**Software Requirements**

**Specification**

**for**

**TAPM: Tracking Activity Project Management**

**Prepared by Abyss**

**Asia Pacific College**

**March 6, 2023**

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# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Abyss Defense (Midterm) | January 16, 2023 | Incomplete System | 1 |
|  |  |  |  |

# Introduction

## Purpose

The purpose of the Tracking Activity Project Management system is to give group project teams and project managers an all-inclusive solution for effectively managing and tracking their projects. The system promises to increase team communication and collaboration, project monitoring, and reporting. It also aims to optimize project workflow.

Features including project creation, task management, feedback, communication and collaboration tools, project monitoring, and reporting are available to users through the system. These tools are made to make it easier for group project members and project managers to efficiently plan, carry out, and monitor projects while ensuring that project objectives are met on schedule and within budget.

The system also aims to improve project transparency and accountability by providing real-time monitoring of project progress, enabling project managers to make informed decisions and take corrective actions in a timely manner.

## Document Conventions

This document convention is applicable to all records created and maintained in the project tracking system, including project documents, files, project members' lists, faculty lists, and records of individual projects.

## Intended Audience and Reading Suggestions

Project stakeholders, such as project managers, project group members, faculty members, and other important decision-makers engaged in the creation, deployment, and usage of the software, are the target audience for the Tracking Activity Project Management document.

Reading suggestions for the intended audience may include:

* Project Managers: Project managers may want to focus on the functional requirements, non-functional requirements, and constraints sections to gain a clear understanding of the software's capabilities and limitations.
* Team Members: Team members may want to focus on the task management, resource management, communication and collaboration, and project monitoring and reporting sections to understand how the software can help them perform their tasks more efficiently and effectively.
* Decision-Makers: Decision-makers may want to focus on the constraints and non-functional requirements sections to understand the limitations and requirements of the software development and implementation.

## Product Scope

The scope of the Tracking Activity Project Management software is to provide project teams with a comprehensive solution for managing and tracking their projects efficiently, from project initiation to project completion. The system also includes Project Management, Task Management, Communication and Collaboration, and Project Monitoring and Reporting. This system would also help to provide a well-suited collaboration space so that student groups and faculty can disseminate files, ideas, and information assisting in the timely completion of the project and Escalate the Project Development Office’s capacity to track projects and generate reports in a timely manner.

## References

The team developed their own use cases in addition to basing the system on the PDO's recommendations.  For the management part the team read the book Scrum: The Art of Doing Twice the Work in Half the Time by Jeff Sutherland - This book provides an overview of the Scrum framework, a popular approach to agile project management, which can be applied to the development and use of Tracking Activity Project Management software.

# Overall Description

## Product Perspective

The Tracking Activity Project Management is a new standalone software product that provides a comprehensive solution for managing and tracking projects. The software is designed to be user-friendly, scalable, and secure, with a range of features to support project planning, execution, and monitoring. The system is also designed based on the suggestions and needs of the PDO.

## Product Functions

* Admin Login – to access the projects created under the organization, group project list, faculty list, and files.
* Student Login – to access the project, upload document, do task, and collaborate.
* Faculty Login – to access files, group project list, invite members, add task, create project, and give feedback.

## User Classes and Characteristics

* Admin – The admin can access the entirely of the system and can view all the project list, group project list, and faculty list.
* Project Development Office – The PDO can also access the entirely of the system and can view all the project list, group project list, faculty list, and give feedback.
* Faculty – The faculty can create project, invite members, access files, add task and give feedback.
* Student – The student can access project that are assigned, upload files, do task, and reply to feedback.

## Operating Environment

The System can operate to Personal Computers and Small Computers such as Laptop.

For Desktop - Windows 10 version 22H2

## Design and Implementation Constraints

* Compatibility: The software must be compatible with a range of hardware and software configurations, including different operating systems, web browsers, and mobile devices.
* Security: The software must meet high standards of security, including encryption of sensitive data, user authentication, and secure data storage.
* Scalability: The software must be designed to accommodate the growth of project teams and organizations, with the ability to add new users, projects, and features as needed.
* Usability: The software must be user-friendly and intuitive, with clear navigation and easy-to-use features for both faculty, student, and admin.
* Budget: The software development and implementation must be completed within the allocated budget.
* Timeframe: The software must be developed and implemented within the required timeframe, taking into account any project milestones or deadlines.
* Availability: The software must be available 24/7, with minimal maintenance or downtime, to ensure that project teams can access the software when needed.
* Resource: The system must be designed to use resources such as memory, processing power, and storage efficiently to ensure that it runs smoothly and does not crash or become slow.

## User Documentation

The user manual and online help can be found on a separate document file provided by the developers.

## Assumptions and Dependencies

Assumptions:

* Users will have basic computer literacy and be able to navigate the software easily.
* The software will be used in a professional setting and adhere to relevant industry standards.
* Users will have access to reliable internet connectivity to use the software.
* Users will be able to input accurate and timely data into the software.
* The software will be developed using modern software development practices and techniques.

Dependencies:

* The software may depend on third-party software or services, such as cloud storage to provide certain features.
* The software may depend on specific hardware or software configurations to function properly.
* The software may depend on data and information from external sources, such as project specifications or client feedback, to provide accurate information to users.
* The software may depend on the availability of key personnel, such as software developers or project managers, to complete development and implementation tasks.
* The software may depend on the availability of project resources, such as funding or time, to complete development and implementation.

# External Interface Requirements

## User Interfaces

The system was developed under the and is for the organization, hence the user interface is based on the colors and logo of the Asia Pacific College. Buttons clearly indicate what they do, whether they update the page with changes or redirect to a new page. Keyboard shortcuts are not yet available. Depending on the needed field(s), error notifications may show up; these might be for password confirmations, account resets, or personal information.

## Hardware Interfaces

The system supports any desktop device as long as it has access to Wi-Fi and has a compatible OS version.

## Software Interfaces

As the system currently uses a XAMPP database, having XAMPP on the primary device necessitates having a XAMPP application on their device.

## Communications Interfaces

The system now only operates locally; however, if connected to cloud, more dependencies and message formatting will be required.

# System Features

## System Feature 1: Admin – side features.

### View All Projects

View all the existing projects created on the system.

### View Project Groups

View names of the students that is part of the created project groups.

### View Adviser/Consultant list

View names of the faculty that are part of the specific project.

## System Feature 2: Project Development Office – side features.

### View All Projects

View all the existing projects created on the system.

### View Project Groups

View names of the students that is part of the created project groups.

### View Adviser/Consultant list

View names of the faculty that are part of the specific project.

### Access Files

Access the files that are uploaded to the system by the faculty and student.

### Give Feedback

Add feedback to the projects.

## System Feature 2: Project Development Office – side features.

### View Project Group Members

View the list of the members of the project created.

### Do Task

Do the tasks that are given by the adviser/consultant.

### Upload File

Student can upload files that are needed to complete the project.

### Answer Feedback

Student can answer feedback given by the faculty.