

BSU Tour App Design

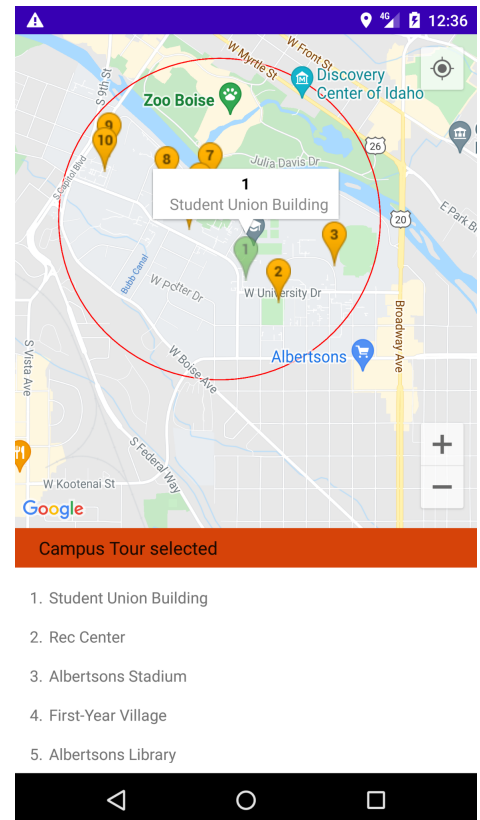
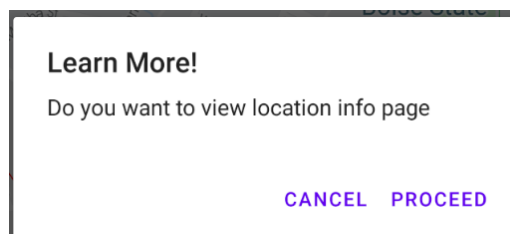
For the design of our app we wanted it to be simple and intuitive to use while having useful features that would make it worth having. The app itself consists of two activities each with its own set of features. The main activity used for navigating and selection and the Location page activity that provides the user information about a selected location on campus.

MAIN ACTIVITY DESIGN

Map Fragment

The top Two thirds of the Main Activity consists of a Google map fragment. On creating the app checks the user's current location, if the user is off campus the map is generated and is centered on the student union building. If the user is detected on campus then the map centers on their current location. The red circle loaded onto the map is a temporary feature that when toggled on will show the approximate border of what is considered on campus. Using the list model the app generates location markers for each item in our list. Each marker is displayed with matching numbers to the location on the list. Zoom and my location buttons are enabled on the map for additional navigation.

Each marker contains an onclick listener which triggers an alert dialog giving the user an option to start the second activity which contains location information.



Spinner

Beneath the Map fragment is the drop down menu known as a spinner in kotlin. It allows the selection of different lists. Currently we have completed the lists for a Campus tour and Campus food locations. When the user selects a new list an intent is sent and the screen refreshed with a map of the new location markers and the selected list displayed.

Scrolling list

Using a Adapter class we are able to make a scrollable list in the bottom third of the Main Activity screen. Each item in the list is clickable and will trigger the start of the second activity which shows information about the selected location.

LOCATION PAGE DESIGN

Control buttons

When the Location page opens there are two different versions of a page that can open. For locations from the Campus tour the XML opens up with Audio controls while other lists do not. The page uses the name of the image file being passed in to determine the appropriate XML to use. To listen to a description of the selected location the user can click play which toggles the button to a pause button. The restart will also work as a play button starting at the beginning of the audio description. The Audio files are stored locally on the device. The Third button that is available is the Map view button and will return the user to the Main activity by ending the Location page activity.

Image

Beneath the button controls we have an image. For the campus tour an image of the location is shown. For campus food locations an image of the company logo is displayed instead. Images are stored locally on the device and the intent that opens the activity passes the file names for retrieval.

Transcript

The lower half of the page is a scrollable section of text that is a transcript of the audio recording for users with hearing impairments or other preferences. For food locations instead of a description the hours of operation are displayed instead. The text for both are passed in as strings in the intent.

