**Progress Report**

**- Increment 2 -**

**Group #17**

# Team Members

# Aamir Baloch, amb21w, ABaloch1

# Blake Barth, bmb22b, Blake1720

# Jacob Copham, jlc21b, jcopham

# Joshua Krug, jak21i, AusarTheVil3

* Ethan Lin, el21v, WindowsSystemAdmin

1. **Project Title and Description**

Gather. Arm. Manage. Endure. (G.A.M.E.)

We are making a single-player video game that is a mixture of tower defense, platforming, puzzles, and resource managing. We are incorporating physics-based movements and randomly seeded resources to find as you explore. We are making waves of enemies to defend against science-based puzzles to solve which will unlock unique upgrades, and we have written an intriguing, mysterious story. We are making the game have a cyberspace-theme, with music and designs fitting that aesthetic.

1. **Accomplishments and overall project status during this increment**

During this development increment, we focused on enhancing the game's structure and functionality. We organized the code into distinct scenes, enabling seamless transitions between screens. Additionally, we expanded the gameplay by incorporating new puzzles and data logs within the levels, enriching the overall player experience. A save and load functionality was implemented to allow players to preserve and resume their progress. We also uploaded and integrated assets, including sprites and character images for both heroes and enemies. Furthermore, we laid the groundwork for enemy subclasses by establishing a framework to support diverse enemy behaviors and interactions. Looking ahead, our goal is to refine the codebase further, solidifying the framework for robust and maintainable architecture. We aim to develop a comprehensive network of scenes with interactive elements tailored to each, alongside ongoing improvements to the visuals and gameplay mechanics. This will ensure a more engaging and dynamic experience for players.

1. **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

During this increment, we came across a few problems. Due to the timing of the semester, we found it difficult to find times to meet, work, and plan. Because of this, the scope of this increment was decreased. We primarily worked on aesthetic aspects of the game, and plan to focus our final increment on the functionalities. We also came across some technical issues related to the screen size of our game, which may ultimately lead us to have a set screen size for the game. Based on where we are at, we have decided to shrink the scope of the game, but only at the edges. Our story will be less intricate, our enemy types and different levels will be fewer, and fewer environments in each level. We are doing this in order to focus on creating a functional and smooth gameplay experience and not overextend in peripheral aspects.

1. **Team Member Contribution for this increment**
   1. **The progress report:**

Joshua Krug – Wrote section 2

Ethan Lin - Wrote section 3

Blake Barth – Wrote section 4

Aamir Baloch – Wrote section 6, 7

Everyone – Sections 1, 5

* 1. **The requirements and design document:**

Joshua Krug – Wrote sections 1, 2, 4, 5, 7

Ethan Lin – Wrote section 6

Jacob Copham – Wrote section 3

* 1. **The implementation and testing document:**

Jacob Copham – Wrote sections 1, 4, 5

Aamir Baloch- Wrote section 3

Blake Barth – Wrote section 2

* 1. **The source code:**

Joshua Krug – Created several scientific puzzles and data logs to be found in the level.

Jacob Copham – Refactored code into the use of “Scenes” allowing for swapping between screens, created title screen and pause screen.

Ethan Lin – Created the code for loading the game with L and saving the game with S.

Aamir Baloch- Found and uploaded all assets and images, made character class with sprite and visual mechanics, made all current sprite sheets for hero and enemy and helped with puzzles.

Blake Barth – Added the framework for different enemy subclasses as well as implementing basic sprite functionality.

* 1. **The video or presentation:**

Joshua Krug & Jacob Copham Collaborated on the Video

1. **Plans for the next increment**

As the project deadline approaches in a few weeks, we will be intensifying our efforts and holding each other accountable to ensure consistent contributions from all team members. Our primary goal for Increment 3 is to deliver a nearly complete version of the game with the following features fully implemented:

* Full integration of the story into the gameplay.
* Functional and polished visual and physical game components.
* Complete freedom of character movement and interaction with enemies.
* The ability to modify game settings and pause the game seamlessly.
* A refined combat system that includes additional mechanics such as health tracking and enemy behaviors.
* Debugging and testing to ensure smooth transitions between levels or game stages.
* Comprehensive inventory management, including adding or removing items dynamically during gameplay.

We will also focus on ensuring the overall stability of the game and conduct usability testing to identify any final improvements or adjustments. With these goals, our aim is to prepare the project for final submission and demonstration.

1. **Stakeholder Communication**

**Being edited by Aamir**

**Dear Stakeholders,**

We would like to start by acknowledging that our group has fallen behind the goals we had set for this increment, and we sincerely apologize for not meeting our initial expectations. While we have made progress, we recognize that it has not been at the pace we had anticipated. Challenges such as coordinating schedules, managing workloads, and balancing other responsibilities have hindered our ability to fully execute our plans. However, we are using this as an opportunity to reassess, refocus, and redouble our efforts.

Over the next few weeks, we will fully commit ourselves to this project. Each team member has pledged to make the successful completion of this game their number one priority. To ensure consistent progress, we are implementing a more structured approach to collaboration, including smaller, frequent pair programming sessions and regular check-ins to monitor task completion. By holding each other accountable, we aim to foster an environment of mutual support and productivity that will enable us to meet our goals efficiently.

Looking ahead to the next increment, we aim to deliver significant advancements in the development of the game. Specifically, our goals include:

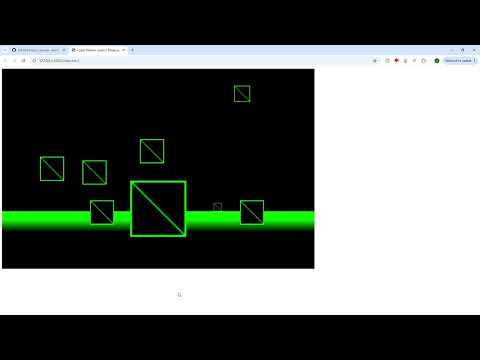
* **Story Integration:** Completing the integration of the narrative into the gameplay, ensuring a seamless and engaging player experience.
* **Visual and Physical Components:** Polishing the visual aspects of the game and finalizing the physical mechanics to enhance immersion.
* **Character and Enemy Interactions:** Enabling smooth, intuitive character movement and functional interactions with enemies.
* **Settings and Pause Feature:** Implementing a robust system for game settings adjustments and a responsive pause feature for better user experience.
* **Combat System Refinements:** Expanding the combat system to include advanced mechanics like health tracking and enemy behaviors.

We are excited about the potential of our project and are committed to making up for lost time. With this renewed focus and dedication, we believe we can deliver a game that meets and exceeds your expectations. Your trust and patience have been invaluable, and we are deeply grateful for your continued support. We will keep you updated on our progress and look forward to showcasing the results of our hard work in the next milestone.

**Best regards,**  
*Project G.A.M.E*

1. **Link to video**

[*https://youtu.be/UDBTUclqqIU*](https://youtu.be/UDBTUclqqIU)

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