

Milestones

- Milestone 1:
 - Successfully implement facial recognition machine learning software.
 - This software will need to be trained and validated on a set of data. We'll need to research how best to acquire this data (whether it be available online or will have to be manually created). We will also need to research and implement the best model for this.
 - Date: 11/11/2021
- Milestone 2:
 - Finish the turret blueprint.
 - The blueprint will list and diagram all of the physical dimensions and specifications of the turret.
 - Date: 11/11/2021
- Milestone 3:
 - Acquire all of the raspberry pi related equipment
 - It is crucial that we get the raspberry pi and a camera for testing during the development cycle
 - Date: 11/11/2021
- Milestone 4:
 - Successfully have the facial recognition software read from a camera.
 - Once we get the facial recognition software to work successfully, it must be able to take input from a camera in order to operate successfully.
 - Date: 12/01/2021
- Milestone 5:
 - Successfully build the turret.
 - The base of the turret will hold the weapon stand, which will include motors and the raspberry pi that processes the camera feed.
 - Date: 01/31/2022
- Milestone 6:
 - Successfully create a web app that allows the user to enable/disable the nerf gun turret.
 - This web page will have a login system for security. It's currently unknown whether or not this site will be "pretty." If there are time constraints, we may decide to make the site very basic to satisfy its base functionality.
 - Date: 12/13/2021
- Milestone 7:
 - Implement the software that allows the nerf gun turret to rotate to face the target.
 - Date: 02/14/2022
- Milestone 8:

- Successfully create a functional database of faces.
 - The database that will be created will house pictures of people, specifically their faces, that the system determines are safe.
 - Date: 02/14/2022
- Milestone 9:
 - Finish creation of a functional prototype.
 - The prototype will be used to test our designs and spot any possible improvements.
 - Date: 03/01/2022
- Milestone 10:
 - Finish creation of the final product.
 - Date: 04/01/2022