Progress Report

In our technical prototype, we implemented the core rhythm component of the game by means of a central rhythm controller module. In doing this, we integrated the action ticker as well as a more fleshed out gameplay structure. We also established and began implementing the modular architecture specification on which we will continue to build our game. In terms of art assets, more sprites were created for the knight, enemies, ticker, background, and board tiles. Additionally, an initial music track was created.

Activity Breakdown

Charles Tark
He was responsible for the implementation of the InputController module, the health-related components, as well as various drawing code throughout the different modules as necessary. He was also responsible for the creation of initial visual and audio assets for the game. Specifically, he was involved with the following activities:

- Implementing the InputController module (2 hours)
- Implementing player HP in the Knight module (1 hour)
- Implementing drawing of the health, ticker, and background (3 hours)
- Creating visual assets for tiles and the ticker (3 hours)
- Editing the initial music track produced by Austin (3 hours)
- Meeting with the group (working on documents, discussing game features/development) (8 hours)

In general, the activities listed were a necessary and productive use of time. He spent time performing the originally planned tasks with the addition of helping to create the music track. In general, helping to create an adequately functioning rhythm element proved to be more difficult than expected. In the future, less time would probably be spent on music. However, some of the listed activities were somewhat nonessential specifically for the production of the technical prototype and could have been less prioritized, such as the creation of new tile assets.

Gagik Hakobyan
He was responsible for creating the framework for our technical prototype. This consisted of copying over code from the gameplay prototype, as well as creating new classes according to our architecture. He implemented the rhythm controller, as well as the code in the gameplay controller that interacted with rhythm controller. Finally, he was in charge of designing the gameâĂŹs architecture and creating the workflow and dependency diagrams. The breakdown of hours was as follows:

- Designing the architecture (2 hours)
- Creating workflow and dependency diagrams (1 hour)
- Meeting with group members(working on documents, discussing game features/development) (10 hours)
- Implementing RhythmController (8 hours)
- Writing parts of GameplayController that interface with RhythmController (5 hours)

Overall, he spent around 26 hours on the game, which were mostly productive. Rhythm controller took much longer to implement than anticipated, and this took up a majority of his time.

Austin Liu
He was responsible for implementing the skeleton of the various controller modules and composing preliminary music themes for the game. Specifically, he worked on:

- Implementing skeleton code for the InputController interface and the PlayerController and GameplayController classes that implement InputController. (4 hours)
- Implementing the bulk of the CollisionController module, which handles bounds checking and collision detection between objects on the game board. (4 hours)
- Adding some skeleton code and abstract methods to the GameObject abstract class. (2 hours)
- Composing music for the game (3 hours)
- Meeting to resolve programming and design decisions (4 hours)
- Meeting to produce documents (4 hours)

In total, he spent about 21 hours on the game over the last two weeks. This was largely in line with the plan set out last week to spend 10 hours programming and 4 hours on music. The activities were largely a productive use of time, though he spent about 1 to 2 hours resolving merge issues related to Git. These are becoming less of a problem.

Kylar Henderson
She was mostly responsible for all of the small coding miscellaneous tasks. She also spent time leading group meetings. Specifically her time was spent:

- Implementing all model classes (6-7 hours)
- Implementing draw code for most of the game (1 hour)
- Meeting with team members (10 hours)
- Making minor tweaks to other group members' code (2 hours)

In total, she spent about 20 hours working on these. Almost all of this time was productive and necessary to make the game functional for the technical prototype. Almost all of the time that needed to be spent was underestimated. All of the tasks ended up being more time consuming than originally thought and certain tasks were not considered, such as working on other group members' code. For the next two weeks, time allotments will be more lenient, especially for major tasks.

Andrew Halpern
He was responsible for designing the technical prototype game level and creating the tile assets. He also worked with the rest of the team to discuss gameplay mechanics and the way they will give feedback to the player. Specifically, he was involved in:

- Designing the color scheme and tile assets (2 hours)
- Designing the layouts for the initial gameplay levels and the level demonstrated at technical prototype (3 hours)
- Brainstorming new ideas for the gameplay mechanics with the rest of the team (10 hours)

- Creating a new background and start menu screen for the technical prototype (2 hours)

In total, he spent around 16 hours working on these assets and collaborating with the rest of the team for the technical prototype. Designing levels for the technical prototype took a lot longer than expected based on the complexity of the maps and discussing with the rest of the team what mechanics would be feasible for the technical prototype. Also, balancing the gameplay levels was very challenging and proved to be too difficult for players in the end. For future milestones, designing levels will be easier to test and iterate on with a level editor.

Julia Cole
She was responsible for creating and updating the assets for the game and directing other members contributing assets. She was involved in:

- Creating an additional monster sprite (2 hours)
- Creating a projectile sprite (10 minutes)
- Altering the player sprite to be more cohesive with the background (1 hour)
- Creating "dash" player sprite (1.5 hours)
- Directing Andrew and Charles on design tasks (1 hour)
- Meeting with teammates (10 hours)

In total, she spent around fifteen hours working on the above tasks. Workload will increase when a demand for animation increases. Additional edits to the player sprite is needed, and the werewolf sprite needs to be cleaned up as well as the skeleton sprite. The dash sprite may need to be edited. Animations may include basic walk cycles for each character asset.

Milestone Predictions

For the alpha release, we plan to implement a level editor with a basic graphical user interface, as well as playable game level.

Tests for Acceptance

Both designers, Andrew and Julia, are able to use the level editor to design the board of the level. We should also be able to parse a JSON representation of a level reliably so that we can test our level editor GUI.

Additionally, we should implement one interesting level that showcases all of the interesting features of our game and is considered as "fun" by at least 5 playtesters before our presentation.

Risk Assessment

The following are potential risks we may face in regards to implementing our deliverables: The JSON representation of a level is not easy to implement and the level editor module will likely require extensive debugging. Synchronizing the RhythmController module with the music more carefully will likely require extensive testing to determine an optimal margin of error for the player with regard to the player's keyboard timings.

Activity Breakdown

Charles Tark
Over the next two weeks, Charles will be responsible for the implementation of the revised health system and the incorporation of visual and audio feedback for the players to reflect current performance. Additionally, he will be responsible for the creation of required visual assets as well as editing music tracks. His rough time breakdown will be as follows:

- Implementing the revised health system (2 to 3 hours)
- Implementing the visual and audio feedback in code (4 to 5 hours)
- Producing necessary visual and audio feedback assets (3 to 4 hours)
- Editing music tracks (2 to 3 hours)
- Producing of any other needed visual assets (2 to 4 hours)
- Meeting with team members (4 - 6 hours)

Gagik Hakobyan Over the next two weeks, Gagik will be responsible for fleshing out the rhythm controller to allow us more precise control over action timings. This will allow us to implement more complex actions, such a dashing and casting freeze, which he will be in charge of implementing as well. The anticipated activity breakdown is as follows:

- Revising rhythm controller (6 - 7 hours)
- Implementing dash, fireball, and freeze (4 - 5 hours)
- Assigning tasks and working with programmers to integrate their code (1 - 2 hours)
- Meeting with team members (4 - 6 hours)

Austin Liu
Over the next two weeks, Austin will be responsible for helping Gagik with improving the quality of the audio visual feedback of the game. His rough time breakdown will be as follows:

- Composing and arranging more music, as well as looking into the JFugue third party library for writing music in Java to avoid music format issues (6 hours)
- Working in the code required in the CollisionController and GameplayController to handle additional additional game actions such as dashing and projectiles (3 hours)
- Working with Gagik to improve the robustness of the RhythmController by providing information on how to anticipate beats in music using various methods (6 hours)
- Meeting with the group (4-5 hours)

Kylar Henderson
Over the next two weeks, Kylar will be responsible for leading the work on the level editor. Her rough time breakdown will be as follows:

- Researching JSON for use by the level editor and loading in levels (4-5 hours)
- Implementing a parser that will convert JSON files into levels (6-7 hours)
- Implementing a GUI for players to use to design levels (7-8 hours)

Andrew Halpern Over the next two weeks, Andrew will be responsible for redesigning visual assets to help players follow along with the game's rhythm. This includes environmental assets such as tiles and background. Andrew will also be responsible for designing the way the new combo bar and rhythm movement status bar will interact and feel. He will also begin to brainstorm and create UI elements that help teach the players how the core gameplay mechanics work in the beginning levels. His rough time breakdown will be as follows:

- Designing more gameplay levels feature new gameplay mechanics such as dashing and testing the level editor (5 hours)
- Collaborating with other team members to create the level editor (2 hours)
- Redesigning tile assets to give player more feedback (3 hours)
- Creating new "ticker" and "combo" meter to reflect changes from technical prototype (5 hours)
- Brainstorming and meeting with rest of the team (10 hours)

Julia Cole Over the next two weeks, Julia will be responsible for directing the production of assets. She will continue to refine character design, implement animation for all characters and tweak existing assets. Her rough time breakdown will be as follows:

- Polishing character drawings (3 hours)
- Animating walk cycles (10 hours)
- Tweaking graphic design assets (1 hour)
- Checking in with Charles and Andrew to ensure a cohesive design (1 hour)
- Meeting with the team (4-6 hours)