The attached portfolio contains reports and excerpts from four of my most fleshed out games.

Lifebound is an Inform 7 interactive fiction game, where I focused heavily on dark storytelling, creating a mood or vibe through language, unexpected/hidden endings, as well as interesting gameplay. In the game, you play as an exiled Shaman who wakes up in his distant hut, unaware of the turmoil he is about to deal with. The player interacts with the environment by typing commands, such as looking, moving, and utilizing items. Hints as to the Shaman's past are littered on item and location descriptions for the player to discover while playing. Interactive fiction is a great way to practice focusing on concept and storytelling as aspects of game design.

Project Lima is a Northwestern University-themed digital/online card game written in Java, taking inspiration from the popular games Hearthstone and Magic: The Gathering. This was a team project where I played the role of game designer and project manager. I also contributed to the creation of efficient Java code for the game, some excerpts of which are included in the folder. A lot of care was taken to ensure that the game was balanced, something that I personally took under my wing. I obsess over character balance in fighting games and found myself easily able to spend hours considering whether a certain card should be buffed or not. This was a fantastic experience in learning the intricacies of gameplay tuning based on both personal ideas, team suggestions, and user feedback. It was also a good learning experience to implement using a fairly standard OOP architecture in Java.

The Savage Suite is the most fleshed out game I've created (it's actually a suite of a couple games), using the extremely versatile Starcraft Editor. This powerful editing tool allows the user to modify and utilize all of the data from the Starcraft II universe in order to create your own game modes / levels / characters with interesting abilities. The Savage Suite's main unique aspect is that it's designed as a high skill-cap, specialization-focused fighting game like Mortal Kombat or Super Smash Bros, but from the up-above RTS camera perspective. This was a 3 person project in which I played nearly every role in the game development cycle. I spent many hours using the editor developing environments, characters with unique and exciting abilities, game logic/rules, and enemy AI. A large chunk of time of time was spent on character balance, making sure that differences in character strength were minor and didn't ruin the game. There is also an adventure mode that takes inspiration from tough adventure RPG games like Demon's Souls, Diablo III, and Bloodborne. It's a maze filled with enemies

that all have different behaviors and that must be approached with a different mindset. It acts as a challenge course when tackled alone, and and as a moderately-difficult cooperative exercise in teamwork when attempted with 2 people. I also focused heavily on the mood of the setting, carefully designing the colors, scenery, and progression of the level. These games are publically available as custom games in the Starcraft II arcade.

My fourth game is called Orbit: Get Rocked and was built with a two-person team during Winter 2016. It was the first game I built in Unity 2d, which was an enormously enlightening and enjoyable experience given that my previous games had been designed in high-level development environments that didn't involve writing code. Developing from the ground-up using Unity improved my C# skills and taught me how much more control I can have over game elements in a more low-level development environment where nearly everything is under the programmer's control. O:GR is a 2d arcade style game that takes inspiration from skill-based games such as Asteroids and the tower defense genre. It requires a combination of raw skill and focus with strategy and planning. In the game, players in the role of Earth itself compete for a high-score by trying to survive the longest before getting hit by an asteroid. The player gains ore by carefully aiming and destroying asteroids, and can use that ore to purchase orbiting satellites that help defend the Earth. The game is very difficult and punishing – it's a 1-hit kill for Earth and the player can accidently destroy his/her own satellites with a poorly aimed missile. There's also no pause feature, a personal favorite design element of mine because it vastly increases immersion. A lot of work was put into the polish/artistic style of the game, including music/sound effects/fonts/prefab selection/background art. We wanted to develop a game that is simple, addicting, and easy to learn/hard to master; our goals were definitely achieved.

I have also spent hundreds of hours in the Halo forge mode across various different Halo games. The Forge is an extremely powerful and flexible tool for imagining, building, tuning, and executing games. This can range from purely aesthetic maps to battlegrounds to racetracks. My main design focus has been on creating punishing but rewarding challenge courses that have a very Dark Souls-esque mindset, where dying puts you right back at the start and you can only overcome the obstacles after practicing them over and over again. I consider this forge experience one of the most fruitful exercises in game design that I have undertaken, given the sheer potential for creativity and execution. Using the forge not only forces the designer to create their own abstract game rules / logic, but also every single aspect of the environment /

course must be built piece by piece. It is a very high level tool - no other tool I have used has made it easier to jump right in and start creating, which is something well worth considering. Some of these maps have multiplayer elements that involve knocking other players off the course in order to get to the end first. I've watched users/friends have fun trying to impede each other's progress while conquering their own obstacles. Although there's not much of an endgame for games that I design in this environment, the creation experience is so fulfilling and engaging that I find myself continuing to hop into the Forge to work on out ideas / concepts.