

Sprint Retrospective

Team reflection | Sprint backlog | User story and test description

Our team, Imagination Terraformers, had a very productive Sprint Two. We decided to focus on game implementation and cleaning up a few things that were left over from Sprint One. We made this decision because after Sprint One, we are more familiar with the technologies that we are using in Sprint Two, which focuses on the actual game implementation. In order for the Sprint Two goals to be reached, we divided the work amongst our team to best suit our skillset. We worked through the challenges such as design, remote database implementation, figuring out how to get information to and from unity, and creating a pleasing experience for users. In the following paragraphs we will breakdown the roles of the sprint members so that there is a better understanding of what was done and how it was accomplished.

First to discuss is Austen's contributions. Austen worked on importing Unity projects into Android Studio, level design and sprites, and collision work between objects. He played a large roll in game design and the creation of the unity project.

Following Austen is Joseph. Joseph also played a huge role in this sprint. He focused on the unity side of the project, working on player controls and interaction with the game objects, and design. Joseph figured out the communication between Android Studio and Unity, and he created and worked on the in-game menu.

Sinead handled our sprint logs and documentation throughout the sprint. Along with this she also completed the remaining testing architecture, implemented the game logging out after five minutes of inactivity, and commented majority of the java classes. She also worked on the activity of completion of the game and the Sprint Two Retrospective.

Finally, Gavin worked on the remote database, implemented several scripts for the PHP interface, and helped Austen to implement collisions that keep objects from phasing through

each other. He also worked on Unity and worked on the information exchange and porting Unity to the android project.

Database functionality was added to support the Unity game and Unity was updated to constantly update and load from the database. Joseph and Austen also got the questions, menu, level progress, quitting, and scene changes completed.

Moving forward our team believes that we put in good work this sprint. We can utilize this experience to further gauge how much we can accomplish in a given sprint iteration. We were able to complete almost all the issues that we set out to accomplish this sprint. Our team got the most work done when we all met together in person, which we will continue to do in Sprint 3.

Figure 1: Screenshots of Issues from Sprint 2

34 Open 4 Closed		Author	Projects	Labels	Milestones	Assignee	Sort
1	Sprint Two Report	Documentation					
#62	opened 8 days ago	by gavinjalberghini					Sprint Two
1	So that I can learn about single-dimensional arrays	enhancement					
#59	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can learn about methods	enhancement					
#58	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can learn about loops	enhancement					
#57	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can learn about mathematical functions, character, and strings	enhancement					
#56	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can learn about selections	enhancement					
#55	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can navigate and interact with the game	enhancement					
#54	opened on Feb 27	by smfoley2nd					Sprint Two
1	So that I can save my progress	enhancement					
#49	opened on Feb 23	by gavinjalberghini					Sprint Two
1	So that I can receive assistance when I get stuck on a question in the game	enhancement					
#46	opened on Feb 23	by gavinjalberghini					Sprint Two
1	So that I can answer questions and progress through the game	enhancement					
#45	opened on Feb 23	by gavinjalberghini					Sprint Two

#44	So that I can show that I have learned while playing the game	enhancement	1	gavinjalberghini	Sprint Two	2
#42	So that get some assistance with the app	enhancement	1	gavinjalberghini	Sprint Two	1
#40	So that I can better visualize the current level I am in	enhancement	1	gavinjalberghini	Sprint Two	1
#39	So that I can stop utilizing the in-game menu and return to the game	enhancement	3	gavinjalberghini	Sprint Two	1
#38	So that I can see all the collectables that I have unlocked	enhancement	1	gavinjalberghini	Sprint Two	1
#37	So that I can stop playing and utilize other tools/menus available to me	enhancement	2	gavinjalberghini	Sprint Two	1
#35	So that I can better understand how answering questions progresses me through a level	enhancement	2	gavinjalberghini	Sprint Two	1
#33	So that my account information stays private	enhancement	4	gavinjalberghini	Sprint Two	2
#27	So that I am aware of how well I am doing on a level	enhancement	1	gavinjalberghini	Sprint Two	1
#24	So that I can have a clean start on the game	enhancement	2	gavinjalberghini	Sprint Two	1
#23	So that I will be proficient in a level's skill before proceeding	General	1	gavinjalberghini	Sprint Two	1
#22	So that I am not able to brute force the level	enhancement	1	gavinjalberghini	Sprint Two	1
#21	So that I cannot cheat my way through a level by remembering the answers in order	enhancement	1	gavinjalberghini	Sprint Two	1
#20	So that I do not get stuck in one portion of a level	enhancement	1	gavinjalberghini	Sprint Two	1
#19	So that I can practice answering coding questions in more than one way	General	1	gavinjalberghini	Sprint Two	1
#18	So that I do not have to have previous programming knowledge	General	1	gavinjalberghini	Sprint Two	1
#17	So that I can continue to practice the concept of a level	enhancement	2	gavinjalberghini	Sprint Two	1
#15	So that I can expand my programming knowledge in Java and Pseudo code	General enhancement	1	gavinjalberghini	Sprint Two	1
#14	So that I am aware of how I have done in the app overall so far	enhancement	3	gavinjalberghini	Sprint Two	1
#10	So that I can have record of my accomplishments	enhancement	2	gavinjalberghini	Sprint Two	1
#9	So that I am aware of my achievements throughout levels	General enhancement	2	gavinjalberghini	Sprint Two	1
#6	So that I can interact with a game that resembles my school	General	1	gavinjalberghini	Sprint Two	5
#5	So that I can understand the content of the coming level	enhancement	1	gavinjalberghini	Sprint Two	1
#4	So that I can learn programming concepts and basic Java	General	3	gavinjalberghini	Sprint Two	1
#63	Extending database to remote functionality	enhancement	3	gavinjalberghini	Sprint Two	1
#61	Update README.md to reflect new files/locations	Documentation	1	gavinjalberghini	Sprint Two	1
#36	So that I can get more information about the development team	enhancement	1	gavinjalberghini	Sprint Two	3
#12	So that no one else can access my data	enhancement	2	gavinjalberghini	Sprint Two	3

The figures above are screenshots of the GitHub issues page for our Repository. Each issue houses the entirety of the user story with elaboration in its description. All

progress was reported in the form of comments by collaborators. In addition, all testing was commented on to each issue. In our project, testing is implemented in the 'androidTest' folder where each activity layout has a corresponding test class with tests that go over scrolling, button mapping, security, and all other forms of functionality for that given screen. For a more detailed explanation of test cases for each class, see the updated GitHub issues page. We were also told that we do not need to do tests for the Unity side of our project, which is what our main focus was in Sprint Two.

Some of the issues that we encountered were not being able to communicate between a unity app and the android app in the beginning and not being able to use Unity's built in physics engine to determine collisions between objects.