

Create a Playable Game

LEARNING GOAL & SCALE: Standard	
4	Student will be successful in level 3 and: Create a final game with advanced features such as a working inventory system, customizable characters, and multiple player choices.
3	Student will: Design and create a playable game. (standard 27.0) ✓ Use a number of computer tools to enhance and ease game programming and artistry. ✓ Use a game engine to create a playable game. ✓ Use animated objects. ✓ Integrate sound and/or music to enhance the game. ✓ Test and debug to game completion.
2	Student will: Define storyboard, test case, architecture chart. Understand the basic requirements involved throughout the game design process.
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 by an indie studio to create a game. The company is giving you specific parameters/requirements but is flexible on level design.



Requirements for your new job:

- Title screen, at least 2 functional levels, and a credit screen.
- Use Unity Engine
- Cohesive design with a central theme that is clearly recognized
- Must use tile sets
- At least two animated objects (enemy & player – can add additional)
- Sound (background music or sounds based on events happening in the game)
- Working game with no major bugs or fatal errors
- MUST BE EXE BUILD FOLDER – NO PROJECT FILES

GRADES WILL BE BASED ON MEETING ALL REQUIREMENTS, DESIGN/STYLE, FUNCTIONALITY, AND ENTERTAINMENT VALUE SO MAKE IT INTERESTING! THE VIDEO PROVIDES EVERYTHING YOU NEED TO CREATE A GAME BUT THE LEVEL DESIGN SHOULD BE YOUR OWN, UNIQUE & CREATIVE

How Do I Begin?

The series provided is just under 6 hours of videos but will take double that while pausing/rewinding/following along. **MANAGE YOUR TIME WELL.** You are being given 10 class periods (roughly 15 hrs) – this will be enough time to finish but only if you work **EVERY SINGLE DAY PROVIDED. It adds up to around 4 videos each day – don't do less and assume you will be okay.**

- Tutorial: <https://www.gamedev.tv/> (use the log in on the top of your monitor). If you are a virtual student contact Dr. Kirk for your at-home log-in.
- Go to “My Courses”(top right)
- Click Complete C# Unity Game Developer 2D Online Course
- Scroll down to “TileVania- 2D Tilemap Platformer”

Time Management

- Fill in the list of videos – **MAKE A PLAN** for each day.
- Complete all tutorials to add code and meet all requirements
- Test, test, test and debug as you go – don't wait until the end
- Turn into EXE ENTIRE BUILD FOLDER and upload to OneDrive (leave OneDrive open at least 15 minutes when you upload)

TileVania Asset Instructions & Tutorial Information

1. Download from OneDrive (TileVania Assets Folder)
2. Once completely downloaded – click “show in folder” or go to downloads to see. Click “Extract All” and choose a save location – DO NOT MAKE THIS LOCATION IN YOUR UNITY GAME BUILD FOLDER. Choose your documents or a flashdrive in a separate location. I usually choose to make a folder called “GameName_Assets” and drop everything in one place.
3. Once extracted you can drag and drop these assets into your game.
4. Standard assets **contain 2d-extras & Crossplatform** if they do not drag/drop properly you can go to “Assets” in Unity – Import Package – Custom Package – then find the location where they are saved.
5. **Organize every asset you bring in by use of folders.**

Cinemachine (DO NOT DOWNLOAD FROM ASSET STORE):

In Unity go to “Windows” – Package Manager – Cinemachine – Install

In video 203: He duplicates levels – to do this press “Ctrl” and drag level with your mouse then you can right click and rename.

Check the TileVania Errors sheet for common errors and additional code I recommend using.