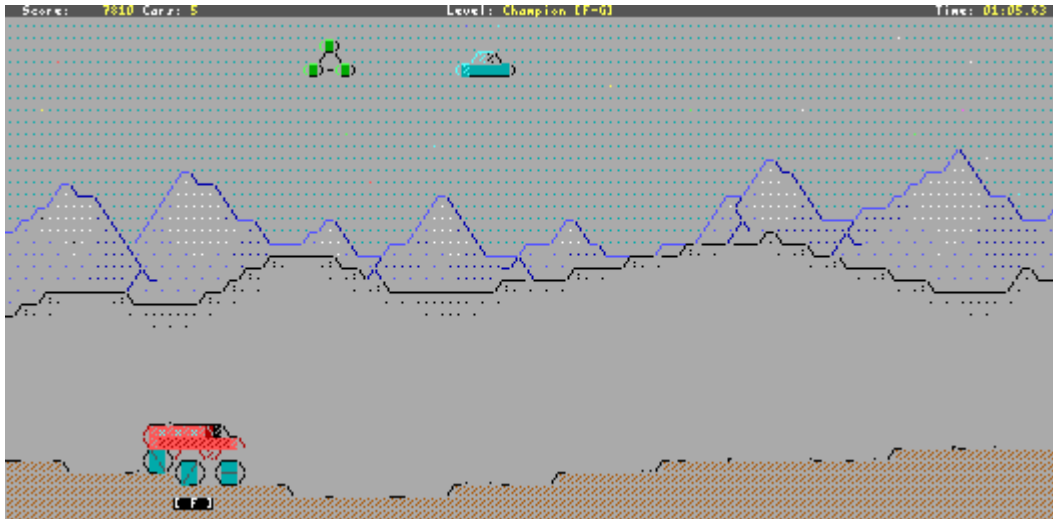


Team Project

CSD3156 Mobile and Cloud Computing Spring 2024

Objectives



The project is a half trimester long implementation of a real, fully featured mobile application in Android. The main objectives are to:

- Learn to develop a working mobile application in Android
- Work in a team and gain experience with some software development methods
- Develop a 2D mobile game of moderate complexity

Requirements

The mobile application (game) should be a 100% native Android application. No hybrid applications or hybrid app frameworks such as Unity should be used. The form factor can be a phone, tablet or wearable (watch), or any combination of form factors.

It is OK to re-use the assets and game design in your previous 2D game project. On top of a UI implementation, the app should aim to employ **three or more** of the following mobile features as suitable or relevant: database with multiple tables or

other suitable content provider, canvas, sensors (e.g., accelerometer, GPS, NFC) multimedia, camera, animations, networking, multi-threading, OpenGL ES, compose, NDK or other advanced implementation of features such as (3D) graphics, VR/AR, computer vision (CV), machine learning (ML), optimization.

Proper software engineering practices should be followed. This means version control with regular commits. The code should be well commented and self-documenting, and the code must compile and build at any stage.

Documents and any non-code items (assets) should be clearly identified and acknowledged, i.e., from previous game projects. Third party libraries, code or tools used in the application should also be clearly identified, commented in the code and listed in the final report or document.

Deliverables & Submission Deadline

- Report
- Game Code
- Game Demo Video (link)
- Presentation Video (link)
- Power Point Slides (if any)

Deadline: 17 Feb, 2024, 23:59

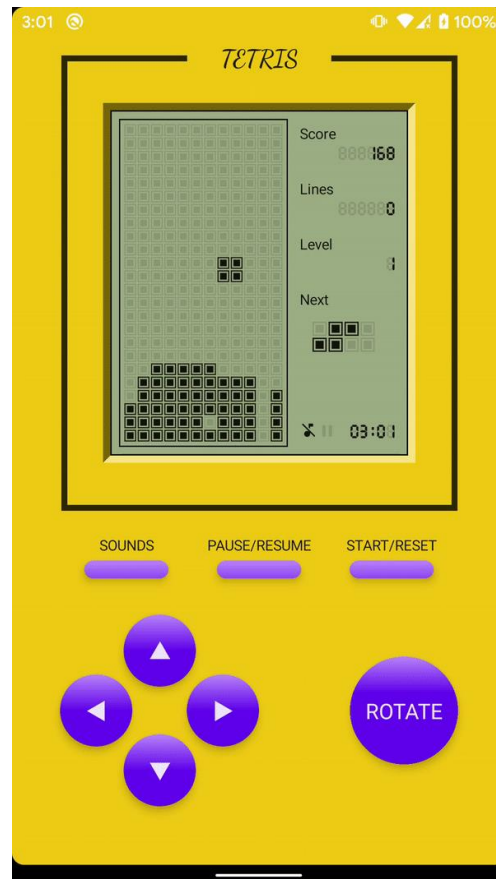
References:

<https://developer.android.com/codelabs/advanced-android-kotlin-training-canvas>

<https://developer.android.com/develop/ui/views/graphics/opengl>

<https://developer.android.com/jetpack/compose/graphics/draw/overview>

<https://github.com/topics/android-game?l=kotlin&o=desc&s=stars>



Plagiarism

C'mon, you guys don't need to be reminded that it's against University policy to copy code, assignments, quizzes and answers from others, the Internet and anywhere else, or sub the work out to another contractor. Any copied work between people/teams will be graded and the grade divided by the number of people who "shared" the work. If copied from the Internet or external sources, or it is discovered that the work does not belong to the owner, the project receives zero. **Just don't do it.**