**Progress Report**

**- Increment 2 -**

**Group #4**

# **1) Team Members**

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| --- | --- | --- |
| **Name** | **FSU ID** | **GitHub ID** |
| Michael Tafuri | Mat12j | mfuri |
| Mackenzie Paul | mcp16t | mackenzie-paul |
| Andrew Lindsay | abl14b | 11drew12314 |
| Seth Polen | scp17d | scp17d |
| Joseph Bellissimo | jsb18e | JosephBellissimo |

**2)** **Project Title and Description**

Retro Arcade

For our project, we have decided to implement a retro-style arcade that has around 4 games. These games include unique renditions of Flappy Bird, Snake, Space Invaders, and Pong. The user will be prompted to create an account that will keep track of their scores as they play the various games. Users will be able to see the highest scores from other users for each game.

**3)** **Accomplishments and overall project status during this increment**

We were able to complete our flappy bird game, besides connecting it to the GUI or the database. We were also able to mostly complete Space Invaders, besides connecting it to the GUI and database. We have also implemented a menu and leveling system for Space Invaders. We also finished the implementation of Snake besides the high score/ranking system and potential sounds. The highscores are 90% complete for Pong (still need to put in 3rd normal form after determining schema for all games), CRUD functions work. HTML pages are basic but easy to navigate.

**4)** **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

We faced similar challenges to that of the last increment with scheduling meetings around our busy schedules. It was difficult to get everyone together in one meeting because there were conflicts with schedules and family emergencies.

One change we made was decreasing the number of games from 5 to 4. We realized Jet Fighter and Space Invaders were relatively similar so we decided not to develop Jet Fighter due to its redundancy.

Another change is the inclusion of Python *cryptography* API to run the Flask app with SSL 2.0 and eventually for encrypting user passwords.

**5)** **Team Member Contribution for this increment**

Michael Tafuri:

1. Section 2, 6, 7
2. Sections 1, 2, 3, 5, 7
3. Sections 1, 2, 3, 4, 5
4. Created original sprites. Implemented controls for rocket ship, added shooting mechanism, leveling and menu system.
5. First section of video

Andrew Lindsay

* 1. Progress Report: 2, 3, 4, 6, 7
  2. RD: 3, 5 (database schema)
  3. IT: 2, 3, 4, 5
  4. Source Code:
     1. *Index.html* -- updated with additional links and a bit of formatting
     2. *Pong\_leaderboard.html -* view top 10 users
     3. *Personal.html* -- view personal score history for pong & flappybird
     4. *Style.css -* basic style sheet
     5. *App.py* - runs flask server, opens index.html
     6. *Setup.py* - if database and/or tables do not exist when connecting to the server, creates them.
  5. Video:
     1. I am going to cover the element ‘d.’ of the video (changes in plans).
     2. Additionally, I will contribute a snippet of highscores to the demo as the integration to the GUI is incomplete, and I am best suited to show the pages at this increment.

Mackenzie Paul:

1. Progress Report: contributed to 4, 5, 6 7
2. RD: updated use case diagram and wrote descriptions for each ambiguous use case
3. IT: Assisted with 3 and 4
4. Code Implementation: Implemented the gravity and enemies (spears) of flappy bird as well as the enemies and collision logic of space invaders
5. Video: Demo for Space invaders and flappy bird section, edited the video clips together

Joe Bellissimo:

1. Progress Report: contributed to 3,5,6,7
2. RD:
3. IT: contributed to 5
4. Source Code:
   1. Worked on snake game and implemented all aspects besides the saving and ranking of high scores.
5. Video:
   1. Plans for the future of our product
   2. Demo of my game in action

Seth Polen

1. Progress Report: contributed to 3, 5, 6, and 7
2. RD:
3. IT:
4. Code: fixed error with PySimpleGUI and have a rough draft of the GUI for our project that includes buttons for the games and right now when you click on them it just shows we should run x game.
5. Video: Demo of game and what we have accomplished this increment.

**6)** **Plans for the next increment**

* Finalize and connect all games to GUI and DB backend.
* Finalizing Space Invaders includes correcting a bug where the enemies will randomly spawn in a different location when they have been hit by a rocket, making the final enemy and rocket disappear between levels, and adding sounds.
* For both Flappy Bird and Space Invaders, we need to clean up our code and then add clearer comments. For Pong, only sounds have to be added and then it’s complete.
* We plan to “freeze” the entire app to allow portability on different systems by the final increment.
* Snake needs to store high scores and then confirm and action before the start of the game, such as pressing the space bar. Also, possibly adding sounds for the Snake game.
* Properly integrate interaction between GUI / highscores, finish all remaining tables & their leaderboard pages. If possible, normalize the tables to 3NF. Tweak css style sheet if time allows.
* Pong: have to add sounds and make the game wait a second or two before the ball starts moving
* GUI: refine it and have it start the games when the user clicks the button

**7)** **Link to video**

[Increment Two Video](https://youtu.be/pM40ruR7RPo)