# Proposal

The game will be a microgame collection for mobile that utilises multiple sensors for varied and unique gameplay opportunities. Players will use touch, motion, microphone and proximity input to play through a large number of very short games, usually taking around five seconds each. The player has a certain number of lives which are lost upon failing games, when they’re all one it’s game over.

Ideally this project will act as a cumulation of all the techniques I have learnt throughout the course. It will act mostly as a portfolio piece so that I have more diverse projects to show off.

The target number of games is 100. They can be played in three modes: endless, which cycles through all games of a set difficulty until the player either quits or runs out of lives; challenge, which features increasing difficulties; and practice mode, where a specified game can be played as much as the player wants. Playing the game will earn a currency which can be used to purchase games and difficulties for practice mode as well as some items to change up the gameplay.

The game will be made in Unity, using GitHub for source control and Trello for project management. It will be released for free on Android on the Google Play Store as well as Itch.io. This release version will be of a high level of polish with no known bugs.

Research would include getting the various sensors to work, especially the microphone and proximity sensor as I have had no prior experience with those. The rest of the project will be utilising the game development skills I have learnt throughout the course to create a wide range of games spanning many gameplay styles.

# Progress so far

## Research

As I already have a lot of experience in developing with Unity, I can easily come up with solutions myself so there isn’t a necessary need for very much additional research. THINK OF MORE THINGS TO TALK ABOUT HERE

## Prototype

Most of my time on the project so far has been spent on the prototype. At the time writing, I have designed 78 games, finished programming 13 games, using 8 unique input methods. Progress on creating these games has admittedly been slow, but I am developing them in such a way that I can reuse assets and scripts in order to eventually be able to drag-and-drop features to make games, so the development time for each game will decrease throughout this project.

# Project specification

Final project will include:

* Minimum of 50 microgames (aim for 100)
* Varied use of four different mobile sensors
  + Touch
  + Motion
  + Microphone
  + Proximity
* Different gameplay modes
  + Practice mode
  + Challenge mode
  + Endless mode
* In-game store (using in-game currency)
* Settings menu
  + Allowed orientations
  + Allowed input methods
  + Accessibility features
  + Clear data
  + Language settings
* Released on Google Play Store

# Potential solutions

# Tools and techniques

|  |  |
| --- | --- |
| Tool | Use |
| Unity | Game engine |
| Visual Studio | IDE |
| Photoshop | 2D art assets |
| 3DS Max | 3D art assets |
| Github | Source control |
| Trello | Project management |

NOT FINISHED

# Methodology

# Management

I am using Trello to keep track of the project, where I have a list of all games which have checkboxes to measure their progress. To do this, I am tracking whether each game is functionally complete, complete art assets, complete sound assets, is polished with clear win or loss events and supports the game’s multiple difficulty levels. These conditions will be tested before being marked as complete.

# Resources

The project does not require any equipment that is not already available to me or additional resources beyond people who would be testing the game. To have other people involved with the project, I would need to go through the ethics board for permission.

# References and reading list