**Files structure**

Data: contains data.dart file which contains the CRUD services.

Helpers: contains the routes file which contains routes of all screens.

Models: contains the classes that represents the data inside the application.

* User: contains the email and the to-do list items of the user
* TodoItem: contains title and whether the item is done or not
* Auth: contains sign in and sign out functions
* Theme: contains theme data

Widgets: contains common widgets used in the application.

Screens: The UI layer.

* Sign in screen
* To-do list screen
* Add item screen
* Edit item screen

**Libraries**

* provider:
* cloud\_firestore: ^0.13.7
* firebase\_auth:
* google\_sign\_in:
* flutter\_facebook\_login:
* equatable: // this library is used to check whether two objects of the class are equal or not.

**Workflow**

* + The first screen is the signInScreen which contains 2 buttons to sign in with Google or Facebook account.
  + After logging in, if the user logged in with Google, his/her data is fetched from the firestore using the email. If the user logged in with Facebook, his/her data is fetched using the user id.
  + If the user is new a screen with text “Add items” will be showed, otherwise the data of the user will be showed.
  + The user can change the theme only from the main screen which is the todo list screen.
  + The user can add a new item by pressing the button at the bottom right of the screen; another screen will be pushed so that the user can enter the title of the new item and add it to the list.
  + The user can edit item by pressing on it; another screen will be pushed so that the user can edit the title of the item.
  + The user can delete an item by pressing the delete icon at the right of each item.
  + The user can toggle check box at the left of the item to mark it as done or not done.

**Screenshots**

**Sign in screen:**

**Android**

A screenshot of a cell phone

Description automatically generated

**IOS**

A screenshot of a cell phone

Description automatically generated

**To-do list screen**

**Android**

A screenshot of a computer

Description automatically generated

**IOS**

A screen shot of a smart phone

Description automatically generated

**To-do list empty**

A screenshot of a computer

Description automatically generated

**Add item screen**

**Android**

A screenshot of a cell phone

Description automatically generated

**IOS**

A screen shot of a computer

Description automatically generated

**Edit item screen**

**Android**

A picture containing player

Description automatically generated

**IOS**

A screen shot of a computer

Description automatically generated

**Light theme**

**Android**

A screenshot of a cell phone

Description automatically generated

**IOS**

A screenshot of a cell phone

Description automatically generated