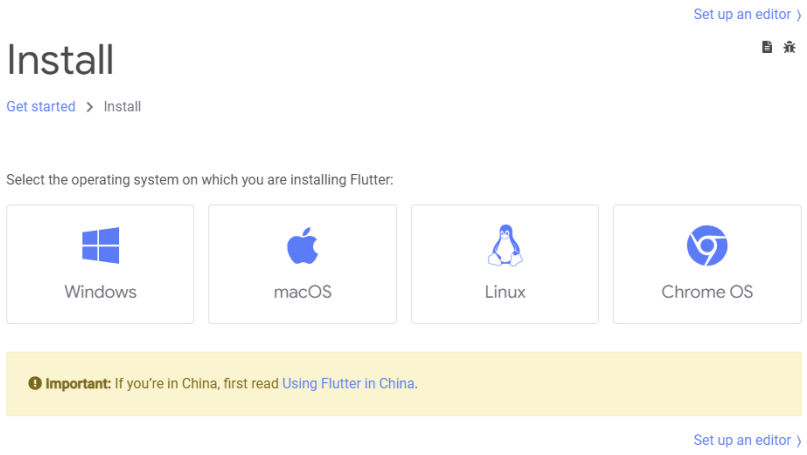
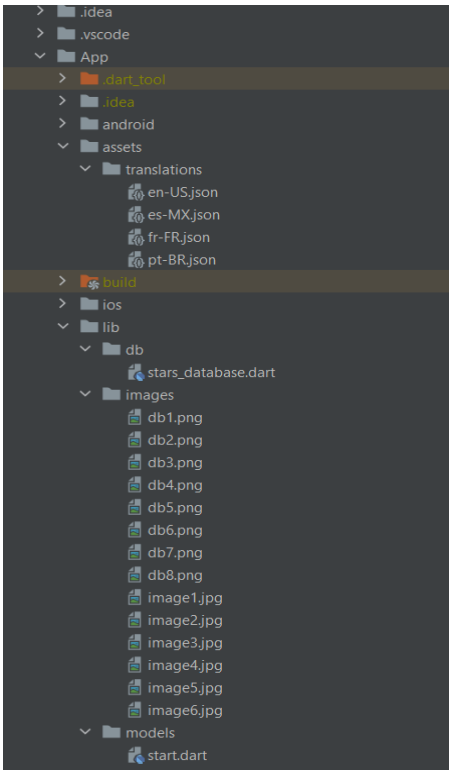
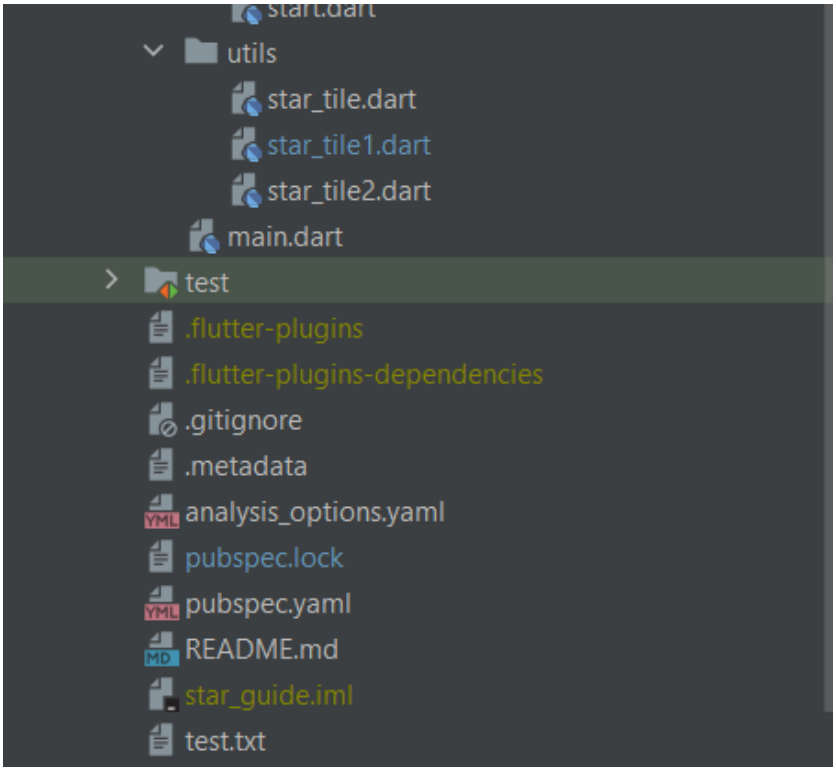
This project consists of two parts, one of them involves the device side while the other is the app. We built our app using the flutter framework. It uses a language called dart. Lots of documentation and learning can be found on the flutter dev website.https://flutter.dev/



To get your environment ready for development follow the steps on the flutter website they have much better documentation on that then I can produce.

To develop in flutter you can either use Visual Studio code or Android Studio, which ever you are more comfortable with. Once your development environment is setup clone the StarGuide github so you can access all of the code. Within our app there are a few main points, there is the translation assets, image assets, and a few external dart files that connect to the main.dart code.



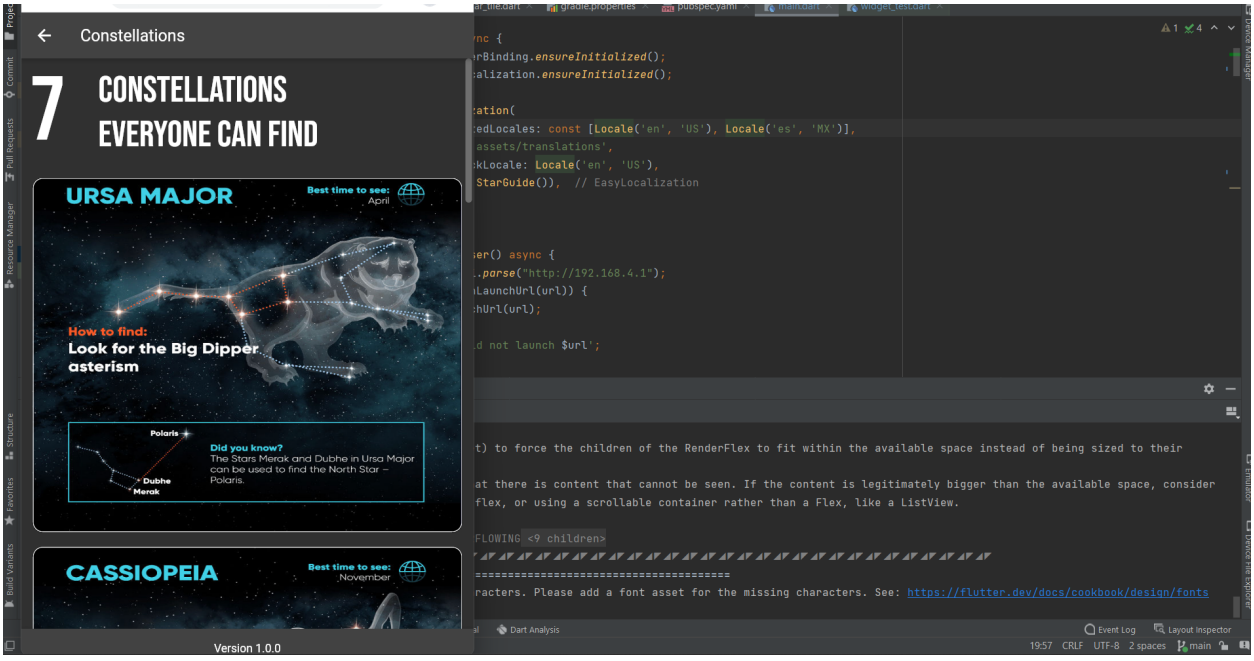


Everything is a widget in flutter so youll find multiple ‘classes’ or widgets in there that control the different pages.

```dart
class StarGuide extends StatelessWidget {
  const StarGuide({super.key});

  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      locale: context.locale,
      supportedLocales: context.supportedLocales,
      localizationsDelegates: context.localizationDelegates,
      debugShowCheckedModeBanner: false,
      title: 'Laser Star Guide',
      theme: ThemeData(
        fontFamily: 'GoogleFonts.bebasNeue',
        brightness: Brightness.dark,
        visualDensity: const VisualDensity(horizontal: 2.0, vertical: 2.0),
        primaryColorLight: const Color(0xff03203C),
        primaryColorDark: const Color(0xff242B2E),
      ),
      home: const MyHomePage(
        title: 'Laser Star Guide',
      ),
    );
  }
}
```

Refer back to the flutter documentation to learn what each of them do and how they are set up. Most of the code will need to be pretty heavily modified to reach a more polished product.
Feel free to change whatever you need and if flutter doesn’t work for you dont hesitate to switch to a language you feel more comfortable with. We liked flutter because of the cross platform devleopment.



When it comes to the device, there are many pieces to this and was the most complicated part of this project. We have a list of all the libraries, dependencies and files related to the device. Make sure you have all of those downloaded and setup in your arduino environment. There is also pictures documenting the circuitry and the setup for the device, this can be found under build folder in the repo.