

Design Process

Our overall design process was fairly straightforward. We stayed pretty faithful to our original concept outlined in the Preliminary Design Note, though with a few changes made along the way. The original concept for the game was that it would be completely unbeatable and unsatisfying; however, it quickly became apparent that it would be much more difficult to design a game like that which is also still fun.

That led us to add the Frustration Meter, which would track performance, but in an early design, also acted as a failure condition. In that version, the minigames were on a set timer, and the goal was simply to make it to the end without letting the Frustration Meter fill up. In testing though, we felt this didn't really align with the original book, in which even if Alexander fails, he still has to go on with his day. Thus, we switched to a more score-oriented system, where progression is guaranteed, but the game is more focused on getting a higher score. The set timer was removed, and the Frustration Meter essentially became the new timer, with the player's skill impacting how long the minigame lasted and how many points they could earn. It is all about minimizing Alexander's suffering by getting better at the game/higher score, but no matter what, he always has a bad day, and he always makes it to the end of that bad day.

For our workflow, we divvied up the minigames between us by how complex they would be to implement. As things came together, we made more final sprites for the game objects, and found images for some of the backgrounds.

Issues/Further Iteration

It felt as if most of the major issues throughout development of the project arose through struggles with GitHub or Unity themselves. We had a lot of trouble getting GitHub set up and

working properly, and then also having the game function the same across our devices.

Eventually, we ended up deciding to just work in different Unity projects, and then copy-paste the files from one to the other to combine our work at the end. Once we did this and created a build of the game, it functioned consistently across our devices, so despite our struggles, it worked out in the end.

One of the biggest points of further iteration could have been adding more minigames. We currently only have three short ones, and there were many ideas from the original book that were ripe for minigame ideas that we simply didn't have the time to implement. Another noticeable path for improvement would be adding sound/music. The addition of music and sound effects would create a more immersive environment and could even add to frustration depending on the sounds and music chosen. One standing bug that could be easily fixed is in the last game, the bullet hell, there are currently no boundaries for the player character. The player can move Alexander completely out of the scene, allowing the player to dodge almost every bullet but will cause the game to soft-lock if the player gets lost or never gets hit. Adding some boundaries to this level or more bullets could be a further iteration that would benefit the overall gameplay loop.

Sources for Visuals

- Flickr image search used to find CC background images for minigames 1 and 2
 - <https://www.flickr.com/photos/wonderlane/23461603/in/photolist-35fjp-6b8C5H-aNizAx-8JX6tD-daqkgZ-7uvyWD-8DspZu-5ums3d-LDb8vw-8NYBWR-9qVxj8-6Yb1Dg-8Dsq7y-9oTiCf-8HdkpJ-88wb6B-daqmSy-6Ns2fk-6Xid6N-daqmQJ-oYkXxm-8YEm6B-6XveYH-8Y9nHx-4QxQvv-6L2b9T-D72gx5-ayUJRk-4VvPn>

[C-HJ9TLK-6XyUcq-5btiZ-KBvi36-k4mH-k4p1-4YPjfs-7EPsCs-Mqwr4L-zcSoZ
-GeyfH-4KUj6a-4b3pGk-2iJ1iuF-7Ta64G-YVcfvN-9wdXQM-k4jW-8g8zTr-72b
Whe-2pp9h76/](https://www.flickr.com/photos/derekruff/8045728599/)

- <https://www.flickr.com/photos/derekruff/8045728599/>
- Kenney public domain sprite/tilesheets used for keyboard icons and minigame 3
background tilesheet
 - <https://kenney.nl/assets/input-prompts-pixel-16>
 - <https://kenney.nl/assets/roguelike-modern-city>
- All other sprites were handmade

YOUTUBE LINK

- <https://youtu.be/j5NTenEPyD4>