DESIGN DOCUMENT
POLITICAL PREPAREDNESS APP

Introduction

This ap provides civic data intended to provide educational opportunities to the U.S. electorate using data provided by the Google Civic Information API.

Author

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Purpose

Capstone Project for the Android Kotlin Developer Nano Degree Progaram

Permissions the app requests

Access Fine Location – this enables the app access user's location when searching for representative using the current location

Internet Permissions – this is to enable the app connect to the internet, request and receive data from the API

3rd Party Libraries

Timber – helps with logging

Coil - Coroutine Image Loader and it is an image loading library backed by Kotlin Coroutines

Retrofit - REST Client for creating HTTP requests and processing the HTTP response
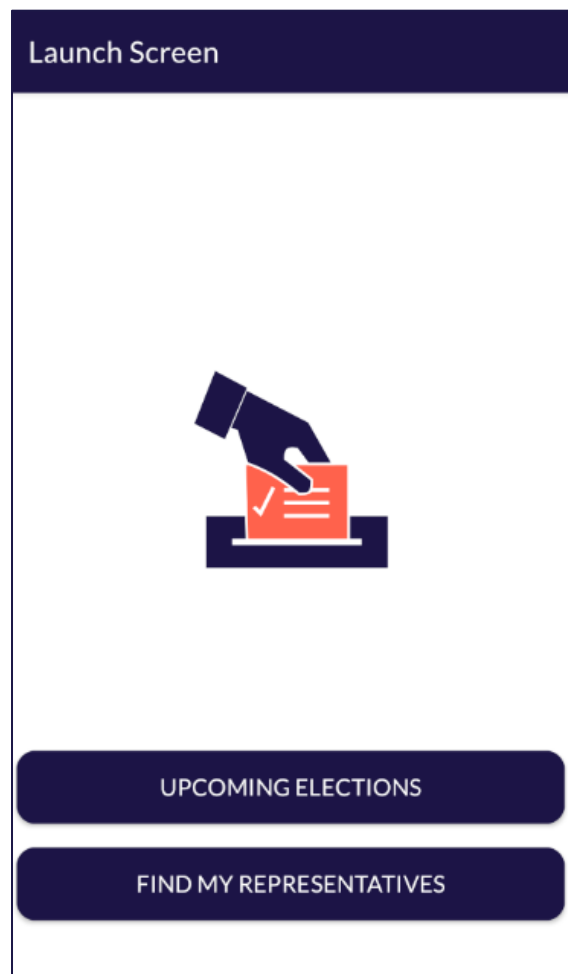
Moshi – Parses JSON string into Kotlin objects

User Interface

The user interface is made of One Activity which contains four fragments as follows.

Launch Screen

This is the entrance screen to the app and features the ballot logo to welcome the user.
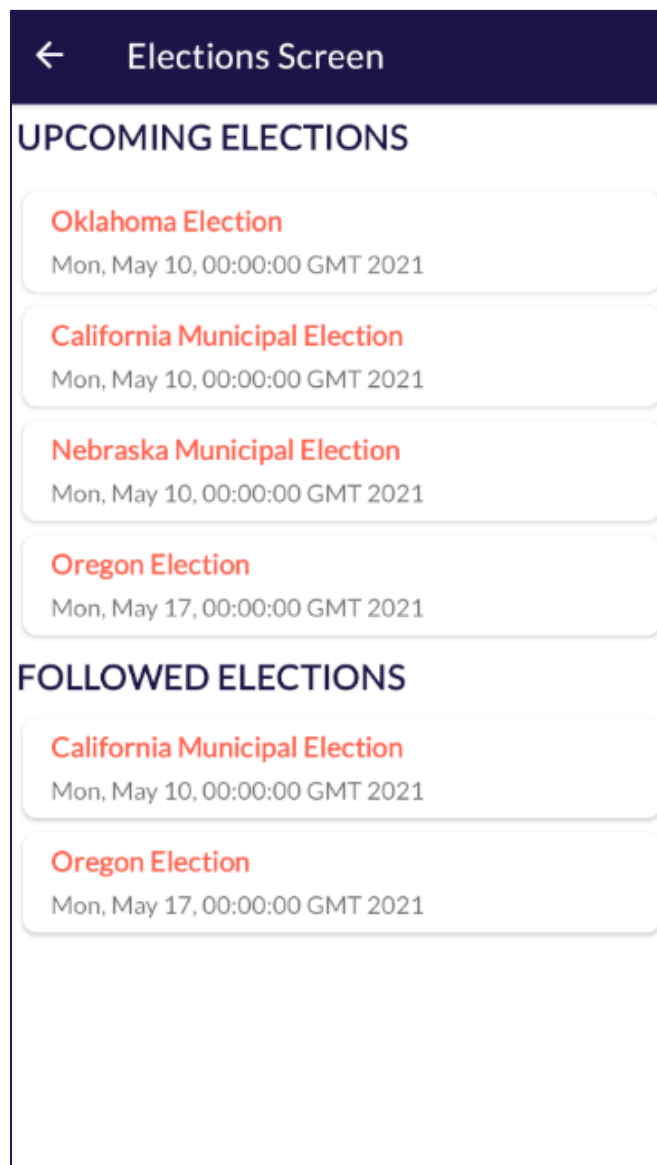

The user is presented with 2 buttons which navigate to the elections or the representatives' fragments.

When the buttons are clicked, Navigation Controller directs to the appropriate Fragment.
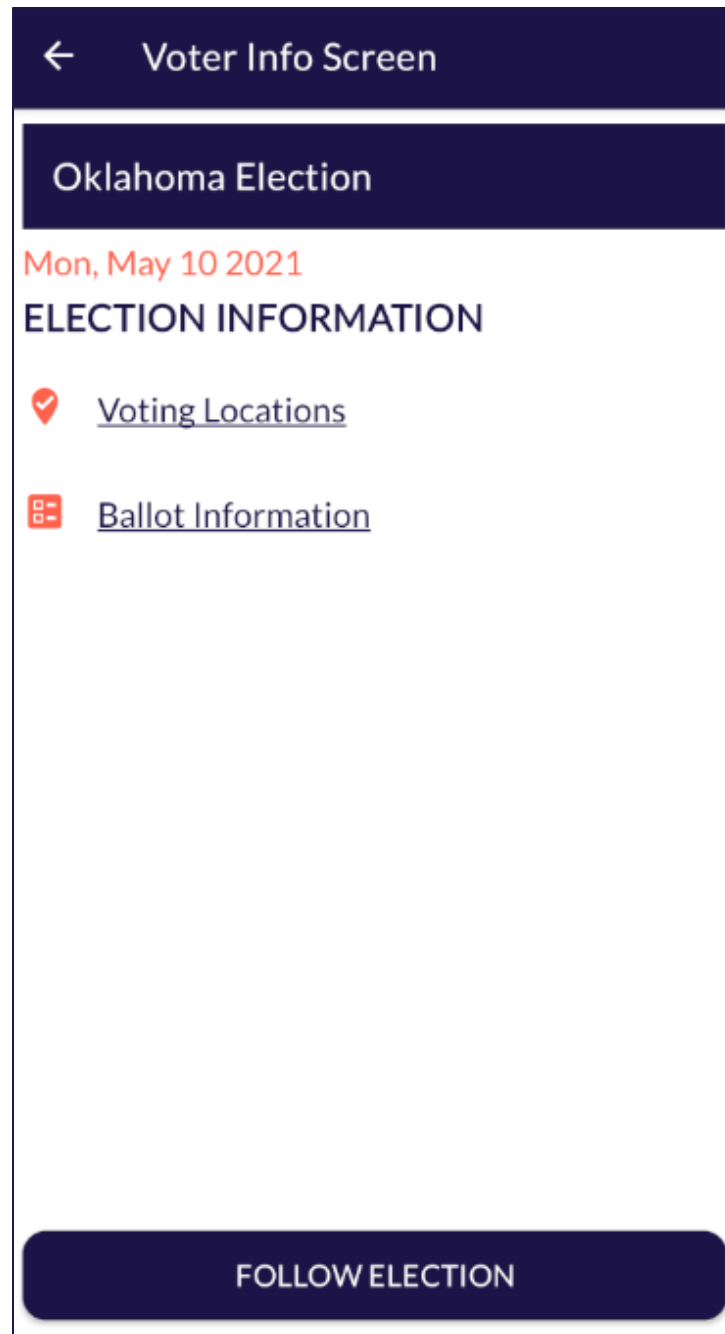
Election Fragment

This fragment displays a list of upcoming election and followed elections.

This is aided by 2 RecyclerViews which are contained in a Constraint Layout.

Card View is used to draw and enhance the list item.

Voter Info Fragment

This screen display Election's details including name and date.

There are also links for voting location and ballot info.

When the user clicks on any links the app takes the user out redirecting the user to the default browser to display a WebView.

This screen enables the user to look up the representative in a certain geographic location.

The user has an option of typing out the address or pressing "Use My Location" Button to automatically get the current address.

The screen has a RecyclerView to display the Reps.

MotionLayout is applied to enable collapsing of the form when the user swipes up.