CIS 4914 Project Plan

PROJECT: NATIVE ANDROID MOBILE APPLICATION FOR COGNITIVE NEUROSCIENCE
STUDENT: CHRISTIAN GRUSS
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STATEMENT OF WORK:

Task 1. Provide technical engineering services to develop a video-game application for clinical research trials.

Review current source code in Dr. Ben Lewis' video-game in Python. Consult about issues of portability and implementation between Python and Android Studio. Convert original source code to Java, C++, and Kotlin languages in Android Studio. Write unit tests and perform debugging services.

Task 2. Serve as lead Software Engineer on build of the native Android mobile application.

Import the newly converted source code to Android Studio. Develop a new Java, C++, and Kotlin source-code of video-game in Android Studio for native Android mobile application. Requirements are to export data to local storage and/or SD flash storage. Write unit tests and perform further debugging.

Task 3. Perform final stages of mobile application development.

Deploy new mobile application to Android tablet testing device. Write final unit tests and perform final debugging.

Task 4. Prepare the final technical report.

Prepare final technical report and project presentation.

Task 5. Deliver the final technical presentation.

Deliver final technical presentation according to CIS 4914 deadlines.

DELIVERABLES:

The deliverables of this project include:

1. Background CS theories, algorithms, and literature in Final Report
2. The final copy of software, source code written in Java, C++, and Kotlin programming languages using Android Studio
3. Software will require:
    a. Operating System: Android Pie version 9.0
    b. Processor (min): 200 MHz
    c. Random Access Memory, RAM (min): 96 RAM
    d. Storage (min): 32 MB
4. Final technical report prepared in MS Word and Adobe PDF
5. Final presentation prepared in MS Powerpoint