Build Notes M1:

Team Longshot

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Chosen Game: Diablo 3

Unity Version:

Unity 2021.1.7F1

- **Controls**

  - Right mouse-click to move around. Move the mouse cursor to desired location, right click, a small green circle will appear in the target location, and your avatar will move there if possible.
  - Left mouse-click is attack, clicking will spawn a projectile that deals damage to other Avatars
  - Space Bar removes 10 points of health from the Player
  - The 'H' Key adds 10 points of health to the Player

- **Walk Through**

  - Upon start-up the splash screen will appear, next will be the title screen, which will finally load into the Main Menu.
  - From the Main Menu choose desired action, see Main Menu section for more information.
  - Hitting play will load the Test Level/Toybox.
  - Once in the ToyBox level players can move around the area, test out health functions, interact with an enemy, shoot projectiles, practice basic moves, pause/unpause the level, go back to the main menu, adjust the settings, or quit the game.
  - To end the game you can (for now) only 'lose' the game, to do so deplete the player's health to zero, which will bring up the Losing Screen.

- **Main Menu**

  - Appears after Splash Screen and Title Screen.
  - Play, Options, Credits, & Quit Buttons.
  - The Play button loads our ToyBox level.
  - The Options button pulls up a settings menu to adjust the game sound. There is a button at the bottom to return to the main menu
  - The Credits button loads the credit scene, which shows the names of each team member and has a rolling list of our references. There is a button at the bottom to return to the main menu.
  - The Quit button activates an "Are You Sure?" menu with Yes and No options. Clicking the yes button will immediately exit the application. Clicking the No button will return the player back to the Main Menu.

- **Pause Menu**

  - Available while playing the game in the ToyBox level.
  - There is an on screen pause button which pulls up the Pause Menu.
  - Pulling up the Pause Menu stops all time. The menu has Return, Options, and Main Menu buttons. The Return button disables the pause menu, restarts time, and allows the player to continue playing in the ToyBox. The Main Menu button returns the player to the starting Menu scene which replays the title screen then advances to the Main Menu. The Options button pulls up the Options Menu, which allows the player to change the settings (currently just controls the volume).

- **Toybox**

  - Loads in from Main Menu when user hits the Play button.
  - The ToyBox level features 1 enemy for the player to engage with as well as several test dummies/targets to attack as well. Players can move around the area using Right-Click movement and Attack with Left-Click Input. From the ToyBox level players can Pause/Unpause and quit the game. (See Pause/Unpause for that Menu's functions)
  - While playing users can see the pause and quit buttons on the HUD as well as their Health and Mana pools.
  - To leave the ToyBox level players can click on the quit button, pause the game and then click on the Main Menu button, or lose the level.To end the level (for now) the player must lose. To do that players must reach zero health which will then show the Losing screen. The Losing screen has buttons to navigate back to replaying the level and to quit the game.

- **Known Issues**

  - ❖ Health and other inputs working when time is stopped:

    - ■ Load into the ToyBox level

    - ■ Pause the game by using the button or input

    - ■ Try to move or take away health while paused

    - ■ Unpause the game and you will see the player move to the last clicked location and the health will decrease by the amount you took away.

      - ● Possible Fixes:

        - ◆ Disable all game input from the Pause Menu or Main Menu script

- **Added Features / Tasks**

  Arissa Adams

  - ● Main Menu & Credits

    - ■ *"As the player I want to be able to enter the game, see a title screen and then the main menu. From there I want to be able to play and exit the game as well as control settings and see the credits."*

    - ■ Created all original 2-D Artwork used for HUD elements and backgrounds. Set-up Splash Screen, Title Screen, and Main Menu Scene which holds the Title screen and Main Menu screens. Menu has Play,Options,Credits, and Quit buttons. Set up script for Options, including adjusting volume settings from within the game. Set up a Credits scene which shows all the team members and our reference list.

  - ● Pause/Unpause

    - ■ *"As the player I want the ability to pause and unpause the game via input and I want to see a pause menu when this ability is active."*

    - ■ Set up Pause/Unpause menu and functionality. Pause menu has resume, options, and main menu buttons to help the player navigate the game. Created all original 2-D Artwork used for HUD elements.

- Basic Gameplay Loop

    - *"As the player I want to be able to start and end the game."*

    - Set up the Basic Gameplay Loop and worked on issues related to it. This includes the Splash Screen, Title Screen, Main Menu, Pause Menu, Credits Scene, In Game Settings, HUD elements, and Play/Main Menu/Quit buttons where applicable.

- HUD Display and Graphics

    - *"As the player I want to be updated with any relevant information on the screen so I can better assess what is happening to my character."*

    - Created 2-D Sprite graphics for HUD use, using [Krita] and [Canva]. This includes things like the D3 logo seen on the Main and Pause Menus, the Health and Mana bars, and the background images seen in the Splash, Title, and Main Menu Screens. I also placed and added functionality to these sprites.

Theodore Doudak
- Avatar
    - *As an avatar, I want to exist, so that I can represent any character in the game.*
    - Define a base "avatar" for all future characters.
- Player Avatar Movement
    - *As the player, I want to traverse the level, so that I can find something to do.*
    - Define a player avatar from the base "avatar". Character horizontal movement via input. Character vertical movement via input. Character Updatable NavMesh for locomotion
- Avatar/Player Shoot
    - *"As an avatar (and the player), I want the ability to shoot projectiles from a weapon, so that I can defeat my enemy."*
    - Avatar has the ability to "shoot" a projectile from their weapon. Player avatar can activate Shoot ability via input. Projectiles, on collision with another Avatar, deal damage. Projectiles vanish on collision or after certain distance
- Enemy Avatar
    - *As an Enemy Avatar, I want to exist so I can move towards and attack the player.*
    - Create Enemy Avatar
- Game Over Screen
    - *As a player I want to be able to navigate out of the game or back into the game after my avatar dies.*
    - Game over screen shows when a player is defeated. Button that takes you back to the main menu. Button that resets the level. Demotivating message that hurts the player's feelings.

Sheon Duncan

- Environment
    - *As the player I want the universe to exist so that I may exist within it and explore.*
    - Create an area for players to exist within so that they don't fall endlessly through a void. Ensure that there is proper lightning within the scene so that players can see clearly. Add a material to the toybox so that an accurate measurement can be deduced and create prefab elements to populate the toy box space.

- Asset Creation

    - *As the player I would like to have objects within the toybox that I can interact with.*

    - Create Wooden Dummy, A Spike Barrier and a Target prefab for the player to interact with and test out mechanics. Also script a trigger for collision between the Avatar or Avatar related objects and the interactable prefabs.

- Audio Events

    - *As an environmental object, I want a sound effect to play whenever I interact with the Player Avatar*

    - When the player bumps into the Spike Barrier, the sound effect should play. When the player swings their sword at the Wooden Dummy or shoots a projectile at the target a sound effect should play to reflect those actions.

Joshua Frizzell

- Camera Follow

    - "As the camera, I want to follow the player avatar, so that I can see them clearly during gameplay."

    - Created a free look camera using Unity's built in Cinemachine component. As the player moves around the game environment the camera follows smoothly with a slight drag to make it feel less rigid.

Jeffery Lyon

- Avatar Health

    - As an avatar, I want to have a value of health, so that I cannot live forever.

- During gameplay, the player avatar has a health pool of 100 points. The pool does not exceed this limit, and does not drop below zero.

- I have implemented pressing the "spacebar" to take 10 points of damage, this is reflected visually on the health bar. The player can also press the "H" key to heal for ten points.

- Enemy avatars also spawn with a health pool of 50 points, and upon sufficient damage they are destroyed and disappear from gameplay.

- Avatar Death/Reset/Spawn

  - As an avatar, I want to reset myself, so that I can start over again.

  - Avatars have a set pool of health, and upon depleting this value they enter a "death" state.

  - Upon the player avatar's death, they are considered "dead" and a game over screen occurs.

  - Players can opt to reset the player by clicking "retry"

  - Upon depleting an enemies health pool they are considered "dead" and are deleted from the level