**Progress Report**

**- Increment 2 -**

**Group #32**

*Please use this template to describe your progress on the group project in the latest increment. Please do not change the font, font size, margins or line spacing. All the text in italic should be removed from your final submission.*

# Team Members

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1. **Project Title and Description**

Undead Alliance

A wave-based co-op top down 2D survival shooter with RPG elements

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

We have added a new game ready, well-developed map. We also cleaned up the reloading feature for the guns where the magazine size reload depends on the guns/type of bullets. We also have an inventory system down with picking up and dropping guns in the game and added more guns for variation. We added a cross hair that follows the curser for when aiming the gun. We added new gun audio for different types of guns. Also added a basic leveling up system based on time survived. We have completed the game with a functioning main menu, gameplay, zombie system, inventory system, guns, player, level system, death and score count.

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

Implementing a co-op feature to play with multiple users became too tricky especially for our timeline so we decided to shift to a single player game and focus on making the features of the game sharper including a nicer map, more weapons, and a better wave-based level system. During working on the reloading feature, having to keep track of the ammo of each gun even after unequipping the weapon was difficult since the reload code is in the shooting script not the weapon script. To work around it was to add ammo counts to the weapon script and alter it from the shooting script. When implementing the gun pickup and drop system, we have had trouble with picking up weapons, as well as switching weapons in the inventory. In order to work around this, we are rewriting the inventory scripts that handle this and making it much more concise and clear, along with many debug issues to help get to the root of this issue. When implementing the leveling system, there was trouble getting the UI to update properly in certain cases. To work around this, we implemented custom scripts to use instead of the basic unity ones, which allowed for more control and customization over the UI. When creating the new map, a bug happened when moving around that would cause the camera to move when not wanted to and also issues with getting the cursor to show up as a crosshair. These bugs are still under work With the zombie spawning and assets, there was a struggle to find a top-down version of a zombie sprite but one was found. There was also an issue of not being able to spawn the zombies outside of the player’s view but changes to the script allowed it to happen. There is currently an issue of no animations for the zombies because the sprite did not come with one.

1. **Team Member Contribution for this increment**

*Please list each individual member and their contributions to* ***each of the deliverables in this increment*** *(be as detailed as possible). In other words, describe the contribution of each team member to:*

* 1. We all contributed to the progress report over a voice call adding what each person has done and brainstormed, Jacob wrote the stakeholder communication email, video, and challenges section on this document. Jacob wrote the accomplishments, plans, and contributions for this document.
  2. We all took part in the RD document by going through it together and editing each other’s paragraphs and adding ideas in a voice call. Each of us all did at least one paragraph in the document, and contributed to each other’s.
  3. Same as before, we all worked together over a voice call and added all our own ideas into each of the paragraphs.

Merrick added an inventory system with picking up and dropping guns in the game.

Jacob wrote the Zombie AI spawn mechanics, zombie assets, and zombie functionality and helped with spawn placement in the map.

Derek worked on the feature of reloading weapons in the game and the logic behind that.

Isaac finished adding the leveling up system and helped out where needed.

Dillion worked on gun sounds, developed a new map, and a cross hair for the user, and helped out with zombie movement.

1. **Plans for the next increment**

We are done!

1. **Stakeholder Communication**

Good evening stakeholders,

We are thrilled to announce that the development of Undead Alliance is officially complete! After months of hard work, the team has successfully brought this game to life, and we are excited to share the features that make it a thrilling and immersive experience. We have implemented a newly designed and well-developed map, providing players with a dynamic and challenging environment. The gun mechanics have been refined to include a realistic reloading system, with magazine sizes and reload times tailored to the type of weapon and ammunition. Players can now utilize a robust inventory system that allows them to pick up and drop a variety of weapons, offering greater strategic flexibility. Additionally, we have expanded the weapon selection to include a wider range of guns for more variation in gameplay.

To enhance precision, we introduced a dynamic crosshair that tracks the cursor, making aiming more intuitive and effective. The audio experience has also been upgraded, with unique sound effects for different weapons to increase immersion. For added progression, we included a leveling system that rewards players based on the amount of time they survive. Finally, the game features a fully functioning main menu, gameplay mechanics, a zombie spawning system, an inventory system, diverse weaponry, a leveling system, death animations, and a score-tracking feature, all working together seamlessly to deliver an engaging player experience.

We deeply appreciate your support throughout this project. The team is proud to present Undead Alliance and looks forward to sharing it with the world. Thank you for being a part of this journey.

Thank you,

Undead Alliance Development Team

1. **Link to video**