**Project 4 Plan**

**Game Name:** Catch me if you can

**Team:** Chris Lee([slee7@wpi.edu](mailto:slee7@wpi.edu)), Matthew Nagy([managy@wpi.edu](mailto:managy@wpi.edu))

**Team Name:** THE KA(Korean-American)

**Genre:** Music, Platform Game

**Game Description:** Catch me if you can will be a homage of geometric dash. Geometric dash is a platform game, where a square must avoid objects and reach the end. Similar but different, Catch me if you can will have a sprite the player controls to avoid objects by jumping. However, there is not end goal, but only a counter to track down the score. Moreover, there will be a sprite-based monster on the left, that will visually show that the player is being chased. We are not sure if there should be different levels and stages, but the root of Catch me if you can will be a platform game like geometric dash.

**Technical Features:**

* Coding how to use the jumping technique with limited frames and time.
* If the height of the jump is automatic or manual
* If the jump is constant, if not how to display it on the screen
  + Possibly have to worry about out of bound event.
* Using different music and sound effects
* Creating sprites for different environment, objects, and more.
* Adding other physics if needed(most mechanical parts are given, so it will be ok)

**Artistic Assets:**

* Main Character: Ball-Shaped
  + Frames: 2
  + Width: 4
  + Height: 3
* Object(Bar): Vertical Bar (3 different types)
  + Frames: 2
  + Width: 4
  + Height: 1, 3, 5
* Object(Spike): 3 different versions
  + Frames: 2
  + Width: 1, 2, 3
  + Height: 2
* Monster: The mouth will only show
  + Frames: 5
  + Width: 5
  + Height: Size of the screen

**Implementation Plan:**

We plan on coding everything from scratch for the game, its levels and its mechanics. Sound effects and music will likely be used from a website that offers free sounds for educational use. Any code (if unoriginal code is needed at any point for the game), sound effects, and music will have proper credit attributed to the sources.

However, for the engine, we decided to use the dragonfly engine provided from Professor Claypool, because there are some features (loading sprite, drawing characters, and more) that are giving errors in our personal dragonfly engine. Rather to fix these errors, we decided it is better for us to just proceed and work on the projects.

**Distribution of Work:**

Chris:

1. Outline
   1. Game Description, Technical Features, Distribution of Work
2. Sprite
   1. Provided in the Artistic Asset
3. Code
4. Creating presentation

Matthew:

1. Outline
   1. Implementation Plan, Schedule, Distribution of Work
2. Audio
   1. Max of 3 Audio and 1 Music
3. Code
4. Creating presentation

**Schedule:**

Outline (Wednesday December 4th): Have outlined the different mechanics and classes needed for the game.

Implementing (Thursday-Friday December 5th-6th): Major development for the mechanics and level, music and sound effects should start to be implemented and which audio is to be used should be determined during this time.

Alpha (Saturday December 7th): All the features should be implemented by now, and more attention towards art can be put at this stage.

Refinement (Sunday-Tuesday December 8th-10th): All features should be operational and art should be near completion, audio should be finished during this time.

Final Playable (Wednesday December 11th): The game should have all aspects done by this day, art, music, sound effects, and the game should be playable and ready.

Presentation Preparation (Thursday December 12th): Recording gameplay for a promotional material, and preparing and practicing for the presentation should be finished by the end of this day.

Promotional Material and Presentation (Friday December 13th): The game’s promotional video is finished and the game is ready to be presented and the group is prepared for such.