Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

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Spin

Description

This game uses your phone's sensors to check how fast you can spin (RPM's) and how many spins you can accomplish. Simply press start and start spinning!

Intended User

This app is intended to reach a younger demographic. Specifically, adolescents. The fun nature of this app should spark their interest in beating their friends in new and creative ways

Features

List the main features of your app. For example:

- Saves information
- Uses phone's built-in sensors
- Posts scores

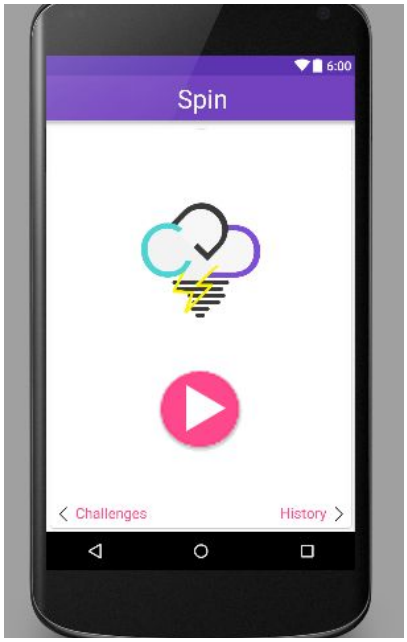
User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Splash screen

This is the splash screen. It will be shown when the app is first launched.

Main Screen

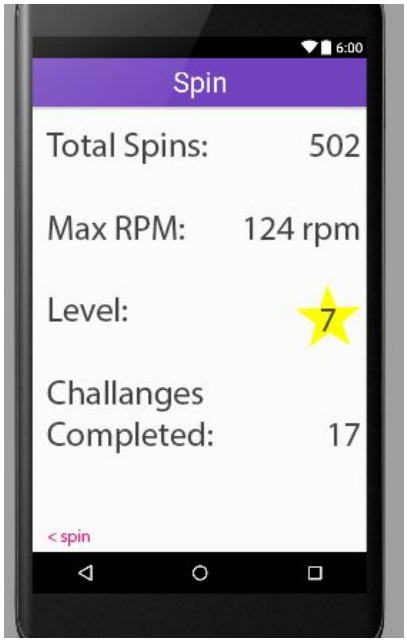


This is the “home screen” from here you can start spinning or tab over to play challenges/ see your spin history.

Challenges Screen

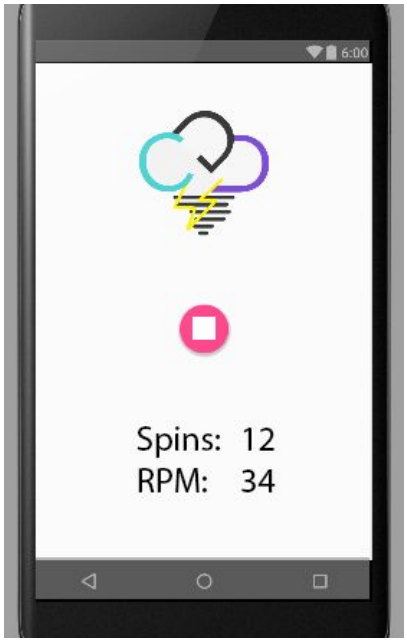
This screen allows you to select and begin a challenge. A helpful dialog will appear explaining that to select a challenge it is required to set your phone down and spin it. This will set off the dialer and select a challenge randomly. Then it will launch the “spin” activity/screen.

History Screen



This screen shows you your spin history.

Spin Activity Screen



This is the game activity. It will be shown when the game is in play. Spins and RPM will be live data and the activity will be stopped by challenge variables or by the stop button. This will return you to the main screen.

Key Considerations

How will your app handle data persistence?

As the retained data is minimal, I will store everything locally on the phone in shared prefs.

Describe any corner cases in the UX.

Users should have the ability to share their success with others. Upon sharing game results etc.. they will return to the main screen by way of the back button. A view pager will be used within the app for easy navigation.

Describe libraries to be used.

- Support Design Libraries. Utilize material design
- Challenges Library. This will house all of the challenges used to play in the app.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

- Create Project
- Create appropriate Classes

Task 2: Implement UI for Each Activity and Fragment

- Build UI for the viewPager base
- Build UI for fragment in the viewPager. This includes the Main Screen, Challenges Screen, and History Screen.
- Build UI for the Spin Activity Screen.
- Build UI for popups and Dialogs.

- Build UI for SplashScreen.

Task 3: Access system sensors and start listening when appropriate activities are launched

I will need to get access for my app to use the gyro sensors in my phone. To maximize battery life it should only read from the sensors when the user is actively engaged in the activity.

Task 4: configure Libraries

I will need to create a new library to hold the challenges users will play when using the app.

- Create library
- Call library when challenge wheel is spun.

Task 5: store game activity

Max rpms, spins, and challenges completed need to be stored to the device

- Create shared prefs variables
- Store new info to shared prefs when the spin activity is killed.

Task 6: share your success

Allow users to share their spin info with others across any sm platform.

- Create link to share in a spinner.
- Access shared prefs to retrieve info to be shared.