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Faculty of Science & Information Technology

**TFB1033 Object Oriented Programming**

Dr Nordin Zakaria



Group Name: **Kampung Innovators**

| Student ID | Name                              | Course                 |
|------------|-----------------------------------|------------------------|
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| 22010182   | Nurul Fatihah Binti Rizwan        | Information Technology |
| 22010431   | Nadzira Binti Ramli               | Information Technology |
| 22008944   | Sheldon Stephen                   | Information Technology |
| 22010232   | Nur Najla Alisa Binti Mat Suhairi | Information Technology |

## Project Description

The Kampung Manage Website is a sophisticated web-based application developed to address the operational challenges faced by small businesses and community organizations in rural Malaysian villages (Kampungs). Traditional practices such as paper-based record-keeping and manual task coordination often result in inefficiencies, errors, and difficulties in managing day-to-day operations. This platform aims to transform these processes by providing a centralized, digital solution that enhances productivity, streamlines workflows, and optimizes resource management.

Built using the Blazor framework, the Kampung Manage Website offers an intuitive and user-friendly interface equipped with essential features such as task management, project tracking, and client data management. Key functionalities include the ability to identify which employees are responsible for specific projects, monitor upcoming deadlines, and track task assignments. This enhanced visibility and accountability foster seamless project coordination and enable managers to make well-informed decisions efficiently.

Employees benefit from clear task allocation and assignment tracking, while managers gain tools to proactively identify and address potential bottlenecks, ensuring projects are completed on schedule. The task management system supports the creation, assignment, and monitoring of tasks, ensuring alignment with organizational goals. Designed for ease of use, the platform is accessible even to users with limited technical expertise, making it highly suitable for the Kampung context.

The Kampung Manage Website represents a transformative approach to business operations in rural communities. By improving task delegation, fostering accountability, and enhancing collaboration, it empowers small enterprises to achieve greater efficiency and adaptability. This platform is a critical tool for reducing errors, streamlining operations, and supporting the sustainable growth of rural businesses, positioning them for success in an increasingly digital economy.

## Evaluation of the Blazor Platform

Blazor provides several notable advantages, including single-language development using C#, a component-based architecture that promotes modularity, and seamless integration with the .NET ecosystem. These features make it an appealing choice for building web applications. However, our experience with Blazor during the project highlighted significant challenges that impacted development efficiency and productivity.

One of the most persistent issues was difficulty connecting to Firebase, which frequently resulted in errors caused by configuration and dependency mismatches. Resolving these issues required extensive debugging and adjustments, consuming a substantial amount of time and resources.

Additionally, the development process was complicated by recurring logical errors that were both complex and difficult to diagnose. These errors often arose from intricate component interactions and human mistakes, such as overlooking small but critical implementation details. In some cases, resolving these problems felt nearly impossible without exhaustive effort.

Furthermore, there were instances where the project could not run at all, with no visible errors or clear cause. This added an extra layer of frustration, as it was challenging to pinpoint the root of the problem, often leading to hours of trial and error without progress.






Compounding these challenges was Blazor's steep learning curve, especially for developers unfamiliar with its architecture and lifecycle. The platform's debugging tools, while functional, proved insufficient for addressing intricate issues within component-based interactions, further slowing down the development process.

In summary, while Blazor offers powerful capabilities and integration benefits, our experience revealed several drawbacks, including logical errors, human error, Firebase integration difficulties, issues with running the project without errors, and the platform's overall complexity. These challenges made the development process demanding, resource-intensive, and at times, frustrating, underscoring the need for improved documentation, enhanced debugging tools, and better support for third-party integrations.


## Team Contribution Statement

Team Name: **Kampung Innovators**

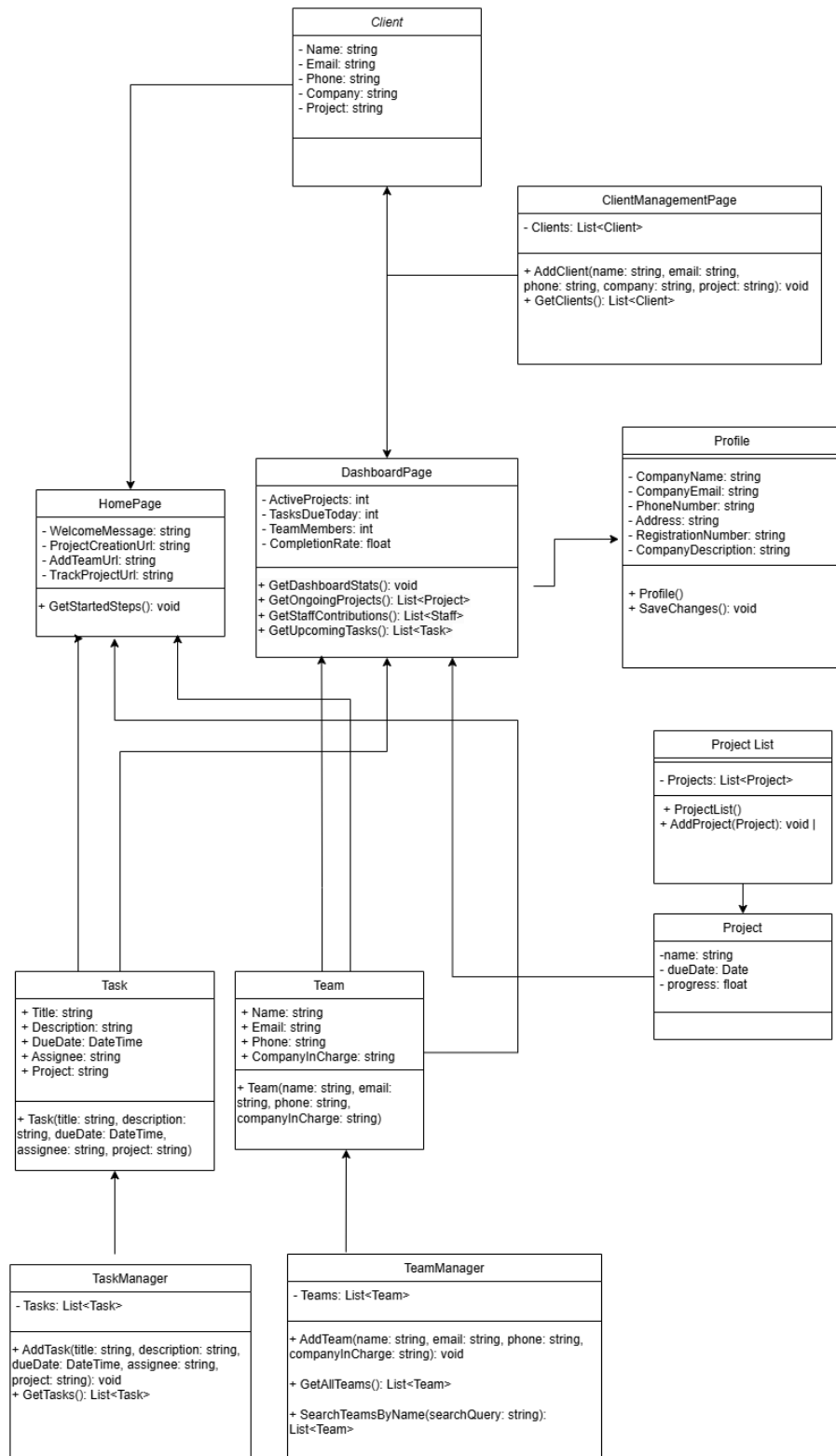
GitHub:

| Name                                 | ID       | Task / Classes / Methods  | Signature   |
|--------------------------------------|----------|---------------------------|---|
| Nurul Aishah Elyani<br>Binti Azhar   | 22010394 | Front-End                 |  |
| Nurul Fatihah Binti<br>Rizwan        | 22010182 | UML                       |  |
| Nadzira Binti Ramli                  | 22010431 | Back-End                  |  |
| Sheldon Stephen                      | 22008944 | Documentation and Testing |  |
| Nur Najla Alisa Binti<br>Mat Suhairi | 22010232 | Debugging                 |  |

I, SHELDON STEPHEN (22008944), the leader/rep for Kampung Innovators hereby declare that the information provided is true and correct. understand that any wilful dishonesty or cover up may render the group submission invalid.

Signature:  Date: 21/11/2024

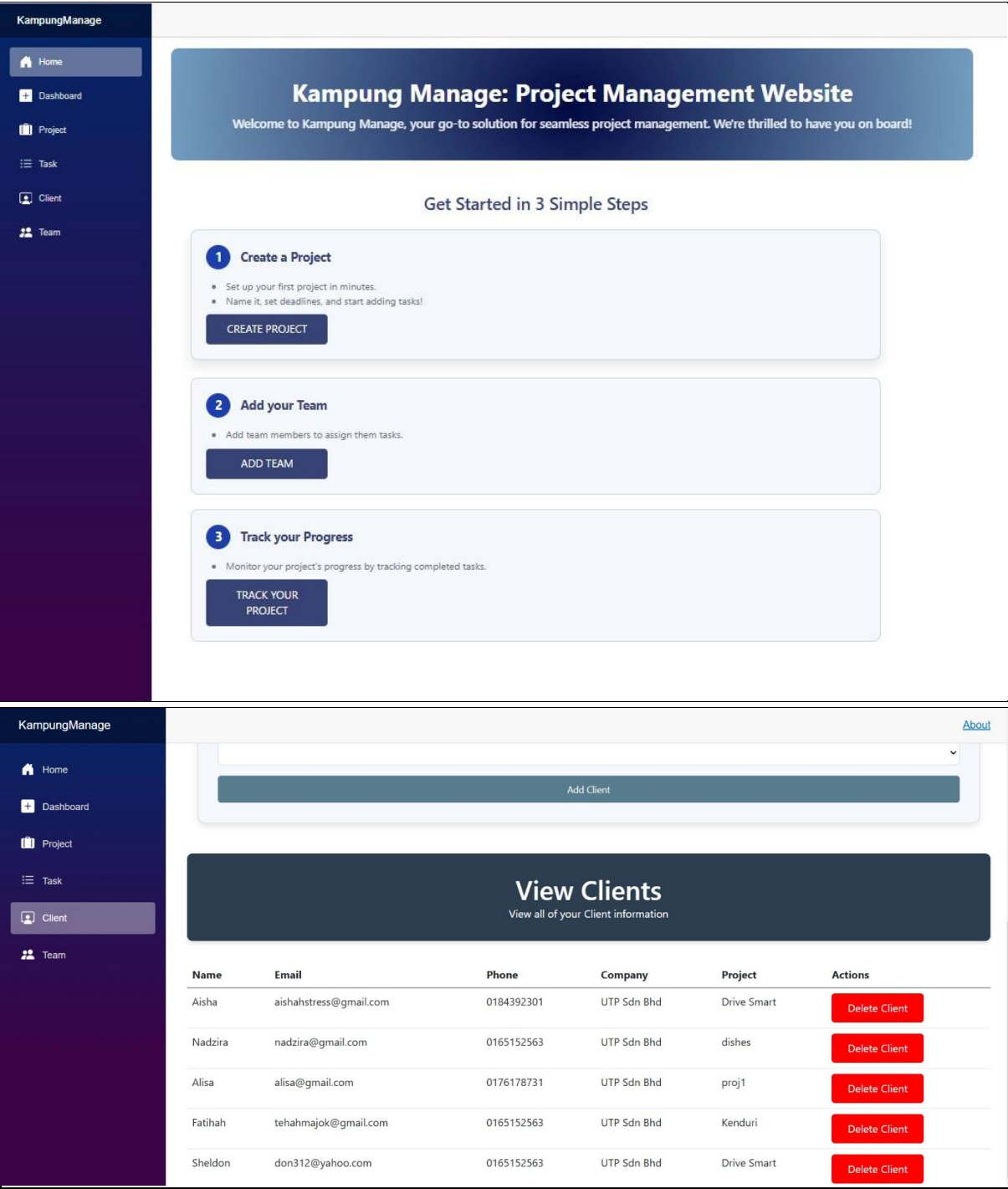
# UML DIAGRAM



# Link

## KampungManage

### Screenshots



KampungManage

About

HomeDashboardProjectTaskClientTeam

Project Creation

Add your project here

Project Name

Project Name

Due Date

yy/mm/yyyy

Project Status

Add Project

Project Tracking

Keep track all of your project here

KampungManage

About

HomeDashboardProjectTaskClientTeam

Dashboard

On-Going Projects

3

Total Project

9

Not Started Project

2

Project Completed

44.44 %

Total Team Members

5

Top Contributors

Nadzira

4

KampungManage

About

HomeDashboardProjectTaskClientTeam

Add Task

Add all of your task information

Task Title:

task title

Description:

task description

Due Date:

ddmmyyyy

Assignee:

Project:

Add Task

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Add Task

View Task

View all of your task information

| Title             | Description                    | Due Date | Assignee | Project     | Actions     |
|-------------------|--------------------------------|----------|----------|-------------|-------------|
| Bawa air          | cocktail                       | 09112024 | Nadzira  | Makan makan | Delete Task |
| goreng cucur      | tepung adabi                   | 08022025 | Nadzira  | potluck     | Delete Task |
| Goreng nugget     | brand ayam                     | 08022025 | Alisa    | Makan makan | Delete Task |
| Masak Nasi Goreng | guna perencah nasi goreng cina | 09122024 | Nadzira  | Makan makan | Delete Task |
| Masak nasi goreng | guna perencah nasi goreng cina | 09122024 | Nadzira  | Makan makan | Delete Task |
| Report            | buat                           | 09122024 | Sheldon  | DTE         | Delete Task |

KampungManage

Home

Dashboard

Project

Task

Client

Team

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Clients

Add new Client information

Name:

Client's Name

Email:

Client's Email

Phone:

Company:

Project:

Add Client

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Task

Client

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View Clients

View all of your Client information

| Name    | Email                  | Phone      | Company     | Project     | Actions       |
|---------|------------------------|------------|-------------|-------------|---------------|
| Aisha   | aishahstress@gmail.com | 0184392301 | UTP Sdn Bhd | Drive Smart | Delete Client |
| Nadzira | nadzira@gmail.com      | 0165152563 | UTP Sdn Bhd | dishes      | Delete Client |
| Alisa   | alisa@gmail.com        | 0176178731 | UTP Sdn Bhd | proj1       | Delete Client |
| Fatihah | tehahmajok@gmail.com   | 0165152563 | UTP Sdn Bhd | Kenduri     | Delete Client |
| Sheldon | don312@yahoo.com       | 0165152563 | UTP Sdn Bhd | Drive Smart | Delete Client |



