



CAPSTONE PROJECT REPORT

Report 1 – Project Introduction

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I. Record of Changes (변화의 기록)

Date	A* M, D	In charge	Change Description
08/05/2023	A	All team members	Added information to every part of the Project Introduction
17/05/2023	M	All team members	Update Jira disadvantage
17/05/2023	M	All team members	Update Software Product Vision
18/05/2023	M	All team members	Update Business Opportunity
21/05/2023	M	All team members	Update Major Features
27/05/2023	M	All team members	Update Major Features
31/05/2023	M	Luu Minh Khoi, Vu Hai Anh	Update features

*A - Added M - Modified D - Deleted

II. Project Introduction (프로젝트 소개)

1. Overview (개요)

1.1 Project Information (프로젝트 정보)

- Project name: Capstone Project Management System
- Project code: CPMS
- Group name: SEP490_G15
- Software type: Web Application

1.2 Project Team (프로젝트 팀)

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2. Product Background (제품 배경)

In reality, managing projects has many challenges and difficulties. Some of the common problems encountered during project management include lack of clarity on project objectives and requirements; many problems encountered during project work; lack of resources (human, budget, time); inconsistencies in approaches and working methods.

In processing, project managers must monitor the progress of work, allocate resources, adjust plans, and produce project-related reports. Collaborative team members have access to project information, helping to improve communication and coordination among team members.

With the development of technology, there are many different project management software in the market today. These software are designed to meet the different requirements of projects, from small projects to large and complex projects. However, choosing the appropriate project management software remains a challenge for many project managers.

3. Existing Systems (기존 시스템)

There are many systems available to help users manage capstone projects. Some of the most popular ones include: Jira, Trello, Microsoft Project...

3.1 Jira

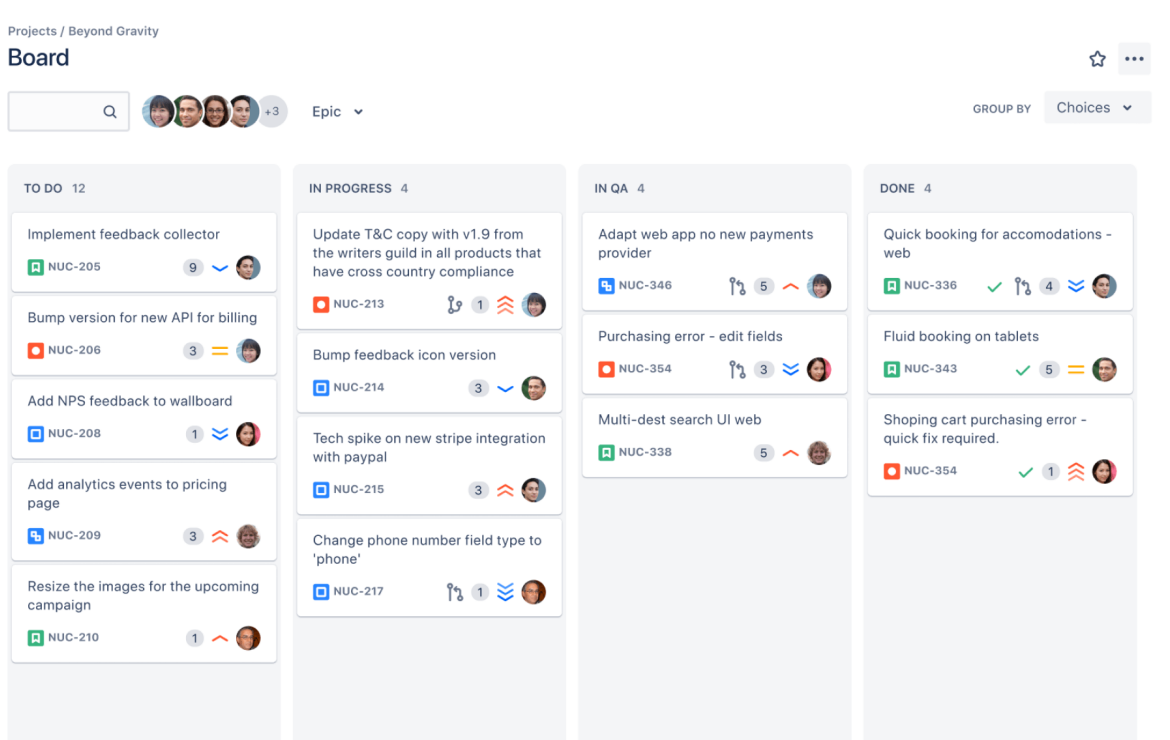


Figure 2.3.1: Jira Board screen on website

Jira: This is a popular software development tool used for issue tracking, project management, and agile software development. Jira allows teams to create and manage projects, track issues, and bugs, and collaborate on code changes.

Advantages	Disadvantages
<ul style="list-style-type: none"> Has the roadmap to help share big-picture plans and assign individual tasks. Has all the features to keep agile development on track. Allows easy integration with other 3rd party software. Enables users to customize their experience by creating and customizing various elements. Used for a number of different tasks by different types of users. 	<ul style="list-style-type: none"> Jira costs a lot when used for large-scale businesses: Cost for up to 10 accounts is \$10/month, for 11-100 accounts is \$7/account/month. Setup takes a lot of time and effort, only maximizing efficiency with large projects. Complex workflow, requiring users who have management experience.

3.2 Trello

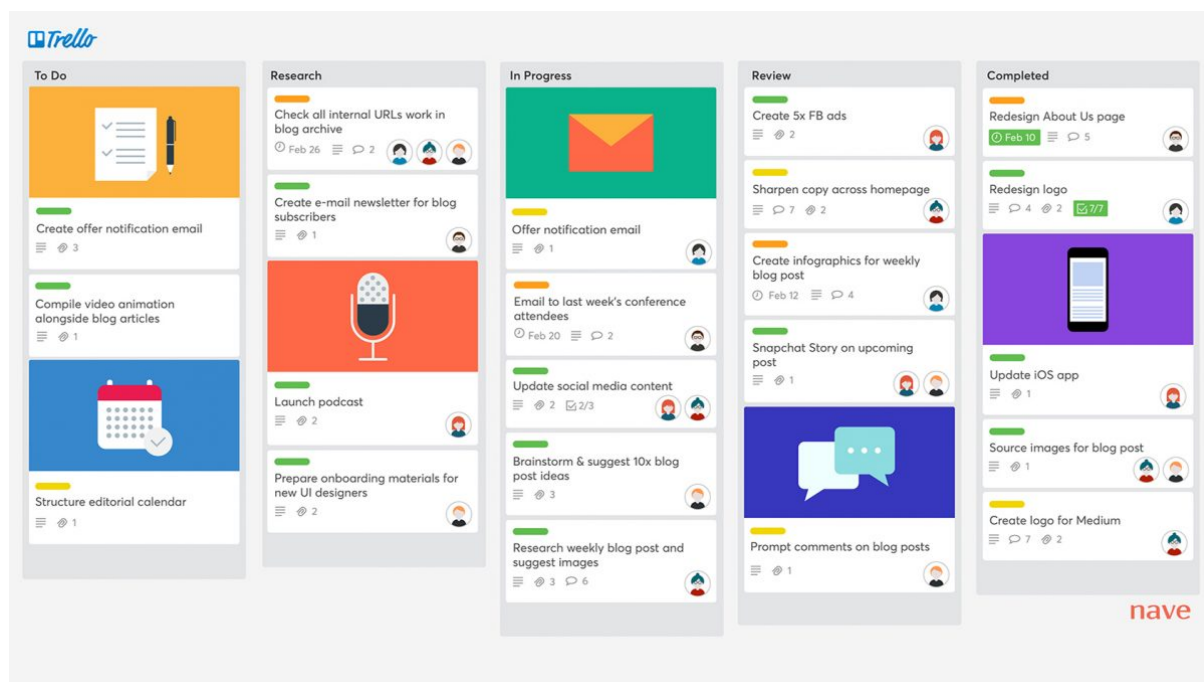


Figure 2.3.2: Trello page on the website

Trello is a web-based project management and collaboration tool that allows individuals and teams to organize and prioritize tasks and projects using an intuitive visual interface. With Trello, users can create boards for different projects or workflows and populate them with cards that represent individual tasks or items. These cards can be moved between lists to reflect changes in status or priority, and they can also be assigned to team members, tagged with labels, and given due dates.

Advantages	Disadvantages
<ul style="list-style-type: none"> ● Responsive Web Design ● Trello's pricing structure is transparent and easy to understand. ● Trello is always on top of notifications. ● No more ridiculous notes ● Real-time updating ● Following the Kanban System 	<ul style="list-style-type: none"> ● Data access is a problem for Trello ● Attachments are limited to 250MB per upload if you are a gold member, 10MB per upload if you're a standard member. ● Cannot edit a comment after it's been posted. ● Only perfect for small-scale projects.

4. Business Opportunity (비즈니스 기회)

As claimed by a survey by Forbes Vietnam Magazine, universities in Vietnam are tending to invest in accessing new technologies such as artificial intelligence (AI), Internet of Things (IoT), Big Data, and Blockchain to improve the quality of education and training. According to Vietnam's Ministry of Education and Training, there are currently more than 400 universities and colleges in Vietnam. As stated by statistics of the General Statistics Office of Vietnam, the number of graduates from universities, colleges, and professional secondary schools in Vietnam in 2022 is about 1.4 million people. And to become graduates, these students need to do a capstone project. Therefore having a good capstone project management system can help ensure project success by providing a framework for planning, implementing, and controlling project activities. It can be seen that this is a very potential market.

By implementing a capstone project management system, the group can streamline its project management processes, which can lead to better efficiency in terms of time and cost savings. The capstone project management system can facilitate real-time collaboration between team members, faculty, and students, which is a crucial element for projects that involve cross-functional teams. The system can help manage resources more effectively, such as allocating staff and budget. With the option to customize the project management system to suit the university's unique needs, it will provide a tailored fit for managing projects.

One potential business opportunity could be to create and market affordable software specifically tailored for student projects. This could involve developing a suite of tools that are both user-friendly and powerful enough to handle a variety of scopes and workloads, while keeping the pricing low enough for students on a budget. Additionally, there may be opportunities to offer educational discounts or partner with universities and schools to provide the software at a reduced cost to students. By filling this gap in the market, you could potentially tap into a large and growing customer base of students looking for quality software solutions that won't break the bank.

A capstone project management system could be an attractive marketing proposition for prospective students and other stakeholders who value efficient project management practices. Since the capstone project management system can enhance the university's operational efficiency, it can act as an additional revenue stream by selling access to this platform to other institutions or organizations.

So this is a big business opportunity for the team to decide to develop the "Capstone Project Management System".

5. Software Product Vision (소프트웨어 제품 비전)

For students in universities, the application of technology solutions to project management and efficiency improvement is gradually becoming inevitable. In addition, currently there is no free software or price suitable for specific scope and work for students, specifically here are student projects . Capstone Project Management System helps to reduce costs, optimize resources, improve productivity, and increase work efficiency. In addition, the software can help users track the overall project implementation process, manage project-related work items, and progress of 1 or more projects on a single screen.

The project's current target is mainly students who are currently studying at FPT University. The further goal of the project is to be trusted and widely used by other schools with project management needs across the country.

6. Project Scope & Limitations (프로젝트 범위 및 제한)

6.1 Major Features (주요 기능)

FE-01: Authentication: This feature allows users to register a new account, login, logout. This feature allows users to authorize in the system, including the specify the role of logged-in user, users' authorized page links.

FE-02: Common: This feature covers the common functions of users in the system, independent of the user's role

FE-03: Issue Management: This feature allows users to manage issues, export/import issue lists, that come from a project.

FE-04: Report Management: This feature allows users to submit reports, view submitted reports with General information, issue list and export issue list with detailed information.

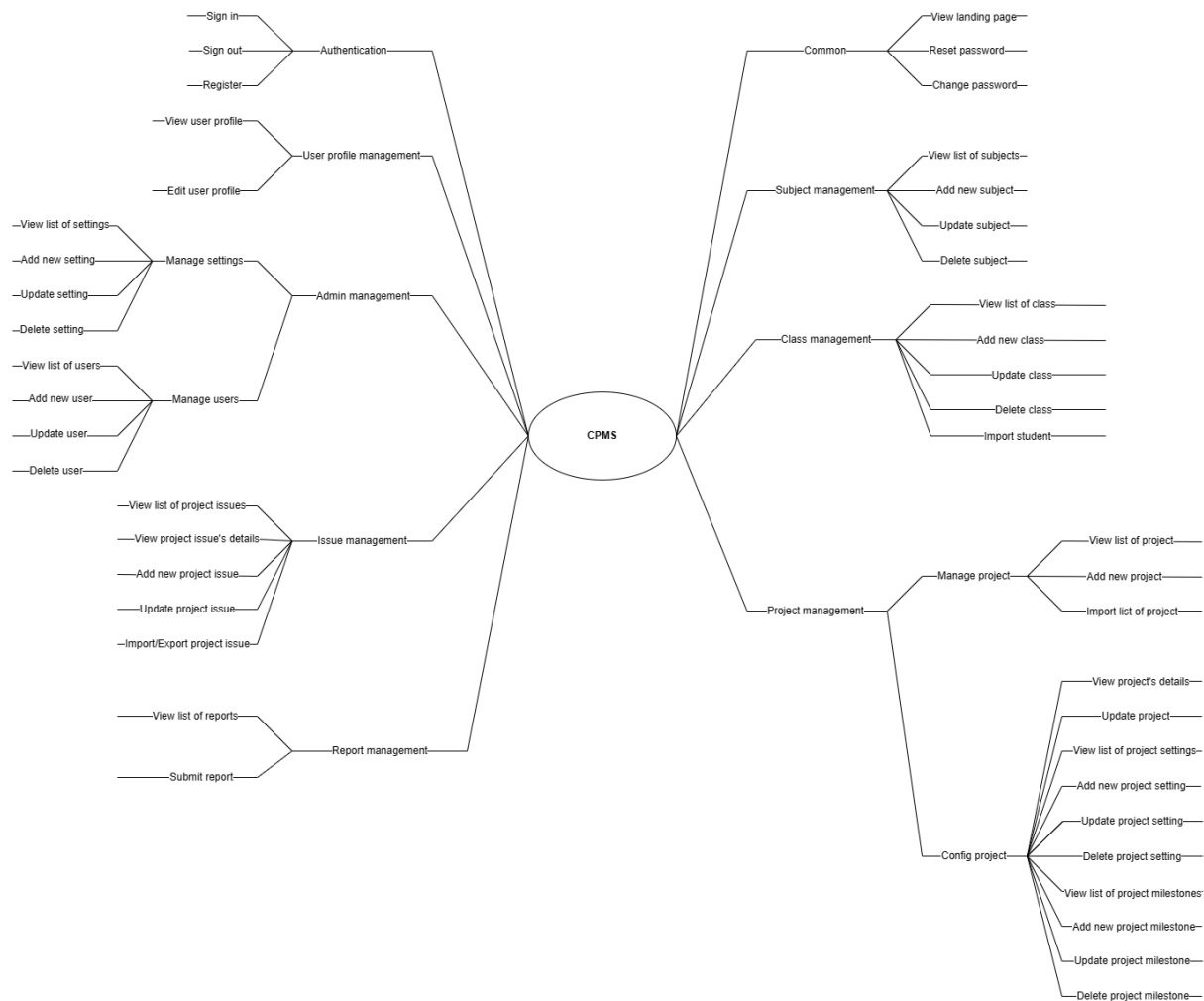
FE-05: Project Management: This feature allows users to view assigned projects, manage project information, manage project milestones and manage project issues.

FE-06: Class Management: This feature allows users to manage classes, including add/view/update delete classes, which means a group of students studying a subject organized in each semester.

FE-07: Subject management: This feature allows users to manage subjects, including add/view/update/delete subjects.

FE-08: User Profile Management: This feature allows users to view their profile and other user profile, update profile, update avatar,....

FE-09: Admin Management: This feature allows admin to manage master data like view list, add new, update - roles, faculties, terms (or semesters), and manage user accounts



Feature tree

6.2 Limitations & Exclusions (제한 및 제외)

LI-1: Users need to have an internet connection. Without a network connection, the user will not be able to use the application.

LI-2: When using the application, users may experience delays or delays in response from the system side, especially when there are many users at the same time.

LI-3: A powerful tool, but it can be difficult to learn for beginners. Its complex features and customization options can be overwhelming.

LI-4: This is a relatively simple tool, which may not meet the needs of more complex projects or advanced project management processes.

LI-5: There is no such app application in the development of this system on the Internet

LI-6: Not enough reputation for people to use the web