

**TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
QUEZON CITY**

**NO-SHIFT:
A STUDENT'S GO-TO TO-DO APPLICATION**

SUBMITTED BY:

ADIA, James Russel
ADUANA, Jake Norwin
ALEGRE, Jhon Isaac
BERIN, Eryn Russell
GASPAR, Aaron
SILANG, Yohance

SUBMITTED TO:

Mrs. Marjorie Escanan

DATE SUBMITTED:

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I. INTRODUCTION / PROBLEM

Students often find themselves in a predicament against an overload of academic tasks, finding little to no time to sort through their assignments and becoming unable to pass in time. Oftentimes, missed assignments become a student's norm, constantly pedaling themselves forward to catch up with an overwhelming influx of tasks—but more often than not, students also lack the time nor energy to actively do so.

As such, the student developers involved in this project are just as aware of the troubles faced by students of today. To overcome this, the developers have come up with a tool that will aid against such an issue: introducing “NO-SHIFT: A Student's Go-To To-Do Application”—a user-friendly option for students to efficiently sort through their assignments in the form of a interactable to-do list.

II. OBJECTIVES

This project aims to:

- provide a tool for students to help them organize their tasks
- exercise maximum efficiency in doing so; and
- encourage active learning by sorting their assignments in an interactive to-do list.

III. SYSTEM REQUIREMENTS AND ANALYSIS

In order to operate the program, a user must have:

- An android device
- At least 20 MB of space

IV. DESIGN

Algorithm	Flowchart
Start Enter App Display To-Do List Select Action Case 1: If Mark task = true, Task marked as done Case 2: If Unmark task = true, Task reverted as undone Case 3:	

If Add task = true,
Input task name
Task added in the list
else go to Display To-Do List

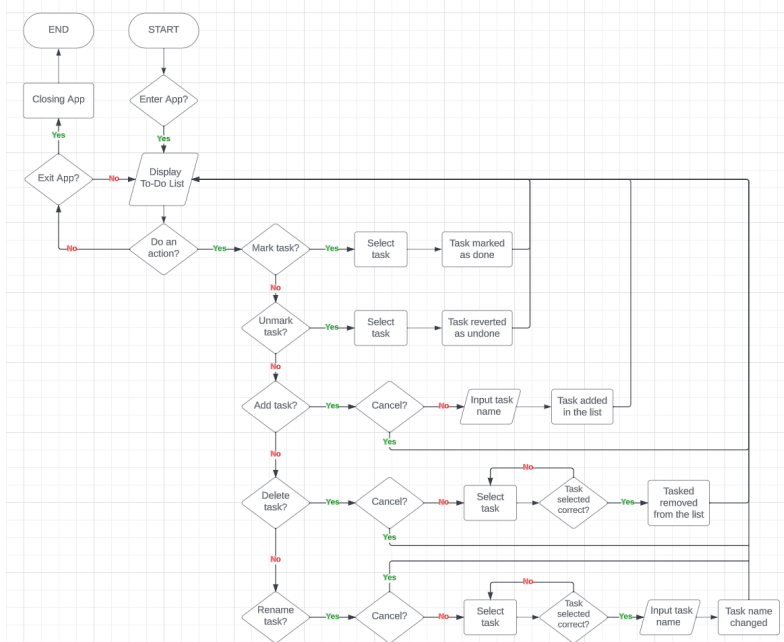
Case 4:

If Delete task = true,
Select task to be deleted
Task removed from the list
else go to Display To-Do List

Default:

If Exit App = true,
Close App
else go to Display To-Do List

End



V. CODE AND IMPLEMENTATION

Insert code snippets here

MAIN FILE

main.dart

```

lib > main.dart x to_do.dart todo_tile.dart dialog_box.dart button.dart database.dart
1 // ignore_for_file: prefer_const_constructors, unused_local_variable
2
3 import 'package:flutter/material.dart';
4 import 'package:flutter/rendering.dart';
5 import 'package:hive_flutter/hive_flutter.dart';
6 import 'package:no_shift/Pages/to_do.dart';
7
8 Run | Debug | Profile
9 void main() async {
10
11   // hive database
12   await Hive.initFlutter();
13
14   // open hive box
15   var box = await Hive.openBox('todo');
16
17   // Make the padding and alignment lines visible
18   debugPaintSizeEnabled = false;
19
20   runApp(const MyApp());
21 }
22 class MyApp extends StatelessWidget {
23   const MyApp({super.key});
24
25   @override
26   Widget build(BuildContext context) {
27
28     return MaterialApp(
29       debugShowCheckedModeBanner: false,
30       home: ToDo(),
31     ); // MaterialApp
32   }
33 }
  
```

UTILITIES

button.dart

```
lib > Utilities > button.dart > MyButton > build
1 // ignore_for_file: must_be_immutable, sort_child_properties_last
2
3 import 'package:flutter/material.dart';
4
5 class MyButton extends StatelessWidget{
6   final String text;
7   VoidCallback onPressed;
8
9   MyButton({
10     super.key,
11     required this.text,
12     required this.onPressed,
13   });
14
15   @override
16   Widget build(BuildContext context){
17     return MaterialButton(
18       onPressed: onPressed,
19       child: Text(text),
20       color: Colors.orange[300],
21       textColor: Colors.white,
22       minWidth: 100,
23       height: 50,
24       shape: RoundedRectangleBorder(
25         borderRadius: BorderRadius.circular(12.0),
26       ), // RoundedRectangleBorder
27     ); // MaterialButton
28
29 }
```

dialog_box.dart

```
lib > Utilities > dialog_box.dart > DialogBox > DialogBox
1 // ignore_for_file: prefer_const_constructors, unused_import, prefer_const_literals_to_create_immutables, prefer_typing_uninitialized_variables
2
3 import 'package:flutter/material.dart';
4 import 'package:no_shift/Utilities/button.dart';
5
6 class DialogBox extends StatelessWidget{
7   final controller;
8   VoidCallback onSave;
9   VoidCallback onCancel;
10
11   DialogBox({
12     super.key,
13     required this.controller,
14     required this.onSave,
15     required this.onCancel,
16   });
17
18   @override
19   Widget build(BuildContext context){
20     return AlertDialog(
21       backgroundColor: Colors.orange[100],
22       title: Text('Create New Task'),
23       content: SizedBox(
24         height: 120,
25         child: Column(
26           mainAxisAlignment: MainAxisAlignment.spaceEvenly,
27           children:[
28             // getting user input
29           ]
30         )
31       )
32     );
33   }
34 }
```

```

29   TextField(
30     controller: controller,
31     decoration: InputDecoration(
32       border: OutlineInputBorder(),
33       hintText: 'Enter new task',
34     ), // InputDecoration
35   ), // TextField
36
37   // buttons
38   Padding(
39     padding: const EdgeInsets.only(top:6),
40     child: Row(
41       mainAxisAlignment: MainAxisAlignment.spaceEvenly,
42       children: [
43         // save button
44         MyButton(
45           text: 'Save',
46           onPressed: onSave,
47         ), // MyButton
48
49         // cancel button
50         MyButton(
51           text: 'Cancel',
52           onPressed: onCancel,
53         ), // MyButton
54       ],
55     ),
56   ), // Row
57 ), // Padding
58
59 ], // Column
60 ), // SizedBox
61 ); // AlertDialog
62 }
63 }

```

todo_tile.dart

```

main.dart  to_do.dart  todo_tile.dart  dialog_box.dart  button.dart  database.dart
lib > Utilities > todo_tile.dart > ...
1  // ignore_for_file: prefer_const_constructors, sort_child_properties_last, must_be_immutable
2
3  import 'package:flutter/material.dart';
4  import 'package:flutter_slidable/flutter_slidable.dart';
5
6  class ToDoTile extends StatelessWidget{
7
8    final String taskName;
9    final bool taskCompleted;
10   Function (bool)? onChanged;
11   Function(BuildContext)? deleteFunction;
12
13   ToDoTile({
14     super.key,
15     required this.taskName,
16     required this.taskCompleted,
17     required this.onChanged,
18     required this.deleteFunction,
19   });
20
21   @override
22   Widget build(BuildContext context){
23     return Padding(
24       padding: EdgeInsets.only(left:18, right:18, top:10),
25       child: Slidable(
26         endActionPane: ActionPane(
27           motion: StretchMotion(),
28           children: [

```

```

29     SlidableAction(
30       onPressed: deleteFunction,
31       icon: Icons.delete,
32       backgroundColor: Colors.red.shade300,
33       borderRadius: BorderRadius.circular(12),
34     ) // SlidableAction
35   ],
36 ), // ActionPane
37 child: SizedBox(
38   height: 100,
39   child: Container(
40     decoration: BoxDecoration(
41       color: Colors.orange[300],
42       borderRadius: BorderRadius.circular(12),
43     ), // BoxDecoration
44     child: Center(
45       child: Row(
46         mainAxisAlignment: MainAxisAlignment.spaceEvenly,
47         children: [
48
49           // Checkbox
50           SizedBox(
51             width: 25,
52             child: Checkbox(
53               value: taskCompleted,
54               onChanged: onChanged,
55             ), // Checkbox

```

```

56           ), // SizedBox
57
58           // Text (taskName)
59           SizedBox(
60             width: 275,
61             child: Text(taskName,
62               style: TextStyle(
63                 decoration: taskCompleted
64                   ? TextDecoration.lineThrough
65                   : TextDecoration.none,
66                 fontSize: 18,
67                 fontWeight: FontWeight.bold,
68               ), // TextStyle
69             ), // Text
70           ), // Text
71         ], // SizedBox
72       ],
73     ), // Row
74   ), // Center
75 ), // Container
76 ), // SizedBox
77 ) // Slidable
78 ); // Padding
79 }
80 }

```

PAGES
to_do.dart

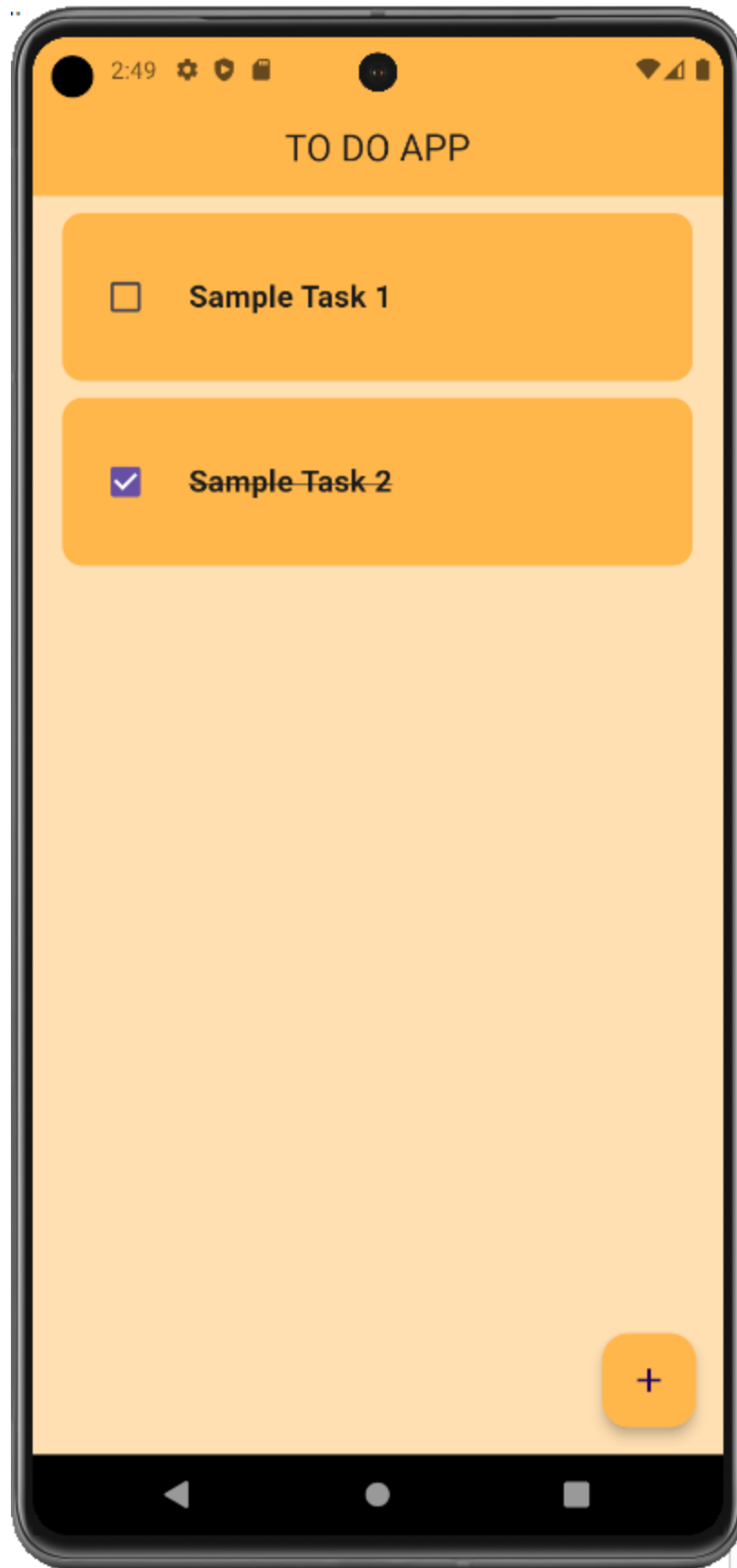
```
main.dart to_do.dart x todo_tile.dart dialog_box.dart button.dart database.dart
lib > Pages > to_do.dart > ...
1 // ignore_for_file: prefer_const_constructors, sort_child_properties_last, unused_field
2
3 import 'package:flutter/material.dart';
4 import 'package:hive_flutter/hive_flutter.dart';
5 import 'package:no_shift/Utilities/dialog_box.dart';
6 import 'package:no_shift/Utilities/todo_tile.dart';
7 import 'package:no_shift/data/database.dart';
8
9 class ToDo extends StatefulWidget {
10   const ToDo({super.key});
11
12   @override
13   State<ToDo> createState() => _ToDoState();
14 }
15
16 class _ToDoState extends State<ToDo>{
17   // hive box reference
18   final _box = Hive.box('todo');
19   ToDoDatabase db = ToDoDatabase();
20
21   @override
22   void initState(){
23     // check if this is the 1st time the app is opened
24     if(_box.get("todoList") == null){
25       db.createInitialData();
26     }
27     else{
28       // if not, load data from database
```

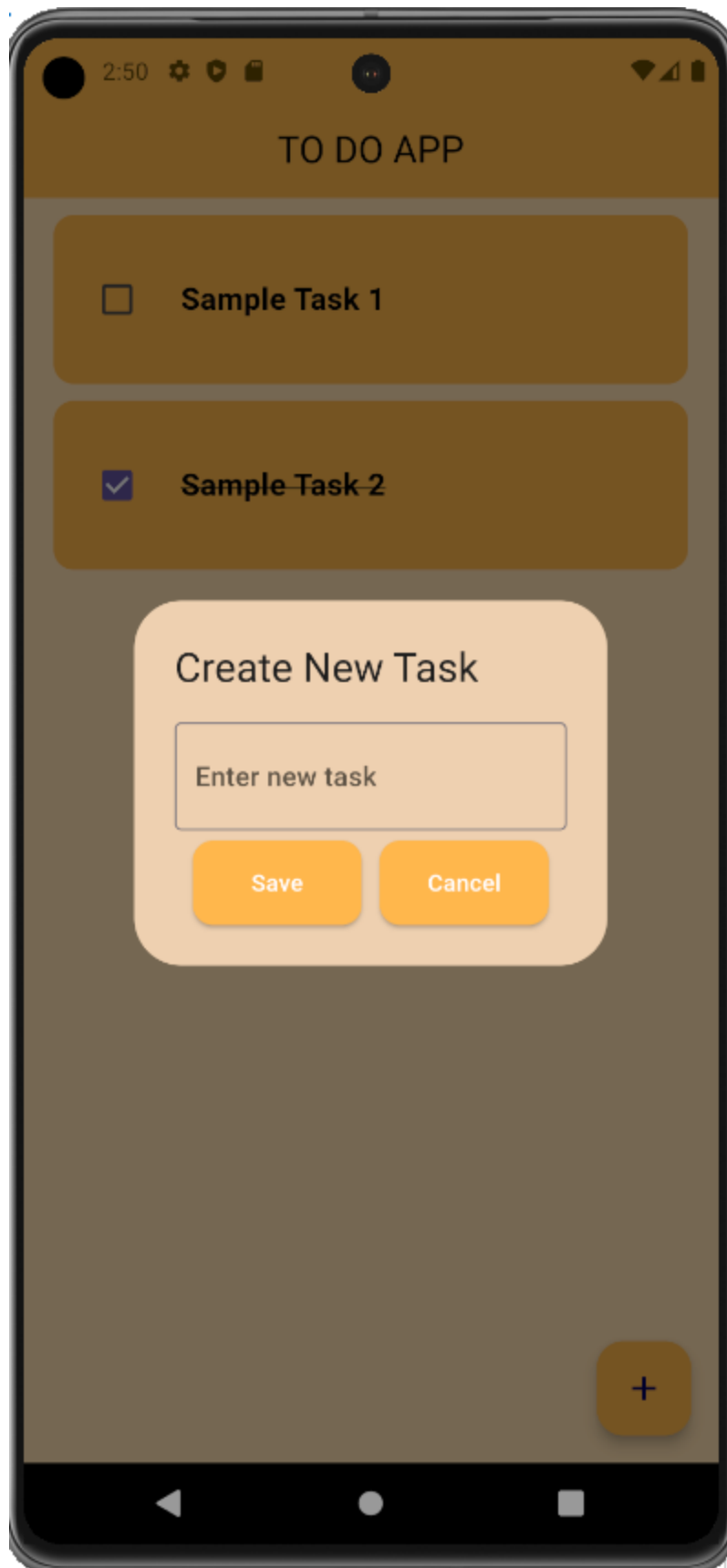
DATA

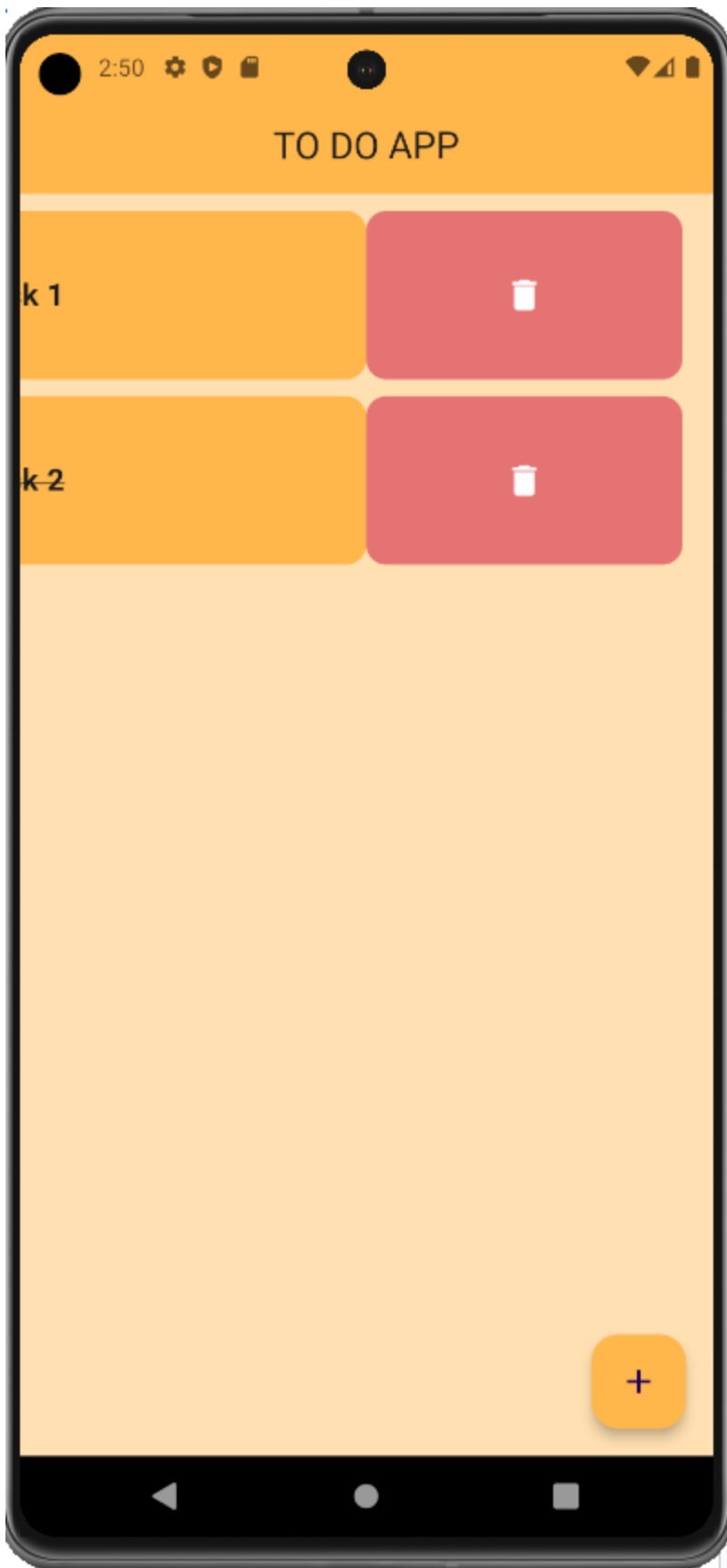
database.dart

```
main.dart to_do.dart todo_tile.dart dialog_box.dart button.dart database.dart x
lib > data > database.dart > ...
1 // ignore_for_file: unused_field
2
3 import 'package:hive_flutter/hive_flutter.dart';
4
5 class ToDoDatabase{
6
7   List todoList = [];
8
9   // reference hive box
10   final _box = Hive.box('todo');
11
12   // run this if this is the 1st time the app is opened
13   void createInitialData(){
14     todoList = [
15       ["This is a Sample Task", false],
16     ];
17   }
18
19   // load data from database
20   void loadData(){
21     todoList = _box.get("todoList");
22   }
23
24   // update the database
25   void updateDatabase(){
26     _box.put("todoList", todoList);
27   }
28
29 }
```

Insert Images of Program Here







VI. MAINTENANCE

Apart from the barebones to-do list provided by the default program, the developers also plan to add other features such as (but not limited to):

- UI update to make it cleaner
- Edit task feature (such as reordering and task editing)
- Set deadlines using dates and notification
- A new page for note taking

VII. GANTT CHART

GANTT CHART

