SEMESTER PROJECT PROPOSAL

The purpose of the app is to create a cross between a Ticketmaster, Tinder, and Airbnb app that allows you to swipe left and swipe right for events in your area. You can either be a host or a normal user. THE LONG term goal is to build a cross platform application that runs on windows, mobile (IOS and Android), and desktop. The priority is mobile. I want to create a fun intuitive way for people to find events or things to do near them. This is especially for college students who are bored on the weekends and looking for something to do. Hosts will be able to make money from their events via STRIPE.

There will be a thorough authentication system so that only one person can exist per person. Hosts will be able to scan barcodes via their camera to authenticate that they paid for their ticket to an event (Similar to online movie theater tickets). **If allowed,** I would like to create a mobile version of this app. If not, I will create a desktop variant of this app. The goal is to use MongoDB as my database of choice as it allows me to model data in an intuitive way, scale easily, and provides high performance.

[Gluon](https://gluonhq.com/) will be my framework of choice for creating a cross platform mobile app. They have intensive support for JavaFX. I will use the IntelliJ IDE and use [the plugin and documentation](https://docs.gluonhq.com/#create_a_new_gluon_project_intellij) they provide to create this app. UNFORTUNATELY, Apple gatekeeps their marketplace and will require a mac, which I don’t have, to develop a mobile app for IOS. If Gluon becomes incredibly hard to handle, I will go back to developing a purely desktop app just using JavaFX.

A High-Level Overview on Creating This App

1. **Install the necessary tools**: Make sure you have JDK 11 or greater installed on your computer. You may also want to install an IDE such as NetBeans, IntelliJ IDEA, or Eclipse and the corresponding Gluon plugin.
2. **Create a new project**: Use the Gluon plugin in your IDE or Gluon Start to create a new JavaFX project.
3. **Design the user interface**: Use JavaFX to design the user interface of your application. You can use Gluon’s UI library and tools such as Glisten to help you create an intuitive and fun user experience.
4. **Implement the functionality**: Write the code to implement the functionality of your app. This will include things like authentication, barcode scanning, and [database integration with MongoDB](https://learn.mongodb.com/courses/connecting-to-mongodb-in-java).
5. **Test your app**: Test your app thoroughly to make sure everything is working as expected.
6. **Convert to a native application**: Use the GluonFX plugin to convert your JavaFX app into a platform-specific native application for iOS and Android.
7. **Deploy your app**: Deploy your app to the app stores for iOS and Android so that users can download and use it.

Diagram

Description automatically generated

**YOU WILL FIND THE CLASSES IN THE UML DOCUMENT**