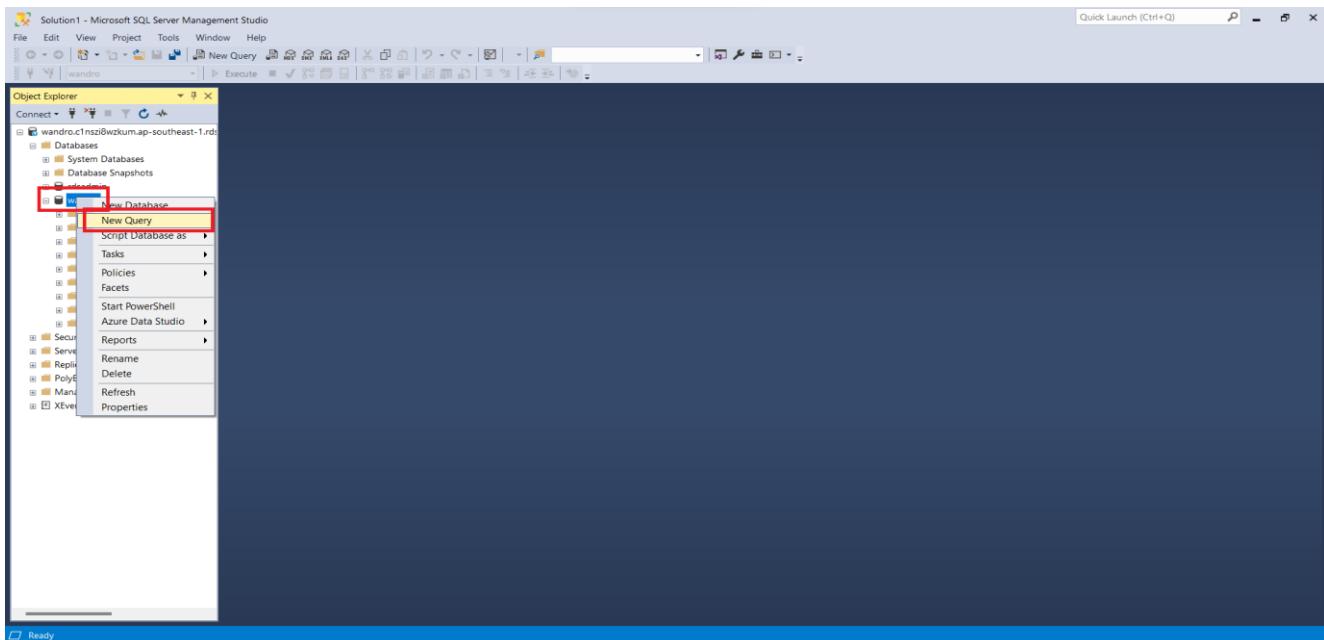


Figure 6.6: Create new query

- Run the database.sql script attached to the delivery package.

6.3.2.2 Install Visual Studio

- Download Visual Studio 2022 Community Edition: [Download Visual Studio](#)

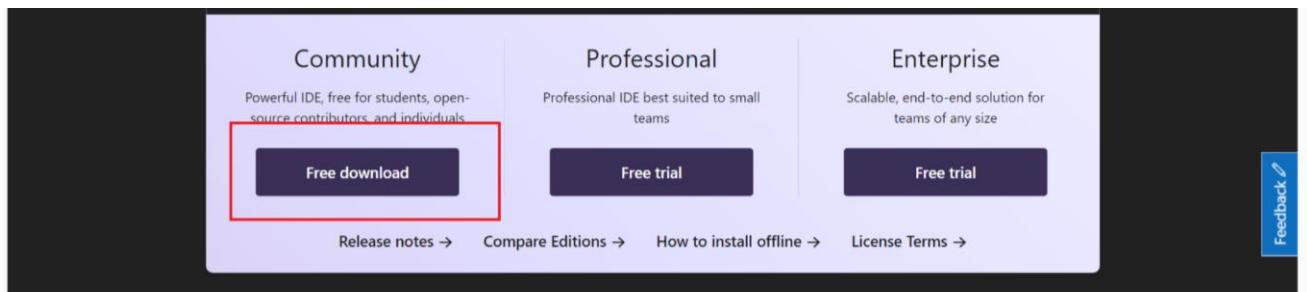


Figure 6.7: Install visual studio

- Select the "ASP.NET and web development" installation package and click the "Install" button.

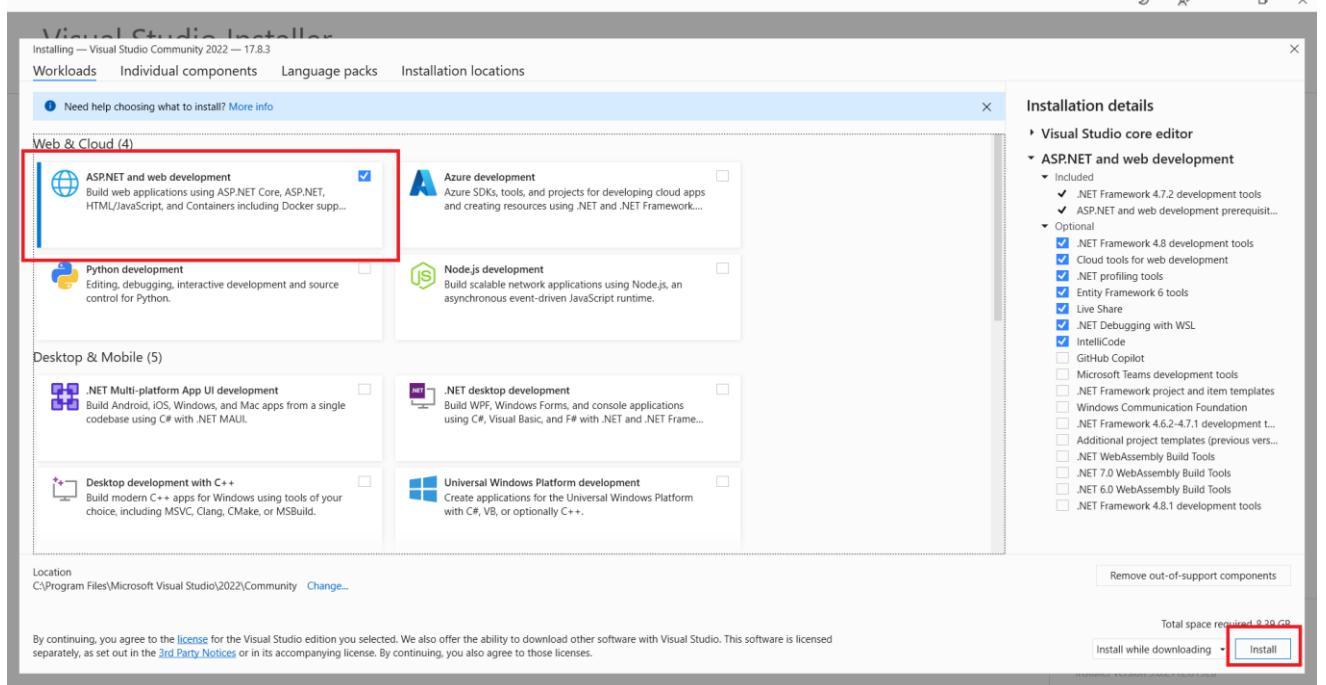


Figure 6.8: Install package development

- Complete the Visual Studio installation process and launch it with the default settings.

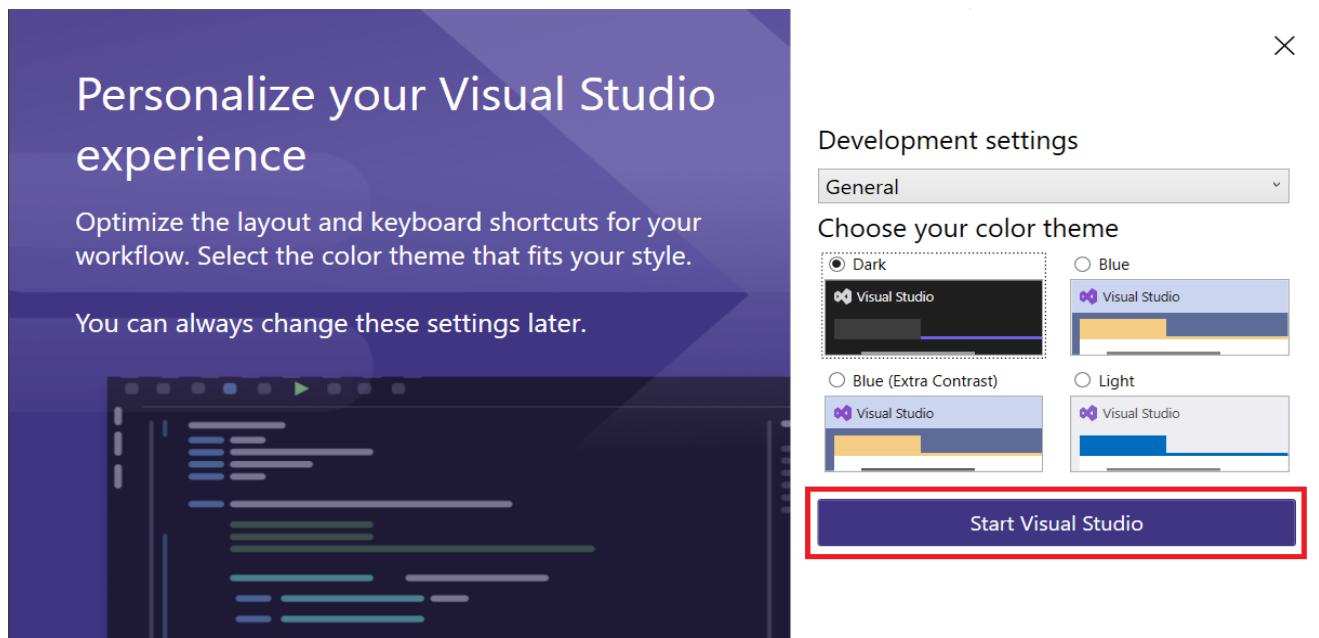


Figure 6.9: Create new project

- To open the source code of a project with Visual Studio, open the file Planify_BackEnd.sln from the folder that contains the source code.

.vs	3/17/2025 11:11 PM	File folder
bin	3/17/2025 8:59 PM	File folder
Controllers	4/22/2025 8:46 PM	File folder
DTOs	4/11/2025 11:21 AM	File folder
Entities	3/17/2025 8:59 PM	File folder
Hub	4/4/2025 1:56 PM	File folder
Migrations	3/17/2025 8:59 PM	File folder
Models	4/5/2025 2:21 PM	File folder
obj	4/14/2025 11:32 PM	File folder
Properties	3/17/2025 8:59 PM	File folder
Repositories	4/11/2025 11:21 AM	File folder
Services	4/11/2025 11:21 AM	File folder
.dockerignore	3/17/2025 8:59 PM	DOCKERIGNORE F...
.gitignore	3/27/2025 12:56 AM	Git Ignore Source ...
appsettings.Development.json	3/17/2025 8:59 PM	JSON Source File
appsettings.json	4/21/2025 9:54 AM	JSON Source File
credentials.json	3/17/2025 9:02 PM	JSON Source File
Dockerfile	3/17/2025 8:59 PM	File
Planify_BackEnd.csproj	4/14/2025 10:38 AM	VisualStudio.Laun...
Planify_BackEnd.csproj.user	4/4/2025 1:56 PM	Per-User Project O...
Planify_BackEnd.sln	4/21/2025 9:53 AM	Visual Studio Solu...
Program.cs	4/14/2025 10:38 AM	C# Source File

Figure 6.10: Open existing solution

- In case Visual Studio reports a lack of resources “This project is targeting a version of .NET which is not installed.”, click the “Install” button.

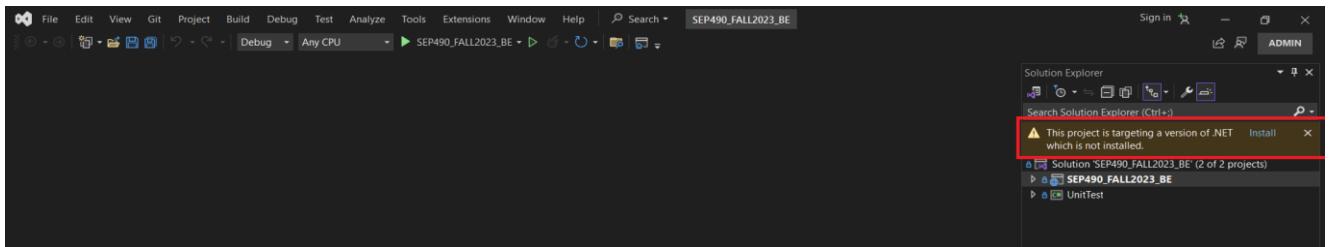


Figure 6.11: Install .Net

- Click the "Install" button.

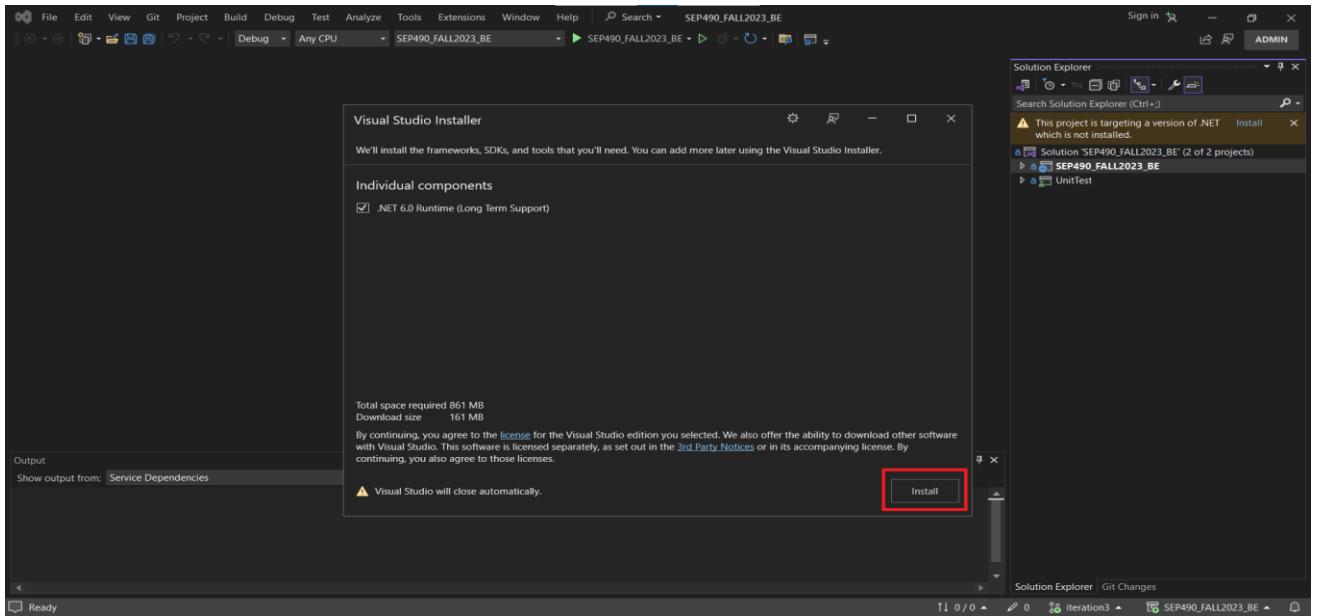


Figure 6.12: Select version .Net

- End the installation process of additional resources. Click the "Close" button.

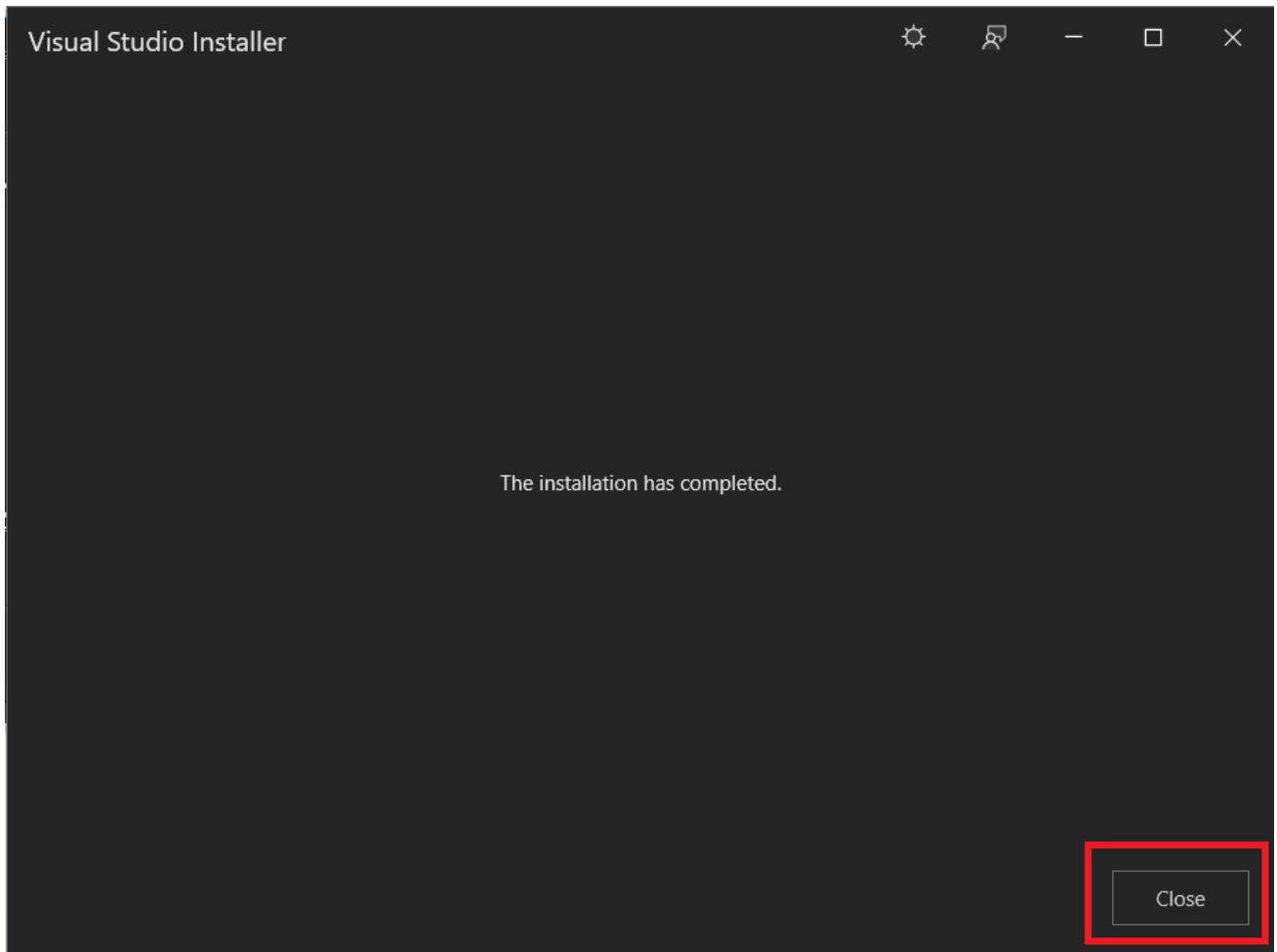


Figure 6.13: Complete installation

- Open the source code with Visual Studio and run the project.

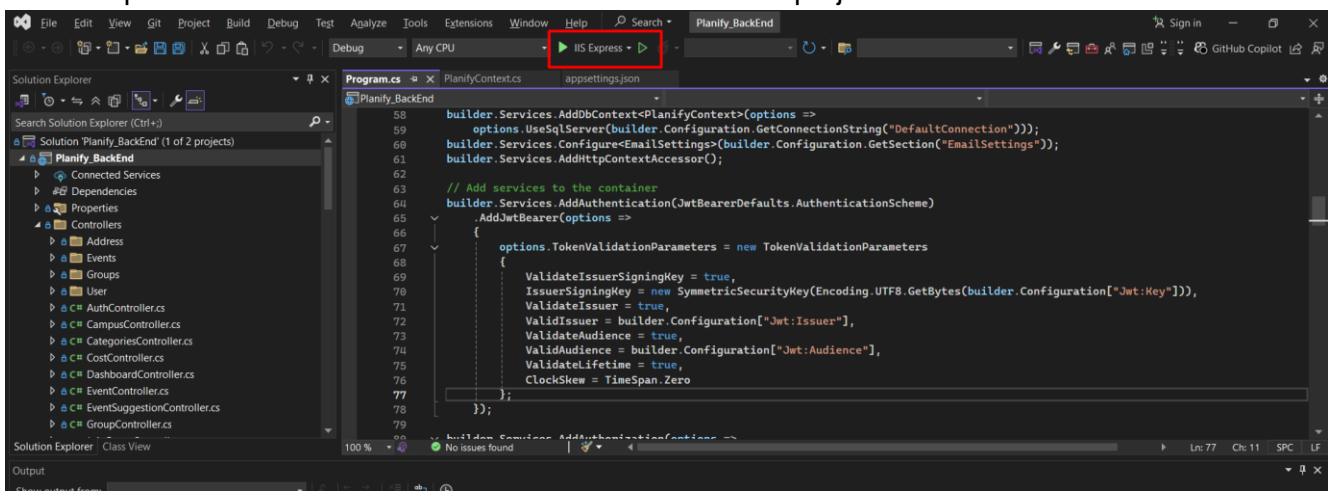


Figure 6.14: Run project backend

- The first time you start Visual Studio, it will display notifications about SSL certificates.

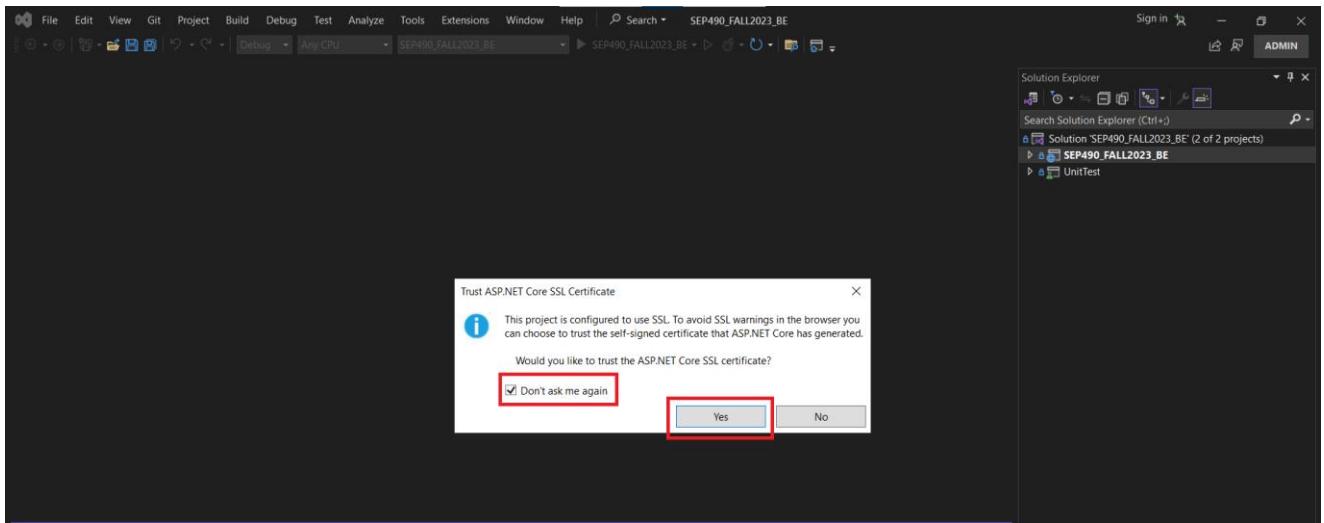


Figure 6.15: Accept certificate

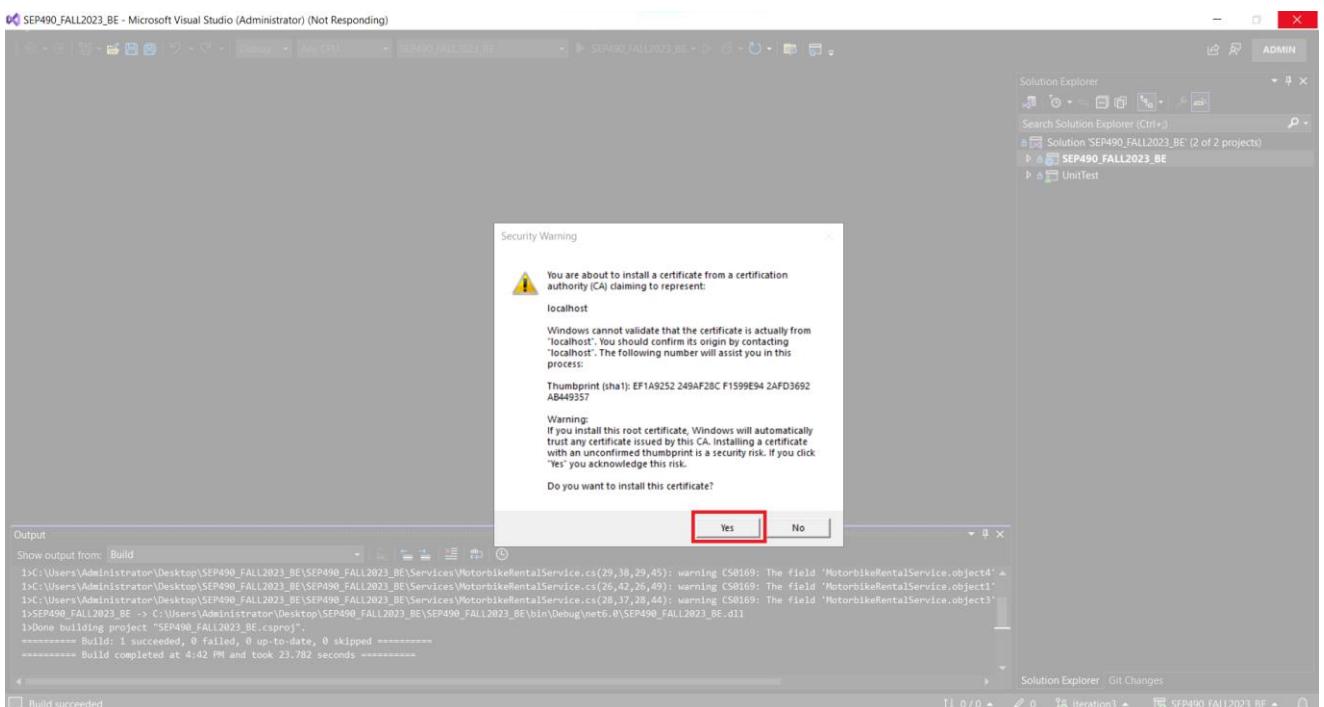


Figure 6.16: Confirm process

- Complete the project launch process.

The screenshot shows the Visual Studio IDE interface. The code editor displays a C# file named 'Program.cs' with code related to dependency injection and configuration. To the right of the code editor is the 'Diagnostic Tools' window, which includes tabs for 'Events', 'Process Memory (MB)', and 'Memory Usage'. The 'Events' tab shows a timeline with several events, and the 'Process Memory' tab displays a graph of memory usage over time.

Figure 6.17: Run time screen

- Check again by accessing the server's Swagger using the following link:
<https://localhost:44320/swagger/index.html>

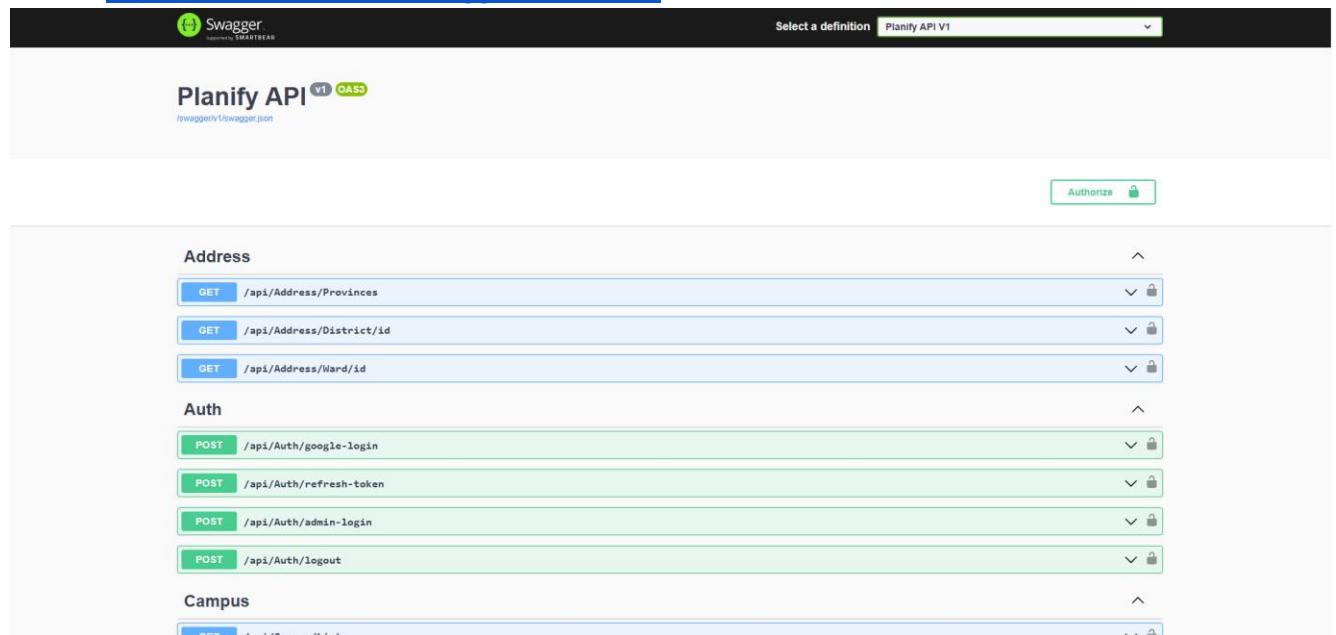


Figure 6.18: Swagger UI

- Complete the Visual Studio installation process and launch a project with Visual Studio.

6.3.2.3 Install Visual Studio Code

- Download Visual Studio Code: [Link download Visual Studio Code](#)

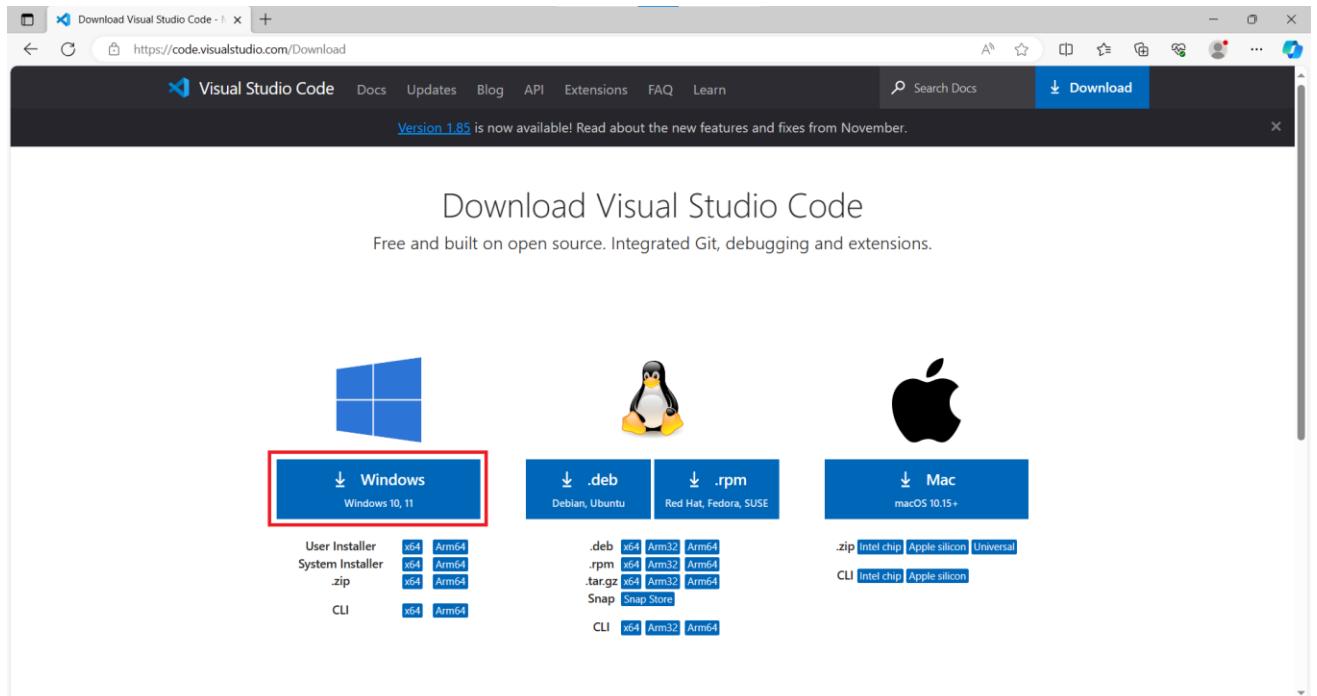


Figure 6.19: Download Visual Studio Code

- Run the downloaded installation package. Accept the terms of use and click the "Next" button.

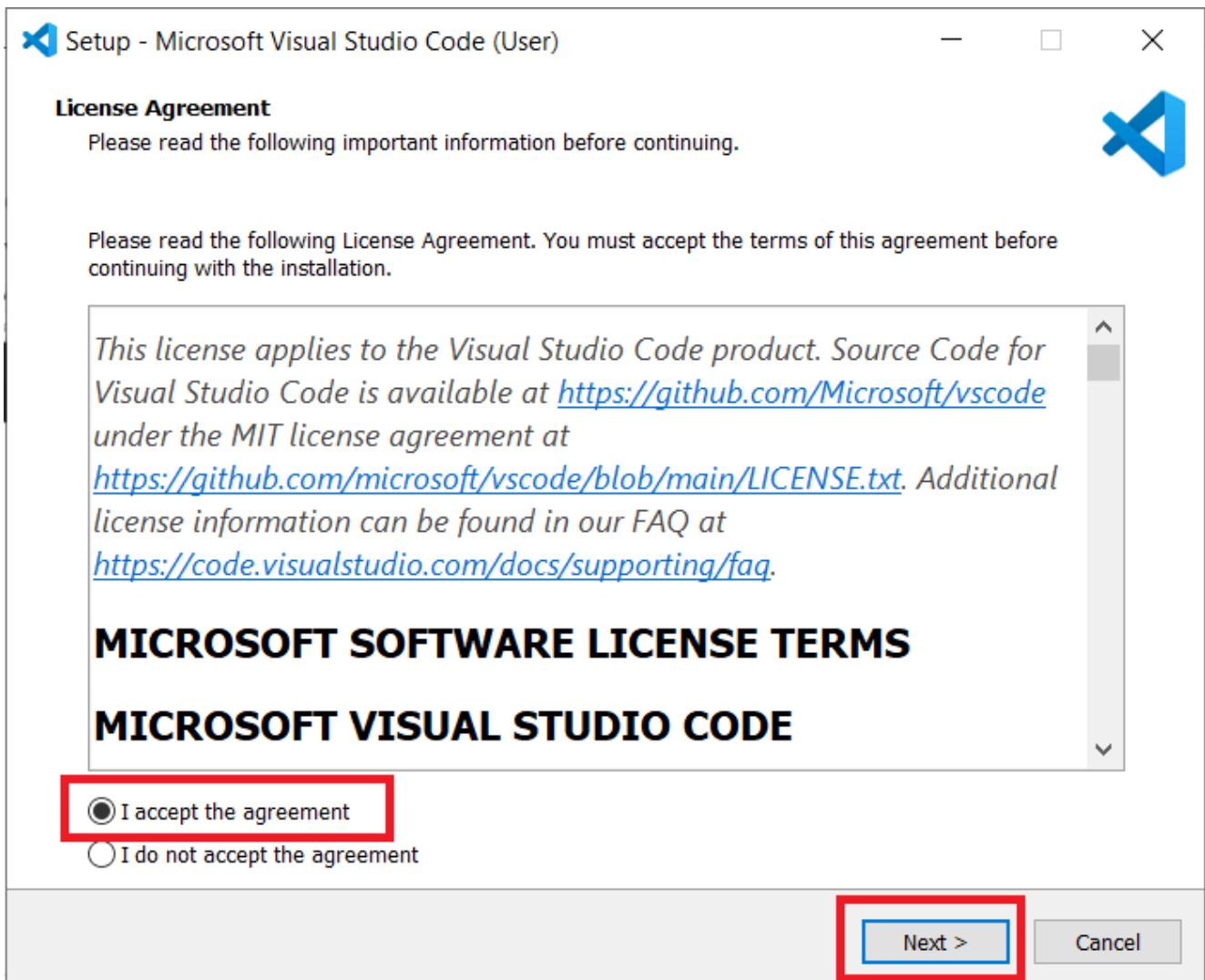


Figure 6.20: Accept the agreement

- Select the installation location and click the "Next" button.

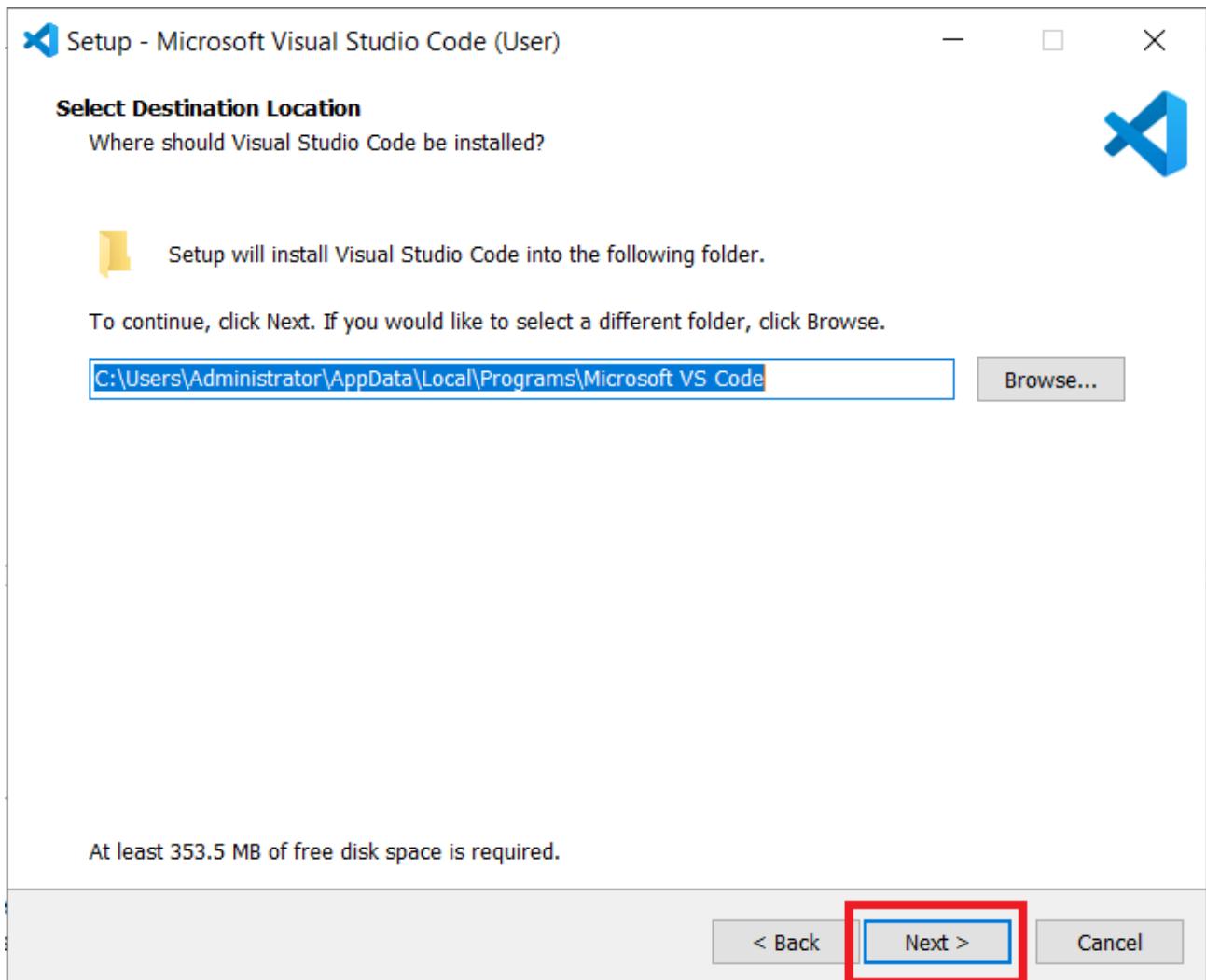


Figure 6.21: Select the folder

- Click the "Next" button.

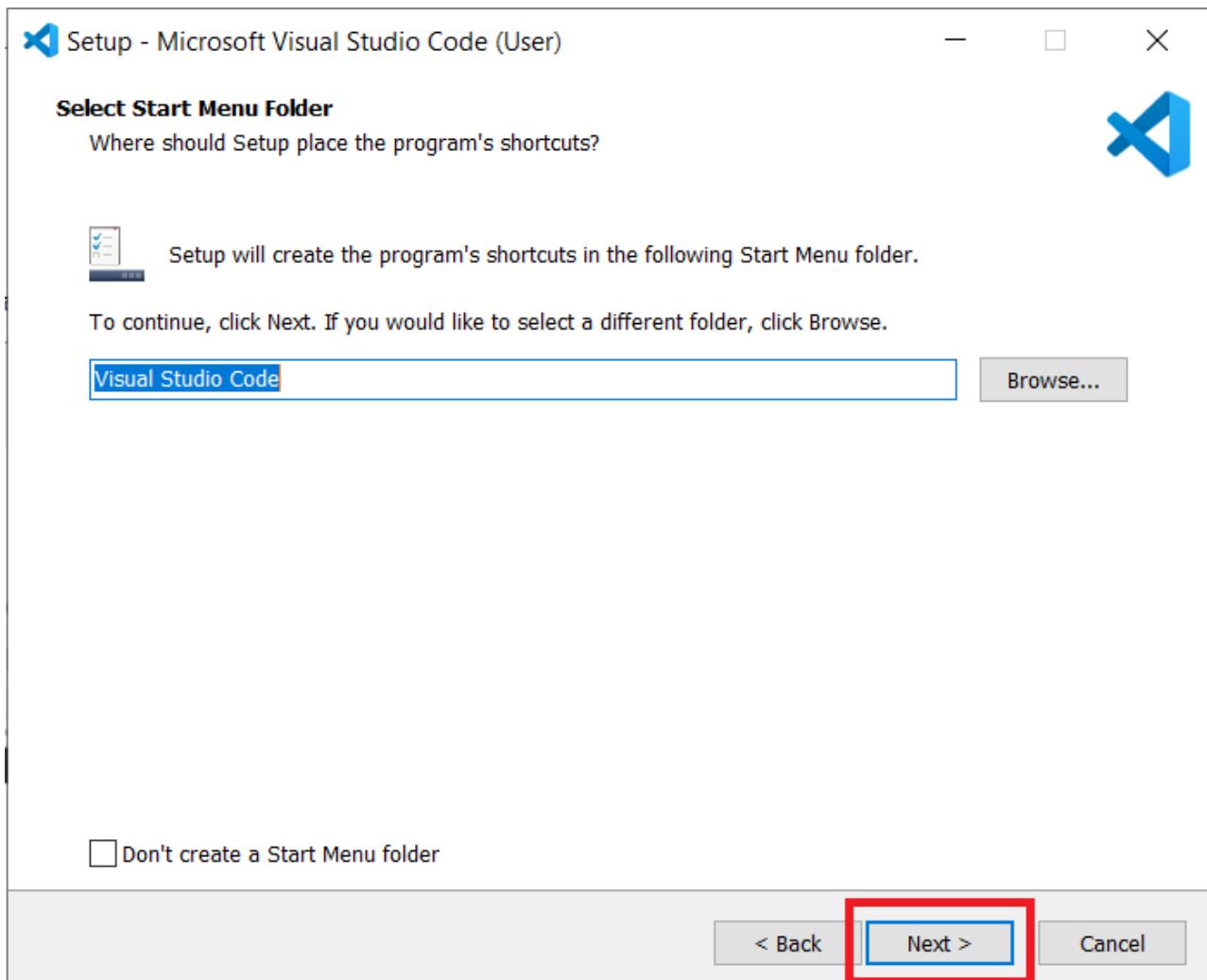


Figure 6.22: Select start menu folder

- Click the "Next" button.

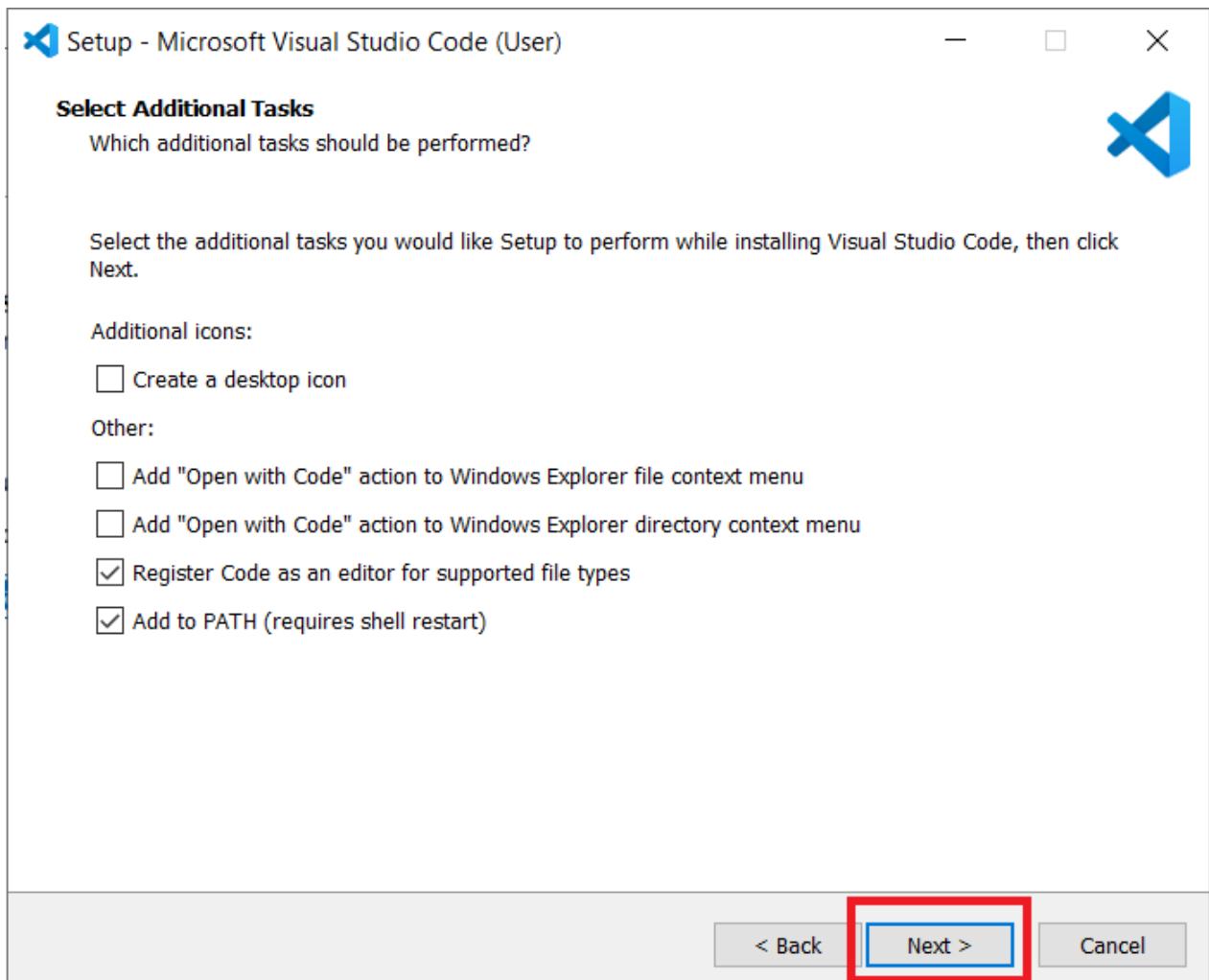


Figure 6.23: Select additional tasks

- Click the “Install” button.

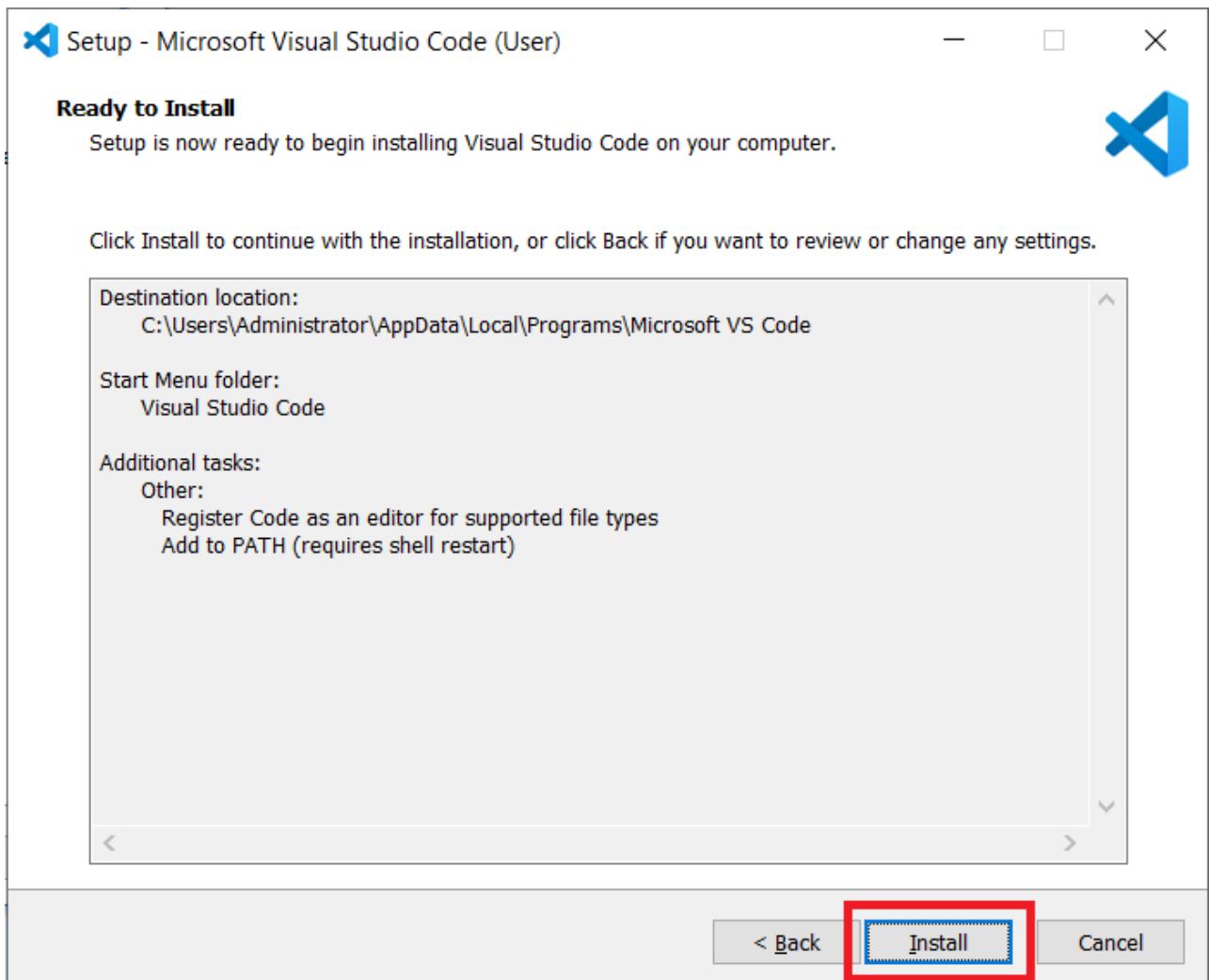


Figure 6.24: Install

- Wait for the installation process to complete.

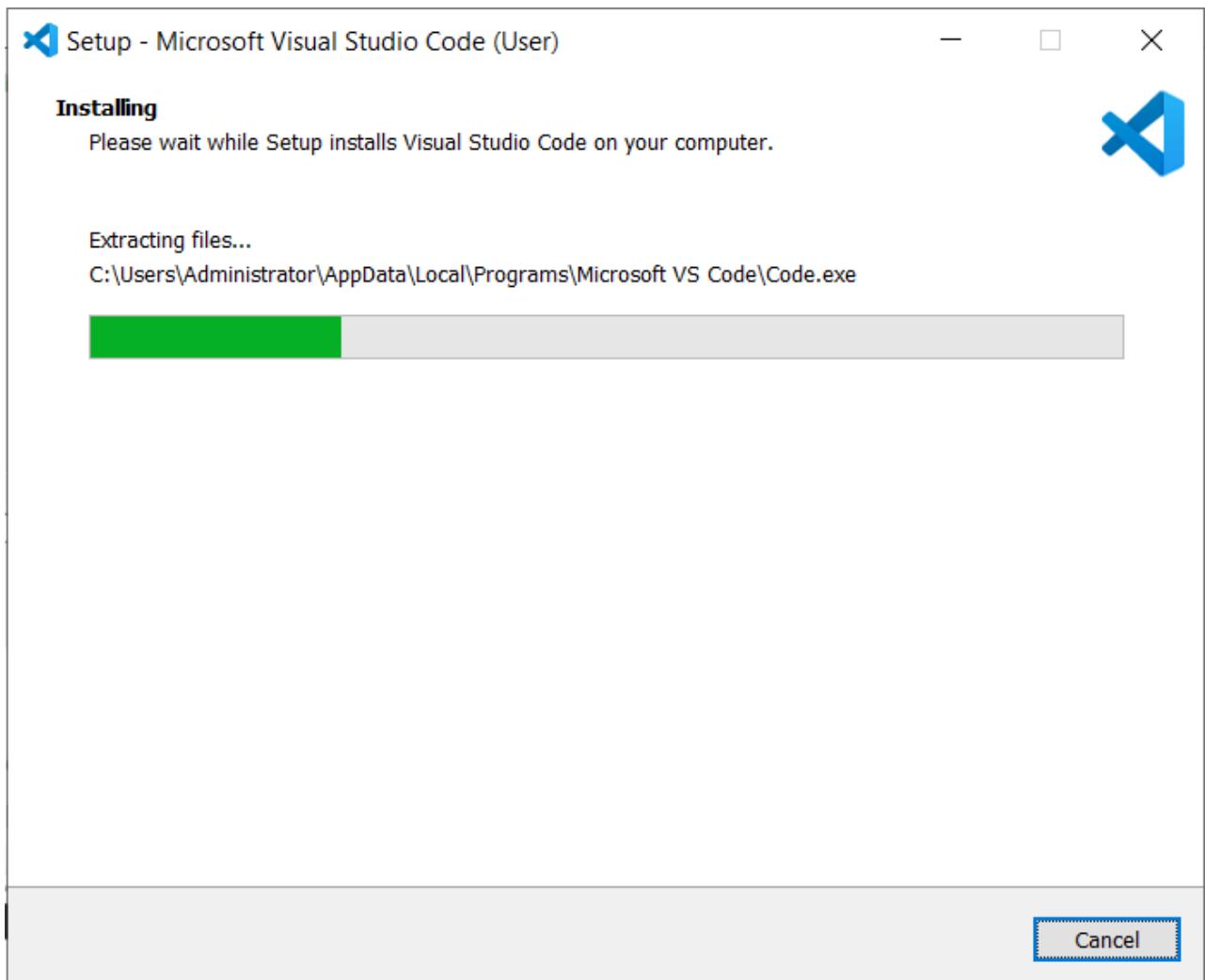


Figure 6.25: Wait for the installation

- The installation process has completed successfully. Click "Finish" to complete.

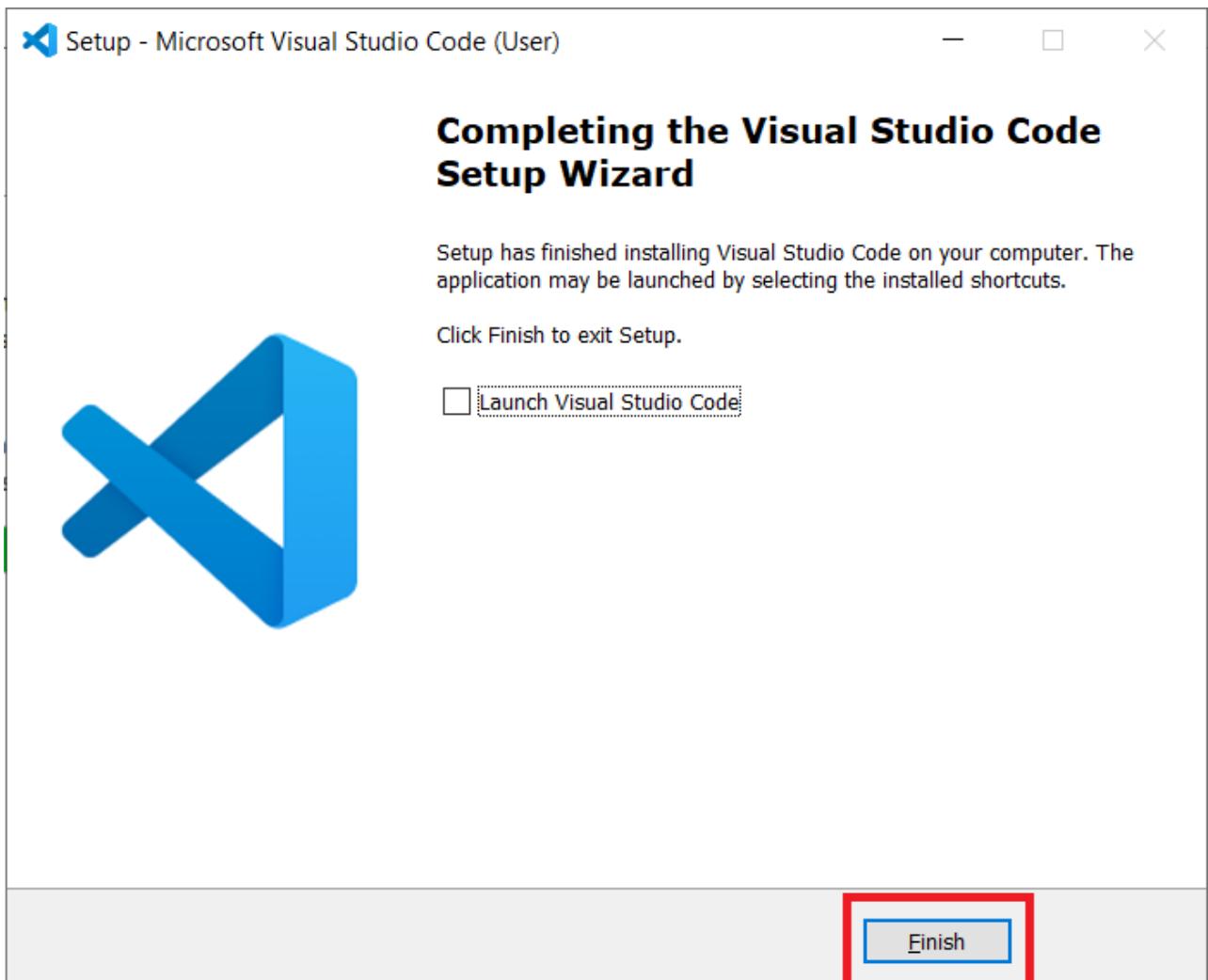


Figure 6.26: Finish installation

6.3.2.4 Install Node

- Download Node. [Link download Node](#)

The screenshot shows the official Node.js website. At the top, there's a navigation bar with links for Learn, About, Download, Blog, Docs, Contribute, and Certification. To the right of the navigation is a search bar with placeholder text "Start typing..." and a keyboard shortcut "Ctrl + K". Below the navigation, there's a large green hexagonal background graphic. On the left, a section titled "Run JavaScript Everywhere" features a green button labeled "Download Node.js (LTS)". A red box highlights this button. Below it, text says "Downloads Node.js v22.15.0 with long-term support. Node.js can also be installed via version managers." To the right, there's a code editor window with a dark theme containing a simple HTTP server example in JavaScript. The code uses the `node:http` module to create a server that responds with "Hello World!". Below the code editor is a "JavaScript" label and a "Copy to clipboard" button. At the bottom of the page, there's a link to "Learn more what Node.js is able to offer with our Learning materials".

Figure 6.27: Download Node

- Open the downloaded installation file and click the "Next" button.

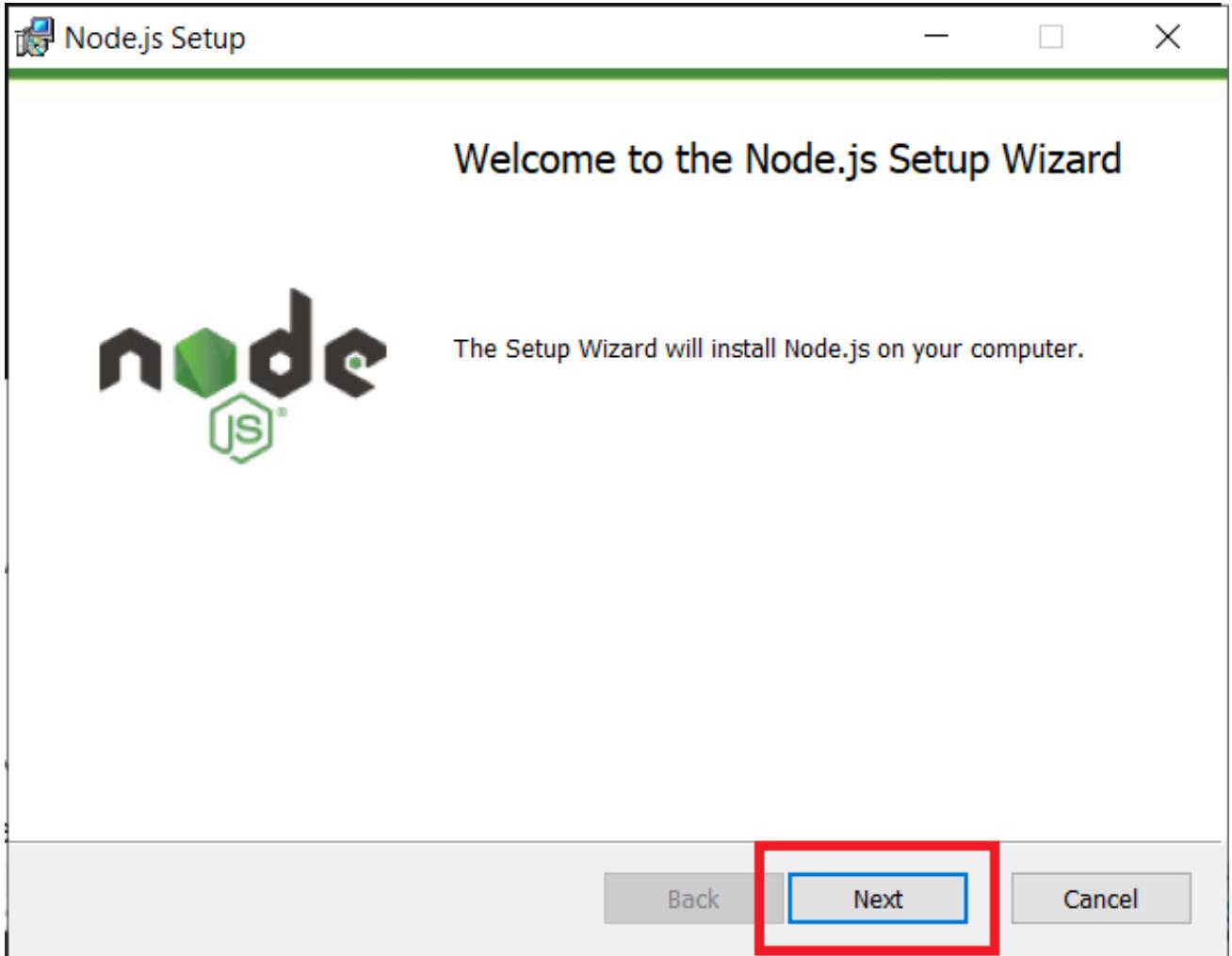


Figure 6.28: Run Node Set up

- Agree to the terms of the licence agreement and click the "Next" button.

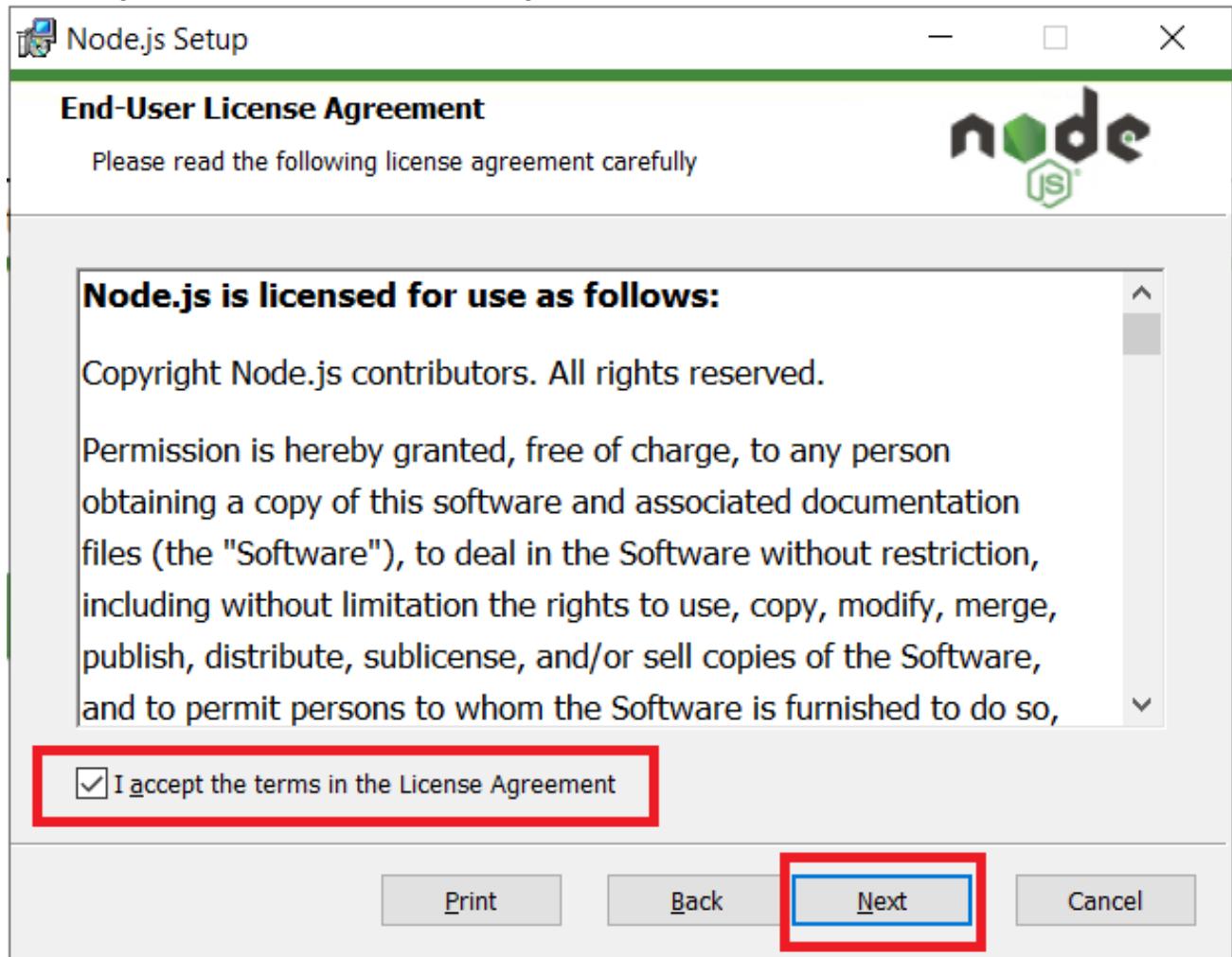


Figure 6.29: Accept agreement

- Select the installation location and click the "Next" button.

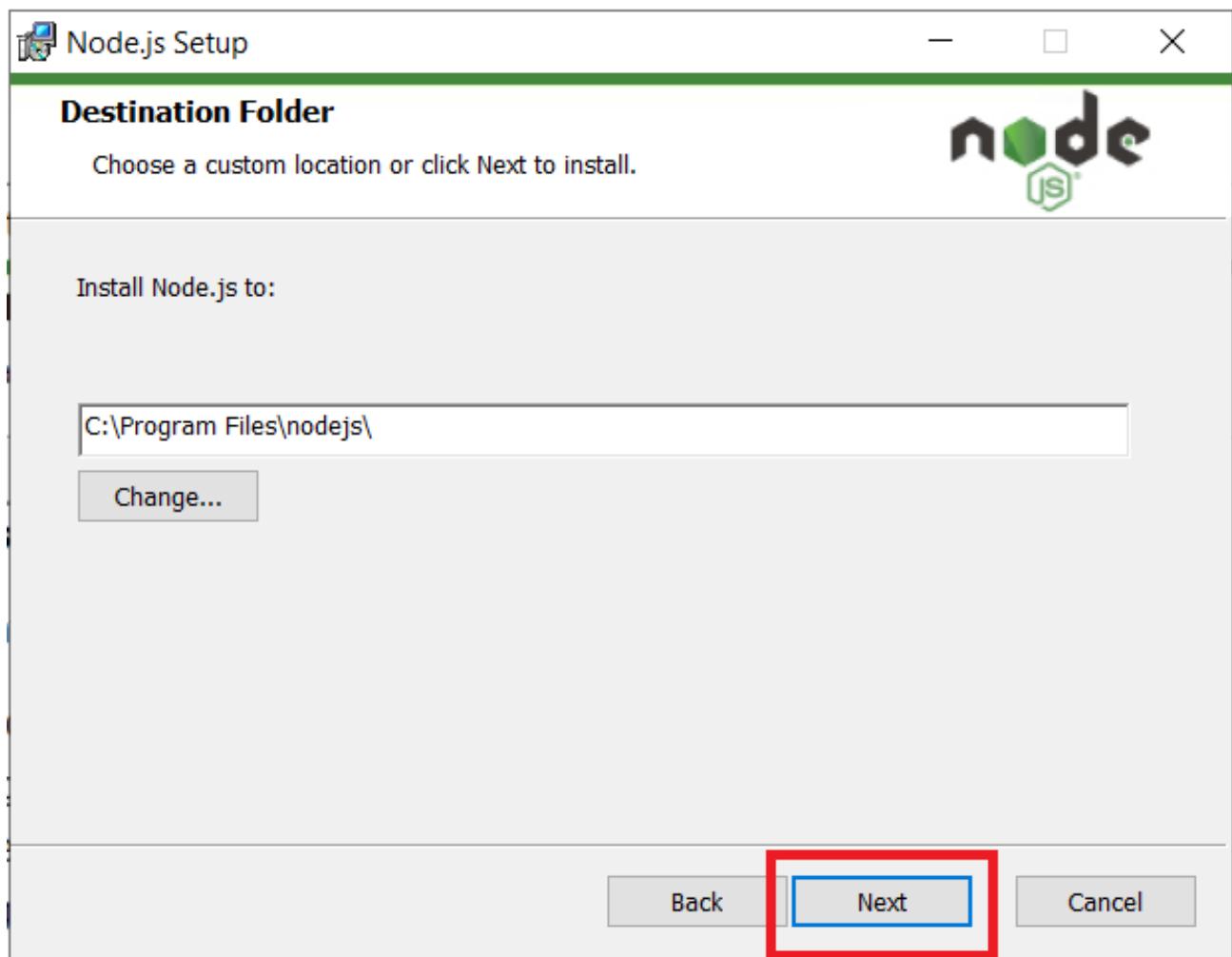


Figure 6.30: Select the folder

- Click the “Next” button.

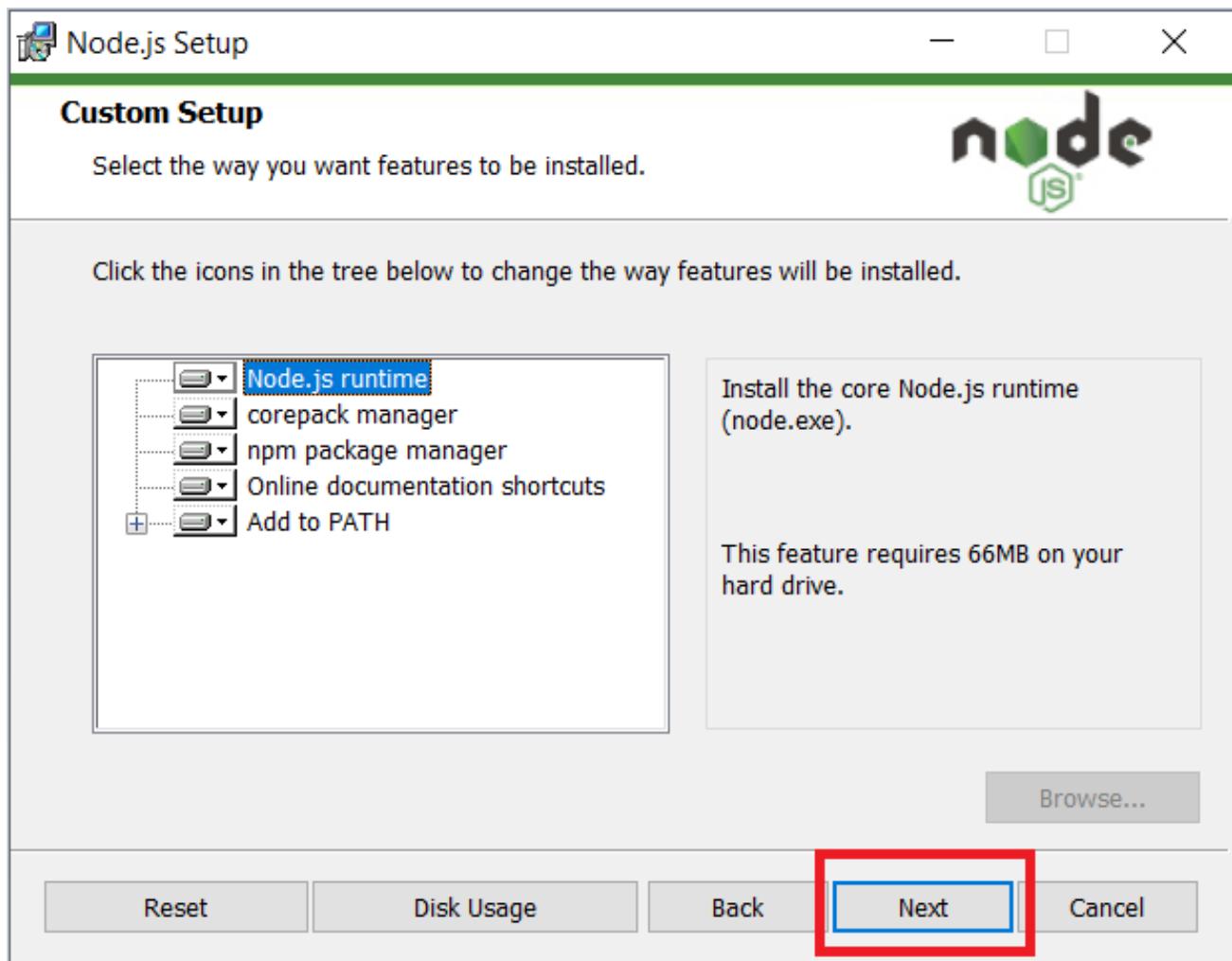


Figure 6.31: Customise the set up

- Click the “Next” button.

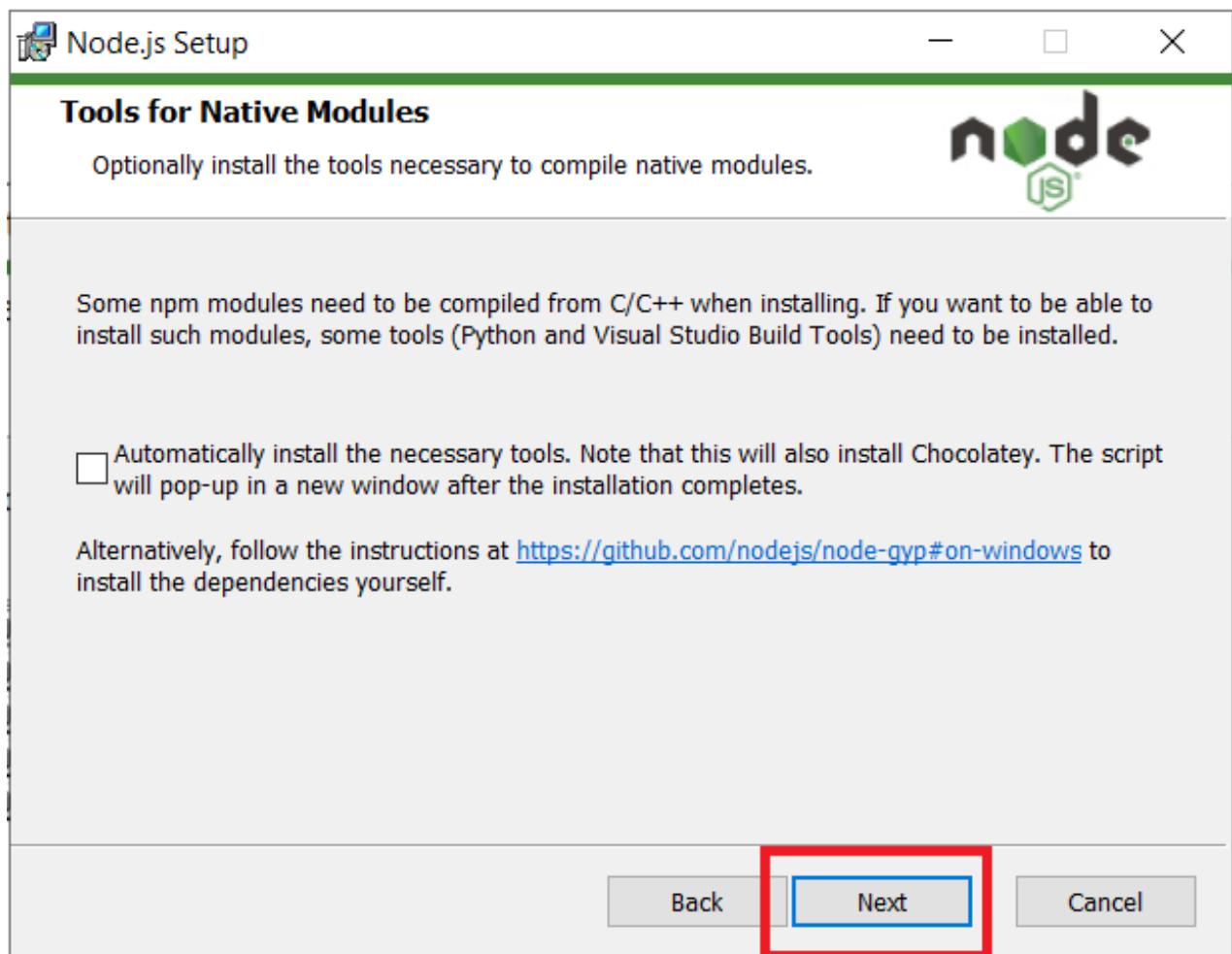


Figure 6.32: Next click the step

- Click the “Install” button.

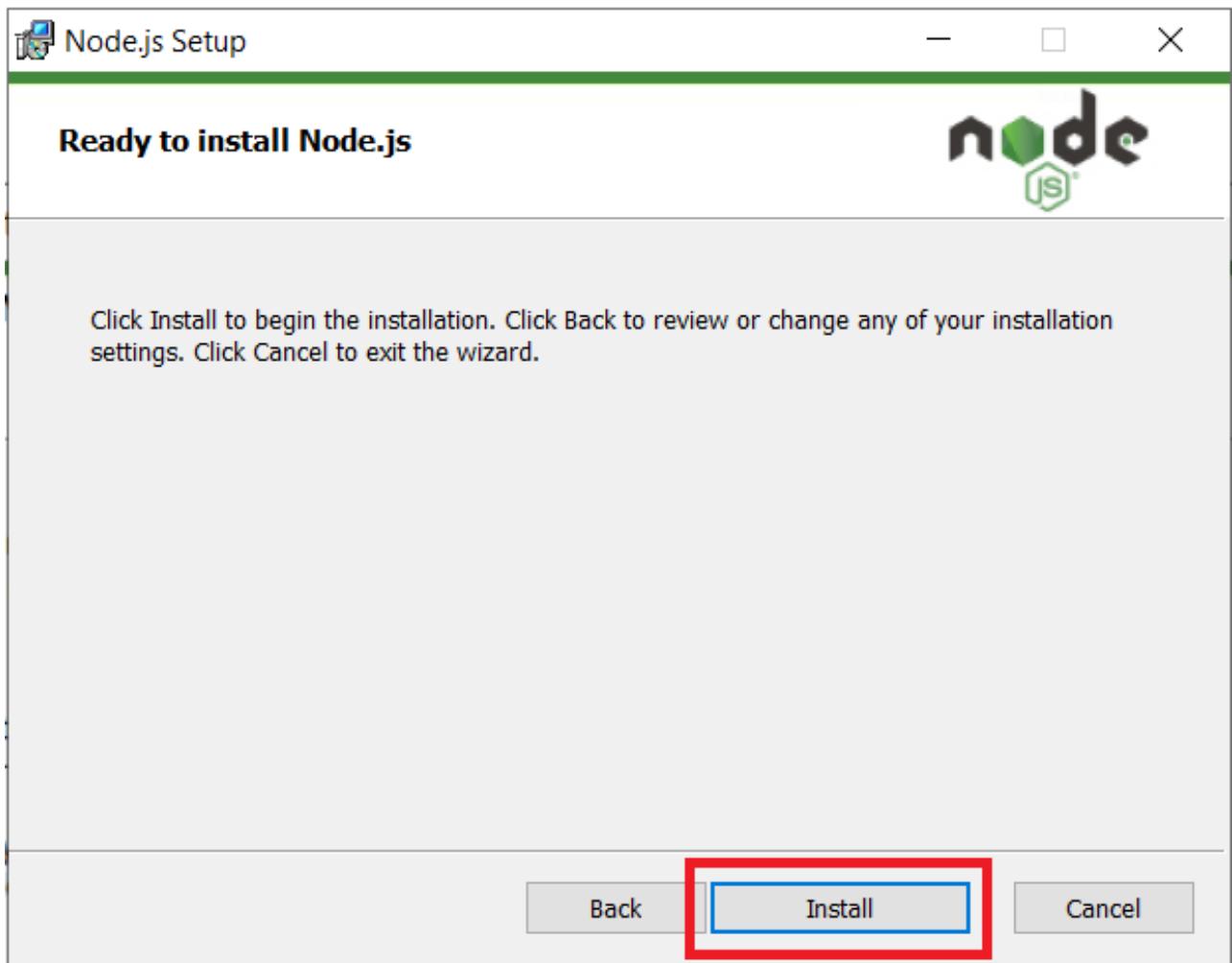


Figure 6.33: Install

- Complete the installation process, click the "Finish" button.

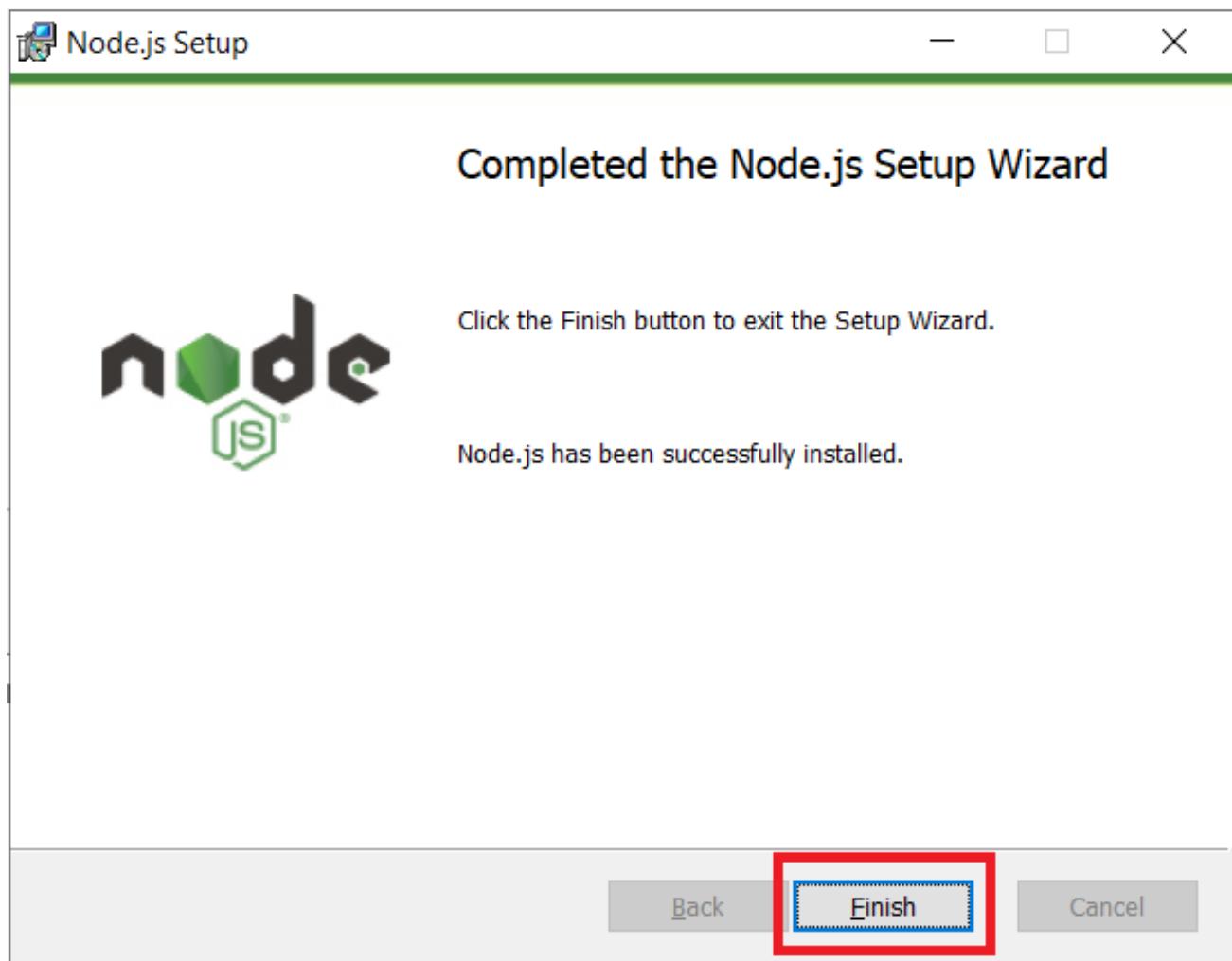
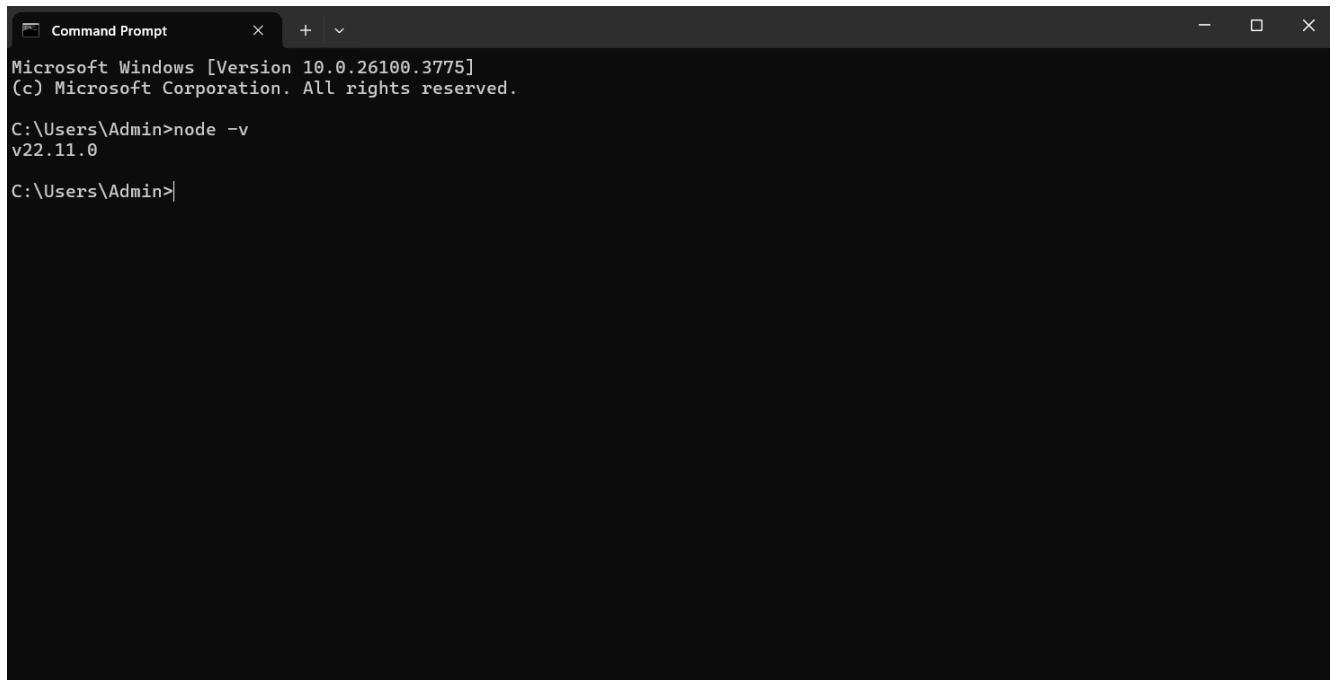


Figure 6.34: Complete the installation

- To check if Node is installed, open a Command Prompt and run the following command: `node -v`



```
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>node -v
v22.11.0

C:\Users\Admin>
```

Figure 6.35: Check Node version

- The Node installation process has been successfully completed.

6.3.2.5 Run frontend project

- Run Visual Studio Code and open the folder containing the Frontend source code.

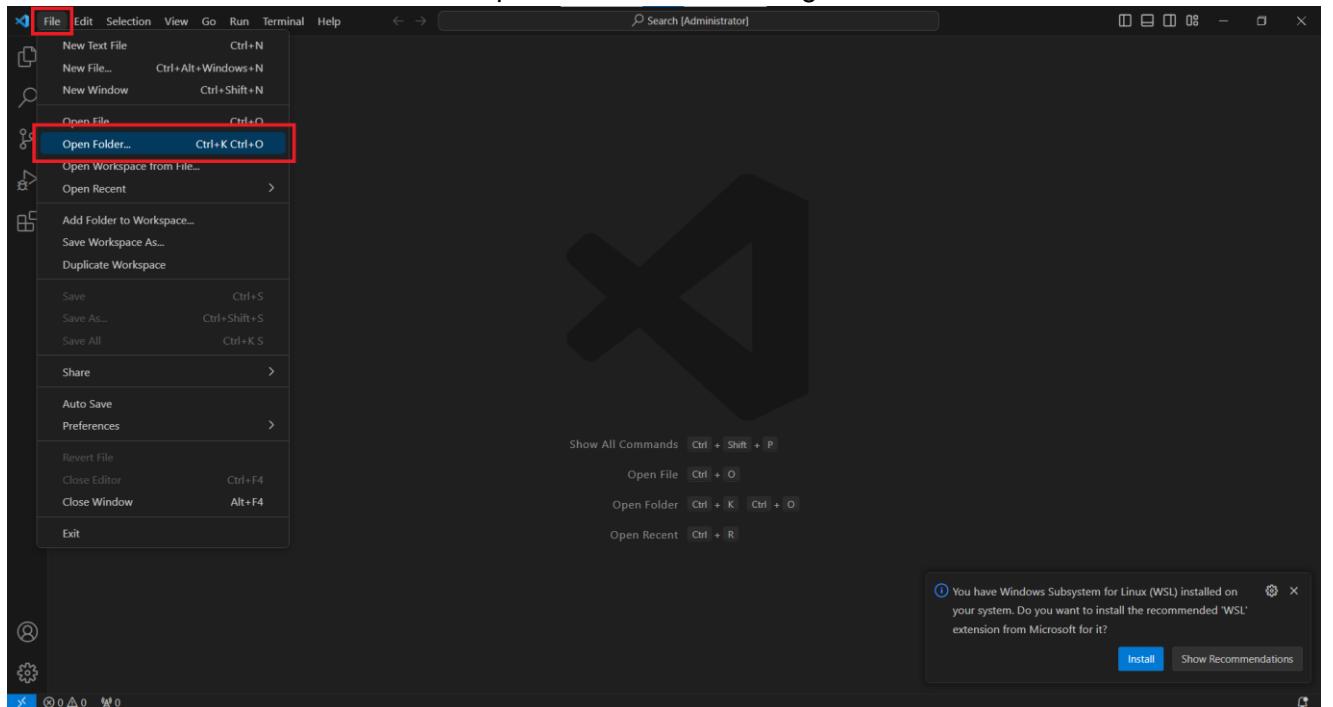


Figure 6.36: Open front end project

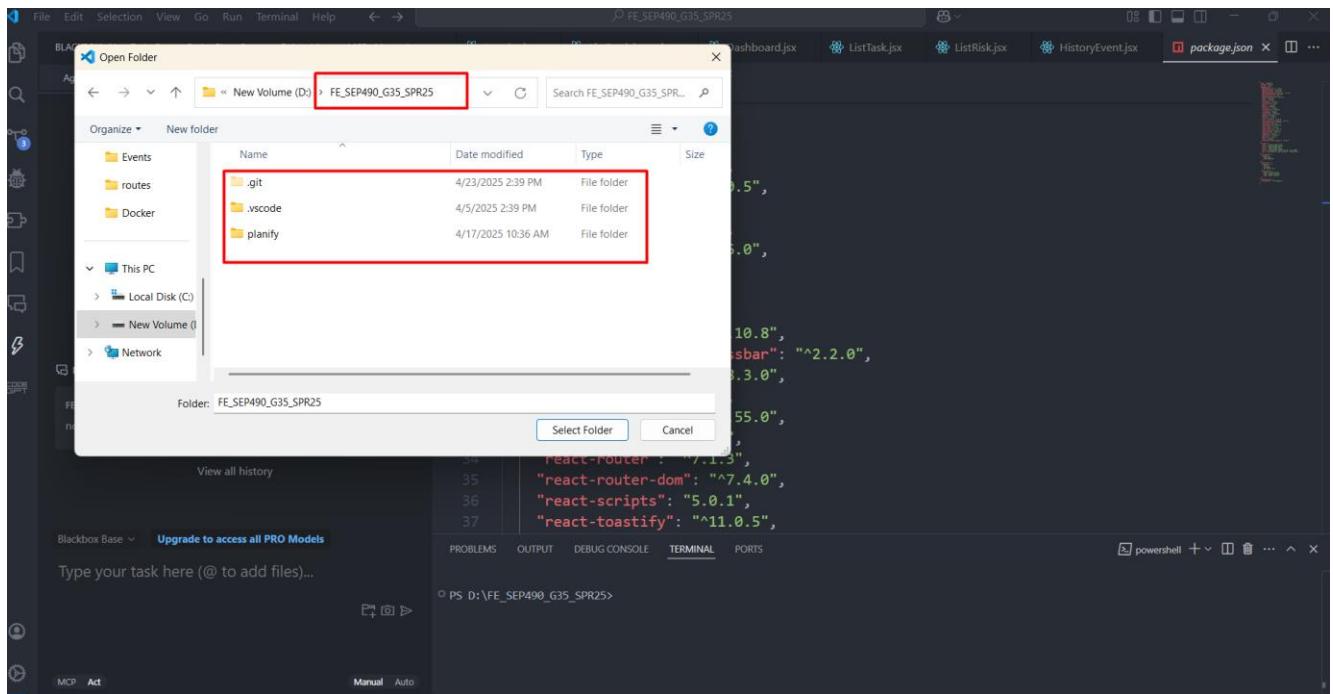


Figure 6.37: Open front end project

- Launch the Terminal in Visual Studio Code.

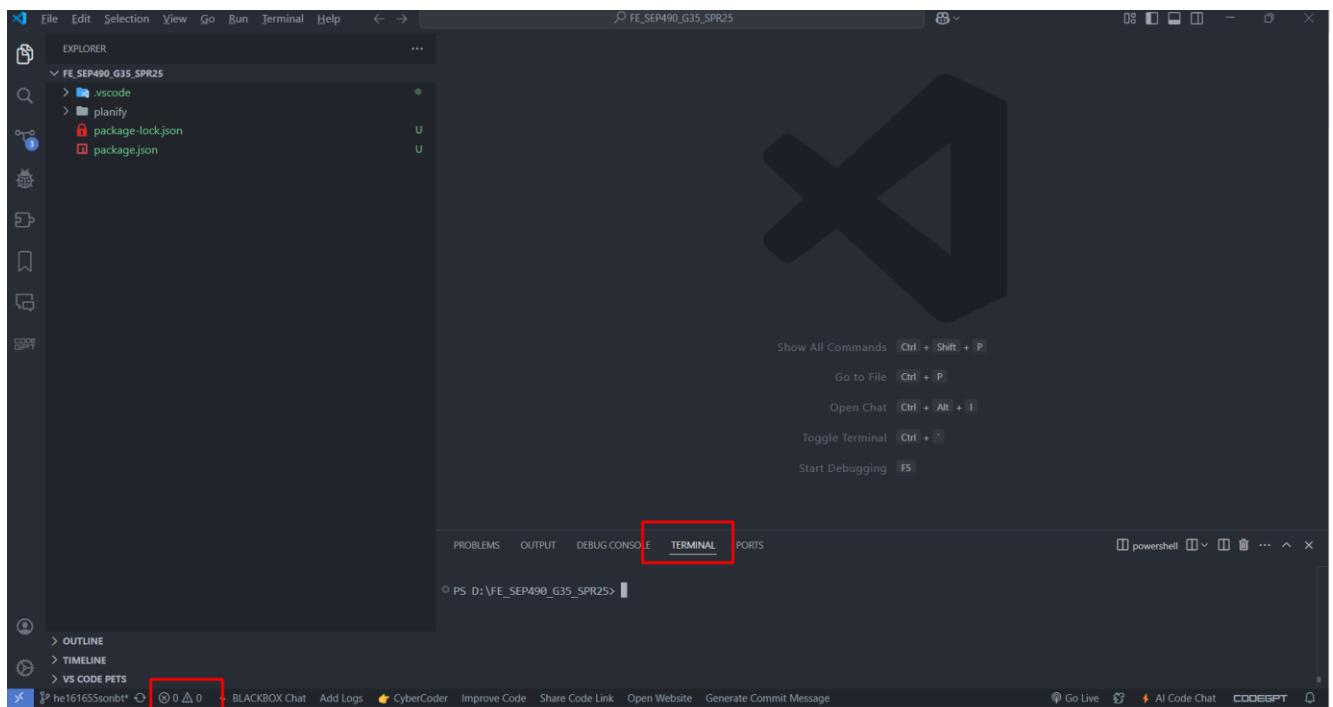


Figure 6.38: Launch the Terminal in Visual Studio Code.

- Go to planify folder

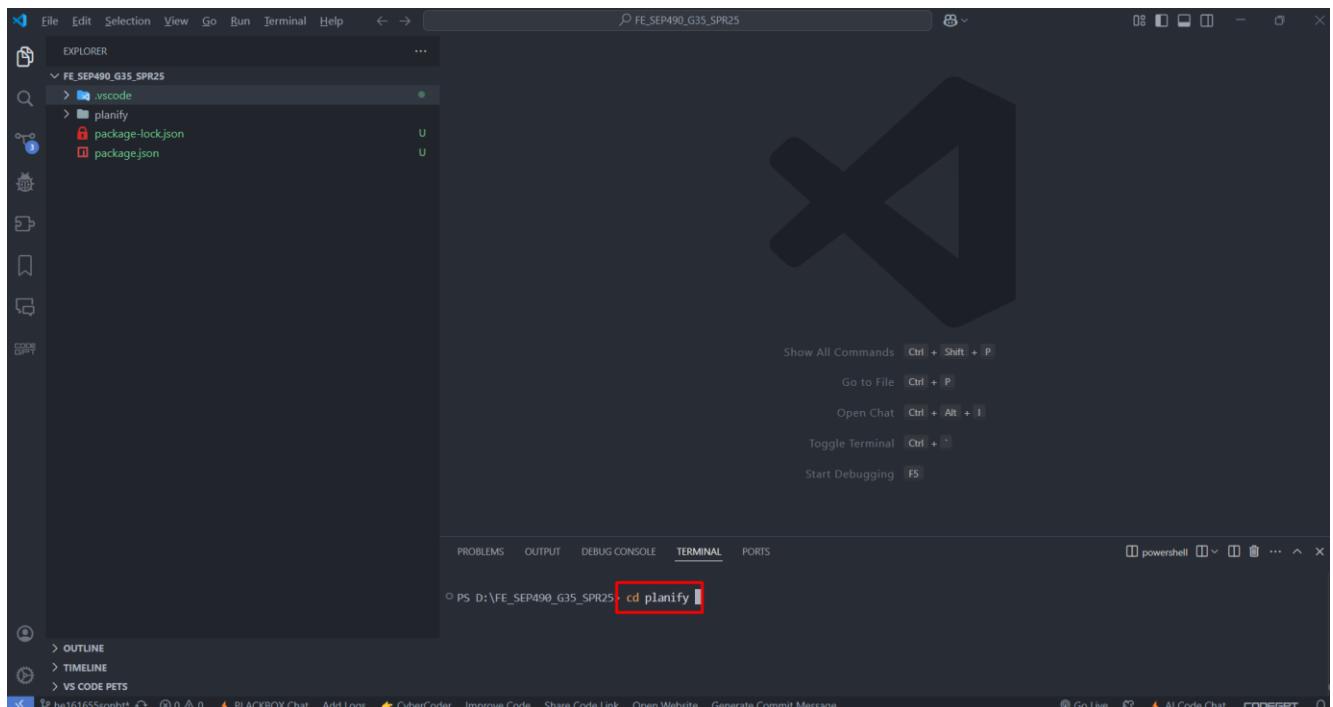


Figure 6.39: Move to planify

- Install npm using the following command: `npm install`

A screenshot of the Visual Studio Code interface, focusing on the terminal window. The terminal tab is selected. The terminal shows two lines of text: 'PS D:\FE_SEP490_G35_SPR25> cd planify' and 'PS D:\FE_SEP490_G35_SPR25\planify> npm install'. A red box highlights the second line, 'npm install'. The rest of the interface is visible, including the Explorer sidebar, the main workspace, and the status bar at the bottom.

Figure 6.40: npm install

- The initial installation process may take 10 - 15 minutes.
- Complete the installation of the required libraries.

A screenshot of the Visual Studio Code interface, focusing on the terminal window. The terminal shows the completion of an npm install command. The output includes:

```
added 7 packages, and audited 1650 packages in 7s
298 packages are looking for funding
  run `npm fund` for details
14 vulnerabilities (1 low, 5 moderate, 8 high)

To address issues that do not require attention, run:
  npm audit fix

To address all issues possible (including breaking changes), run:
  npm audit fix --force
```

A red box highlights the first line of the output, 'added 7 packages, and audited 1650 packages in 7s'. The rest of the interface is visible, including the Explorer sidebar, the main workspace, and the status bar at the bottom.

Figure 6.41: Complete installation

- Run project using the command line: npm start

The screenshot shows a terminal window with the following text:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
node - planify □ □ □ ...
```

To address all issues possible (including breaking changes), run:
npm audit fix --force

Some issues need review, and may require choosing
a different dependency.

Run `npm audit` for details.
PS D:\FE_SEP490_G35_SPR25\planify> **npm start**

> planify@0.1.0 start
> react-scripts start

Figure 6.42: Npm start

- The browser will automatically open and navigate to the project's loginpage.

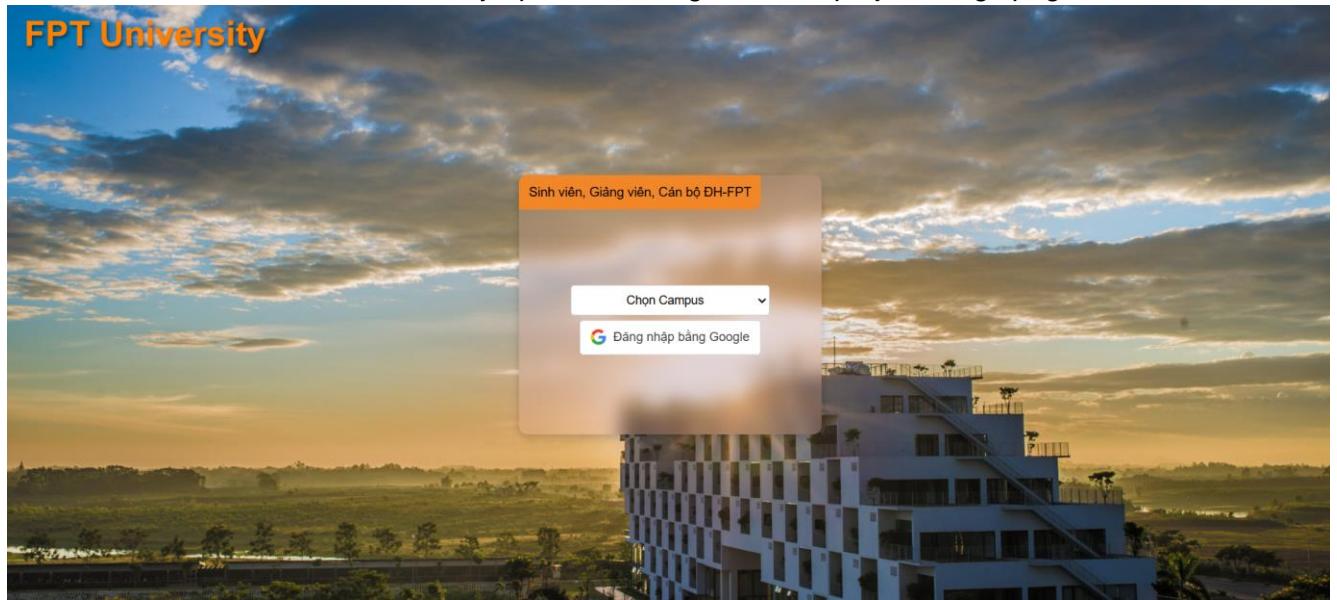


Figure 6.43: Run successfully

- Successfully completed the project launch process.

6.3.2.6 Build frontend source code

- Launch Visual Studio Code and open the folder containing the Frontend source code.

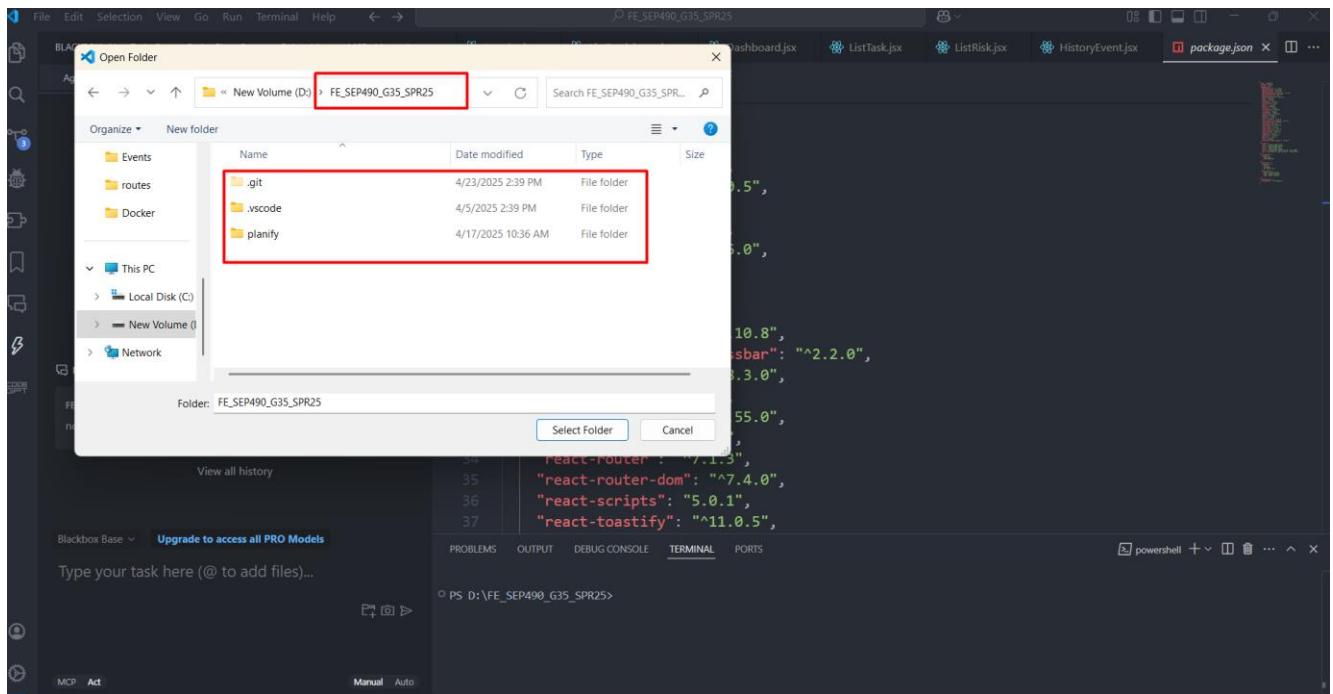


Figure 6.44: Open source code

- Open the Terminal in Visual Studio Code.

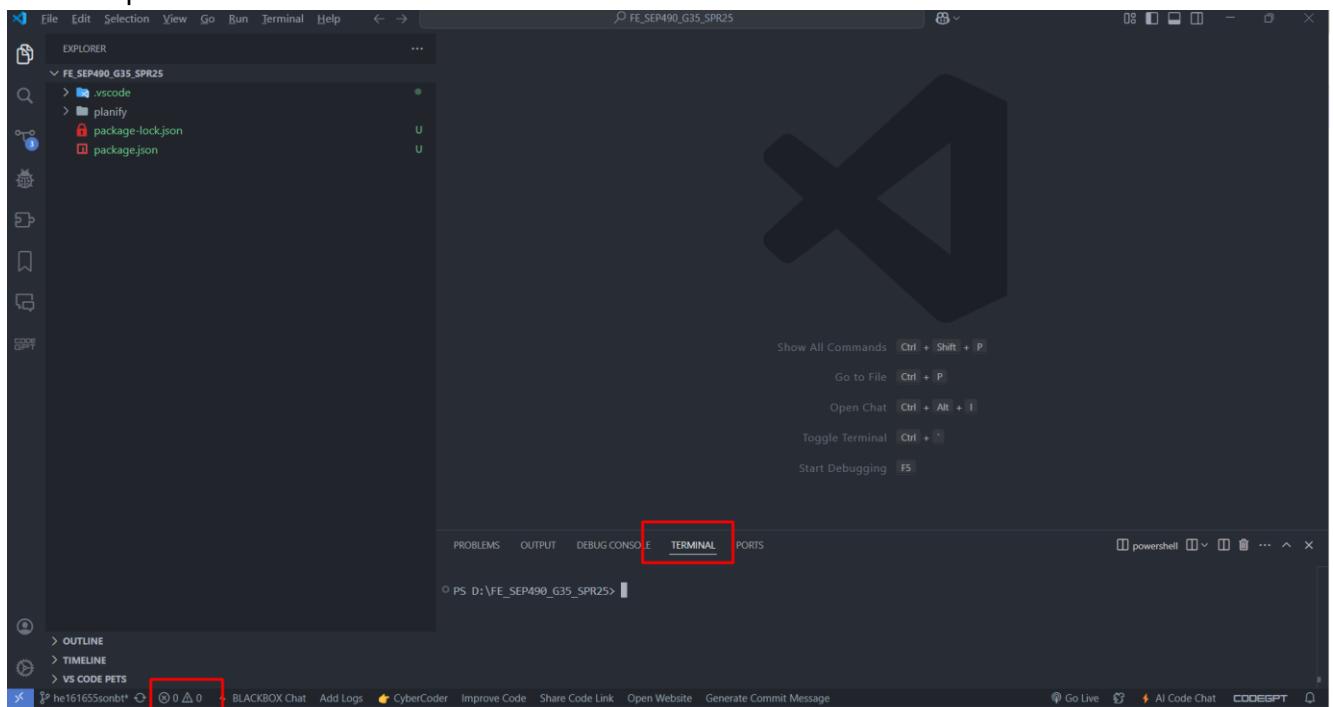


Figure 6.45: Open terminal

- Go to planify folder

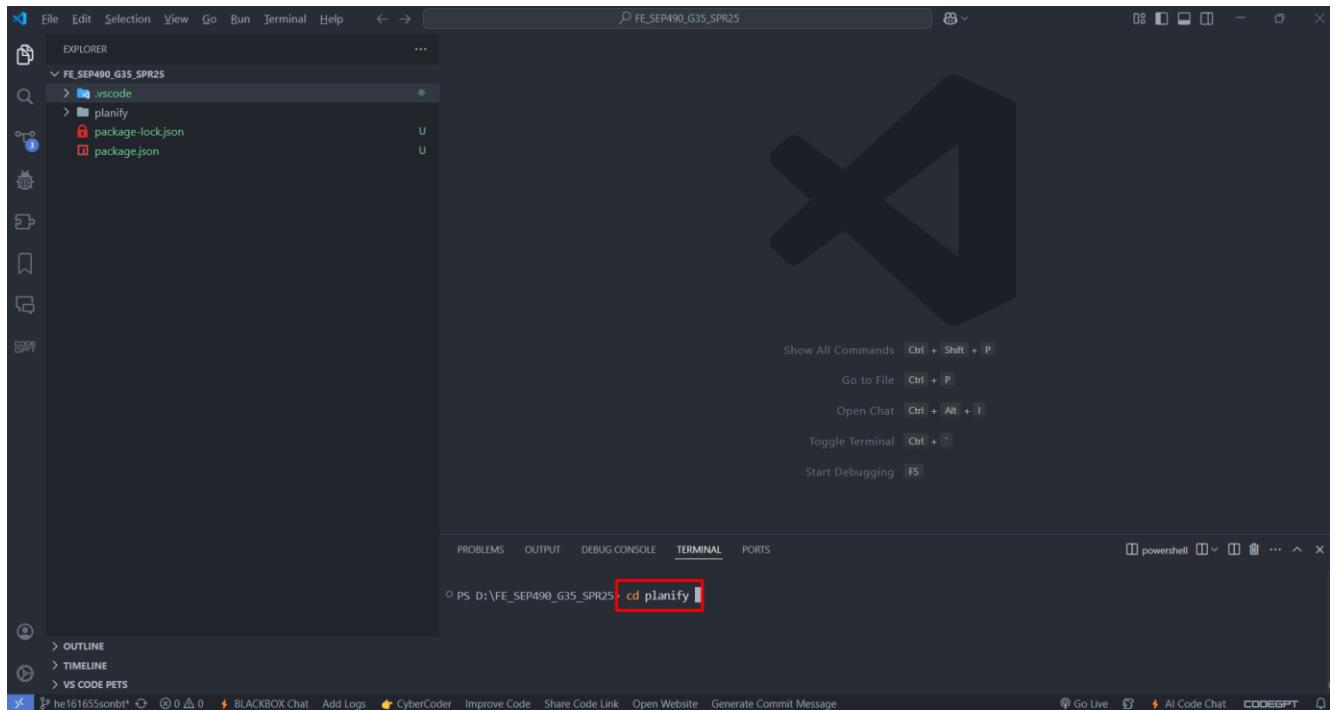


Figure 6.46: Move to planify

- To build the frontend source code using the command: `npm run build`

A screenshot of the Visual Studio Code interface, similar to Figure 6.46. The terminal window now shows:

```
PS D:\FE_SEP490_G35_SPR25> cd .\planify\  
PS D:\FE_SEP490_G35_SPR25\planify> npm run build
```

The command 'npm run build' is highlighted with a red rectangle.

Figure 6.47: npm run build

- Build process completed successfully.
- The output of the build process is the /build directory.

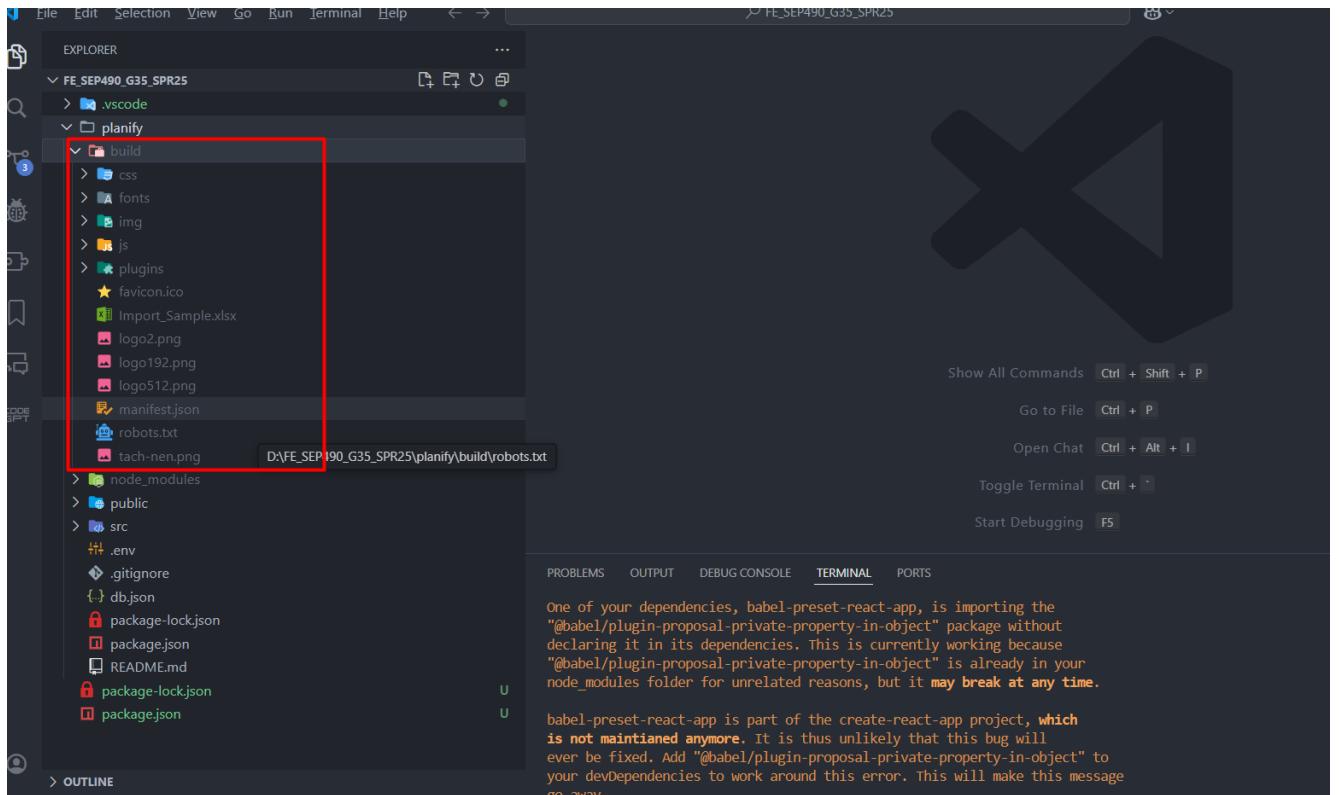


Figure 6.48: Output of build

6.3.2.7 Set up gmail for sending email

Step 1: Enable Two-Factor Authentication (2FA)

- Go to Security in Google Account Management Page: [Google Security](#)
- Scroll to the "How you sign in to Google" section and enable 2-Step Verification.

You have security tips

Security tips found in the Security Check-up

Review security tips

Recent security activity

No security activity or alerts in the last 28 days

How you sign in to Google

Make sure that you can always access your Google Account by keeping this information up to date

2-Step Verification	2-Step Verification is off	>
>Password	Last changed 14 Jul 2022	>
Skip password when possible	On	>

Figure 6.49: Security

- Follow the on-screen instructions to add your phone number or other 2FA methods like Google Authenticator or security keys.

← 2-Step Verification

 Add a second step to your account
To turn on 2-Step Verification, you first need to add a second step to your Google Account, like a phone number [Add phone number](#)

Turn on 2-Step Verification

Prevent hackers from accessing your account with an additional layer of security.

Unless you're signing in with a passkey, you'll be asked to complete the most secure second step available on your account. You can update your second steps and sign-in options any time in your settings. [Go to security settings](#)



[Turn on 2-Step Verification](#)

Second steps

Make sure that you can access your Google Account by keeping this information up to date and adding more sign-in options

 Passkeys and security keys	 Add a security key >
 Google prompt	 2 devices >
 Authenticator	 Add authenticator app >
 Phone number	 Add a phone number +

Figure 6.50: Two-Factor Authentication (2FA)

Step 2: Access the App Passwords Page

- After enabling 2-Step Verification, go back to the "Security" section in your Google account settings.
- Locate the App Passwords option and click on it, or simply type "App Password" in the search bar to find it quickly.

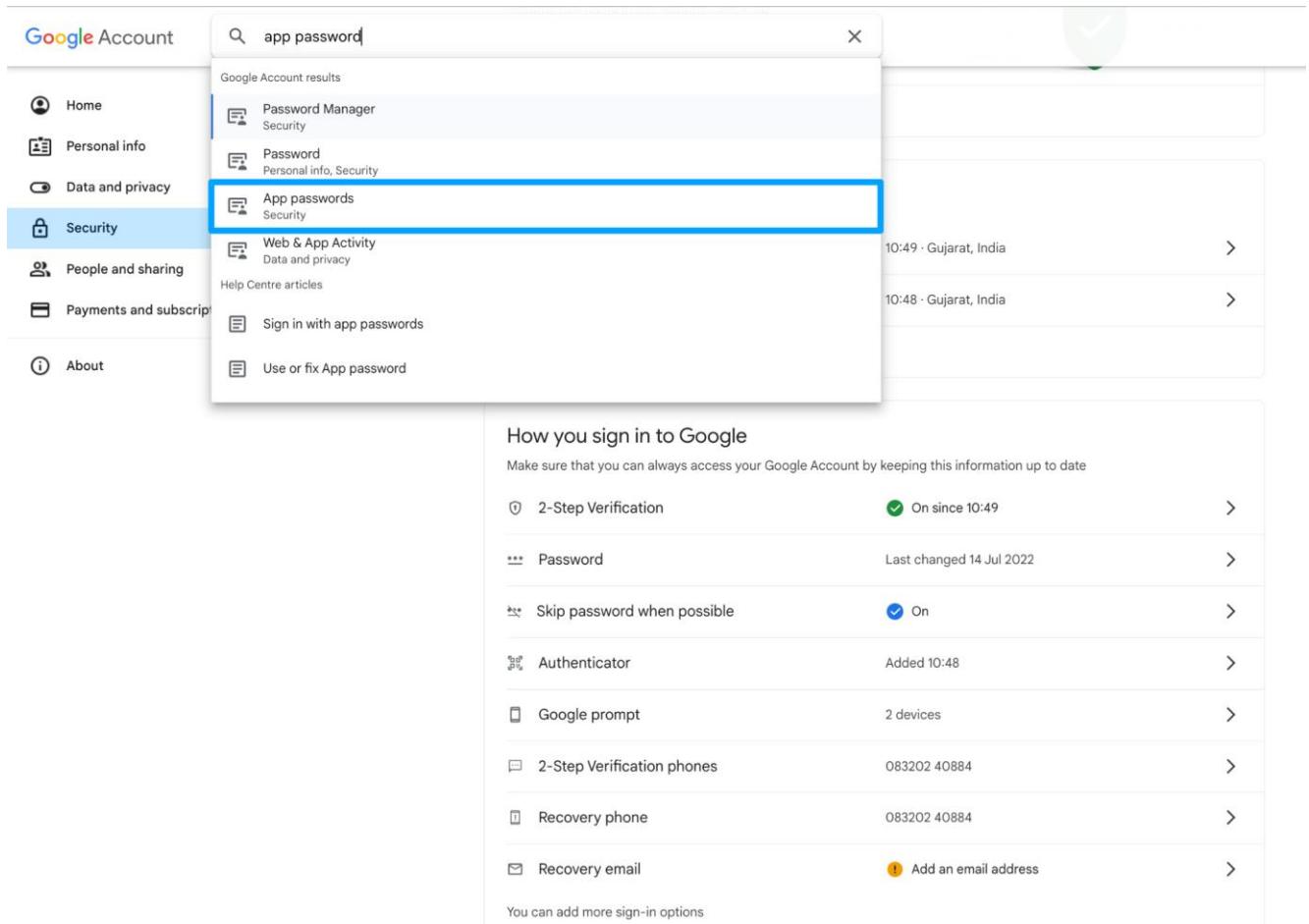


Figure 6.51: Search app password

Step 3: Sign in Again for Security

- Google may ask you to sign in again to verify your identity. Once verified, you will be directed to the App Passwords page.
- Once verified, enter the name of the app you need the password for in the App Name field, and click on Create to generate your App Password.

← App passwords

App passwords help you sign in to your Google Account on older apps and services that don't support modern security standards.

App passwords are less secure than using up-to-date apps and services that use modern security standards. Before you create an app password, you should check to see if your app needs this in order to sign in.

[Learn more](#)

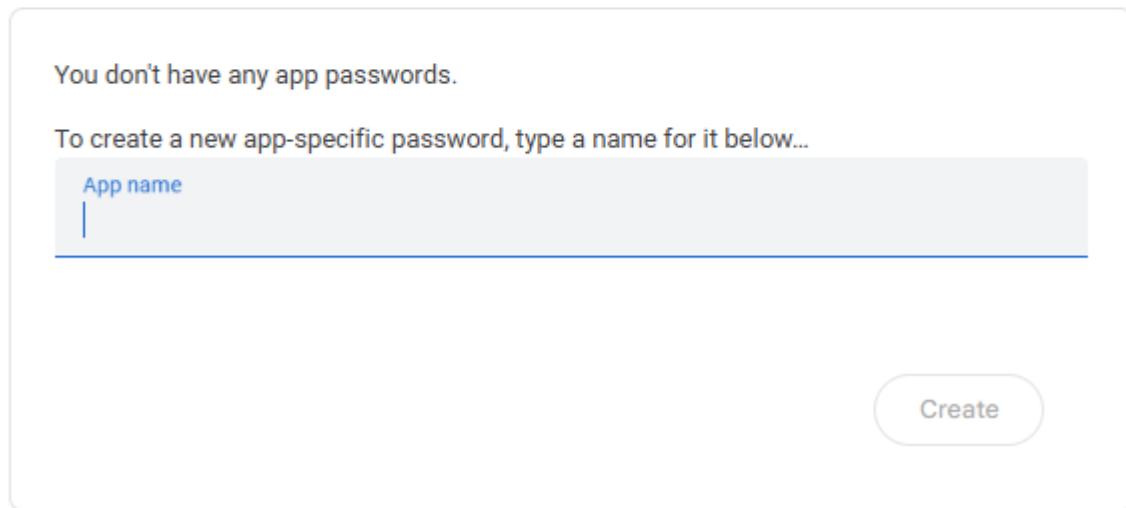


Figure 6.52: Create App Password

- A pop-up will appear where Google generates a 16-character App Password.

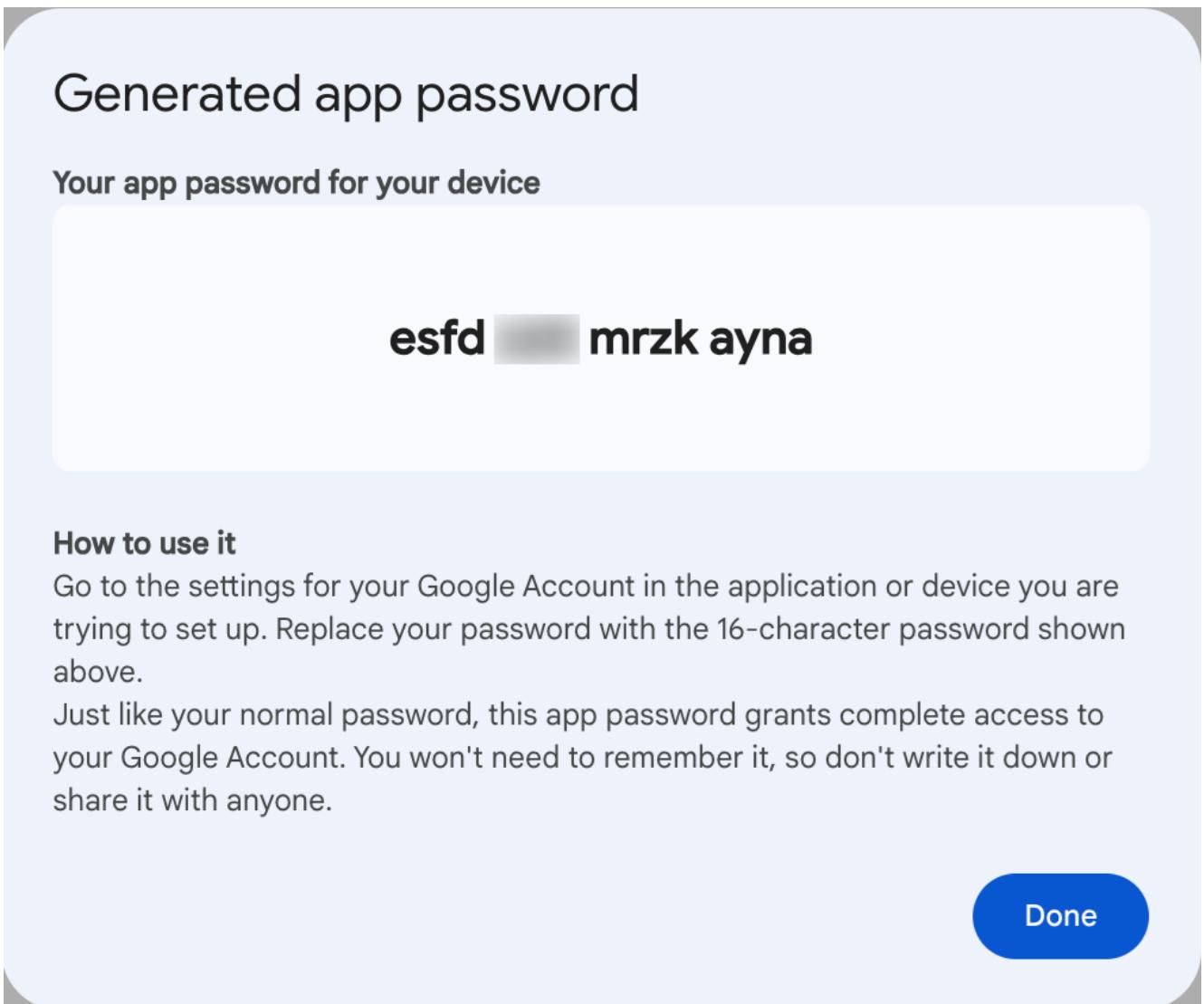


Figure 6.53: App Password

6.4 User Manual

6.4.1 Overview

Planify is a web platform designed for the FPT University community that enables seamless event planning and management. Integrated with AI, the platform automates scheduling, task creation, risk assessment, and cost estimation, improving efficiency. Aimed at students, staff, and faculty, Planify simplifies event coordination with a user-friendly interface and intelligent features.

6.4.2 Authentication Workflow

6.4.2.1 Login with email FPT

- Step 1: Access the website.
- Step 2: Choose your Campus

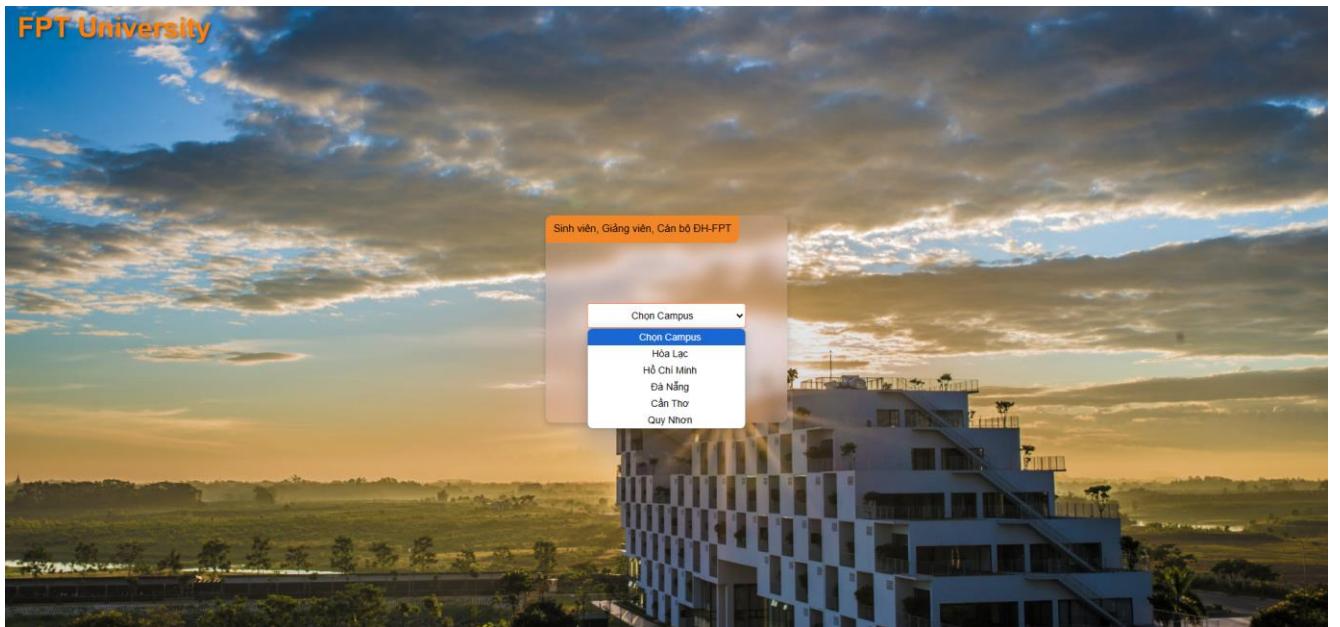


Figure 6.54: Choose Campus

- Step 3: Select your correct gmail account

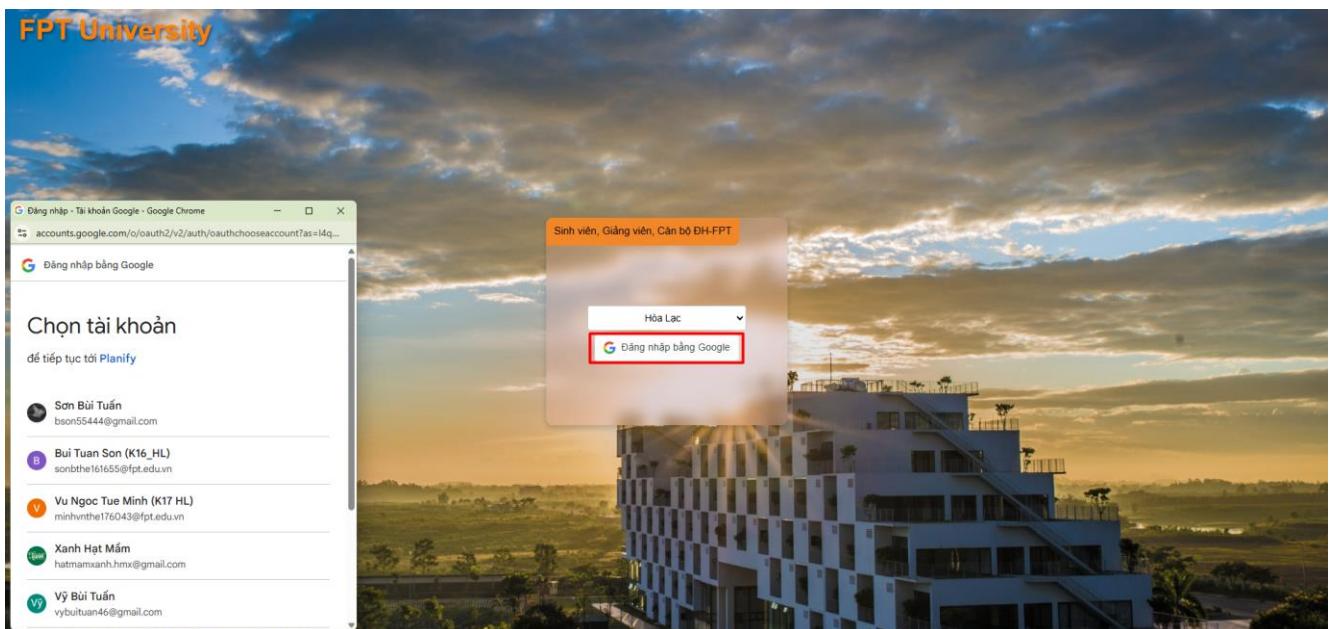


Figure 6.55: Choose account gmail

- Step 4: After login successfully, redirect to homepage.

6.4.2.2 Log Out of the account

- Step 1: Click your name or avatar on the navigation bar.

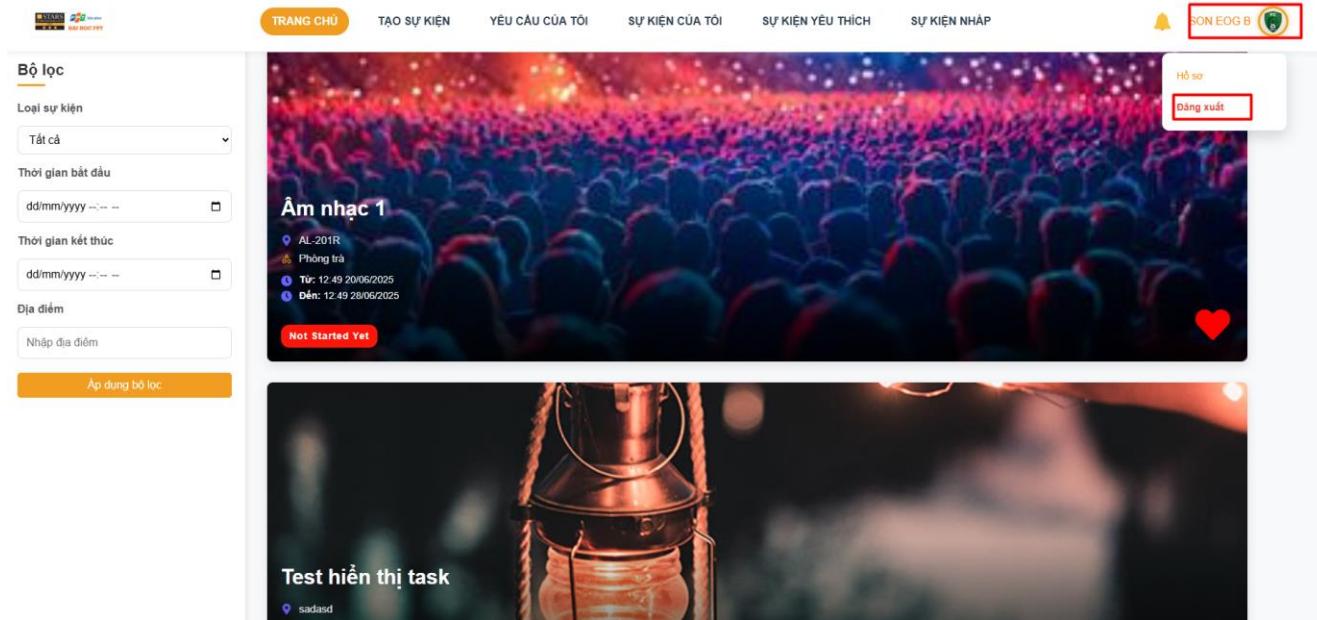


Figure 6.56: Logout

- Step 2: Click “Đăng xuất”

6.4.3 User Profile Management Workflow

6.4.3.1 User Profile View

- Step 1: Login.
- Step 2: Click your name or avatar on the navigation bar.
- Step 3: Click “Hồ sơ” to go to user profile.

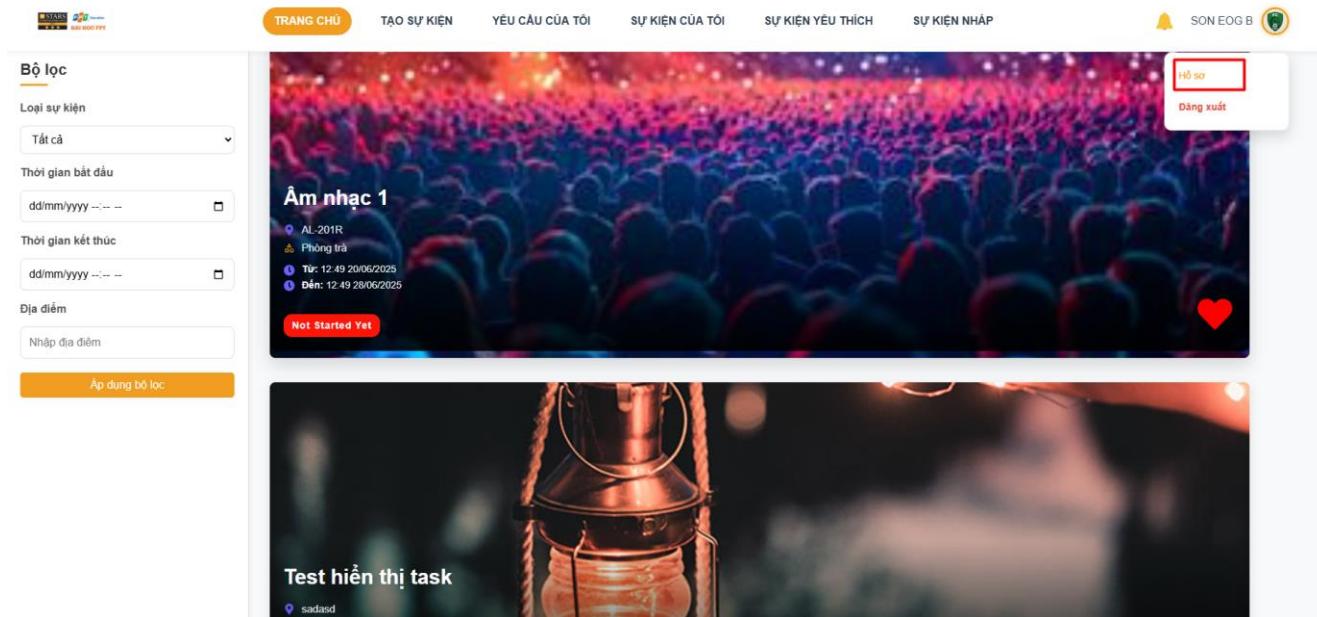


Figure 6.57: View profile user

6.4.3.2 Edit User Profile

- Step 1: At the User profile page, Click ‘Cập nhật hồ sơ’ to change your information.

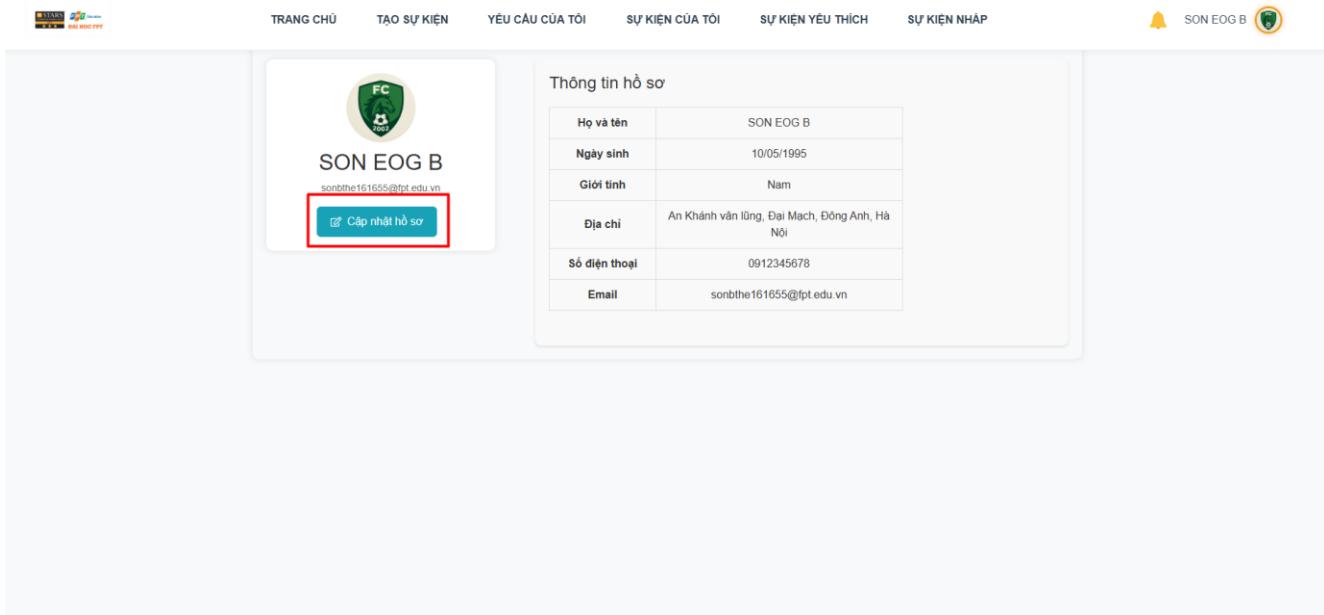


Figure 6.58: View profile user

- Step 2: Edit information in the form then click “Lưu” to update information

The screenshot shows the 'Cập nhật hồ sơ' (Update profile) form. It contains fields for Name, Date of Birth, Gender, Address, and Phone Number. The 'Gender' field has radio buttons for 'Nam' (Male) and 'Nữ' (Female), with 'Nam' selected. The 'Address' field contains the value 'An Khánh văn lũng'. The 'Phone Number' field contains the value '0912345678'. At the bottom of the form, there are two buttons: a red 'Hủy' (Cancel) button and a green 'Lưu' (Save) button, which is highlighted with a red box.

Figure 6.59: Update profile user

6.4.4 Create Event Workflow

6.4.4.1 Create events manually

- Step 1: Log in as Event Organizer.
- Step 2: Click “Tạo sự kiện” on the navigation bar.

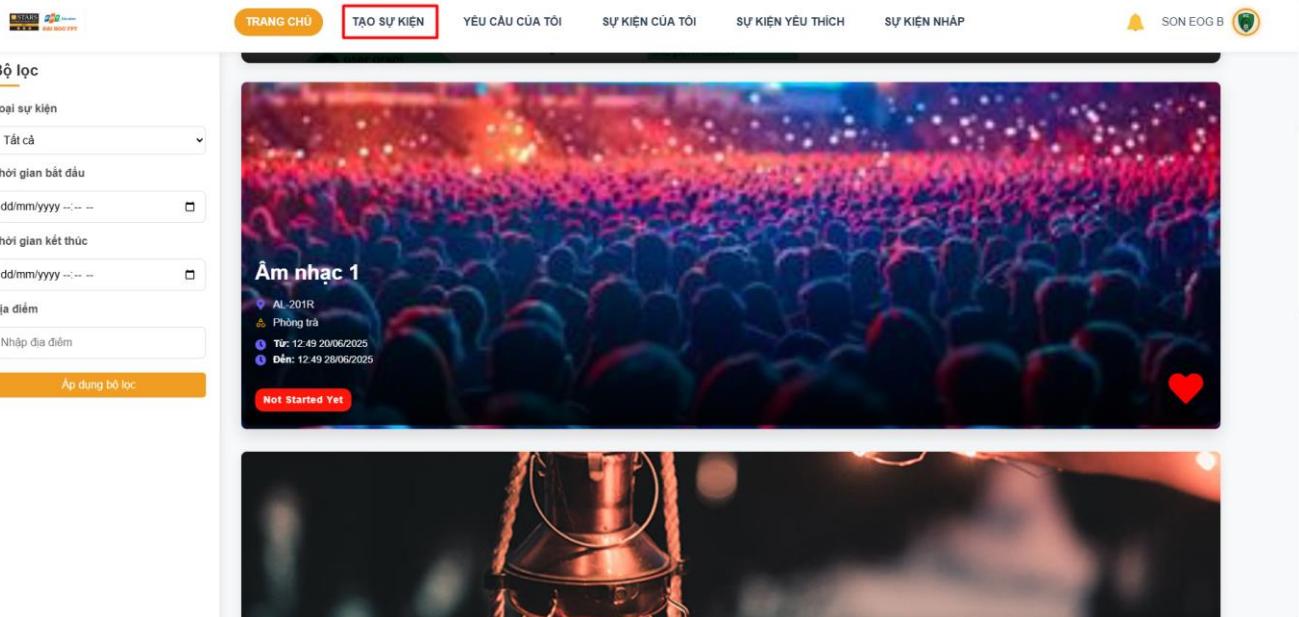


Figure 6.60: Create event

- Step 3: Enter the information for your event
- Step 4: Click “Tạo sự kiện”

A screenshot of the event creation page. It features two main sections: 'Riddle' and 'Photo'. The 'Riddle' section has a table with columns: STT, Tên riddle, Lý do, Mô tả, and Giải pháp. There is one row with the value '1' in the STT column and 'Tên riddle' in the Tên riddle column. The 'Photo' section shows a placeholder for an image with a '+' button. At the bottom, there are buttons for 'Lưu bản nhập' (Save draft) and 'Tạo Sự Kiện' (Create Event), with the latter being highlighted by a red box.

Figure 6.61: Create event page

- Step 5: Click “Vâng, Tạo sự kiện” to send request to Campus Manager for approval

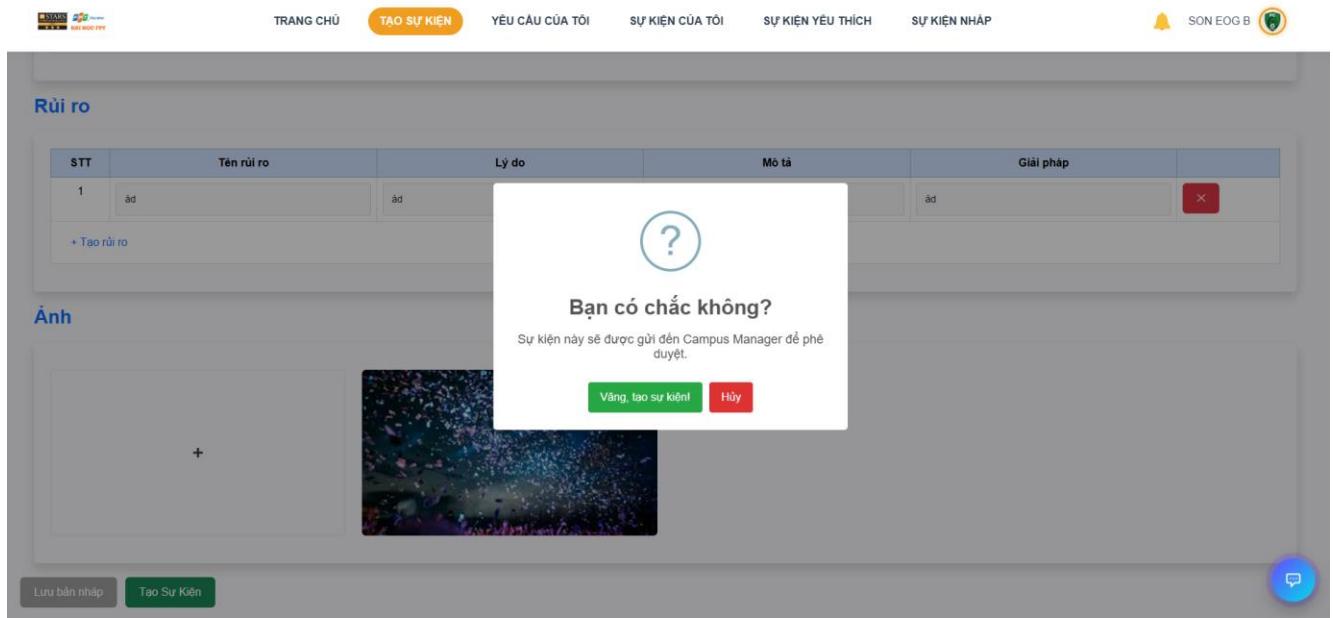


Figure 6.62: Popup send request

6.4.4.2 Create Event with AI

- Step 1: Log in as Event Organizer.
- Step 2: Click “Tạo sự kiện” on the navigation bar.
- Step 3: Click to box chat

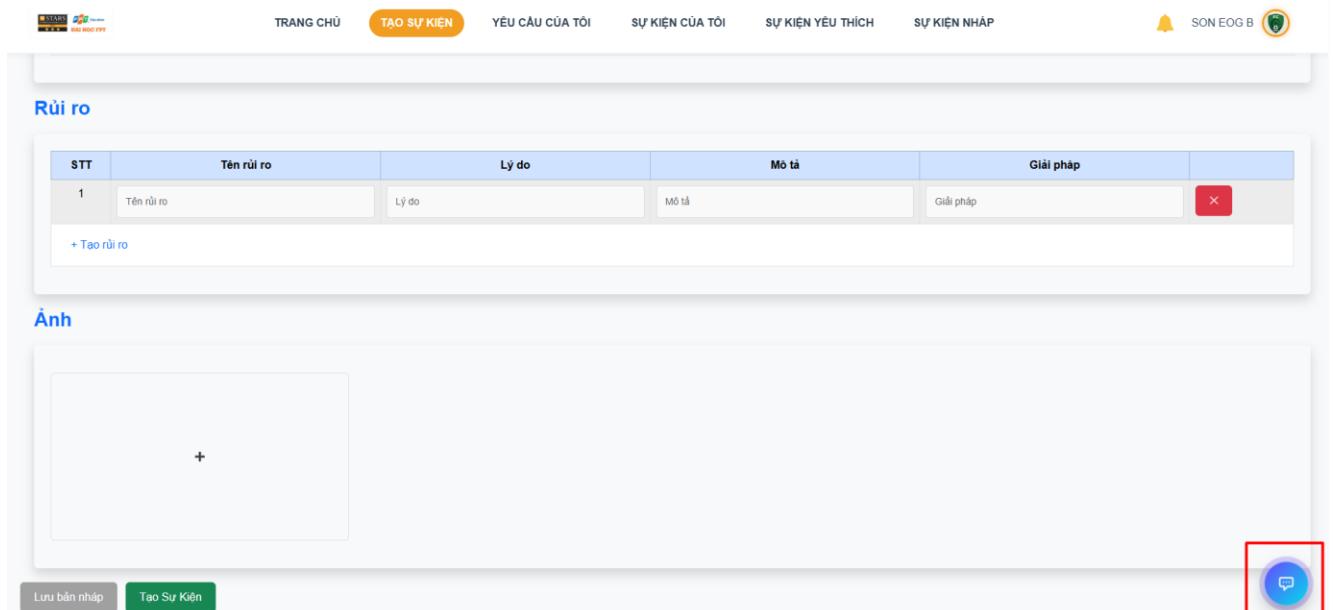


Figure 6.63: Create Event with Ai

- Step 4: Tell AI what kind of event you want to host

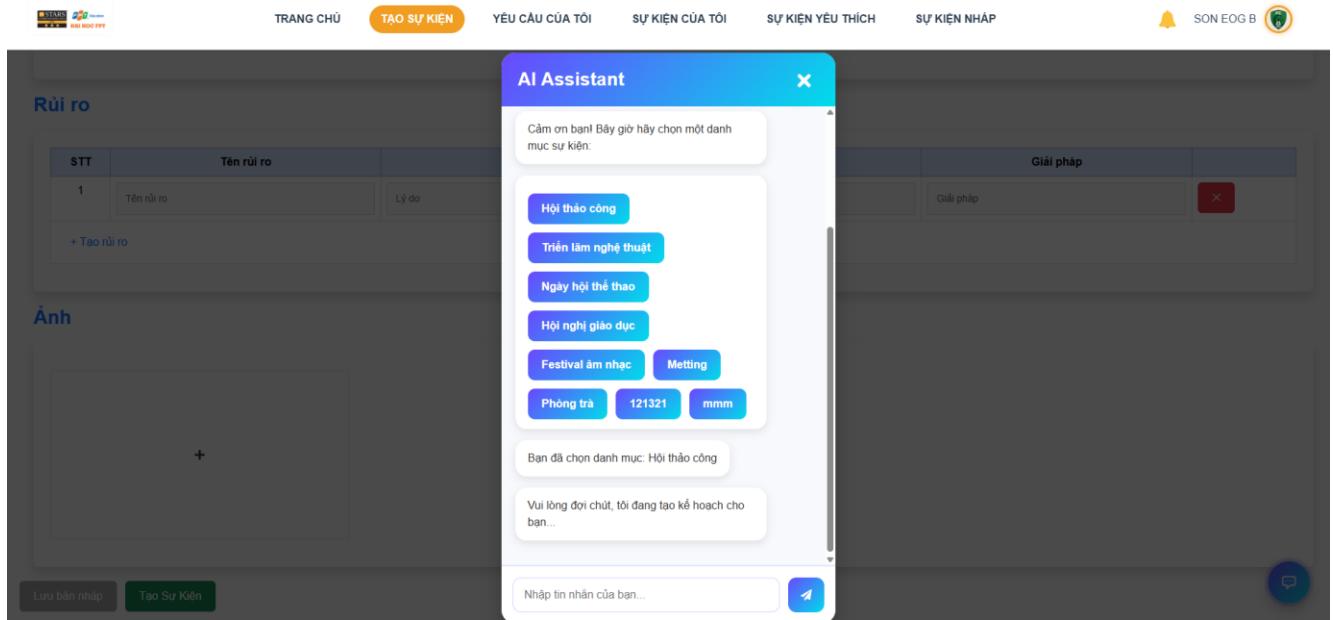


Figure 6.64: Choose event type

- Step 5: Click “Có” to automatically fill in the form

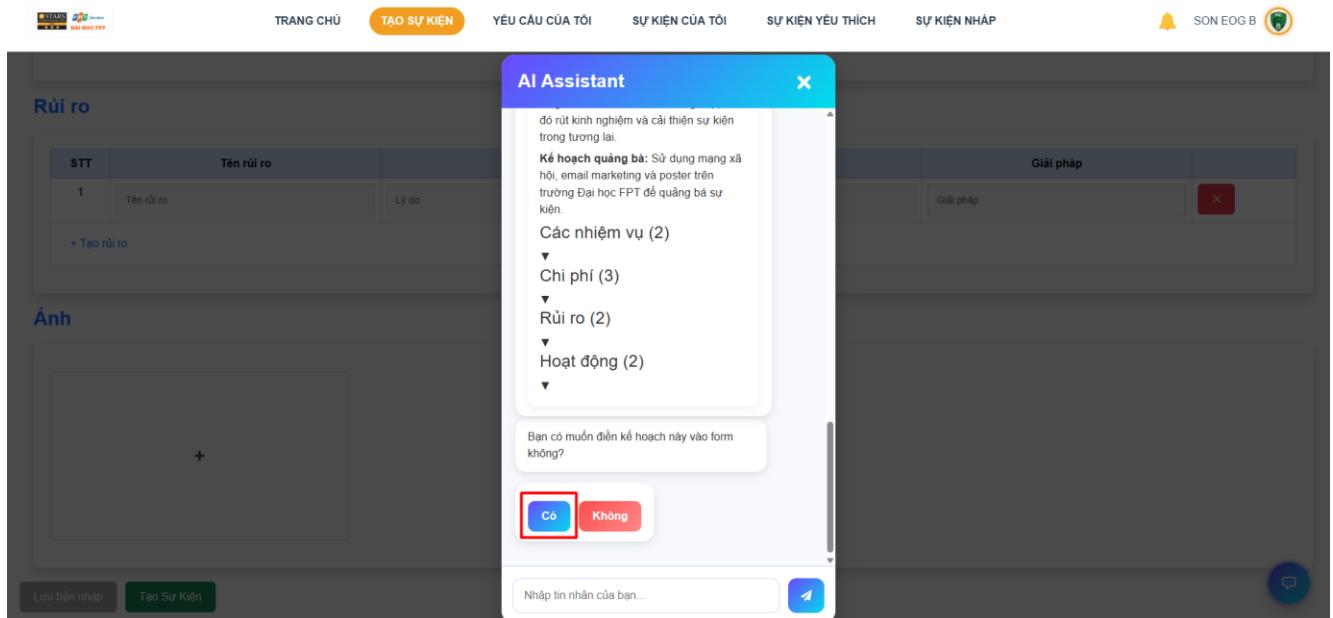


Figure 6.65: Fill fields of event

- Step 6: You can modify the AI content if you find it unreasonable.
- Step 7: Click “Tạo sự kiện”
- Step 8: Click “Vâng, tạo sự kiện” to send request to Campus Manager for approval.

6.4.5 Update Event Workflow

6.4.5.1 Update general information about the event

- Step 1: Log in as Event Organizer.
- Step 2: Click “Sự kiện nháp” on the navigation bar.

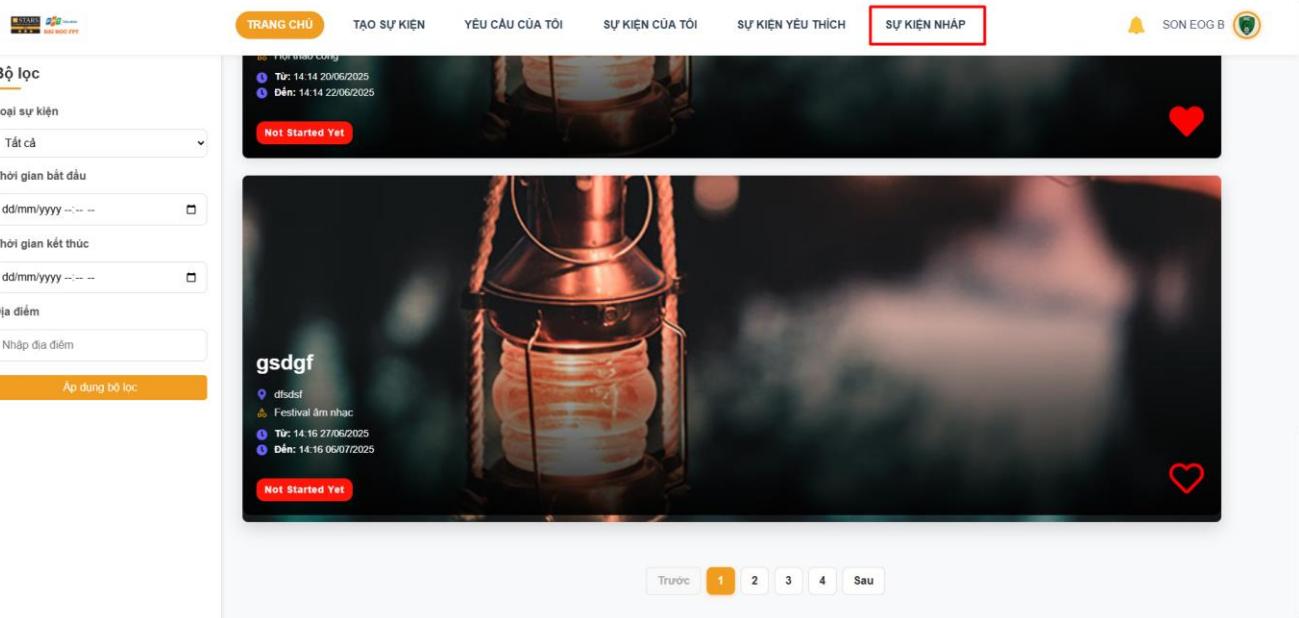


Figure 6.66: Draft Event

- Step 3: Click on the event you want to update

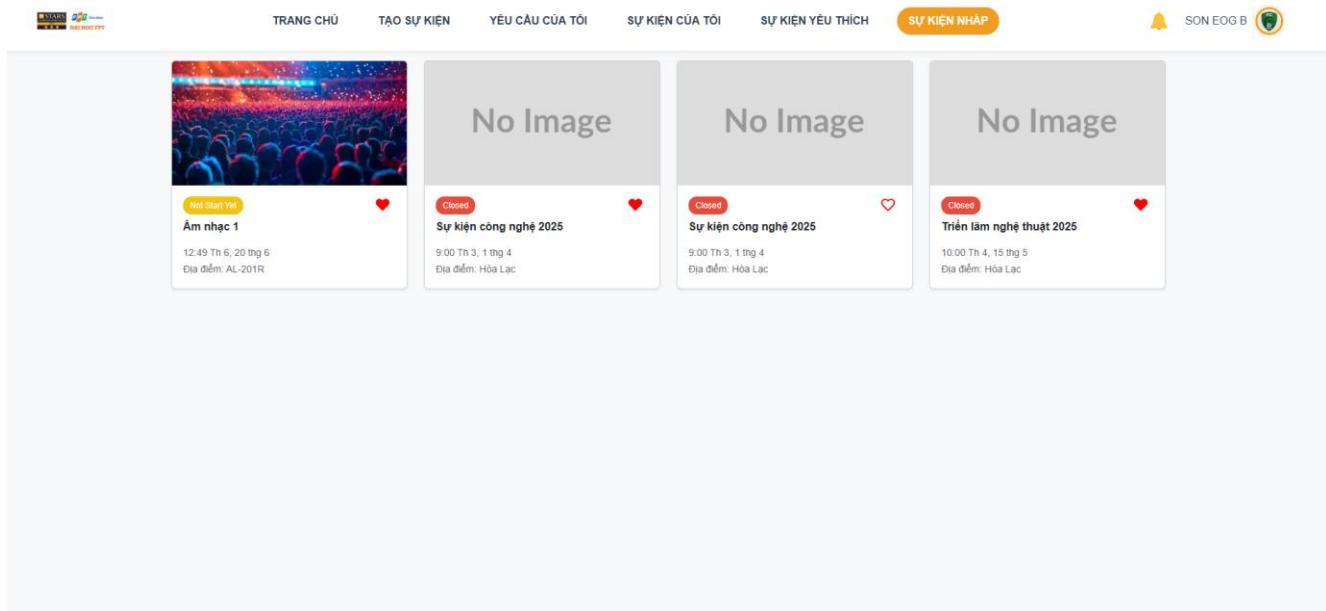


Figure 6.67: Draft Event Page

- Step 4 : Scroll down to the bottom of the page then click "Cập nhật sự kiện"

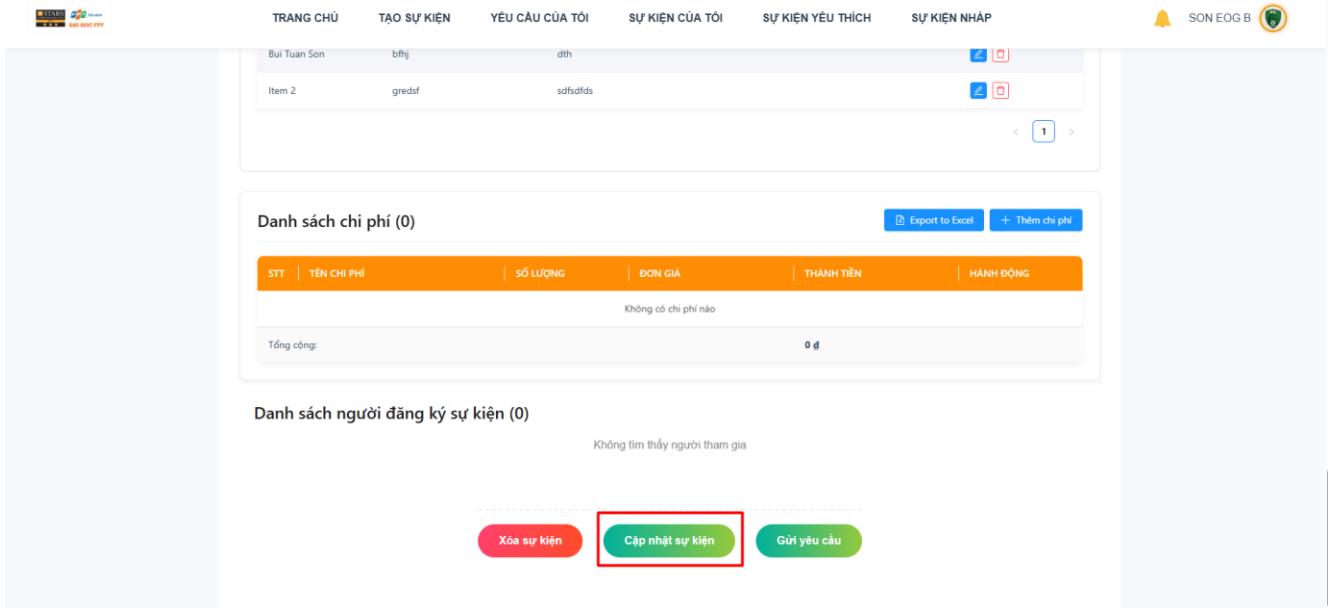


Figure 6.68: Event Detail

- Step 5: Update information for your event.
- Step 6: Click to “Cập nhật”

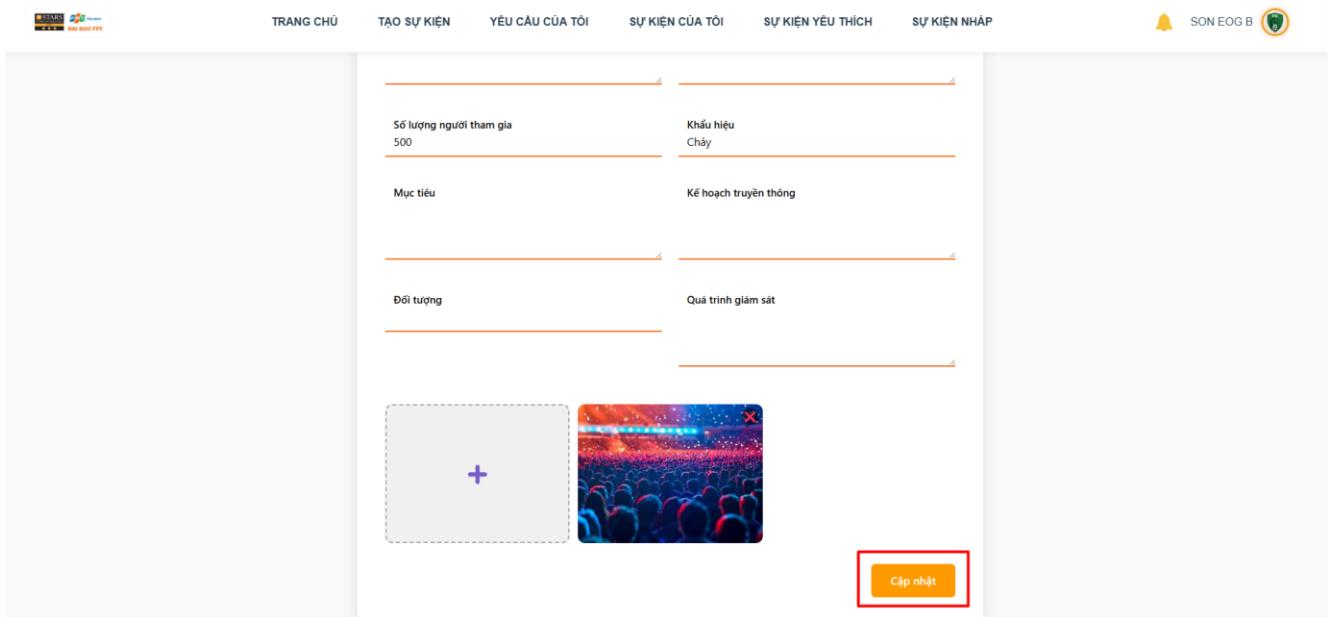


Figure 6.69: Update Event

6.4.5.2 Update event details

- Step 1: Log in as Event Organizer.
- Step 2: Click “Sự kiện nháp” on the navigation bar.
- Step 3: Click on the event you want to update.
- Step 4: Click on actions to perform event updates

Danh sách nhiệm vụ (3)

#	TÊN	MÔ TẢ	BẮT ĐẦU	HẠN CHỐT	NGÂN SÁCH	HÀNH ĐỘNG
1	Hihihih [1 Subtask]	dfvsdf	15/04/2025	23/04/2025	0 ₫	[Edit] [Delete]
2	test1	ádasd	24/04/2025	25/04/2025	0 ₫	[Edit] [Delete]
3	1212	dfgd	23/04/2025	02/05/2025	0 ₫	[Edit] [Delete]

Quản lý người tham gia sự kiện (5)

HỌ TÊN	THỜI GIAN THAM GIA	HÀNH ĐỘNG
Phạm Thị D	13:01 15/04/2025	[Edit]
SON IMPLE	13:01 15/04/2025	[Edit]
Test	14:00 15/04/2025	[Edit]
SON SPEC	14:00 15/04/2025	[Edit]
Hoàng Văn C	14:00 15/04/2025	[Edit]

Figure 6.70: Event Detail

Danh sách rủi ro (2)

TÊN RỦI RO	NGUYỄN NHÂN	GIẢI PHÁP	MÔ TẢ	HÀNH ĐỘNG
Bui Tuan Son	bfbj	dth		[Edit] [Delete]
Item 2	gredsf	sdfsdffds		[Edit] [Delete]

Figure 6.71: Event Detail

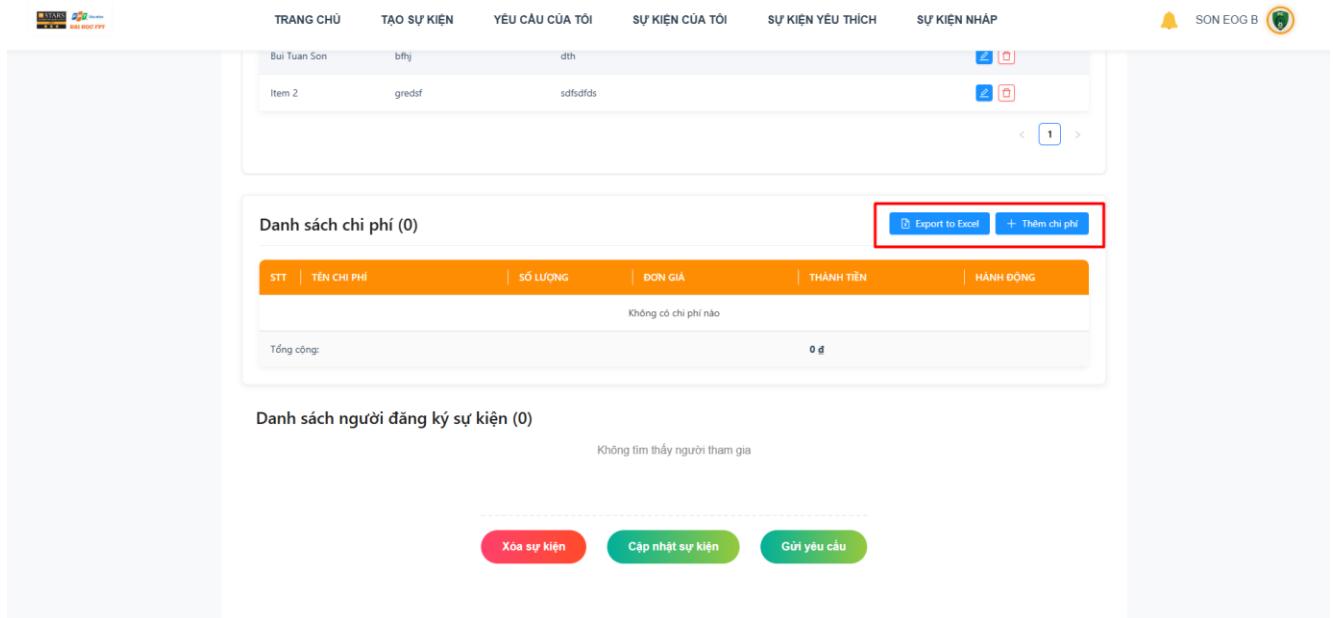


Figure 6.72: Event Detail

6.4.6 Event approval workflow

6.4.6.1 Event approval

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý yêu cầu” on the navigation bar.

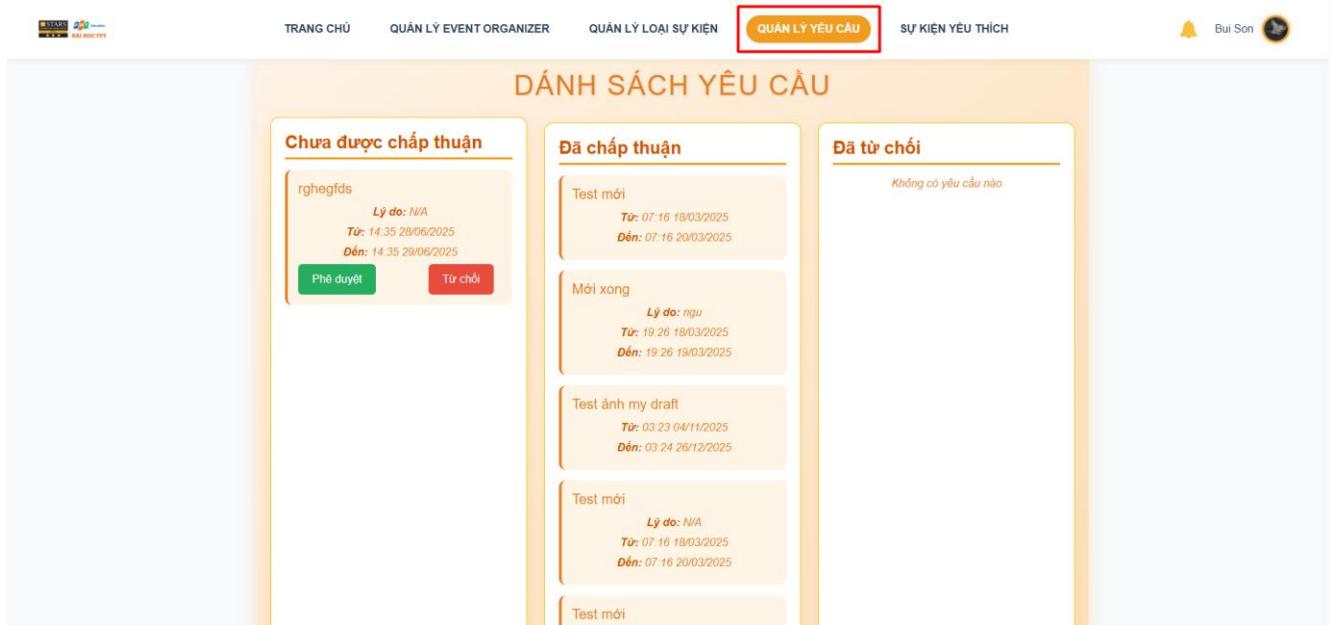


Figure 6.73: Manage request

- Step 3: Click “Phê duyệt” or “Từ chối”
- Step 4: Enter reason if any

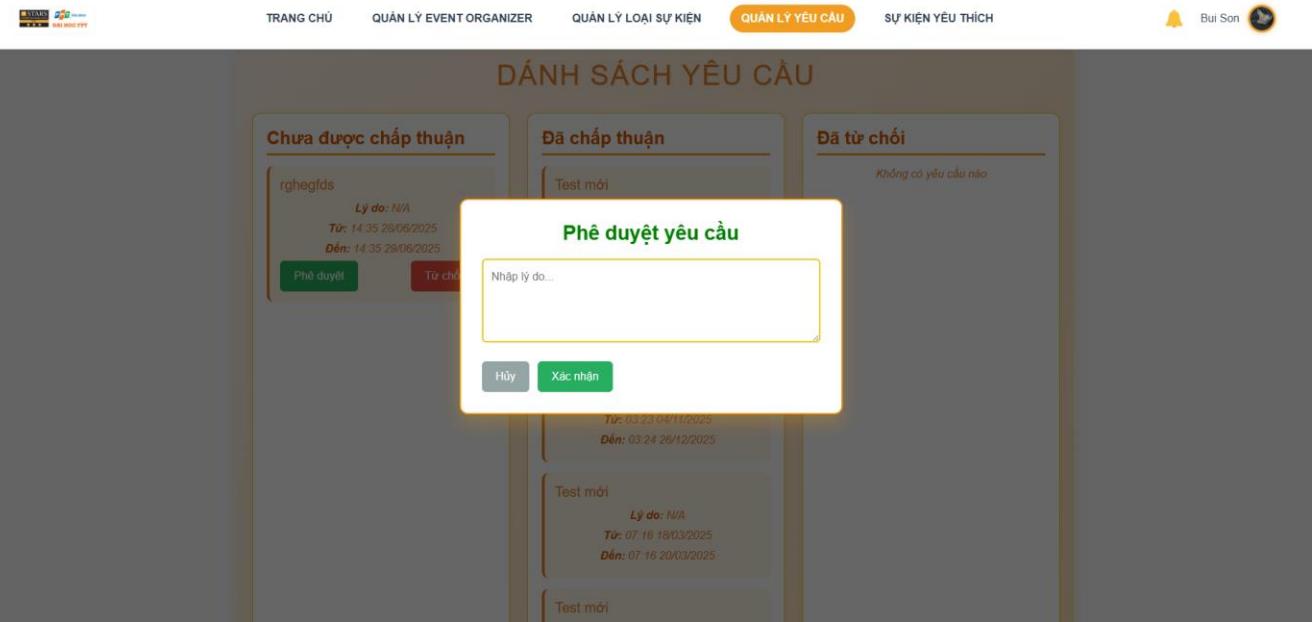


Figure 6.74: Popup approval

- Step 5: Click “Xác nhận”

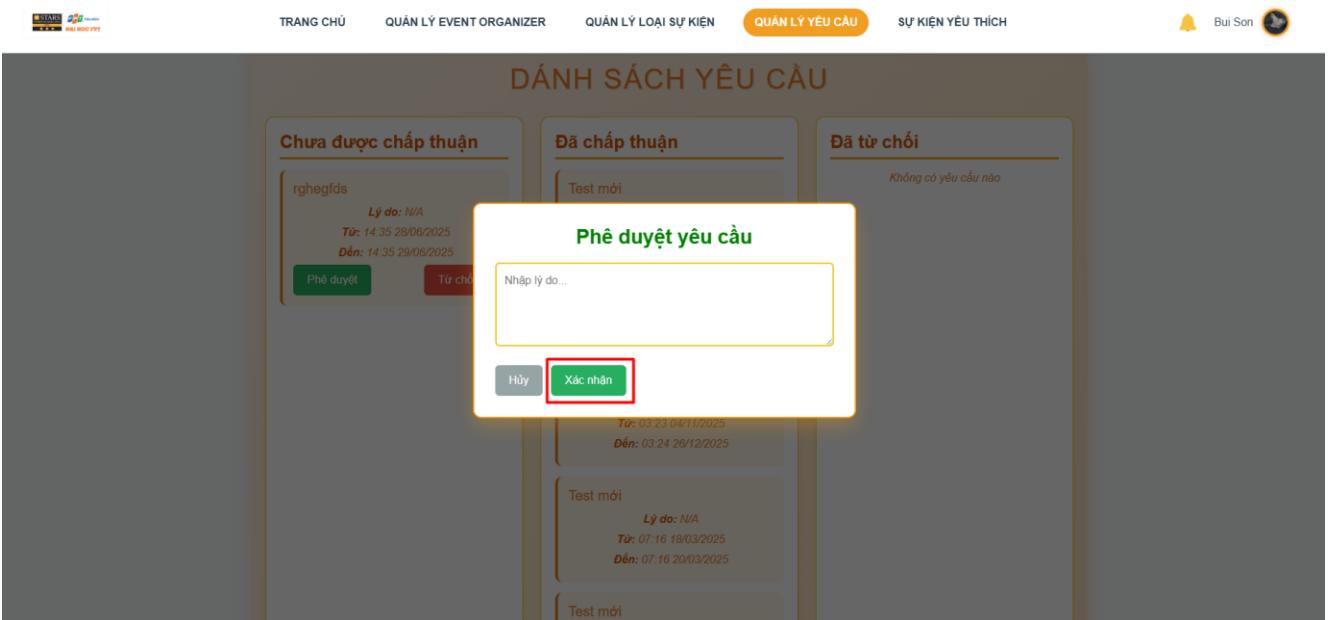


Figure 6.75: Submit approval

6.4.7 Event Type Management Workflow

6.4.7.1 Create event type

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý loại sự kiện” on the navigation bar.

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Metting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa

Figure 6.76: Create event type

- Step 3: Click “Tạo mới” to create event type

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Metting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa

Figure 6.77: Management event category page

- Step 4: Enter event type

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Meeting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa

Figure 6.78: Popup create event category

- Step 5: Click “Tạo” to create event type

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Meeting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa
10	1	Cập nhật Xóa

Figure 6.79: Submit create event category

6.4.7.2 Update event type

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý loại sự kiện” on the navigation bar.
- Step 3: Click “Cập nhật” for the event type you want to update.

The screenshot shows a table with columns: ID, Tên danh mục (Category Name), and Hành động (Actions). The Hành động column contains two buttons: 'Cập nhật' (Update) and 'Xóa' (Delete). A red box highlights the 'Cập nhật' button for the first row. The table has 10 rows, each representing a category from 1 to 10.

ID	Tên danh mục	Hành động
1	Hội thảo công	<button>Cập nhật</button> <button>Xóa</button>
2	Triển lãm nghệ thuật	<button>Cập nhật</button> <button>Xóa</button>
3	Ngày hội thể thao	<button>Cập nhật</button> <button>Xóa</button>
4	Hội nghị giáo dục	<button>Cập nhật</button> <button>Xóa</button>
5	Festival âm nhạc	<button>Cập nhật</button> <button>Xóa</button>
6	Meeting	<button>Cập nhật</button> <button>Xóa</button>
7	Phòng trà	<button>Cập nhật</button> <button>Xóa</button>
8	121321	<button>Cập nhật</button> <button>Xóa</button>
9	mmm	<button>Cập nhật</button> <button>Xóa</button>
10	1	<button>Cập nhật</button> <button>Xóa</button>

Figure 6.80: Management event category page

- Step 4: Enter event type change

The screenshot shows a table with columns: ID, Tên danh mục (Category Name), and Hành động (Actions). The Hành động column contains two buttons: 'Cập nhật' (Update) and 'Xóa' (Delete). A red box highlights the 'Cập nhật' button for the fourth row. A modal window titled 'Cập nhật danh mục' is open over the table, containing a text input field with the value 'Hội thảo công'. The modal has 'Hủy' (Cancel) and 'Cập nhật' (Update) buttons.

ID	Tên danh mục	Hành động
1	Hội thảo công	<button>Cập nhật</button> <button>Xóa</button>
2	Triển lãm nghệ thuật	<button>Cập nhật</button> <button>Xóa</button>
3	Ngày hội thể thao	<button>Cập nhật</button> <button>Xóa</button>
4	Hội nghị giáo dục	<input type="text" value="Hội thảo công"/> <button>Cập nhật</button> <button>Xóa</button>
5	Festival âm nhạc	<button>Cập nhật</button> <button>Xóa</button>
6	Meeting	<button>Cập nhật</button> <button>Xóa</button>
7	Phòng trà	<button>Cập nhật</button> <button>Xóa</button>
8	121321	<button>Cập nhật</button> <button>Xóa</button>
9	mmm	<button>Cập nhật</button> <button>Xóa</button>
10	1	<button>Cập nhật</button> <button>Xóa</button>

Figure 6.81: Popup update event category

- Step 5: Click “Cập nhật” to update the event type.

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Meting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa
10	1	Cập nhật Xóa

Figure 6.82: Submit update event category

6.4.7.3 Delete event type

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý loại sự kiện” on the navigation bar.
- Step 3: Click “Xóa” for the event type you want to delete.

ID	Tên danh mục	Hành động
1	Hội thảo công	Cập nhật Xóa
2	Triển lãm nghệ thuật	Cập nhật Xóa
3	Ngày hội thể thao	Cập nhật Xóa
4	Hội nghị giáo dục	Cập nhật Xóa
5	Festival âm nhạc	Cập nhật Xóa
6	Meting	Cập nhật Xóa
7	Phòng trà	Cập nhật Xóa
8	121321	Cập nhật Xóa
9	mmm	Cập nhật Xóa
10	1	Cập nhật Xóa

Figure 6.83: Management event category page

- Step 4: Click “Vâng, xóa nó” to confirm deleting this event type

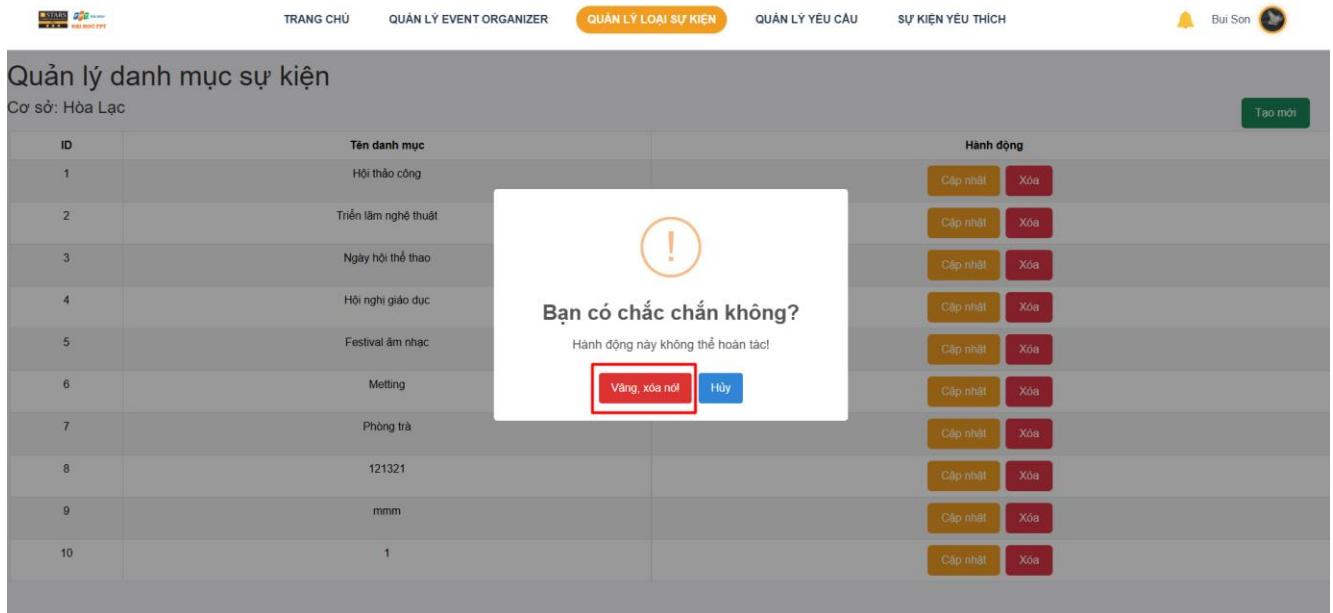


Figure 6.84: Popup confirm delete event category

6.4.8 Event Organizer Management Workflow

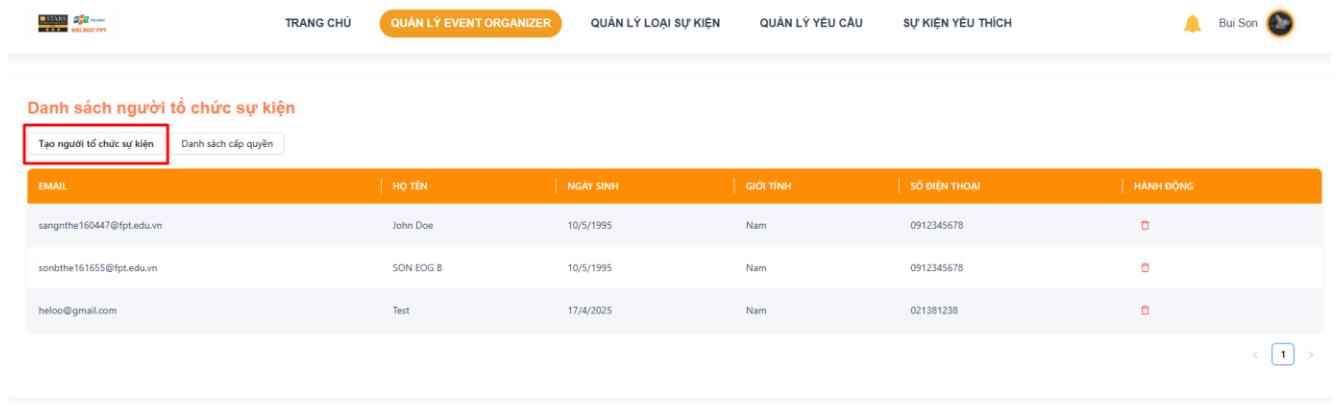
6.4.8.1 Create Event Organizer

- Step 1: Login as Campus Manager.
- Step 2: Click “Quản lý Event Organizer” on the navigation bar.

EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	0912345678	<input type="button" value=""/>
sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	0912345678	<input type="button" value=""/>
heloo@gmail.com	Test	17/4/2025	Nam	021381238	<input type="button" value=""/>

Figure 6.85: Manage Event Organizer

- Step 3: Click “Tạo người tổ chức sự kiện”



The screenshot shows a web application interface for managing event organizers. At the top, there are navigation tabs: TRANG CHỦ, QUẢN LÝ EVENT ORGANIZER (highlighted in orange), QUẢN LÝ LOẠI SỰ KIỆN, QUẢN LÝ YÊU CẦU, and SỰ KIỆN YÊU THÍCH. On the right, there are user profile icons for 'Bui Son' and a notification bell.

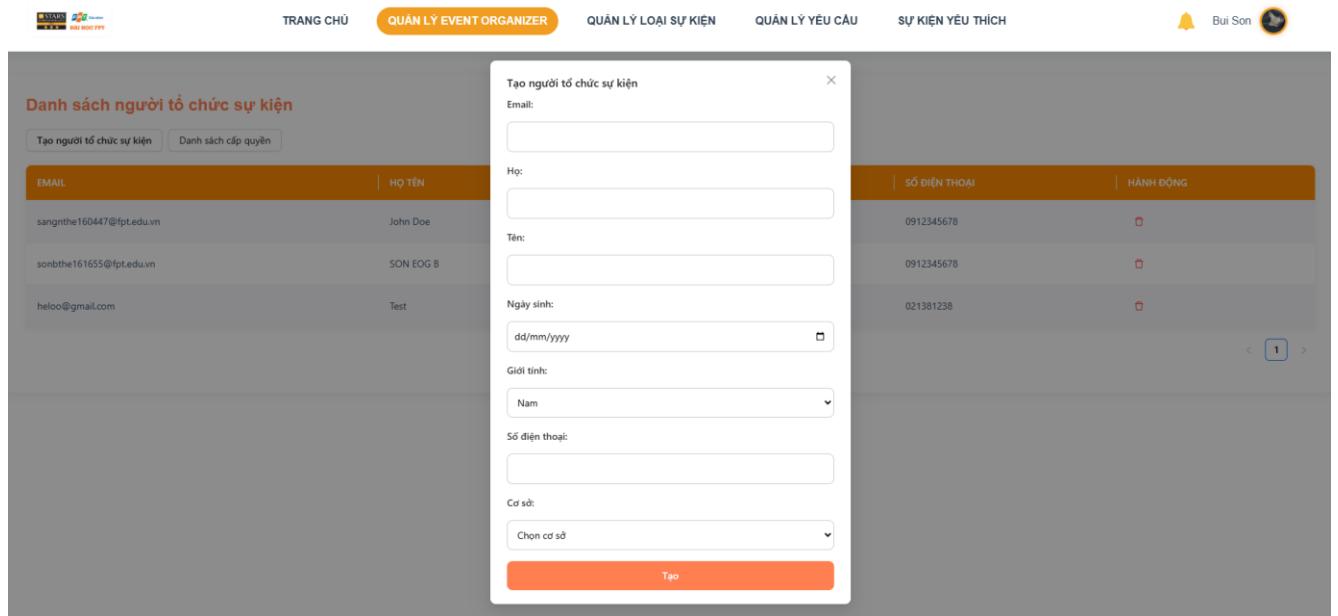
The main content area displays a table titled "Danh sách người tổ chức sự kiện" (List of event organizers). The table has columns: EMAIL, HỌ TÊN (Name), NGÀY SINH (Birth Date), GIỚI TÍNH (Gender), SỐ ĐIỆN THOẠI (Phone Number), and HÀNH ĐỘNG (Actions). Three rows of data are shown:

EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	0912345678	<input type="button" value=""/>
sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	0912345678	<input type="button" value=""/>
heloo@gmail.com	Test	17/4/2025	Nam	021381238	<input type="button" value=""/>

A small blue box highlights the "Tạo người tổ chức sự kiện" (Create organizer) button in the top left corner of the table header. Below the table, there are navigation arrows: < (left), 1 (center), and > (right).

Figure 6.86: Manage Event Organizer Page

- Step 4: Enter information of this event organizer



This screenshot shows the same application interface as Figure 6.86, but with a modal dialog box overlaid. The dialog is titled "Tạo người tổ chức sự kiện" (Create organizer). It contains input fields for various details:

- Email:
- Họ:
- Tên:
- Ngày sinh: dd/mm/yyyy
- Giới tính:
- Số điện thoại:
- Cơ sở:

At the bottom of the dialog is a large orange "Tạo" (Create) button.

Figure 6.87: Pop-up create event organizer

- Step 5: Click “Tạo” to create Event organizer

Danh sách người tổ chức sự kiện

Tạo người tổ chức sự kiện | Danh sách cấp quyền

EMAIL	HỌ TÊN
sangnthe160447@fpt.edu.vn	John Doe
sonbthe161655@fpt.edu.vn	SON EOG B
heloo@gmail.com	Test

Tạo người tổ chức sự kiện

Email:

Họ:

Tên:

Ngày sinh:

Giới tính:

Số điện thoại:

Cơ sở:

Tạo

SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
0912345678	<input type="checkbox"/>
0912345678	<input type="checkbox"/>
021381238	<input type="checkbox"/>

Figure 6.88: Submit to create event organizer

6.4.8.2 Grant permission to become an event organizer

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý Event Organizer” on the navigation bar.
- Step 3: Click “Danh sách cấp quyền” to grant permission.

Danh sách người tổ chức sự kiện

Tạo người tổ chức sự kiện | **Danh sách cấp quyền**

EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	0912345678	<input type="checkbox"/>
sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	0912345678	<input type="checkbox"/>
heloo@gmail.com	Test	17/4/2025	Nam	021381238	<input type="checkbox"/>

Figure 6.89: Manage Event Organizer page

- Step 4: Grant permission to users you want

The screenshot shows a table with columns: EMAIL, TÊN, HỌ, NGÀY SINH, GIỚI TÍNH, SỐ ĐIỆN THOẠI, and HÀNH ĐỘNG. The 'HÀNH ĐỘNG' column contains the text 'Cấp quyền tạo sự kiện' for all users listed. A red box highlights the 'HÀNH ĐỘNG' column.

EMAIL	TÊN	HỌ	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
implementer1@example.com	Pham	Thi D	20/3/1992	Nam	0901234570	Cấp quyền tạo sự kiện
vybuttuan46@gmail.com	SON IMPLÉ		10/5/1995	Nam	0912345678	Cấp quyền tạo sự kiện
heloo@gmail.com	Test		17/4/2025	Nam	021381238	Cấp quyền tạo sự kiện
hatmamaxanh.hmx@gmail.com	SON SPEC		10/5/1995	Nam	0912345678	Cấp quyền tạo sự kiện
spectator1@example.com	Hoàng	Văn C	25/7/1998	Nam	0901234571	Cấp quyền tạo sự kiện

Figure 6.90: List user can grant permission

6.4.8.3 Remove event organizer permissions

- Step 1: Login as Campus Manager
- Step 2: Click “Quản lý Event Organizer” on the navigation bar.
- Step 3: Click to icon delete to remove event organizer permissions you want

The screenshot shows a table with columns: EMAIL, HỌ TÊN, NGÀY SINH, GIỚI TÍNH, SỐ ĐIỆN THOẠI, and HÀNH ĐỘNG. The 'HÀNH ĐỘNG' column contains small red square icons with a white minus sign. A red box highlights the 'HÀNH ĐỘNG' column.

EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SỐ ĐIỆN THOẠI	HÀNH ĐỘNG
sangnghie160447@fpt.edu.vn	John Doe	10/5/1995	Nam	0912345678	<input type="button" value="Xóa"/>
sorbtbe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	0912345678	<input type="button" value="Xóa"/>
heloo@gmail.com	Test	17/4/2025	Nam	021381238	<input type="button" value="Xóa"/>

Figure 6.91: Manage Event Organizer page

- Step 4: Click “Xóa” to confirm



Figure 6.92: Pop-up delete event organizer

6.4.9 Update subtask status workflow

6.4.9.1 Update subtask status

- Step 1: Login as Implementer
- Step 2: Click “V” to update subtask status

	Th 2 28/4	Th 3 29/4	Th 4 30/4	Th 5 1/5	Th 6 2/5	Th 7 3/5	CN 4/5
test 2 ✓	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test 2 Mô tả: a Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới
test ✓	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test Mô tả: Hello Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới
test1 ✓	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới
test1 ✓	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới	test1 Mô tả: dsfsdf Ngân sách: 0 ₫ Nhiệm vụ: Chuẩn bị địa điểm Sự kiện: Test mới
Dòng Thanh ✓	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1	Dòng Thanh Mô tả: ád Ngân sách: 123 ₫ Nhiệm vụ: Hihihh Sự kiện: Âm nhạc 1

Figure 6.93: Home page of Implementer

6.4.10 Event registration workflow

6.4.10.1 Event registration

- Step 1: Login as Implementer or Spectator
- Step 2: Click to event you want to join

Figure 6.94: List event page

- Step 3: Click on “Đăng ký tham gia”

Figure 6.95: Event Detail

6.4.11 Admin workflow

6.4.11.1 View Dashboard

- Step 1: Login as Admin

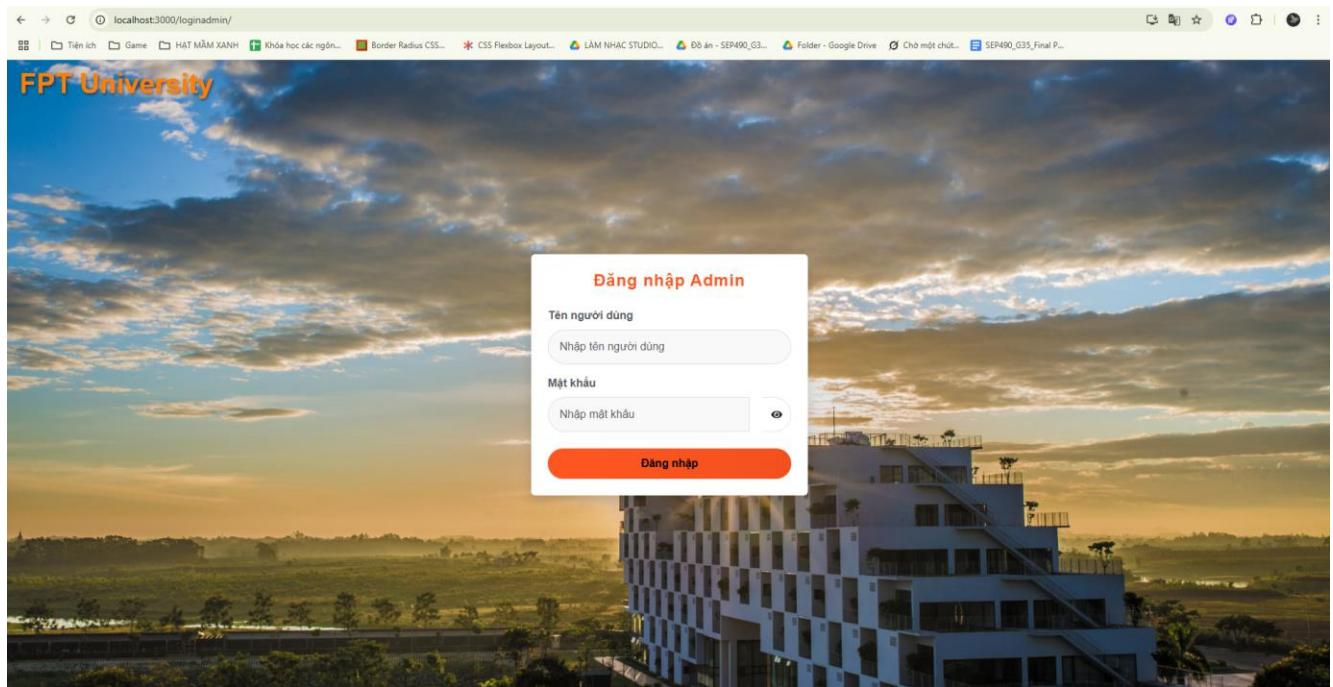


Figure 6.96: Login for Admin

- Step 2: Enter username and password
- Step 3: Click “Đăng nhập”

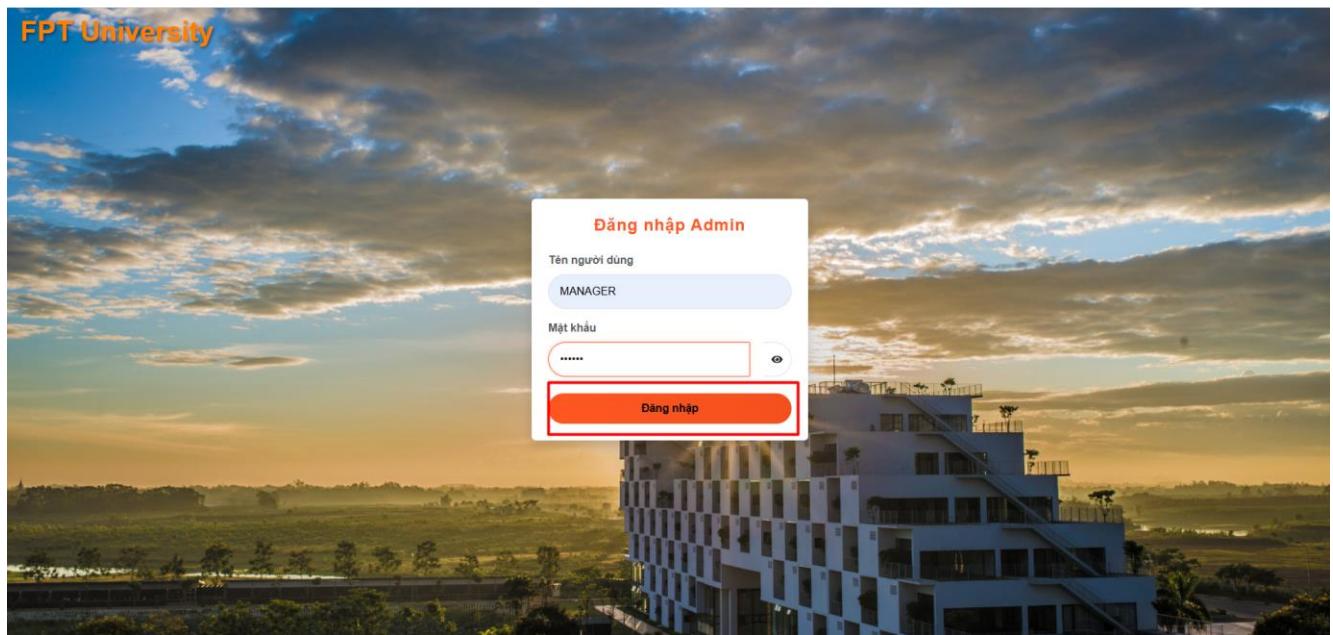


Figure 6.97: Login for Admin

6.4.11.2 Ban/Unban User

- Step 1: Login as Admin
- Step 2: Click “Danh sách Users” on the navigation bar.

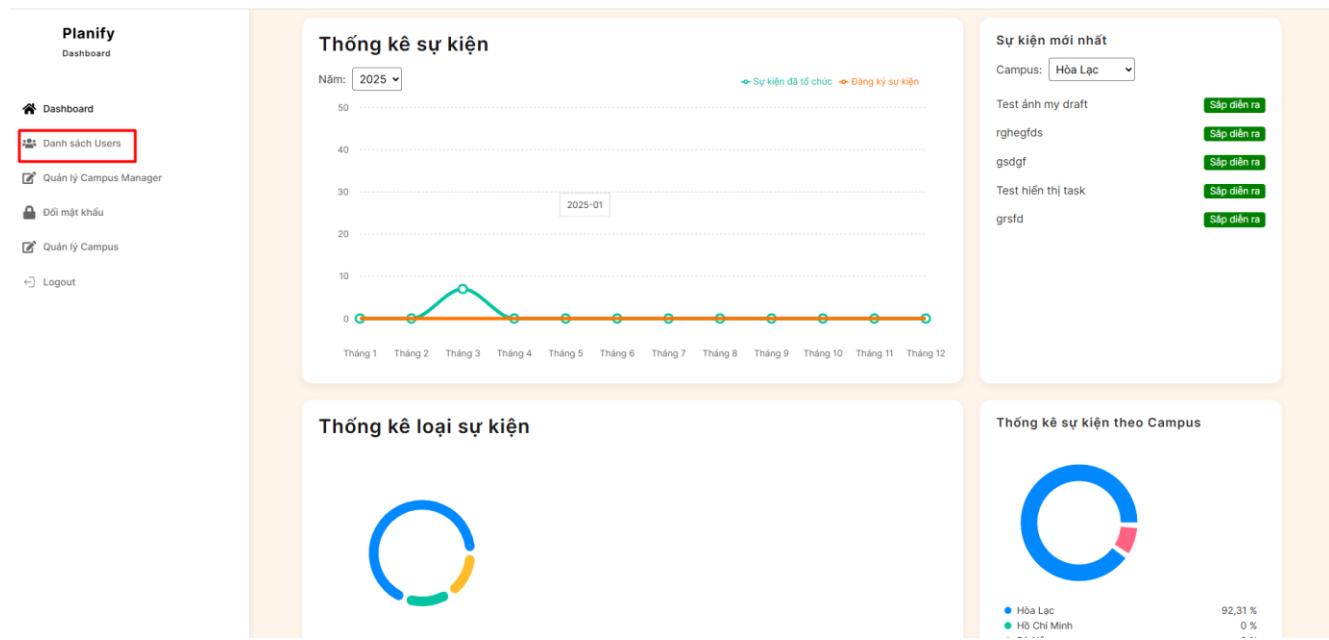


Figure 6.98: Dashboard page

- Step 3: Click “Cấm” or “Bỏ cấm”

Danh sách người dùng (14)									
#	ẢNH ĐẠI DIỆN	EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	VAI TRÔ	SDT	HÀNH ĐỘNG	
1		bson5544@gmail.com	Bui Son	9/3/2002	Nam	Campus Manager	0392730906	Cấm	
2		implementer1@example.com	Phạm Thị Đ	20/3/1992	Nam	Implementer	0901234570	Cấm	
3		admin1@example.com	Nguyễn Văn A	1/1/1990	Nam	Admin	0901234567	Cấm	
4		vybuituan46@gmail.com	SON IMPL	10/5/1995	Nam	Implementer	0912345678	Cấm	
5		minhvntthe176043@fpt.edu.vn	Vũ Ngọc Tuệ Minh	27/11/2003	Nam	Spectator	0386312395	Cấm	
6		nguyenthanhsang17102002@gmail.com	John Doe	10/5/1995	Nam	Campus Manager	0912345678	Cấm	
7		bson5544@gmail.com	SON MANAGER	10/5/1995	Nam	Admin	0912345678	Cấm	
8		manager1@example.com	Trần Thị B	10/5/1995	Nam		0901234568	Cấm	
9		sangnthe160447@fpt.edu.vn	John Doe	10/5/1995	Nam	Event Organizer	0912345678	Cấm	
10		sonbthe161655@fpt.edu.vn	SON EOG B	10/5/1995	Nam	Event Organizer	0912345678	Cấm	

Figure 6.99: List user page

6.4.11.3 Create Campus Manager

- Step 1: Login as Admin
- Step 2: Click “Quản lý Campus Manager” on the navigation bar.

Danh sách Campus Manager				
Tạo Campus Manager				
EMAIL	HỌ TÊN	NGÀY SINH	GIỚI TÍNH	SĐT
minhvntthe176043@fpt.edu.vn	Vũ Ngọc Tuệ Minh	27/11/2003	Male	0386312395
nguyenthanhsang17102002@gmail.com	John Doe	10/5/1995	Male	0912345678
bson55444@gmail.com	Bui Son	9/3/2002	Male	0392730906

Figure 6.100: List Campus Manager

- Step 3: Click “Tạo Campus Manager”

Figure 6.101: Popup create campus manager

- Step 4: Enter information for new Campus Manager
- Step 5: Click “Tạo” to create new Campus Manager

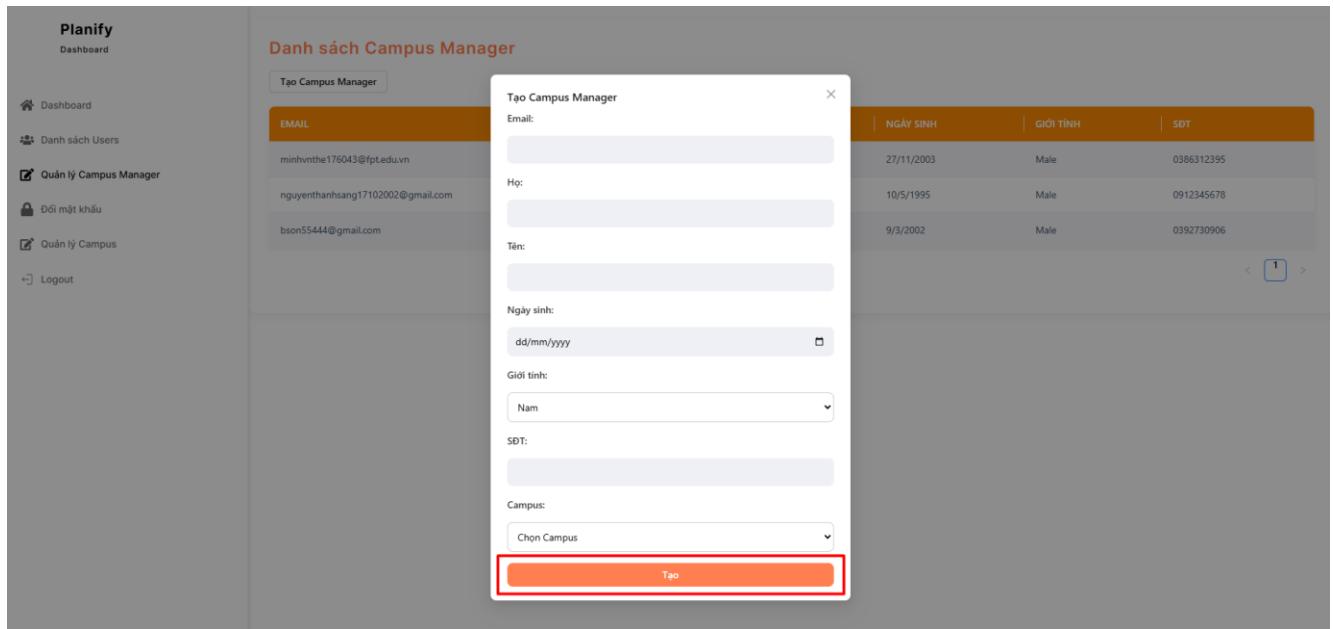


Figure 6.102: Submit to create Campus Manager

6.4.11.4 Change Password

- Step 1: Login as Admin
- Step 2: Click “Đổi mật khẩu” on the navigation bar.

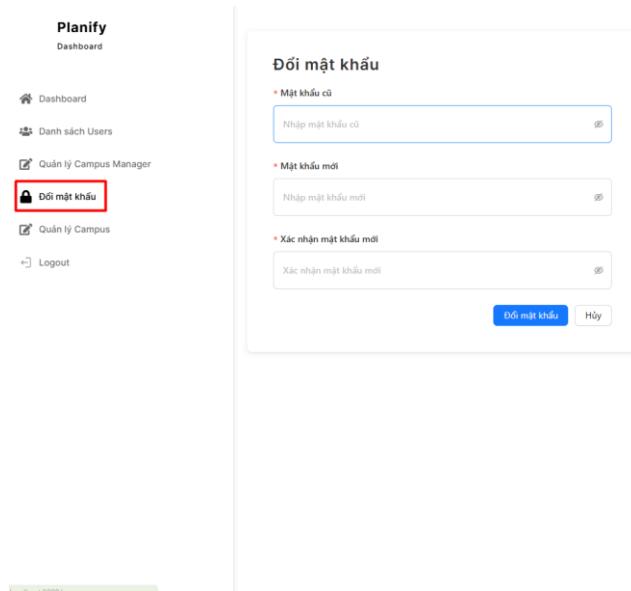


Figure 6.103: Change password page

- Step 3: Enter old password and new password
- Step 4: Click “Đổi mật khẩu” to change password

Đổi mật khẩu

* Mật khẩu cũ

Nhập mật khẩu cũ



* Mật khẩu mới

Nhập mật khẩu mới



* Xác nhận mật khẩu mới

Xác nhận mật khẩu mới



Đổi mật khẩu

Hủy

Figure 6.104: Form change password

6.4.11.5 Create Campus

- Step 1: Login as Admin
- Step 2: Click “Quản lý Campus” on the navigation bar

Quản lý Campus		
Tạo Campus		
#	TÊN CAMPUS	HÀNH ĐỘNG
1	Hà Nội	Xóa
2	Hồ Chí Minh	Xóa
3	Đà Nẵng	Xóa
4	Cần Thơ	Xóa
5	Quy Nhơn	Xóa

Figure 6.105: Management Campus

- Step 3: Click “Tạo Campus”

Quản lý Campus		
Tạo Campus		
#	TÊN CAMPUS	HÀNH ĐỘNG
1	Hà Nội	Xóa
2	Hồ Chí Minh	Xóa
3	Đà Nẵng	Xóa
4	Cần Thơ	Xóa
5	Quy Nhơn	Xóa

Figure 6.106: Management Campus page

- Step 4: Enter campus's name

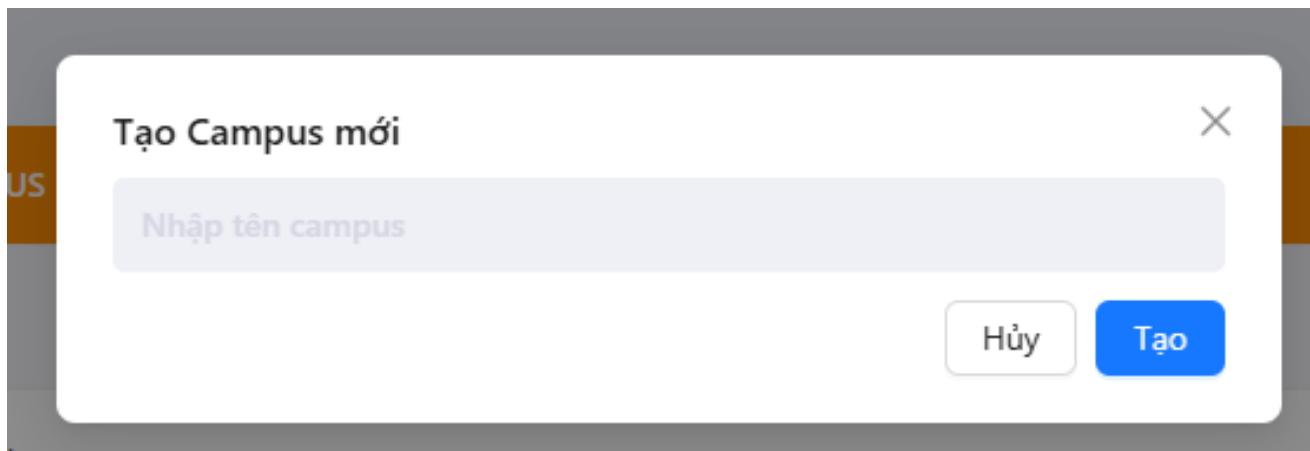


Figure 6.107: Popup create campus

- Step 5: Click “Tạo” to create Campus

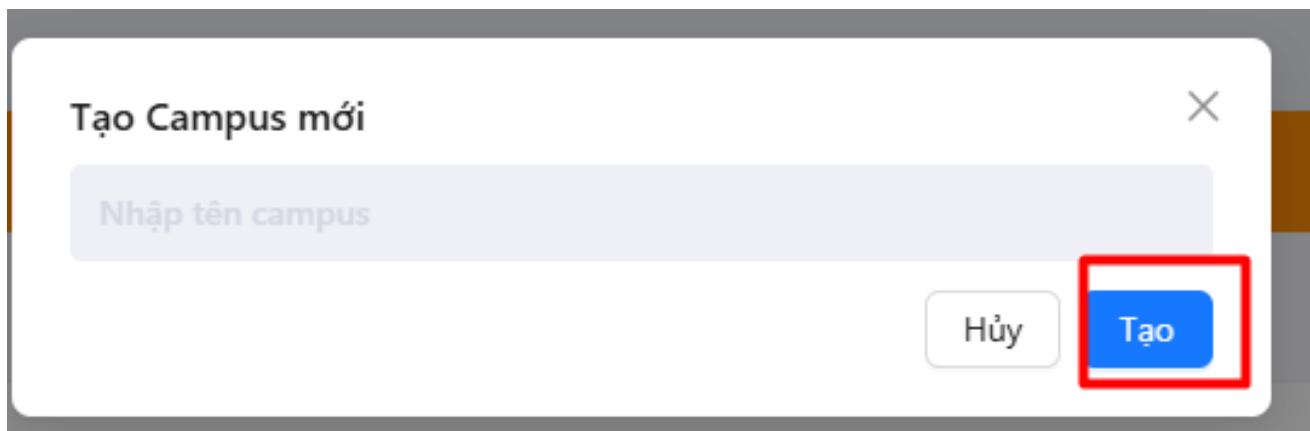


Figure 6.108: Submit to create campus

