**Documentation**

1. **Getting Started**

Code structure

The code structure that used in this project is like the following:

* + - 1. All Screens have a component folder and the screen widget is only call the body widget inside the component. So that will be easy to understand.
      2. To run the program you will need to download the flutter project dependencies by opening a new terminal and write “ flutter pub get ”. after doing that you will be able to run the project.
      3. To change the main theme and colors of the application you can do it from the constants.dart file.

1. **Editing the code**

You can edit the code and change styles and change functionalities as well as change the backend of the application.

The first file is main.dart , in this file you will find the main function that all the project will start with, you can change the Project title from “title” in the Material App widget then you will find the “home” and that will return the home screen.

In the “MainScreen” class you will be able to change the title of the appBar, or changing the color of it. Then you will see the body and that will Navigate you “mainBody”

In the mainBody you can see that I’ve made a “SingleChildScrollView” inside the “Container” and then put that main image of the program in it, in addition I’ve put two Buttons, Which are “Spin The Wheel” and that will navigate you to “WheelScreen”, and “See The History” and that will navigate you to “HistoryScreen”.

**WheelScreen Folder:** this folder is the most important folder in the project because the files that inside it handling all the rotating and animation features of the wheel.

**WheelDesign.dart:** In this file I’ve made a stateful widget and its state will be WheelDesign. So I’ve defined the angle and the current angle and List of WheelModel and that’s a list of prizes, so when we want to design a wheel we just call that class and define the angle , current angle and prizes, I’ve get some help in order to the design and the animation of the wheel from this documentation “[dougTesting.net : Winwheel.js Documentation](http://dougtesting.net/winwheel/docs)”.

**Body.dart:** in this file I’ve defined the angle, current angle and list of prizes so that we will use them when we want to design the wheel. Then I’ve initialized the duration, controller and animation inside “initState()” function. Then I’ve called the WheelDesign to get the design of the wheel.

**ArrowDesign.dart :** This file is I’ve just designed an arrow that will be drawn on the wheel.

**HistoryScreen:** in this folder I’ve made the body and that will be the screen of the history and I’ve just designed the “HistoryCardWidget”

**Db:** in this folder I’ve made the database file, in order to understand it you can read “[Persist data with SQLite | Flutter](https://flutter.dev/docs/cookbook/persistence/sqlite)”.

**Models:** in this folder you can see that I’ve made a model for wheel, and that will take the list of prizes and colors of the wheel, in other file we have the “winHistoryModel” and that model is used in the database, so in future when we develop the application we can put other models inside it E.g “UserModel”.

**Assets:** you can change the images of the prizes or add new images from the “assets/images/” folder

1. **Versions:** this project was done using
   1. **Flutter version : 2.5.3**
   2. **Dart version : 2.14.4**
   3. **Rflutter\_alert version : 2.0.4**
   4. **Sqflite version : 2.0.0+4**
   5. **Intl version : 0.17.0**

**Thank you for reading 😊**