**Project Description**

*PyKeys*

PyKeys is a game with preloaded levels of difficulty where bubbles fall onto their corresponding keys on a piano. The user must hit the keys on time for the score to increment. The game has two additional features, a music composition mode wherein the user can input notes saved into a file loaded as a level for the user to play, and an algorithm that analyzes where the user makes the most errors, allowing the user to practice the section again.

**Competitive Analysis**

Similar projects include ‘Synthesia,’ a computer program that allows users to play on a MIDI Keyboard. This project is identical to ‘Synthesia’ because it has the composition feature and tracks the score. One difference is that while ‘Synthesia’ pauses the piece when a wrong note is pressed (until corrected), PyKeys provides a performance analysis after the music is played and allows the user to practice the section of the piece with the most errors.

**Structural Plan**

**Algorithmic Plan**

**Timeline Plan**

**Version Control Plan**

**Graphical user interface, text, application, website

Description automatically generated**

**Module List**

Musical Beeps – Allows for the generation of piano tones