



ITT626: BACK-END TECHNOLOGY

Semester March 2022 – August 2022

BACK-END TECHNOLOGY Case Study Report: Task Management System

Prepared by:

Name of the Group Members	Student ID
1. MUHAMMAD ZAINUL MUTTAQIN BIN MOHD ZAINUDIN	2020828578
2. NUFAEL BIN ABDUL WAHAB	2020813684
3. WAN AMIRUL AFIQ BIN WAN ALIAS	2020627832

Prepared for:

AHMAD YUSRI BIN DAK

(Leave this part blank. For lecturer's comments only)

Remarks:

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1.0 Project Background

In today's fast-paced and ever-changing business environment, it's essential to have a tool that helps individuals and teams manage their tasks efficiently and effectively. With the increasing demand for productivity, many companies and individuals are looking for a comprehensive solution to manage their daily tasks and projects. A task management application offers a centralised platform where users can create, prioritise, assign, and track their tasks, helping them to stay organised and on top of their workload. The need for a task management application has become even more pronounced in the wake of the COVID-19 pandemic, as many people are now working from home and need a way to stay connected and organised with their teams. With remote work becoming the new norm, a task management app that allows for collaboration and communication is crucial. The goal of this task management application is to provide a user-friendly and intuitive platform that streamlines task management, improves collaboration, and increases productivity. The application will allow users to create tasks, set due dates, assign tasks to team members, and track progress in real-time. Users will also be able to communicate and collaborate with each other within the app, making it easier to stay connected and informed, even when working remotely. This task management app will be designed to be flexible and customizable, so that it can be adapted to the specific needs of different teams and organisations. Whether it's for personal use or for managing a team, this application will provide users with the tools they need to get their tasks done on time and with ease. In conclusion, the task management app will provide a comprehensive solution for managing tasks and projects, streamlining workflow, improving communication and collaboration, and ultimately increasing productivity.

2.0 Module for System

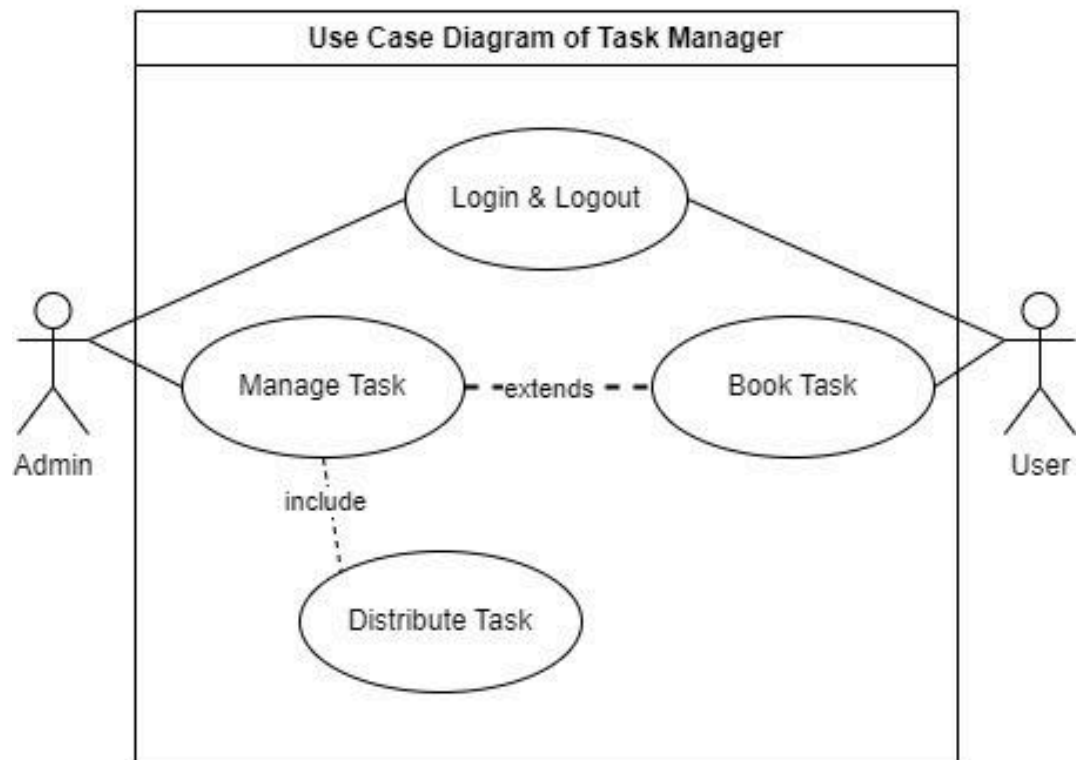
There are two types of modules in the system which is:

1. Admin Module

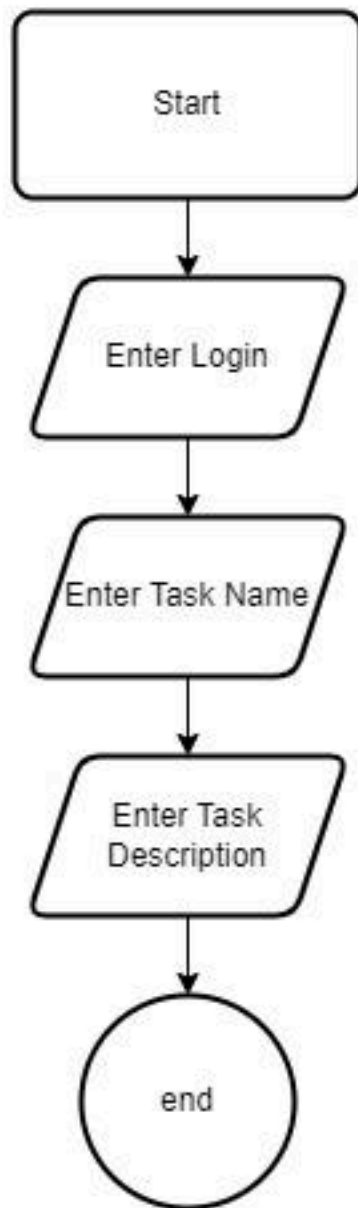
For the user module, the users are able to enter tasks name and description to the database to be reviewed by the admin. The Users are also able to delete the requests of tasks to cancel any task prompted.

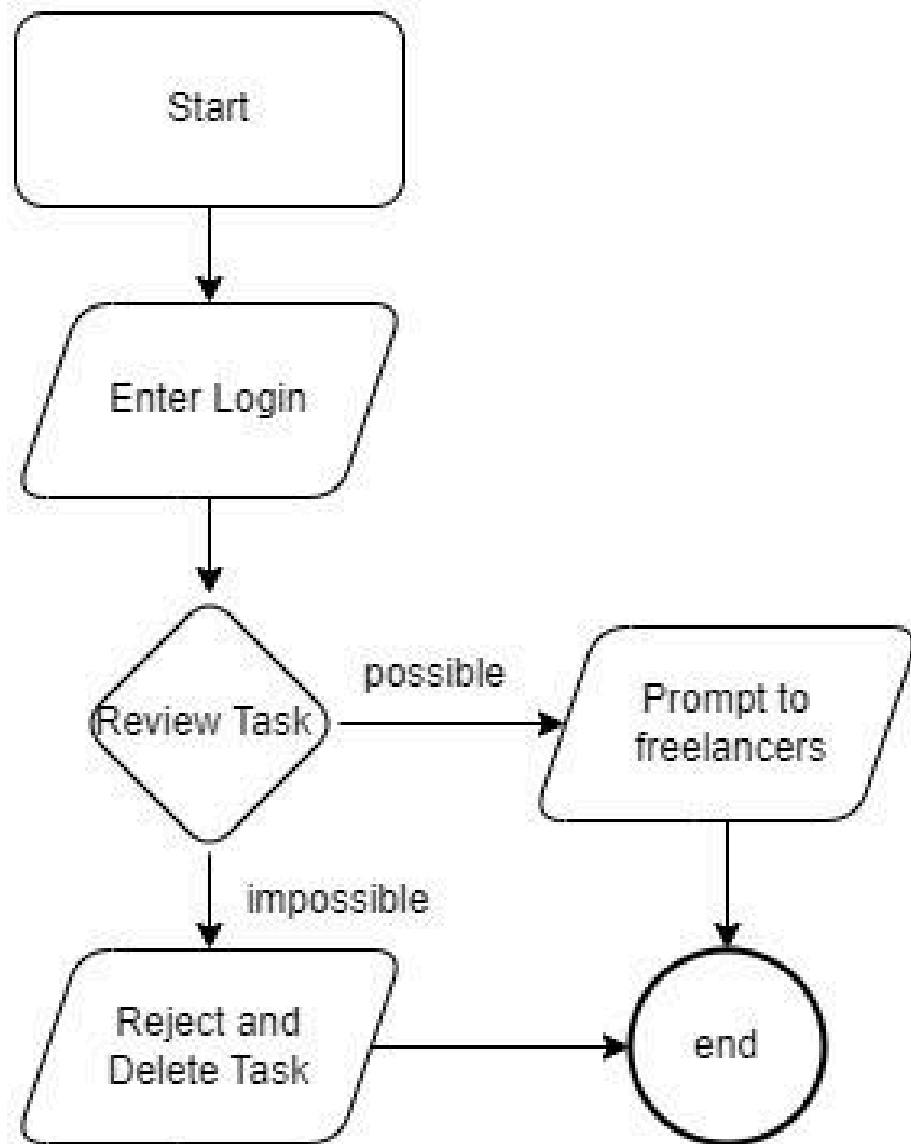
For the admin module in the system, admin can do several types of activities such as create and delete tasks

3.0 Use Case Diagram

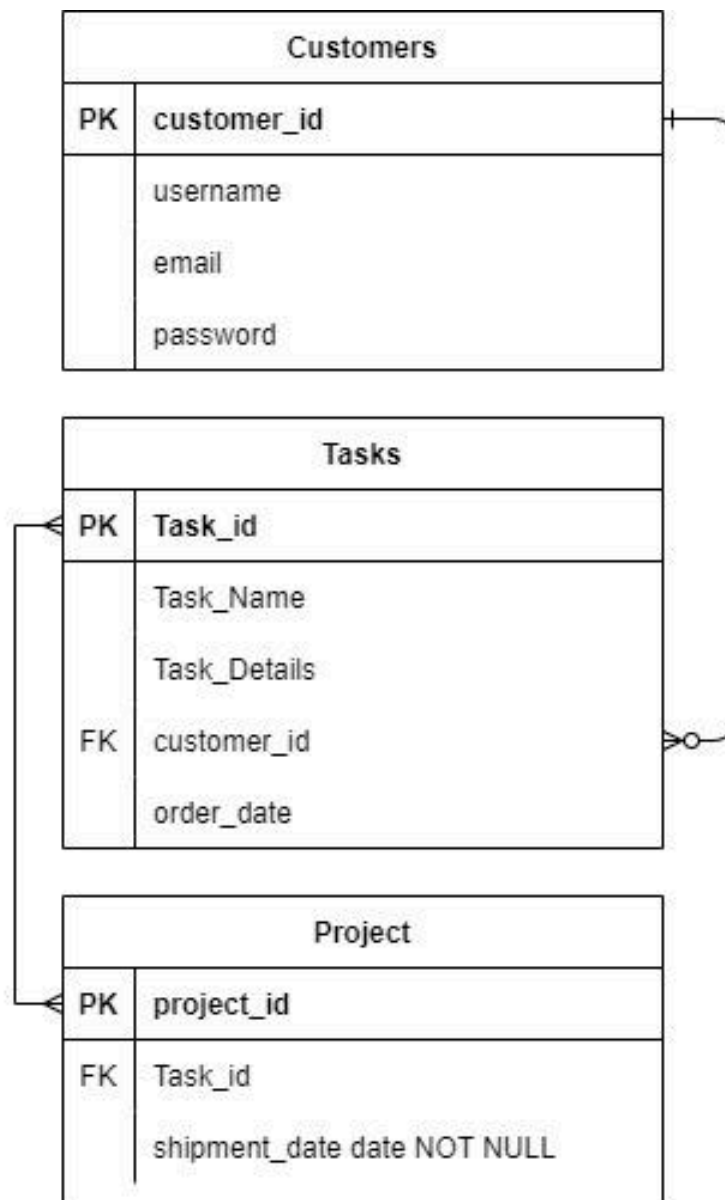


4.0 Flowchart Diagram





5.0 Entity Relationship Diagram



6.0 User Interface

LARAVEL:

Sign Up Page:

Laravel Task Management System

LoginRegister

Register

Name

Email Address

Password

Confirm Password

Register

Login Page:

Laravel Task Management System

LoginRegister

Login

Email Address

Password

Remember Me

LoginForgot Your Password?

Dashboard:

Task Manager System

Search now

Dashboard

All Tasks

Welcome to Dashboard,

Your analytics dashboard template.

Dashboard / Analytics

Download

Refresh

+

Generate report

All Tasks:

Task Manager System

Dashboard

All Tasks

Search now

Jamal

List of all tasks

Add Task

ID	Task	Description	Status	Action
14	BM	Math	Taken	<div>EditDelete</div>
13	Burnout	reach 40k burnout points	Available	<div>EditDelete</div>
12	ICT650	Develop a mobile app for hazard locator	Taken	<div>EditDelete</div>
10	Touch Grass	Complete 100 grass touching	Taken	<div>EditDelete</div>
6	ITT626 Group Project	Web app development using Laravel	Taken	<div>EditDelete</div>

<

1

2

>

Add Task:

Task Manager System

Dashboard

All Tasks

Search now

profile Jamal

Add Task

BACK

Task

Description

Image

Status

Task description...

Choose File

No file chosen

☐ Taken

SAVE

Edit Task:

Task Manager System

Search now

profile Jamal

Dashboard

All Tasks

Edit Task

BACK

Task

BM

Description

Math

Image

Choose File

No file chosen

Status

☒ Taken

UPDATE

Delete Task:

Task Manager System

Search now

Jamal

Dashboard

All Tasks

List of all tasks

ADD TASK

Delete Task

Are you sure you want to delete this data?

Close

Yes, delete.

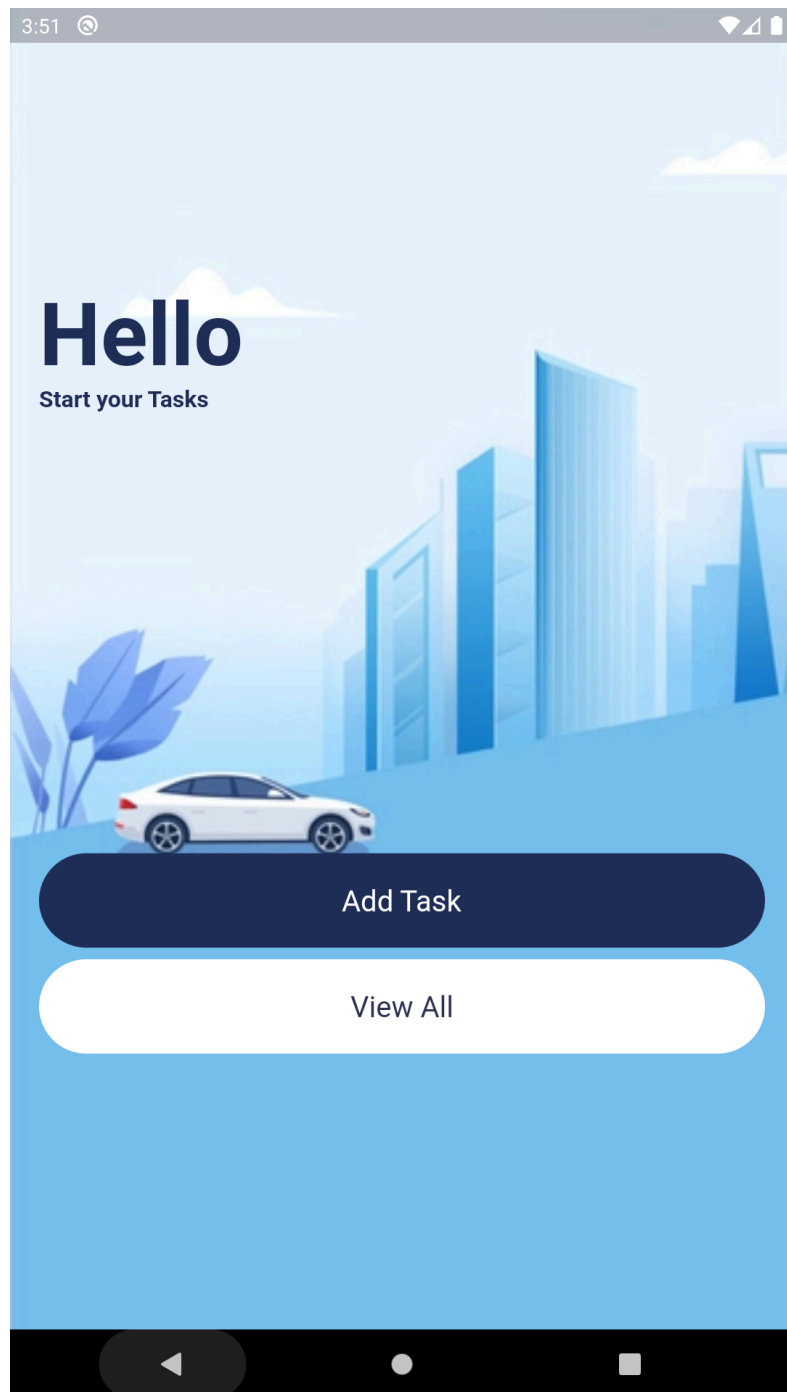
ID	Task	Status	Action
14	BM	Taken	<div>Edit</div> <div>Delete</div>
13	Burnout	Available	<div>Edit</div> <div>Delete</div>
12	ICT650	Taken	<div>Edit</div> <div>Delete</div>
10	Touch Grass	Taken	<div>Edit</div> <div>Delete</div>
6	ITT626 Group Project	Taken	<div>Edit</div> <div>Delete</div>

1

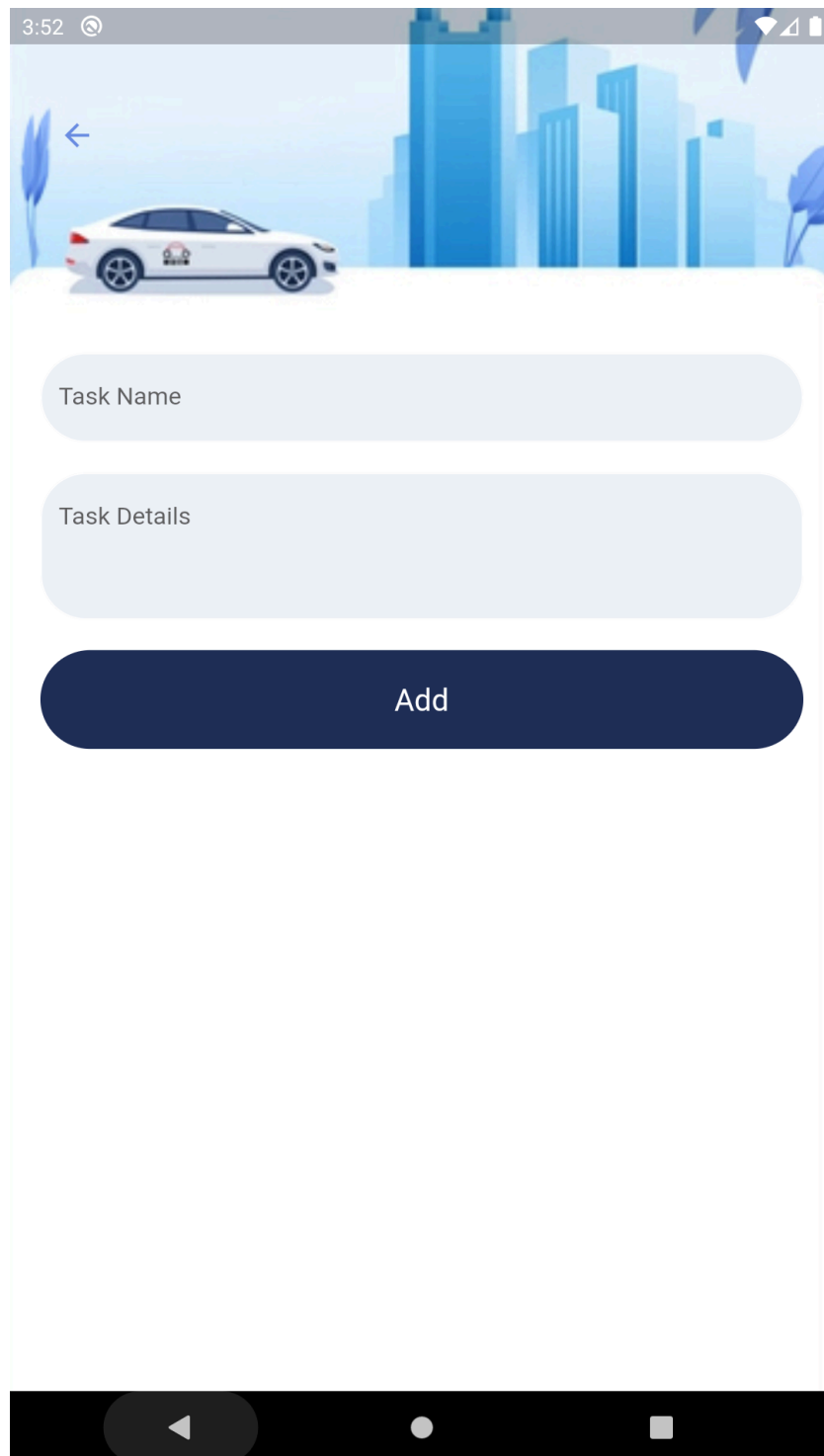
2

FLUTTER:

Home page:



Add task page:



The image shows a mobile application interface for adding a task. At the top, there is a header with a blue background featuring a white car and a city skyline. A back arrow is on the left. Below the header, there are two text input fields: 'Task Name' and 'Task Details'. At the bottom, there is a dark blue button labeled 'Add'. The status bar at the top shows the time 3:52 and various icons. The bottom navigation bar is visible at the very bottom.

3:52

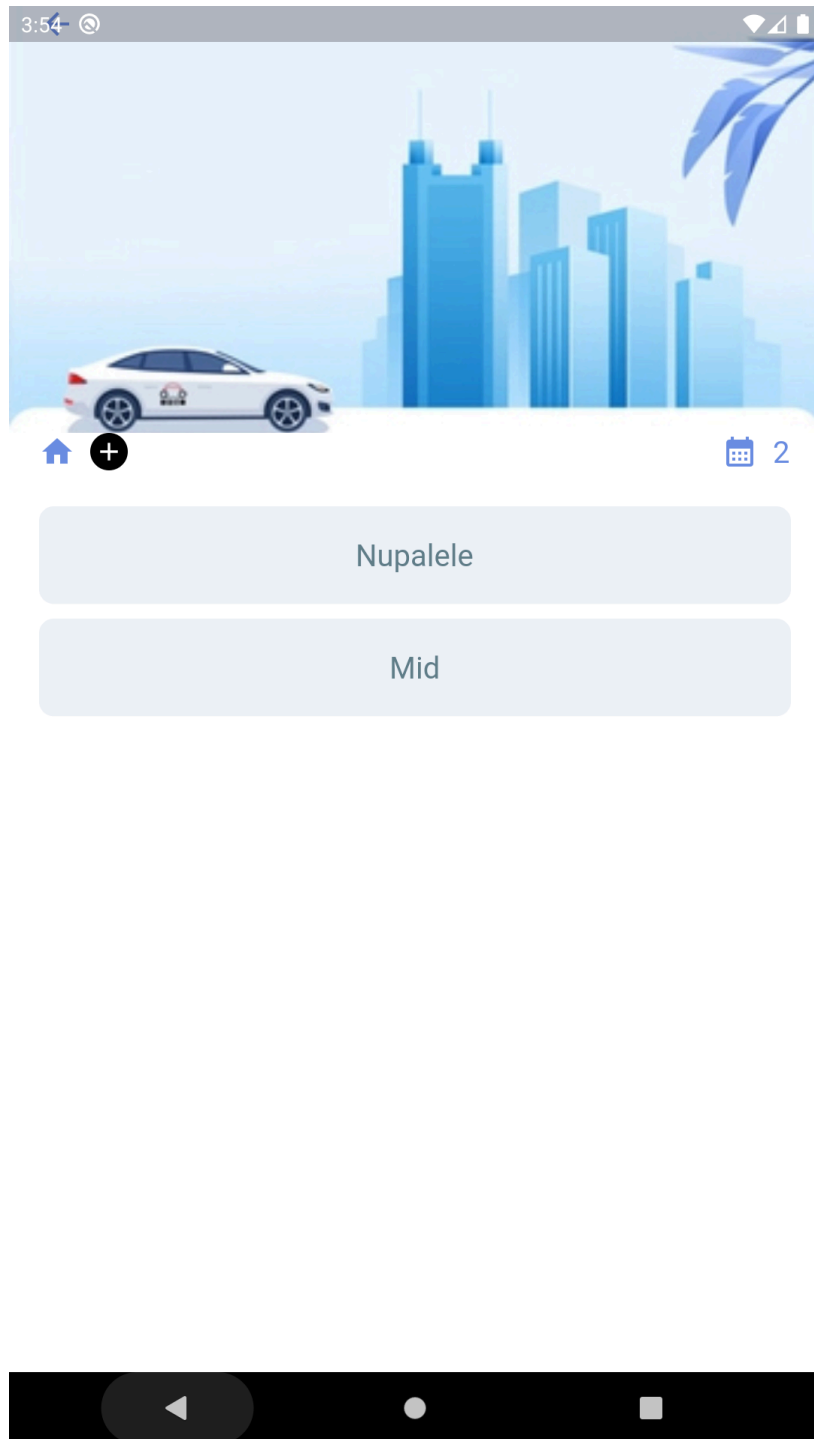
←

Task Name

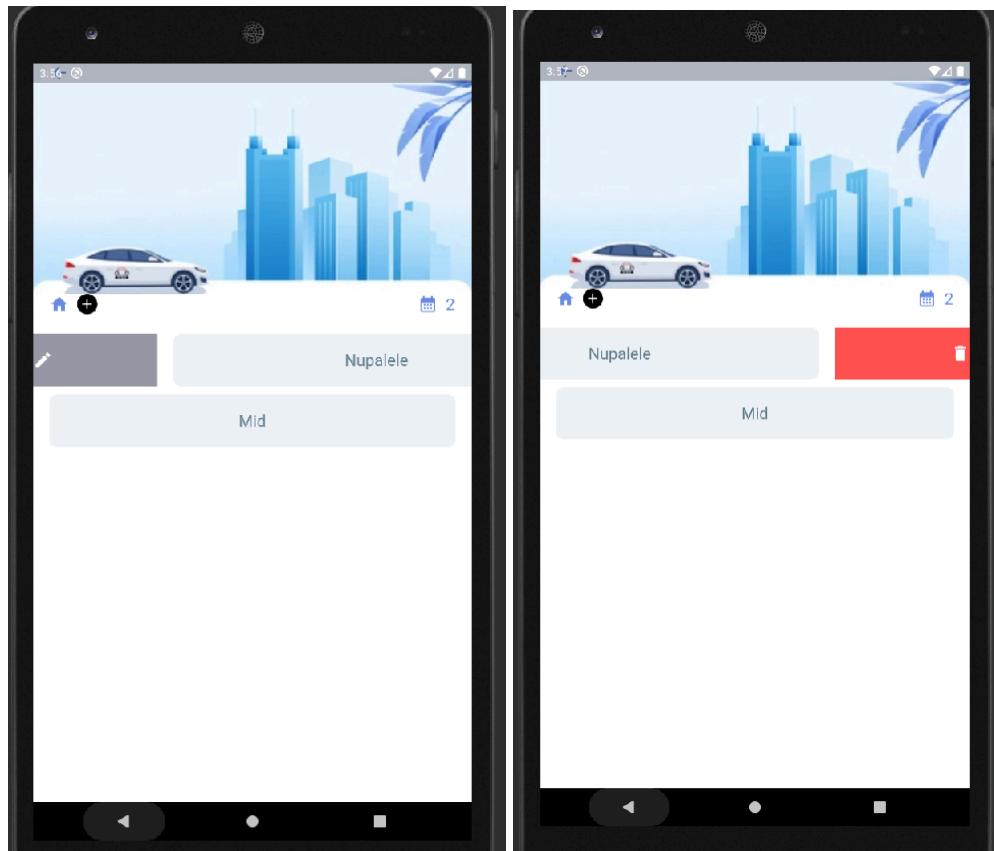
Task Details

Add

All task page



Delete and edit task function:



7.0 Appendix

SOURCE CODE FOR LARAVEL

https://github.com/zainul-byte/task_management_system

FLUTTER CODE

HOME PAGE

```
alltasks.dart  add_task.dart  Homepage.dart X  home_screen.dart

mobileapp1 > lib > screens > Homepage.dart > _HomescreenState > build
1  import 'dart:convert';
2
3  import 'package:flutter/material.dart';
4  import 'package:mobileapp1/app_colors.dart';
5  import 'package:mobileapp1/screens/alltasks.dart';
6  import 'package:mobileapp1/widgets/button_widget.dart';
7  import 'package:get/get.dart';
8
9  import 'add_task.dart';
10
11 class Homescreen extends StatefulWidget {
12   const Homescreen({super.key});
13
14   @override
15   State<Homescreen> createState() => _HomescreenState();
16 }
17
18 class _HomescreenState extends State<Homescreen> {
19   @override
20   Widget build(BuildContext context) {
21     return Scaffold(
22       body: Container(
23         width: double.maxFinite,
24         height: double.infinity,
25         padding: const EdgeInsets.only(left: 20, right: 20),
26         decoration: const BoxDecoration(
27           image: DecorationImage(
28             image: AssetImage("assets/welcome.jpg"), fit: BoxFit.cover
29           ) // DecorationImage
30         ), // BoxDecoration
31       child: Column(
32         mainAxisAlignment: MainAxisAlignment.center,
33         crossAxisAlignment: CrossAxisAlignment.start,
34         children: [
35           RichText(
36             text: TextSpan(
37               text: "Hello",
```


alltasks.dart

add_task.dart

Homepage.dart X

home_screen.dart

mobileapp1 > lib > screens > Homepage.dart > _HomescreenState > build

```
37       text: "hello",
38       style: TextStyle(
39         color: AppColors.mainColor,
40         fontSize: 60,
41         fontWeight: FontWeight.bold), // TextStyle
42       children: [
43         TextSpan(
44           text: "\nStart your Tasks",
45           style: TextStyle(
46             color: AppColors.mainColor,
47             fontSize: 16,
48             fontWeight: FontWeight.bold
49           ) // TextStyle
50         ) // TextSpan
51       ])), // TextSpan // RichText
52     SizedBox(
53       height: MediaQuery.of(context).size.height / 3,
54     ), // SizedBox
55     InkWell(
56       onTap: () {
57         Get.to(() => AddTask(),
58           transition: Transition.fade,
59           duration: Duration(seconds: 1));
60       },
61       child: ButtonWidget(
62         bgcolor: AppColors.mainColor,
63         text: "Add Task",
64         textColor: Colors.white), // ButtonWidget
65     ), // InkWell
66     const SizedBox(
67       height: 8,
68     ), // SizedBox
69     InkWell( onTap: () {
70       Get.to(() => AllTasks(),
71         transition: Transition.fade,
72         duration: Duration(seconds: 1));
73     },
```

```
74         child: ButtonWidget(  
75             bgcolor: Colors.white,  
76             text: "View All",  
77             textColor: AppColors.smallTextColor), // ButtonWidget  
78         ) // InkWell  
79     ],  
80 ), // Column  
81 ), // Container  
82 ); // Scaffold  
83 }  
84 }  
85
```

MAIN ROUTES

```
mobileapp1 > lib > main.dart
1  import 'package:flutter/material.dart';
2  import 'package:mobileapp1/screens/Homepage.dart';
3  import 'package:mobileapp1/screens/add_task.dart';
4  import 'package:mobileapp1/screens/alltasks.dart';
5  import 'package:get/get.dart';
6
7  void main() {
8    runApp(const MyApp());
9  }
10
11 class MyApp extends StatelessWidget {
12   const MyApp({super.key});
13
14   // This widget is the root of your application.
15   @override
16   Widget build(BuildContext context) {
17     return GetMaterialApp(
18       debugShowCheckedModeBanner: false,
19       title: 'Flutter Nupa',
20       theme: ThemeData(
21         primarySwatch: Colors.blue,
22       ),
23       home: const Homescreen(),
24     );
25   }
26 }
```

ALL TASK LIST PAGE

```
alltasks.dart × main.dart
mobileapp1 > lib > screens > alltasks.dart > ...
1 import 'package:flutter/material.dart';
2 import 'package:mobileapp1/app_colors.dart';
3 import 'package:mobileapp1/widgets/button_widget.dart';
4 import 'package:mobileapp1/widgets/task_widget.dart';
5
6 class AllTasks extends StatelessWidget {
7   const AllTasks({super.key});
8
9   @override
10  Widget build(BuildContext context) {
11    List myData = ["Nupalele", "Mid"];
12    final leftEditIcon = Container(
13      margin: const EdgeInsets.only(bottom: 10),
14      color: const Color(0xFF2e3253).withOpacity(0.5),
15      //withOpacity(0.5),
16      child: const Icon(
17        Icons.edit,
18        color: Colors.white,
19      ), // Icon
20      alignment: Alignment.centerLeft,
21    ); // Container
22    final rightDeleteIcon = Container(
23      margin: const EdgeInsets.only(bottom: 10),
24      color: Colors.redAccent,
25      child: const Icon(
26        Icons.delete,
27        color: Colors.white,
28      ), // Icon
29      alignment: Alignment.centerRight,
30    ); // Container
31    return Scaffold(
32      backgroundColor: Colors.white,
33      body: Column(
34        children: [
35          Container(
36            padding: const EdgeInsets.only(left: 20, right: 20),
37            alignment: Alignment.topLeft,
```

```
34     children: [
35       Container(
36         padding: const EdgeInsets.only(left: 20, right: 20),
37         alignment: Alignment.topLeft,
38         child: Icon(
← 39           Icons.arrow_back,
40           color: AppColors.secColor,
41         ), // Icon
42         width: double.maxFinite,
43         height: MediaQuery.of(context).size.height / 3.2,
44         decoration: const BoxDecoration(
45           image: DecorationImage(
46             fit: BoxFit.cover,
47             image: AssetImage("assets/header1.jpg")
48           ) // DecorationImage
49         ), // BoxDecoration
50       ), // Container
51       Container(
52         padding: const EdgeInsets.only(left: 20, right: 20),
53         child: Row(children: [
54           Icon(
55             Icons.home,
56             color: AppColors.secColor,
57           ), // Icon
58           const SizedBox(
59             width: 10,
60           ), // SizedBox
61           Container(
62             child: const Icon(
+ 63               Icons.add,
64               color: Colors.white,
65               size: 20,
66             ), // Icon
67             width: 25,
68             height: 25,
69             decoration: BoxDecoration(
70               borderRadius: BorderRadius.circular(12.5),
```

```
69         decoration: BoxDecoration(  
70             borderRadius: BorderRadius.circular(12.5),  
71             color: Colors.black), // BoxDecoration  
72     ), // Container  
73     Expanded(child: Container()),  
74     Icon(  
75         Icons.calendar_month_sharp,  
76         color: AppColors.secColor,  
77     ), // Icon  
78     const SizedBox(  
79         width: 10,  
80     ), // SizedBox  
81     Text(  
82         "2",  
83         style: TextStyle(  
84             fontSize: 20,  
85             color: AppColors.secColor,  
86         ), // TextStyle  
87     ) // Text  
88 ], // Row  
89 ), // Container  
90 Flexible(  
91     child: ListView.builder(  
92         itemCount: myData.length,  
93         itemBuilder: (context, index) {  
94             return Dismissible(  
95                 background: leftEditIcon,  
96                 secondaryBackground: rightDeleteIcon,  
97                 onDismissed: (DismissDirection direction) {  
98                     print("after dismiss");  
99                 },  
100                 confirmDismiss: (DismissDirection direction) async {  
101                     if (direction == DismissDirection.startToEnd) {  
102                         showBottomSheet(  
103                             backgroundColor: Colors.transparent,  
104                             //BarrierColor: Colors.transparent,  
105                             context: context,
```

```
105 context: context,
106 builder: (_) {
107   return Container(
108     height: 550,
109     decoration: BoxDecoration(
110       color: ■const Color(0xFF2e3253)
111       .withOpacity(0.5),
112       borderRadius: const BorderRadius.only(
113         topRight: Radius.circular(20),
114         topLeft: Radius.circular(20)
115       ) // BorderRadius.only
116     ), // BoxDecoration
117     child: Padding(
118       padding: const EdgeInsets.only(
119         left: 20, right: 20), // EdgeInsets.only
120       child: Column(
121         mainAxisAlignment:
122           MainAxisAlignment.center,
123         children: [
124           ButtonWidget(
125             bgcolor: AppColors.mainColor,
126             text: "View",
127             textColor: □Colors.white), // ButtonWidget
128           const SizedBox(
129             height: 20,
130           ), // SizedBox
131           ButtonWidget(
132             bgcolor: AppColors.mainColor,
133             text: "Edit",
134             textColor: □Colors.white) // ButtonWidget
135         ],
136       ), // Column // Padding
137     ); // Container
138   });
139   return false;
140 } else {
141   return Future.delayed(const Duration(seconds: 1),
```

alltasks.dart ✕

mobileapp1 > lib > screens > alltasks.dart > AllTasks

```
135         ],
136       )), // Column // Padding
137     ); // Container
138   });
139   return false;
140 } else {
141   return Future.delayed(const Duration(seconds: 1),
142     () => direction == DismissDirection.endToStart
143   ); // Future.delayed
144 }
145 },
146 key: ObjectKey(index),
147 child: Container(
148   margin: const EdgeInsets.only(
149     left: 20, right: 20, bottom: 10), // EdgeInsets.only
150   child: TaskWidget(
151     text: myData[index], color: Colors.blueGrey
152   ) // TaskWidget
153 ), // Container
154 ); // Dismissible
155 },
156 ), // ListView.builder
157 ) // Flexible
158 ],
159 ); // Column // Scaffold
160 }
161 }
```


ADD TASK PAGE

```
alltasks.dart  add_task.dart X
mobileapp1 > lib > screens > add_task.dart > AddTask > build
1  import 'package:flutter/material.dart';
2  import 'package:mobileapp1/app_colors.dart';
3  import 'package:mobileapp1/widgets/button_widget.dart';
4  import 'package:mobileapp1/widgets/textfield_widget.dart';
5  import 'package:get/get.dart';
6
7  class AddTask extends StatelessWidget {
8    const AddTask({super.key});
9
10   @override
11   Widget build(BuildContext context) {
12     TextEditingController nameController = TextEditingController();
13     TextEditingController detailController = TextEditingController();
14     return Scaffold(
15       body: Container(
16         width: double.maxFinite,
17         height: double.maxFinite,
18         padding: const EdgeInsets.only(right: 20, left: 20),
19         decoration: const BoxDecoration(
20           image: DecorationImage(
21             fit: BoxFit.cover, image: AssetImage("assets/addtask1.jpg")
22           ) // DecorationImage
23         ), // BoxDecoration
24       child: Column(
25         crossAxisAlignment: CrossAxisAlignment.start,
26         mainAxisAlignment: MainAxisAlignment.spaceBetween,
27         children: [
28           Column(children: [
29             const SizedBox(
30               height: 60,
31             ), // SizedBox
32             IconButton(
33               onPressed: () {
34                 Get.back();
35               },
36               icon: Icon(
37                 Icons.arrow_back,
```

alltasks.dart

add_task.dart X

mobileapp1 > lib > screens > add_task.dart > AddTask > build

```
36      icon: Icon(
37        Icons.arrow_back,
38        color: AppColors.secColor,
39      )) // Icon // IconButton
40    ], // Column
41    Column(
42      children: [
43        Textfield_Widget(
44          textController: nameController, hintText: "Task Name"
45        ), // Textfield_Widget
46        const SizedBox(
47          height: 20,
48        ), // SizedBox
49        Textfield_Widget(
50          textController: detailController,
51          hintText: "Task Details",
52          borderRadius: 30,
53          maxLines: 3), // Textfield_Widget
54        const SizedBox(
55          height: 20,
56        ), // SizedBox
57        ButtonWidget(
58          bgcolor: AppColors.mainColor,
59          text: "Add",
60          textColor: Colors.white) // ButtonWidget
61      ],
62    ), // Column
63    SizedBox(
64      height: MediaQuery.of(context).size.height / 3,
65    ) // SizedBox
66  ],
67 ), // Column
68 ), // Container
69 ); // Scaffold
70 }
71 }
```

