# Cloud Computing Workshop with AWS

## Detailed Project / Product Document

### Project Information

Project Name:  
OptiPlanner  
  
Student Names:  
Ziv Cohen, Ron Yakov, Ido Hirschmann

This document will fully describe the project content (10-30 pages).

The document should be submitted with a presentation (English & Hebrew) alongside with a prototype of the project, working on AWS Account.

Submission date: June 9, 2024.

The below are mandatory details to the document. Feel free to add any additional information as you like.

### 1. Introduction

*Provide an up-to-date summary and fine-tuning of the content outlined in the proposal document. This includes discussing the project's Motivation, Context, Objectives, and how it stands in terms of Innovation compared to existing market products.*

Our main goal is prioritizing and Sorting Calendar Missions To alleviate the burden of time management. Our workshop project focuses on creating a solution that empowers users to identify and prioritize their daily missions effectively. By leveraging the capabilities of AWS, we aim to develop a tool that intelligently sorts and organizes tasks based on predefined criteria, helping users make informed decisions about where to invest their time and energy. We intend to offer a system in which the user will sort in his prioritizes in general and by that we will help him organizing his day to day schedule the best way possible. And by that making sure our users will be able to use their free time the most efficient way, but not with the cost of skipping their mandatory duties.

We offer the best of both worlds, meaning we allow users to both organize and prioritizing their tasks and keep it stored in calendar. Our app is a task management tool designed to help users organize their tasks and boost productivity. Users can prioritize tasks, set deadlines, and track progress efficiently. The app offers flexible task sorting options and supports integration with calendars and other productivity tools for seamless workflow management.

Our app is designed for busy individuals seeking to better manage their hectic schedules. With intuitive features and user-friendly interfaces, we empower users to efficiently organize tasks and reduce stress. By providing a practical solution to the challenges of modern life, we aim to enhance productivity and promote a balanced lifestyle. Our mission is to make time management accessible to all, ensuring that everyone can navigate their daily routines with ease.

The primary features available to users of our app include:

Creating a customized schedule based on their preferences and priorities. We will help users to decide in which order and in what way to split their tasks for the best possible utilization of their time.

Utilizing our assistance to optimize their calendar to best suit their needs.

Track progress of ongoing tasks, for even better efficient time utilization.

Periodical graph of your recent most popular time-consuming activities.

### 3. System Architecture including AWS modules used per module

*Illustrate the system architecture encompassing servers, databases, storage, network, etc. Focus on each component's AWS module utilized in the project, elucidating the rationale behind the chosen modules. Additionally, discuss any third-party tools besides AWS and justify their selection. A diagram summarizing this architecture should be included.*

The overall current architecture structure is :

client built in Angular , running on the web and server that contains services to the whole app built in NestJs.

About aws modules:

Cognito- the first module we utilized in our project Is cognito, an aws module that is responsible to managing all the authentication part in the project, including saving the registration info, login, and verification of the users. The justification of selecting this module is simple- all the data of our users is safely and easily stored and managed by aws while we only serve them with the input from the users. It helps us register and auth login users easily.

### 4. Data Base

Explain the chosen database, rationale behind its selection, and provide a diagram showcasing tables, columns, and their relationships.

The data we intend to store:

-users - basic profile data: fname, lname, email, phone number, user\_id(generated by us)

-users-profile – inside app relation data: preferences, prioritize, interest fields, calendars, events

-app-init-data – prioritize scale, interest fields,

### 5. Flow charts

Present flow charts depicting the main operational flows of the system. Utilize diagrams for clarity and understanding.

### 6. Screen mockups

Create screen mockups for all primary screens of the system. Tools like PowerPoint, Canva, Photoshop, or **Figma** are suitable for this task.

### 7. Development tools

ANGULAR   
Angular is a powerful framework for building modern web applications. With its wide set of tools, including powerful data binding, modular architecture, and extensive documentation, Angular provides great tool that improve the process of developing, maintaining and productivity. Its strong community support, regular updates, and built-in features like dependency injection and routing make it an ideal choice for creating web apps.

NestJS  
NestJS is a progressive Node.js framework that provides a solid foundation for building efficient and scalable server-side applications. Leveraging TypeScript, NestJS offers strong typing, dependency injection, and modular architecture, which simplifies code organization and enhances maintainability. Its intuitive CLI, extensive library of modules, make it a preferred choice for developers seeking productivity and reliability in server-side development.

TypeScript  
TypeScript boosts web development with its typing system, catching errors early and improving code quality. Its support for modern JavaScript features enhances productivity, while its active community ensures rich resources and support. As a result, TypeScript stands out as a top choice for building reliable and scalable web applications.

WebStorm

AWS

Chat gpt copilot/ chat gpt 3.5/ Gemini

Bootstrap

### 8. Submission Details

*Include the GitHub link for the project repository.*

<https://github.com/IdoHirschmann/R.I.Z_frontend>

https://github.com/IdoHirschmann/R.I.Z\_backend

### 9. Additional Notes

Feel free to add any supplementary information deemed relevant to the project.