# Game Development Tools- Platformer Game

LEARNING GOAL & SCALE: Standard	
4	Student will be successful in level 3 and: Begin using multiple game development tools like GameMaker, Unity, Blender, etc.
3	Student will: Become familiar with popular game tools and different gaming engines including: GameMaker, Unity, and Unreal Engine. -Create your first game in Gamemaker and learn the basics about using game engines. (standard 34.0).
2	Student will: -Understand common game vocabulary including: sprites, objects, navigation, help, assets, and Photoshop.
1	With help from the teacher, the student has partial success with the current content.
0	Even with help, the student has no success with the current content.

Work Scenario: You have been hired to create a one level platformer game. The game must include: title/menu screen, 1 level with platform mechanics, and a final credit screen that includes your name and where you found assets used in the game. You need to choose a central theme to design your game around and backgrounds, character, rewards, and platforms should go with the theme you choose.

Try to adjust all assets by removing backgrounds and make your level as polished as possible while completing the game on time to show to your boss!
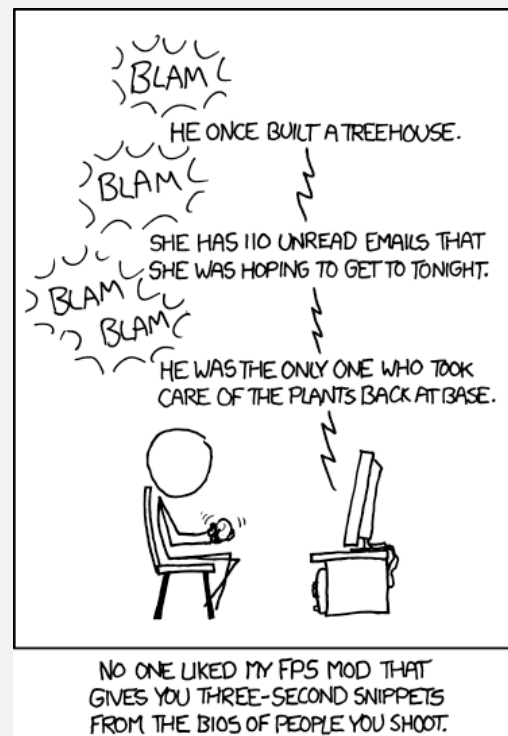
Monday

-Play the first tutorial on the "Current Week" page on mrskirk.com "How to adjust images".

-Create sprites from assets: Go to Opengameart.org or Freepik.com and find assets. Below is a list of assets and adjustment sizes. -You will adjust sizes in Photoshop, save the images as jpeg (see the tutorial on mrskirk.com how to adjust images for more information). Remove backgrounds easily in GameMaker (sprite editor→erase a color).

Assets to Find/Edit Sizes:

- ✓ **1- title screen background** (adjust size to 1024 x 768 in Photoshop (image→image size), I unchecked the link symbol to do this.
- ✓ **1- Level 1 background** (adjust size to 1024 x 768 in Photoshop)
- ✓ **1- main player/character** (size 32 x 32 with "constrained properties)
- ✓ **3 rewards** Sizes can range from 32 x 32 to 96 x 96 depending on how big the asset should be in relation to the character (should it be the same size or bigger than your character?)
- ✓ **Wall or platforms** A good starting size would be 32 height x 100 width- think of Mario platforms- they are not has tall as they are wide.
- ✓ **1-enemy** or something that the character can collide with. Can be 32 x 32 like player unless it should be bigger. Example: a giant might be 96 x 96.

Tuesday

-Play "tutorial 1" on the "Current Week" page on mrskirk.com. This covers how to create sprites and objects out of your assets.

-Begin to watch the external YouTube tutorial for the movement pieces: https://www.youtube.com/watch?v=IysShLIaosk or if you prefer to read it: http://gamemakertutorials.com/?p=383

Wednesday

-Finish external movement's tutorial and work through any bugs and errors.

-Begin the final tutorial (Tutorial 3) if able.

Thursday/Friday

-Finish final tutorial (Tutorial 3) if you have not already.

-Finalize game and save as an application (.exe file) **See instructions on the next page.**

-Upload to Office365

How to Make a GameMaker Application (EXE) File in GameMaker

- Go to File(top left)
- Click "Create Application"
- Choose your Removable Drive/Flash Drive (it will not save an exe to your H/R2D2 drive)
- Rename the file name to your name and what the game title is (Example: KirkPlatformer)
- Change the second box (Save as type) to "Single runtime executable (*exe)"
- Click "Save"
- Upload the .exe file to OneDrive