

Project Title: Quack the Code App
Client: Prof. Kathleen Kelly
Preferred Team Size: 4 students
Work Location: On campus
NDA Required: No

Project Summary

The purpose of this project is to convert an educational game from PyGame into a more versatile app that can be run anywhere.

As part of my PhD research, I am creating educational games and tools to be used by students as a way of increasing learning engagement and motivation. A recent game is entitled Quack the Code, a game show themed game where students learn by teaching their debug duck. In order to further my research, I would like to offer this game to students outside of Mines.

The game is currently built using Python and PyGame, running off an HTML page on a local Mines server. Students must be on the Mines VPN to use it. I would like to move this to a server outside of Mines, improve it, and make it much more polished. Ideally it will be written as a simple webapp.

Deliverables

A new version of Quack the Code that can be accessed from anywhere, can handle many users at the same time, and has a more polished UI. The current tool can be viewed (while on the Mines VPN) here: [https:// 138.67.22.6:8001](https://138.67.22.6:8001).

I am open to ideas from the team on how to make this game better, more polished, and scalable.