João Bosco Unity Developer Report

Tricky Towers

Project Features

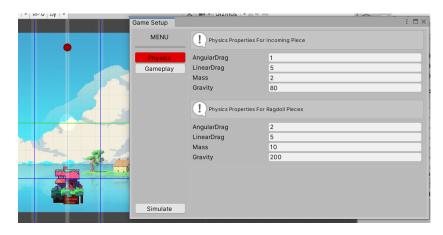
- One/Two players tricky towers game



- Editor Test Scene integrated with the Game Setup Window



- Game Setup Window



Test Conditions

- The project was tested and validated on a Samsung Galaxy A7 device (Android version 10).

Actions Taken To Enhance Performance

- Using Object Pooling: A pool of pieces was created to reuse the lost pieces, reducing GC Allocs, and improving the framerate.
 - Using Sprite Atlas to save DrawCalls.

Further Steps Towards Performance (Backlog list)

- Use a single pool of pieces. Unify players' piece pool into a single one.
- Consider the use of DOTS (Entity-Component-System, Jobs, etc.) to improve the CPU usage and enhance the framerate.

Next Steps (Backlog list)

- Create Unit Tests
- Add SFX
- Fit-To-Ground Piece Assist (to avoid corners collisions by adjusting position when moving pieces or

adjusting colliders when detecting small collisions)

- Improve UI
- Add In-Game animations and particle effects (Piece Placement; New Piece Arrival; Life Lost)
- Improve GameOver conditions and screen
- Improve Al
- Add Multiplayer