INTRODUCTION

OVERVIEW

Asd is a productivity enhancing tool that keeps track of ongoing projects, employees' work utilization. Asd is a web-based application that provides interfaces for various stake holders (project leaders, managers, employees).

Asd admins can add new recruits to the employee pool where they'd be assigned to projects according to the respective project leader's request. The admins can monitor the current work utilization of employees and view over-utilized and cross-utilized employees to better divide their workloads if possible and/or necessary. Asd admins can also view the status and punctuality of projects. Asd aggregates relevant and useful statistics to support data driven decision making regarding how workload is managed within the department.

OBJECTIVES

- Collect work management and human resource details for admins to extract useful information from their statistics.
- Facilitate tracking employee utilization in an everchanging work environment.
- Minimize employee cross-utilization and over-utilization.
- Provide essential information about a project's status and punctuality to better manage projects depending on their unique cases.
- Provide statistics and aggregations that would be useful for Asd admins to make decisions regarding the work environment.

THE NEED FOR THE PROJECT

The client lacked a user-friendly and proprietary system that allows them to manage their work environment beyond project planning. Asd keeps track of all ongoing projects and employees that are working on them. It keeps track of their work utilization to reduce cross-utilization and over-utilization. It provides statistics for employee work utilization that allows the admins to make data driven decisions that should maximize departmental productivity.

EXISTING SYSTEMS AND TECHNOLOGIES

The client's current solution for keeping track of all productivity related data was having a shared spreadsheet where all employees can view the current state of work and update their work status.

Asd provides a more efficient, user-friendly, and work-safe solution for keeping track of work and viewing work details.

SCOPE

MAIN ACTORS

- Project leaders
- Managers
- Admins

MAIN USE CASES

- Project leaders
  - Add employees to their project teams.
  - Edit project details.
- Managers (extends leader functionality)
  - View project data.
  - View employee data.
- Admins (extends manager functionality)
  - Add new projects.
  - Assign project leaders.
  - Add new employees.
  - Update employee data (promote employee).
  - View statistical details.

DELIVERABLES

A web-based software system. This contains a central database and functionalities for various stakeholders. Since many stakeholders are involved, different GUIs will be provided to different users.

FEASIBILITY STUDY

FINANCIAL FEASIBILITY

- This system is exclusively designed for the use of Schneider Electric. It is not made for commercial gains or profits.
- The system will be used locally with a limited number of employees in certain departments. The system will not cost a lot to serve and maintain.

TECHNICAL FEASIBILITY

Asd is completely web-base. The main technologies and tools that are associated with Asd are

- HTML, CSS, JavaScript
- React.js
- PHP
- Laravel
- MySQL (hosted on XAMPP)
- Diagram drawing tools
  - app.diagrams.net
  - www.lucidchart.com

RESOURCE AND TIME FEASIBILITY

- Programming device (Laptop)
- Hosting space (freely available)
- Programming tools (freely available)
- Programming individuals

CONSIDERATIONS

PERFORMANCE

The system will be used in a single department in a company, so it won't need high-end technology to run effectively.

USABILITY & EASE OF USE

Ease of use is the main target of this project given how the main problem with the previous solution was the lack of a good user experience, so the system will be designed to be simple, easy and intuitive.

AVAILABILITY

The system never urgently needed, even if the system isn't available (for technical difficulties) there will not be any huge loss.

MAINTAINABILITY

By following the proper software design patterns, the system will be well structured and easy to maintain.