



**UNIVERSITI MALAYSIA TERENGGANU (CENTRE)**  
**FAKULTI SAINS KOMPUTER DAN MATEMATIK**  
**FRAMEWORK-BASED MOBILE APPLICATION**  
**DEVELOPMENT**  
**CSM3114**

**Project 1**  
**Todo-List App**  
Project Report

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## 1.0 Executive Summary of the Prototype

The University Personal Mobile Apps Prototype: ToDo-List is an application using Dart language and Flutter framework which focuses on helping students to sort the tasks and assignments given from the lecturers and manage their time wisely. This application ensures a friendly user interface (UI) for the students and is easy to use.

These are what ToDo-List mobile application can offer to the students:

1. Students can add a new list in the application and include the due for the task.
2. Students can delete and cross the tasks they have done.
3. Students will be able to see what task they need to prioritize since the app prioritizes tasks by placing those with imminent due dates at the top of the list.

## 2.0 The prototype design

### 2.1 Wireframe for the prototype

The main screen is as in Figure 2.1.1.

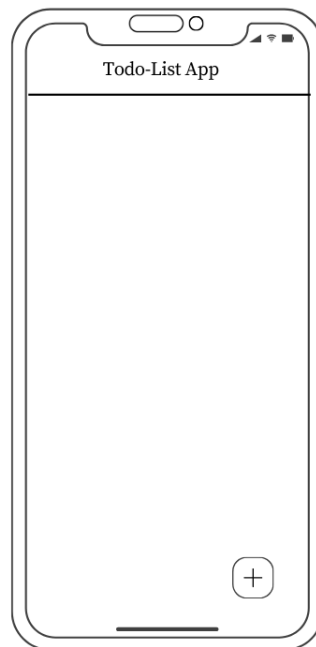


Figure 2.1.1: Wireframe for main screen.

The second wireframe is the add list screen as in Figure 2.1.2, and Figure 2.1.3 is for the lists of to-do lists after the user inserts some lists.

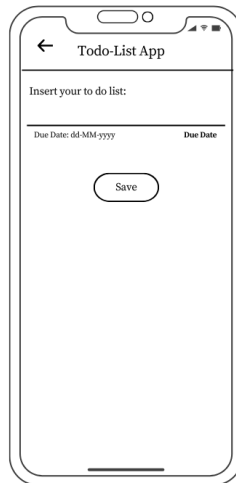


Figure 2.1.2: Wireframe for add list.

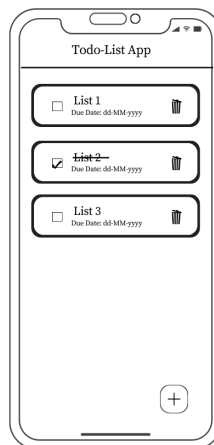


Figure 2.1.3: Wireframe for main screen with example lists.

## 2.2 Project dependencies

ToDo-List app is built using five dart files following the MVC(Model-View-Controlling) which will be presented in Figure 2.1 in the project dependency.

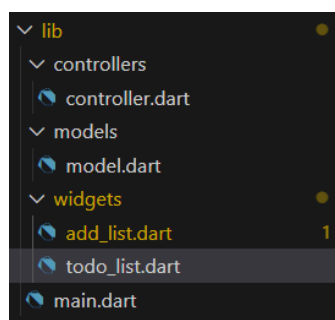


Figure 2.2.1 : Project Dependencies for ToDo-List App.

### 3.0 The UI for the application with explanation

ToDo-List app has two screens which are the main screen as the list screen and the add list screen which will be explained later. Figure 3.1 shows the main screen for the ToDo-List app.

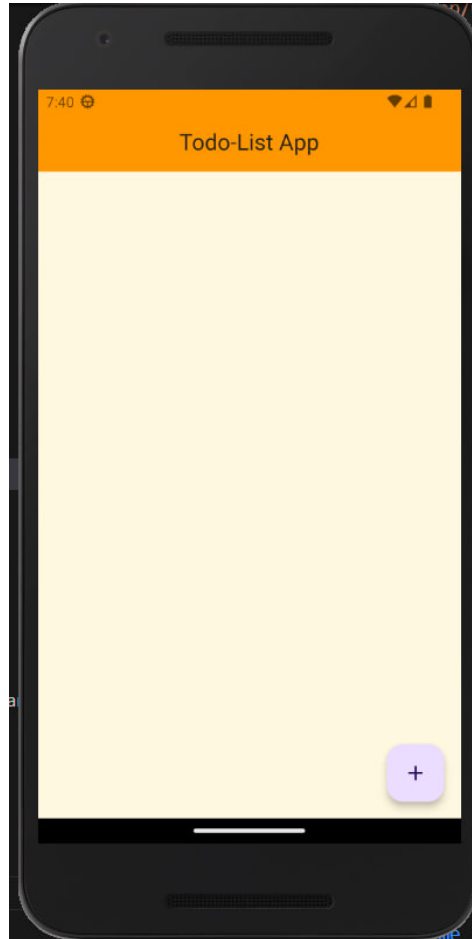


Figure 3.1 : Main Screen for the ToDo-List App.

Based on Figure 3.1, this is the main screen for the ToDo-List app which also works as the list of the to-do screen. At the right side of the bottom of the application, there is a floating button with '+' sign for the user to add a new list which will direct the user to another screen which is the add list screen in Figure 3.2 and Figure 3.3.

Based on Figure 3.2 and 3.3, users can insert the to-do list's name and the due date. There is also a 'Save' button to add the list in the list that can be displayed in the main screen. If users change their mind and no longer want to add the list, they can click the left arrow at the top left of the screen to go back to the main screen.

Figure 3.4 represents the lists after the user added the lists. As shown in Figure 3.4, there is a tick button at the left side of the list which will cross the task if the button is ticked and there is a delete button at the right side of every list.

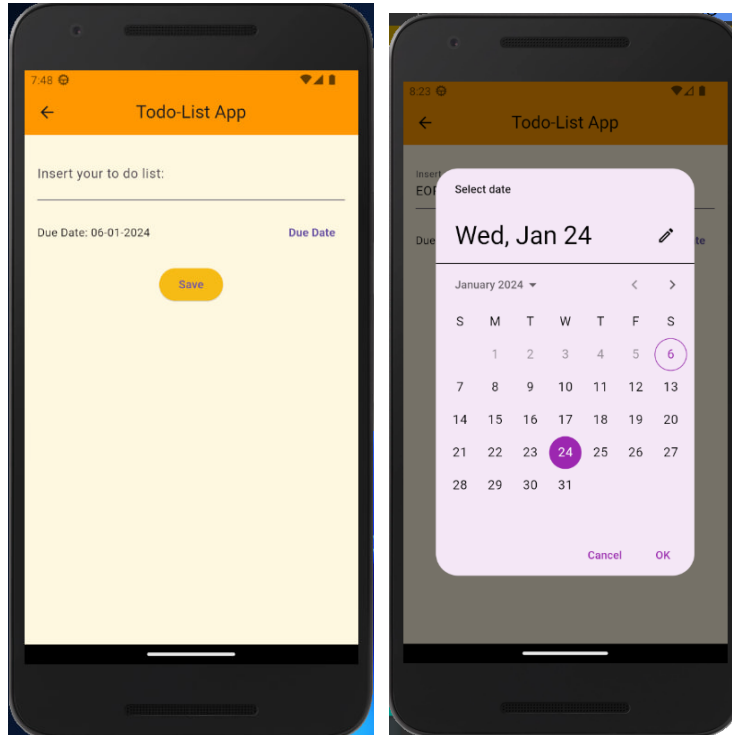


Figure 3.2 and Figure 3.3 : Add list screen for ToDo-List App.

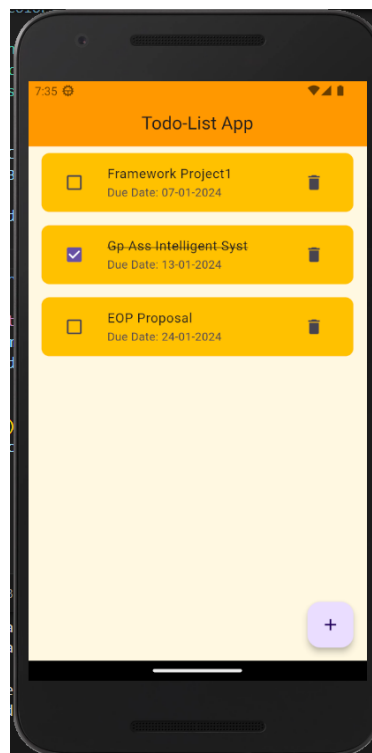


Figure 3.4 : Lists of the to-do tasks.

#### **4.0 Potential commercial value an the pricing of the prototype**

The University Personal Mobile Apps Prototype: ToDo-List holds substantial commercial potential owing to its relevance in addressing the organizational needs of students. The application's potential commercial value are in :

1. Market Demand:

This prototype caters to the specific needs of students, targeting a niche market within the broader domain of productivity and task management applications with an increasing number of students seeking efficient ways to manage academic tasks, the prototype stands to tap into a growing user base.

2. Features Driving Value:

To-Do List app focuses on task prioritization which has strategic prioritization of tasks based on due dates and provides a unique value proposition, assisting students in managing their workload effectively.

3. Monetization Strategies:

Universiti Malaysia Terengganu(UMT) could apply this app under Educational Licensing which could be used by all of the students in UMT. Since this is a prototype app, this app could be improved to make a notification popup which reminds users or students to complete their tasks before the due arrives.

4. Future collaborations

ToDo-List is ready to join any collaboration or any sponsorship with UMT or any other parties to expand the chance of this app to be used by all people and become other sources of income.

To sum up, the prototype's potential commercial worth is dependent on smart pricing, efficient marketing, and ongoing user input modification. In the highly competitive task management application industry, the prototype sets itself up for success by providing a useful solution catered to the demands of students.

## 5.0 Lesson Learned

During this whole assignment:

1. I got to refresh back all the lab that I have done and all the activity in the classes which really helped me through this Project 1.
2. I also got to apply using MVC architecture which separates the model, view(widgets) and the controller.
3. I become more alert to add dependencies in the pubspec.yaml like the date dependencies (intl) after designing my prototype and realizing it uses date formatting.
4. I also strengthen my knowledge about sync and await of how to use it and to fetch data and store the result.
5. Lastly, I learnt how to sort the date either in descending or ascending order using Dart depending on their due date priority.

## 6.0 Conclusion

In conclusion, I really hope that the ToDo-List app prototype can help students to manage their task and help them divide their time more wisely. I also believe that this prototype will become more efficient and useful to students if there is much more time, monetization, collaboration and others to improvise this prototype to be a better mobile application and have friendly user interface.

## 7.0 GitHub Link

<https://github.com/ilhamhanina/todoList-app-S63762.git>

## 8.0 References

1. Class Activity for shopping\_list, expenses\_app, and the labs' answers.
2. <https://docs.flutter.dev/tools/pubspec#:~:text=The%20pubspec%20file%20specifies%20dependencies,version%20of%20the%20Flutter%20SDK>
3. <https://www.fluttercampus.com/guide/169/how-to-sort-list-by-date-in-dart-flutter/>
4. <https://pub.dev/packages/intl>
5. <https://youtu.be/SmTCmDMi4BY>