

## Sprint (1) Retrospective

### Team 2 Project Trials

Garrett Kizior, Nicolas Bratton, Ryan DeSalvio, Keith Droll

## What Went Well?

A lot of the first Sprint went well. We 100 % completed almost all of the tasks we set out to do and are very happy with the foundation we have set for ourselves. In particular, we are proud of the random generator we created and hope to add more to it in the next Sprint. The animations also look good for what we have.

1	Familiarize with Unity's input controllers	5	Ryan
2	Set up keyboard functionality	4	Keith
3	Set up controller (ex. Xbox Controller) functionality	6	Keith

**Completed:** Both a controller and keyboard may be used to control the game.

4	Create Player model.	6	Ryan
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**Completed:** A player model was designed from scratch and implemented into the game.

5	Create Player walking animation.	5	Nick
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**Completed:** An animation for walking was created for all four directions the player walks

6	Create Player running animation.	5	Nick
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**Completed:** An animation for running was also created for all four directions the player runs

7	Link together Player model, walking animation, and running.	6	Ryan
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**Completed:** These animations were all implemented and has were debugged to look smooth in-game.

8	Create Player model holding (2-3) weapons with walking, running, and attacking animation	8	Ryan
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**Completed:** Two weapons were implemented as well as their walking, running, and attacking animations.

9	Create environment object models (rocks, trees, etc.)	6	Garrett
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**Completed:** Rocks and grass object models were created and implemented.

14	Develop basic enemy AI	8	Nick
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**Completed:** Basic Enemy AI was created and implemented for the enemy characters.

15	Define and implement walking function for player	2	Nick
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**Completed:** A walking function was defined and implemented for the player.

16	Define and implement walking function for enemy	4	Nick
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**Completed:** A walking function was defined and implemented for the enemy character.

17	Create Environment Class	5	Keith
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**Completed:** An environment class was created in order to help randomly generate the layout of each level.

18	Create Environment objects (rocks, trees, boundaries)	3	Keith
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**Completed:** Environment objects were created such as rocks and grass.

19	Place Character, enemy models, and environment objects on Environment	6	Keith
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**Completed:** All the models and objects we created were implemented into the game.

20	Create algorithm for random level generator	10	Garrett
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**Completed:** An algorithm for a random level generator was created and implemented and tested to make sure that the algorithm worked and ran well.

21	Implement said algorithm into environment class	4	Garrett
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**Completed:** It was implemented into the environment class and used to randomly spawn rock and grass objects.

22	Implement health tracking functions within each class (Player, Enemies)	5	Ryan
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**Completed:** Health tracking functions were created for both enemy and player classes.

## What Didn't Go Well?

We, as a group, did a fairly good job of completing everything we had set out to do. There was an expected learning curve to associate ourselves with Unity but beyond that, some of the tasks we did not complete were actually completed to a better degree so overall we are very happy with what we have. One major hitch in our plan was an underestimation of our knowledge of GitHub. We struggled at times with it and it took our team while to figure out how to get GitHub working with Unity and how to commit changes and sync to a master branch. Besides this, we got off to a solid start.

1	Create Abstract Character Class complete with fields and skeleton functions	3	Garrett
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**Not Completed:** No abstract classes were created but we might look into this for Sprint 2.

2	Create Player class with fields and skeleton functions	3	Garrett
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**Somewhat Completed:** The player class and fields were created but none were skeleton as we filled everything in.

3	Create Abstract Enemy Class with fields and skeleton functions	3	Keith
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**Not Completed:** Again no abstract enemy class was created and we will look into this for Sprint 2.

4	Create a basic Walking Enemy Class with fields and skeleton functions	3	Keith
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**Somewhat Completed:** Again no skeleton functions were created and we ended up just implementing the class.

5	Determine appropriate health levels for enemies and Player, including modifiers from experience	4	Garrett
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**Somewhat Completed:** This was partially done as health levels were created but no testing as far as health goes was done and experience was not implemented.

6	Implement health subtractors for on-hit when attacking/being attacked, linked with hit-boxes	8	Nick
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**Somewhat Completed:** Subtractors were implemented for both the enemy and player characters but only the player can be hurt in game as the weapons do not yet have hit boxes. This will be one of the first tasks we accomplish in Sprint 2.

## How Should You Improve?

In order to improve on implementing our backlog and achieving our goals for this project, we will do a couple of things. Firstly, we will better use our time throughout the sprint. Continuing to set aside meetings every week might be the best solution to this in order to make sure a consistent amount of work is getting done on a week to week basis instead of a having an extra workload at the end of the Sprint. Another thing we can do is to better estimate the time it will take to finish each task. This will allow us to better split up the time we create for ourselves and give us a better idea of how much we can realistically get done. Yet another thing we can do to improve is to spread the animation responsibilities among all of the group. Originally we had one person working on animations but it might be a better idea to spread this task out because we seriously underestimated how much work will have to go into that aspect of the project. Finally, we would like to nail down how GitHub works. We had a lot of problems with GitHub in the first sprint and would like to iron those out and make sure we all completely understand how the software works to ensure no further problems are created.