Planning Document

Testing Strategy:

* Testing Drawing the display - Make sure display properly places all images onto the game. Ammo is loaded correctly and the controller panel is at the bottom of the display. All titles loaded correctly.
* Test Motion of the projectile – Projectile moves according to the drawn trajectory. Projectile updates according to set timer. Stops at bottom of screen or at a hitbox.
* Test Controller – Ammo decreases every fire, reloads every quiz. Angle Text Field allows numeric entry of angles (in degrees). Fire button starts the animation.
* Test hit boxes – Increment a score variable (to be displayed at completion of quiz). Projectile stops animated if hit. Bucket fills up (changes to full image). If the last bucket is hit, reset game and start a quiz. Dialog opens and shows “Nogg’d” buckets.
* Test drawing trajectory – Trajectory matches angle and distance on screen. Trajectory line includes all points.
* Test loading images – All images loaded successfully with no errors.
* Test loading of quizzes – Dialog combo box shows up with a preset question on angles and trajectories. Will not allow game to commence if not answered (Modal).
* Test checking quizzes – Correct answer refills eggnog supply. Incorrect answer results in another quiz.

Development Strategy:

We plan on completing a “trajectory game” that allows the player to bring the joy of eggnog (Christmas) into a region that might not have the true spirit. The game will consist of buckets that need to be filled with eggnog, and upon completion of all buckets, more take their place (reset game). The player will enter an angle and fire the eggnog into the play area, continuing till they run out of ammunition or fill all the buckets. In either case, they will answer a quiz about the trajectories they used to bring the sweet, sweet joy of eggnog to the people.

For Part I:

We plan on being able to load the images into the project, have the game displayed, and be able to draw a trajectory according to the angle.

For Part II:

We will animate the projectile when fire button is pressed according to the trajectory, and check hit boxes. In addition, we will have the quiz functionality completed by then (the display and checking of answers).