**Progress Report**

**- Increment 3 -**

**Group Tanx**

*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**

Project Title: Tanx

We are building a reimagined version of the Tanks game from Wii-Play, implementing a computer-based version that allows users to play through multiple levels of varying difficulty. The main differences between our version and the original will be the obvious omission of Wii-based technologies, but in actual gameplay we will build wholly new levels that allow the users to experience the game in a completely different way.

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

**Menu**: Menu now properly loads all stages and info pages. Implemented access keys to each stage to prevent players from jumping straight to the final stage. Uon beating each level the code for the next stage is presented.

**Level Design**: completed levels 16-25 this iteration, implementing new AI characters and level design objects.

**AI**: All AI classes and subclasses spawn in, shoot, and are destroyed on bullet collision. All AI subclasses inherit from the main AI class and modify certain attributes of that class, such as speed, movement, and bullet velocity. The EvilChris class modifies all three of these attributes and is it’s own class due to a few features that needed to be added. Every AI shoots directly at the player to provide a challenge, bullets spawn at the head of the barrel of the tank (and cannot shoot through walls), sprites rotate when AI changes direction, and all despawn after the player’s bullet collision

**Enemy Bullets:** Enemies have their own bullet class as they can only kill the player class and have a red sprite to differentiate from player bullets. Other than that, they are identical to the player bullet class and even despawn upon bullet collision with player bullets.

**Evil Chris:** Ai class that moves and shoots much faster and is the final boss of the level. Uses Professor Mills’s face as the sprite.

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

*Please describe here in detail:*

*- anything that was challenging during this increment and how you dealt with the challenges*

*- any changes that occurred in the initial plan you had for the project or its scope. Describe the reasons for the changes.*

*- anything that went wrong during this increment*

AI: The most challenging part of this project was implementing the final classes and creating all of the functions for those classes to run properly. Sometimes, certain functions would or wouldn’t execute and we had to see what was going with the code as well as consult both Phaser documentation and online resources to help in the debugging process. Getting bullets to despawn from the .js classes was extremely difficult as well since documentation on that was difficult to find, but eventually we figured that you needed to call the original scope to despawn it after messing around with the code and finding some documentation on colliders. Lastly, getting things to connect and getting the structure of the code correct was difficult and making sure dependencies were followed correctly. For example, the AI needs the Player class to already be instantiated so the AI can find where the player is and aim at the player. We all reviewed the code and made sure the structure was correct and ensured that all levels worked with the AI was created.

Overall structure: The most challenging portion of the game structure was deciding how we wanted the transitions between stages to function. We decided on the access key method because it was able to be implemented fairly easily and satisfied the need of preventing users from skipping levels. At first, the display of alerts and access keys in transitions were causing gameplay issues however they were able to be overcome using some boolean variables.

1. **Team Member Contribution for this increment**
   1. Andrew Thrash — **Progress Report** sc. 1, 2, 3, 4, 5,, 7; **RD** sc. ; **IT Doc** sc. 1-5; **Source Code** managed github files, fixed general bugs across code, playtesting, levels 16-24, created new sprites **Video/Presentation** edited video, play demonstration
   2. Nolan Monahan — **Progress Report** sc. 3, 4, 5; **RD** sc. 1, 2, 3, 4, 5; **IT Doc** sc. ; **Source Code**:all html files other than levels. helped trouble shoot and debug levels. javascript code for ; **Video/Presentation** Talked about the menu functionality and access key implementation.
   3. Alexander Gentry — **Progress Report** sc. 3, 4; **RD** sc. 1, 6; **IT** **Doc** sc. 1, 2, 3, 4, 5; **Source** **Code** ai.js, some small functions in player.js, and implementing certain features in the levels; **Video/Presentation**: talked about the AI functionality and other aspects of the code
   4. Blake Antone — **Progress** **Report** sc. 3,4,5; **RD** sc. 1,3,6,7 ; **IT** **Doc** sc. --; **Source** **Code** player.js and other minor fixes **Video/Presentation** Gave demo
2. **Link to video**

[*https://youtu.be/1n-6ygBkwbQ*](https://youtu.be/1n-6ygBkwbQ)