

## 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: -Follow the game development lifecycle (standard 23.0) -Create your first game in GameMaker
2	Student will: -Understand common game vocabulary including: sprites, objects, assets, tile set, Alpha, Beta, RTM, pre-production, levels, missions. -Describe the Game Development Lifecycle
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.

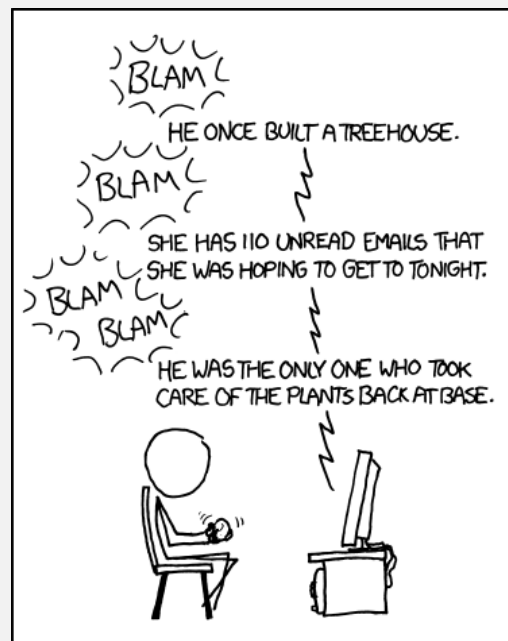
**Work Scenario:** You have been hired to create a one level platformer game. The game must include: title/menu screen, 1 level with platform mechanics, and a final credit screen that includes your name and where you found assets used in the game. You need to choose a central theme to design your game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

**Learning Target:** For a one-level GameMaker platform game, create asset & code checklists, find assets, code your game, export to an exe.

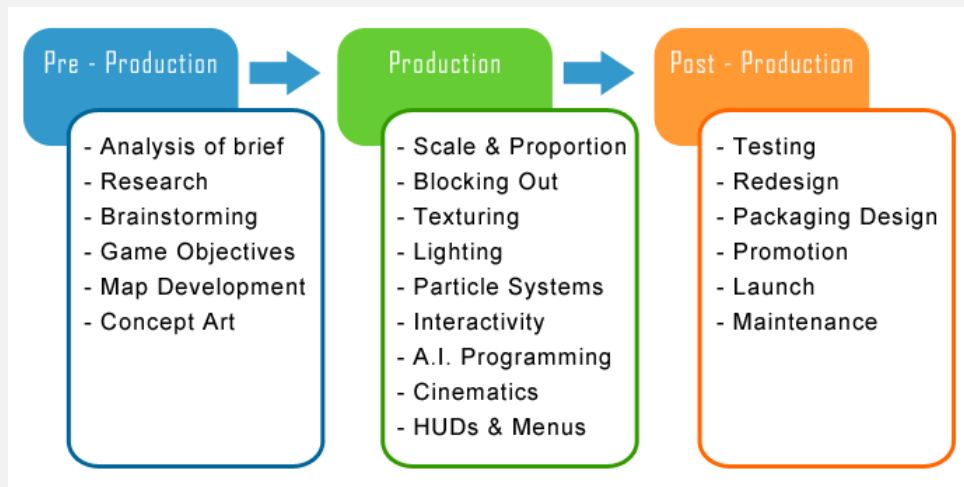
**Pre-production-** asset/code checklists, deciding on overall theme/design

**Production-** find & edit assets, code the game

**Post-Production-** Test for bugs, export to exe, critique with peer for feedback



NO ONE LIKED MY FPS MOD THAT GIVES YOU THREE-SECOND SNIPPETS FROM THE BIOS OF PEOPLE YOU SHOOT.



## Project Guide

-Watch “[Open Game Art/Dropbox](#)” & “[Spriter’s Resource](#)” tutorials.

-Watch “[Video tutorial about lists](#)” and create asset/code list.

### Assets to Find/Edit Sizes (make a list with sizes and what you want them to be):

- ✓ **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 16 x 16 to 96 x 96 depending on how big the asset should be in relation to the character (should it be the same size, smaller, 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 as 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.

-Use “[Sprite Sheets/Animation](#)” tutorial for how to add sprite sheets.

-Use “[Erase a background](#)” tutorial for images with white backgrounds.

-Use “[Detailed Tilesets Tutorial](#)” for background tile sets.

## Platform Tutorials

[Platform Tutorial 1](#) – 17 Min. Adding sprites, objects, and rooms

[Platform Tutorial 2](#) - 10 Min. Origin points, collision masks, adding objects

[Platform Tutorial 3](#) - 29 Min. Movement code

[Platform Tutorial 4](#) - 10 Min. Rewards, enemy, credit screen, and animation

## 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

## Things to Consider

- What genre am I creating?
- Where will the game take place?
- What design style do I want? (pixelated, photo realistic, cartoon, hand drawn, 3D, etc.)

## Sample Asset Checklist → GET THIS DETAILED TO HELP GUIDE YOU.

- ✓ **Level 1 Background**- 32x32 tileset side view- want it to include water and ground. Prefer pixelated.
- ✓ **Menu background** (adjust size to 1024 x 768 in Photoshop – adjust by going to image→image size→ unchecked link symbol. Pixelated to match overall theme.
- ✓ **Main Player**- 32 x 32 – Human character, pixelated.
- ✓ **Reward 1**-32x64 - treasure chest, pixelated.
- ✓ **Reward 2**- 16x16- coin
- ✓ **Reward 3**- 16x16- crown
- ✓ **Platforms**- 32 height x 100 width- pixelated, color to match level 1 background. Unknown until I find that tile set.
- ✓ **Enemy** 32x32, human enemy, pixelated.