# Postmortem

I was given the opportunity to work on a projects alongside other game designers and creators in a project called "Tournamental," where we were given the opportunity to take a shell of a game and create brand new mechanics to make the game more interesting and give it substance. The game is a 4rth person perspective top-down puzzle game where tile-based movement is the main form of play. Beyond the means to move, we had to create mechanics that allowed for the creation of puzzles in the program used to create them (Unreal Engine 5). I had created a mechanic I called the "Bombpick," which was set to be a Pickaxe with explosive capabilities that allowed players to break down specific destructible walls to reach desired destinations in the level.

Along with making our own mechanic and implementing it, we were instructed to take another mechanic made by a peer and implement theirs to our level as well. Along this challenge I had taken a mechanic from my peer Fernando Cordoba he called "The Crumble Tile." This mechanic was a floor tile that, once stepped on by the player, will set to fall upon the player exiting the space. This mechanic prevented the player from returning to already entered spaces, causing the player to reset the level upon mistake. I found this mechanic to be a perfect fit to the preexisting Bombpick walls that already stop players from reaching certain areas.

**"What went right?":**

1. _Communication:_ The main, and most important thing that went right in this project's development was "Communication." I found not only was the instruction by my peers on how they created their mechanics very easy to understand, but the ability to involve myself in the conversation about the levels goal showed for great involvement and thus I was able to create the mechanic with little hiccups. I always had someone I could reach out to have questions answered or understanding explained.

2. _Time Management:_ I was able to have my time managed efficiently to reach deadlines. Once I was unable to make up for a deadline due to unrelated-to-games life scenarios, I then reached out for an extension and explained my

situation. Luckily though I asked for an extension, I was able to buckle down and make the deadlines with time to spare.

3. _Coding Performance:_ In the beginning I was struggling to find a workflow within blueprint. As I had more of an idea of what I wanted to make and how I wanted it to happen, I was able to find that flow. I then became proud of the thing(s) I created and put more effort into the minor details. In the end I am very proud of my working mechanics and implementation within the level/game.

4. _Research:_ the very beginning process took additional time in areas I had not intended to spend on. One of these areas was "Research." I found the research to be boring but spent a lot of time on it and ended up finding out a lot more about tile-based games. This research leads me down a rabbit hole that ultimately led me to decide on how I wanted my mechanics to work. Due to the effort put into research I had a smoother transition into the beginning of my creation process.

5. _Preparedness:_ I had many tools when creating this game. Quite as few of them are multi-million-dollar companies with high involvement in vast areas of any industry. However, I found the most important tool, besides UE5, was the system we used to keep track of the progress everyone had on their levels. An online Pinboard called "Trello" is what kept everyone on track and organized. Using _Trello_ I was able to update my peers and boss' on how my progress is going as well as keep myself honest about my efforts.

**"What went wrong?":**

1. _Coding:_ Though I was able to receive help, I had run into the biggest hurdle this project had thrown at me. During the coding process within blueprint. I had a half working Bombpick Mechanic. Then upon retrieval of the additional mechanic, the Bombpick still would not work properly. I had struggled with getting the blueprints of the Bombpick and breakable walls to communicate with each other. Only until I had connected with my peers had I found a solution that was right in my face the whole time.

2.  _Bugs:_ During the Level design aspect of the design process, I found a few bugs. The main TileMap that is used to be edited in a modular fashion was creating problems when trying to make the levels layout. Mostly problematic was the fact that my mechanics that were being placed were then being _Replaced_ by a floor tile that then broke the mechanic. This was an easy fix within the code process.

3.  _Second Mechanic:_ One of the main things about this project was taking on a new mechanic that was created by a peer. Then implementing that mechanic within our already existing mechanic. The only problem with that was the means of acquiring the new mechanic. This was done by taking a video explanation of the mechanic and code made by our peers and copying the workflow. This created a hurdle by how easily you can make a simple mistake when watching a "Tutorial" in a sense. This was easily mitigated by another watch through.

4.  _Stress:_ In the middle of the design sprint, I had run into real life issues that were unrelated to Game design. This problem had caused me to fall behind by a day along the sprint. Being behind by a day, I had to really try and push for the deadline to meet it. As the days got closer to reaching an end, I reached out for an extension, but it was too late. I knew I wouldn't receive a response right away so I continued to push for the deadline in hopes I would make it. I was late, by about an hour. However, I did turn in my section of the project and documented the whole process even though I was not sure I could finish it in time. Even though this all happened so quickly and set me back I still made a quota and created something worth being proud of.

5.  _Organization:_ The organization within UE5 was not the worst but there is always room for improvement when it comes to file/data organization. During the design process I was able to make my own folders and import files into them as I worked. But as I created duplicates of other blueprints and downloaded external files, I started running around to look for things. I had to spend additional time organizing my blueprints and files within UE5 so that my workflow would maintain at an efficient speed. This problem only lasted for a few days near the end of the sprint as I acquired more files to worry about. In the end my organization wasn't too bad but could always be better.

Reflecting on my game design sprint for "Tournamental," it was a mix of highs and a few bumps along the way. I nailed it when it came to talking things out and keeping myself on track. Time management could have been better but was ultimately on point, making sure I hit all my deadlines. The coding aspect ended beautifully, where I turned cool ideas into real game features using Unreal Engine 5. It wasn't all smooth sailing. Coding had given my trouble and I had run into tough moments and had to wrestle with the program bugs. I threw in an extra game mechanic, making things trickier. Then dealing with stress from outside sources and staying organized became an issue.

In the end, I made a game I am proud of, thanks to teamwork among my peers, good timing efforts, and coding skills. I faced challenges, like coding headaches and extra game elements, but tackled them head-on. Looking forward, I will learn from these hiccups and keep leveling up in the game design world.