

PicCarto

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@dalehopper on GitHub

Description

A custom map Android application which allows the user to scale an imperfect image of a map and overlay it on a google maps interface. It is envisioned as a companion application for theme parks, and other attractions where adequate gps navigation is not available.



Features

- Google Authentication based login
- Camera Application interface with image import
- Image scaling functionality to create a custom map
- GPS navigation on the custom map



Planning - User Stories

Users can access the application with a valid google account.

The user can utilize the native camera application to import an image of a map.

The user can use the GPS capabilities of their device to navigate on the uploaded custom map.



Planning - Database

A database will be needed to link the saved scaled maps and to associate those maps with the users that created them.



Technology Stack

- Java
- XML
- Android
- Database engine (undetermined)
- Google Maps and Authentication APIs



Demo



What I Learned

- I learned the basics of Android development and how to create activity layouts in XML
- Utilizing Google APIs and licensure process.
- An algorithm for scaling an image on the basis of more than two non-collinear points.



What's Next

- Databases in Android
- Added functionality for tracking progress on the map
- Integrating the device compass for displaying photo orientation on the map.

