User requirement:

1. Showing a dropdown list of classes based on the user’s location and current time
2. Button for check-in and attendance query
3. (for attendance query) Showing the attendance record for the selected class
4. (for check-in) Input box for user to enter their name/panther ID after selecting the class

System requirements:

1. Class information storage: class time and building location
2. Storage of inputted user information (Name/PantherID) for the corresponding class
3. Location refresh rate set to 10 mins for system optimization
4. Access to user’s GPS location and time
5. Android 4.0+

Risk Analysis:

1. Learning Kotlin/Getting familiar with Android Studio
   1. Mitigation possible via preparation time, code reuse/examples, and github copilot
   2. Java -> kotlin translation
2. Missing the class time window as the refresh rate is set to 10 minutes
   1. Mitigation possible via faster refresh rate
3. GPS Access/Location Resolution
   1. Mitigation possible via mock-up gps data
4. Time constraint to implement all layers of technology stack
   1. Certain components can be mocked as functional and outputs/variable values can be hard coded to show different use cases