

Language Project Proposal

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Plan

We are interested in learning about the Dart programming language. Dart is a popular language for mobile application development, to showcase the possibilities of Dart, we will create a simple to-do list application that can be deployed as a mobile app, a desktop app, and a web app. Dart is a programming language made by Google used for programming fast apps on any platform. Dart is primarily used with Flutter, which is an app framework that allows you to program an app, and deploy it as a mobile app, desktop app, and web app all from a single codebase. Dart has many useful features we will be studying and using such as null safety, and the ability to compile into native ARM or x64 code, as well as javascript for the web.

Special Software

- Flutter SDK <https://docs.flutter.dev/get-started/install>
- Android Studio and Xcode, to run app on either Android or iPhone emulators.
- IDE such as VScode, for its useful integrated Flutter developer tools.

Milestones

- **Monday 11/13:** Have Dart and Flutter running well on all of our machines.
- **Wednesday 11/15:** Finish designing the to-do list app at a high level
- **Thursday 11/16:** Finish gathering research on Dart and Flutter for the research paper
- **Friday 11/17:** Start the app, and implement the high-level details.
- **Monday 11/20 IMPORTANT:** Progress report. Includes outline for paper and outline for design of app
- **Wednesday 11/22:** Design low-level implementation details
- **Friday 11/25 IMPORTANT:** Finish low-level implementation of the app. At this point, the app should be mostly finished
- **Tuesday 12/4 IMPORTANT:** Finish the research paper draft & organize the final presentation
- **Friday 12/8:** Wrap up any last-minute implementation details
- **Monday 12/11 IMPORTANT:** Implementation of the app completely finished

