Project Definition Document

Team Name: **HighFive**

Project Name: **WorkClaim**

Team Members:

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Table Of Contents

Project Summary:

Our aim is to develop a Python-based application that provides an interface for monitoring the availability of school facilities, including conference rooms, classrooms, meeting rooms and library desks. The application will allow users to track occupancy status and conveniently reserve available spaces.

Project Objectives:

- *Provide an interface to show occupied/unoccupied school facilities.*

- *Reserve a facility depending on its availability.*

- *Allow users to cancel or modify existing reservations.*

- *Send notifications or reminders about upcoming reservations.*

Project Scope:

   Included:

- *Provide an interface of the existing school facilities and their availability*

- *Reserving a facility for use*

- *See other reservations and cancel reservations*

- *Set reservation precedence levels based on user authority (Teachers have priority over students when reserving facilities)*

   Not Included:

- *This application is intended only for facility reservation and does not support event scheduling.*

Target Audience:

This application is intended for students, teachers, teaching assistants, and school administrators who want to view the availability of school facilities and reserve them for use.

Key Features of The Project:

- *Filter the facilities depending on the type.*

- *View detailed models of the school's facilities.*

- *Provide authorization based on user type.*

- *Easy to use and clean interface for reservations.*

Deliverables:

Fully functional web application , Project Documentation(Project Definition Document, Project Plan Document, Requirements Document, Effort Estimation, Task Assignments.

Budget And Resources:

    Resources Required:

- *Team members (Frontend Engineers, Backend Engineers, Testing Engineers)*

- *Python for Backend and PyQt for Frontend, PostgreSQL for database*

- *Github for code repository and version controlling*

- *Whatsapp and Zoom for communication*

    Budget Estimate:

- *~150 – 200 hours of developement effort and team work*

Risks And Migitation Strategies:

- *Slowdowns and crashes caused by database bottlenecks: Optimize database performance by designing efficient schemas, writing optimized queries, and implementing advanced indexing techniques in PostgreSQL.*

- *Unauthorized access to modify reservations, which could compromise system reliability and fairness : Implement role-based access control (RBAC) for students, teachers, assistants, and administrators.*

- *Technical difficulties and incapabilities : Researching on online platforms, books and seeking help from teachers and methors.*

Project Success Criteria(At least 3 items):

- *Having an application that provides a clean, and easy-to-use interface that enables users to complete reservation tasks efficiently.*

- *The application operates without errors or crashes and processes reservation requests accurately with short response times during normal user activity.*

- *The system correctly enforces authorization rules by providing different permission levels for students, teachers, teaching assistants, and administrators.*

Tasks	Zafer	Mert Efe	Orhanefe	Hasan Yiğit	Emre Kaan
Project Name	X	X	X	X	X
Project Summary	X	X	X		X
Objectives			X	X	X
Scope	X	X	X	X	X
Target Audience		X	X	X	
Key Features	X	X		X	X
Deliverables	X		X	X	X

Tasks	Zafer	Mert Efe	Orhanefe	Hasan Yiğit	Emre Kaan
Budget and Resources	X		X	X	X
Estimated Budget		X		X	
Risks and Mitigation Strategies	x	x		X	
Project Success Criteria (At least 3 items)	X	X	X		X