Beginner's Guide to Modding Terraria

Introduction:

Terraria is a 2D survival sandbox game in which players explore, build, and fight enemies. tModLoader is an open-source expansion that enables users to create custom content, enhancing gameplay. This guide provides step-by-step instructions for Terraria players interested in modding, helping them begin their modding journey by creating new items!

List of Parts:

- Terraria (Steam Version) – tModLoader requires the Steam version of Terraria to function.
- tModLoader – Downloadable from Steam
- Integrated Development Environment (IDE) – Visual Studio Code (VS Code) is recommended.
- Basic understanding of C# – While not mandatory, familiarity with C# will enhance beginner understanding.

Hazard Notes:

Please note that running into errors/bugs will be common and that debugging will be necessary for your mod to perform as expected.

Quick Start Guide:

1. Install **tModLoader** from **Steam**.
2. Set up **Visual Studio Code** (VS Code).
3. Generate a **basic mod skeleton** using **tModLoader's** built-in tools.
4. Test the mod by building and reloading it in **tModLoader**.
5. Begin modifying game elements.

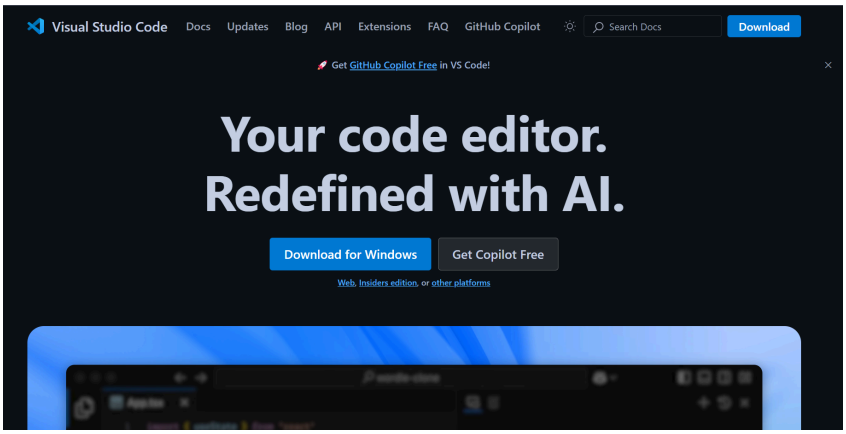
Glossary:

- **tModLoader (TML)** – A modding API for Terraria that allows players to create and install mods.
- **IDE (Integrated Development Environment)** – A software application for writing and debugging code.
- **Mod Skeleton** – The base framework required for creating a Terraria mod.
- **.cs File** – A C# script file where the mod's code is written.
- **Class -** Blueprint used to create objects. Defines properties of said class.

Step-By-Step Instructions:

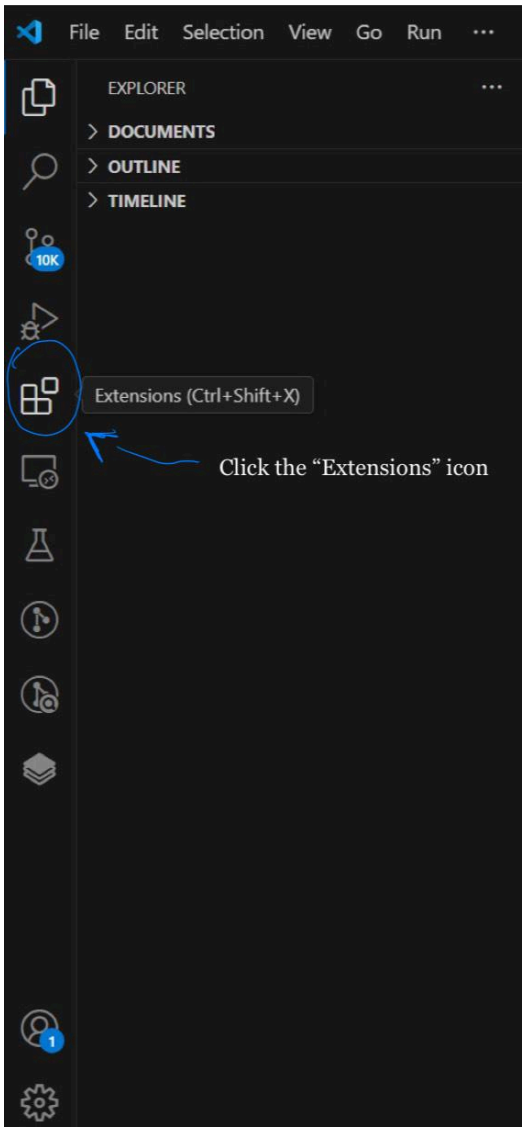
Step 1: Setting Up Your IDE

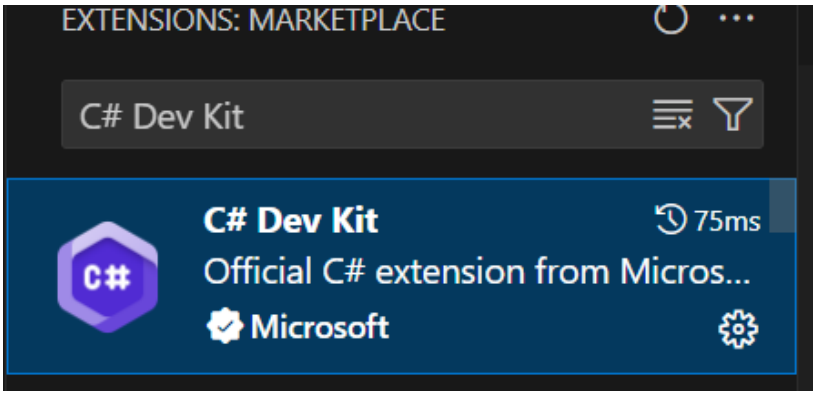
1. Download and install **Visual Studio Code (VS Code)** from Microsoft's website.

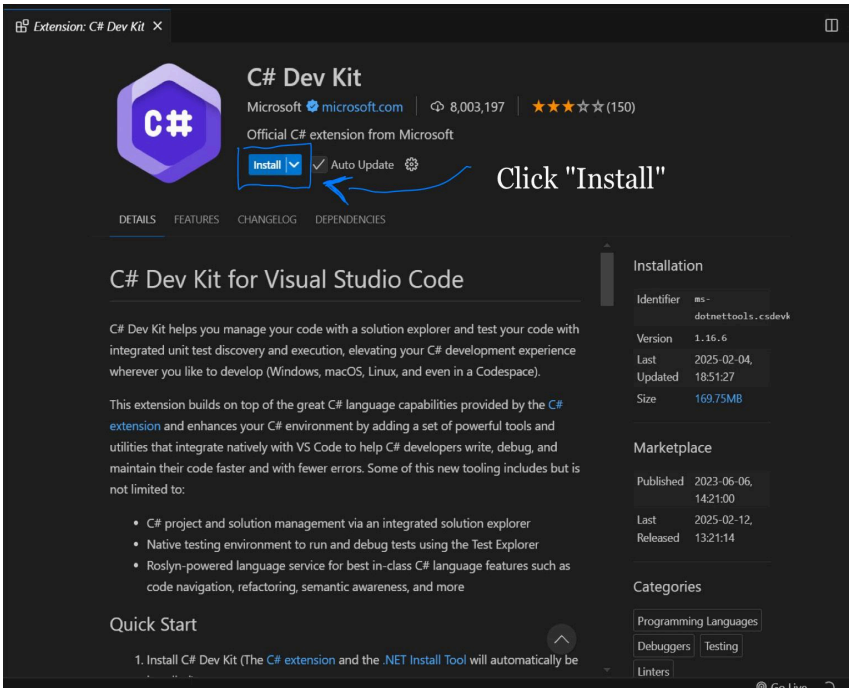


2. After installing VS Code, install the "**C# Dev Kit**" extension to enable C# development.

a. The “**C# Dev Kit**” downloads two extensions: “**.NET Install Tool**”, and “**C#**”. Two extensions that’re necessary for C# development.







Step 2: Generating a Basic tModLoader Mod Skeleton

1. Open **tModLoader** and navigate to **Workshop -> Develop Mods**

2. Click **Create Mod** and enter a **mod name**, **author**, and a "BasicSword" name.
    a. **Although** it says **Leave blank to skip**, since this is a beginner tutorial, we will be using the BasicSword to understand the basics of creating items.

3. Upon selecting **Create Mod**, a folder should open containing 7 files
    a. If this folder does not open, locate your mod's folder in **Documents/My Games/Terraria/tModLoader/ModSources/YourModName**
4. Open the mod folder in VS Code

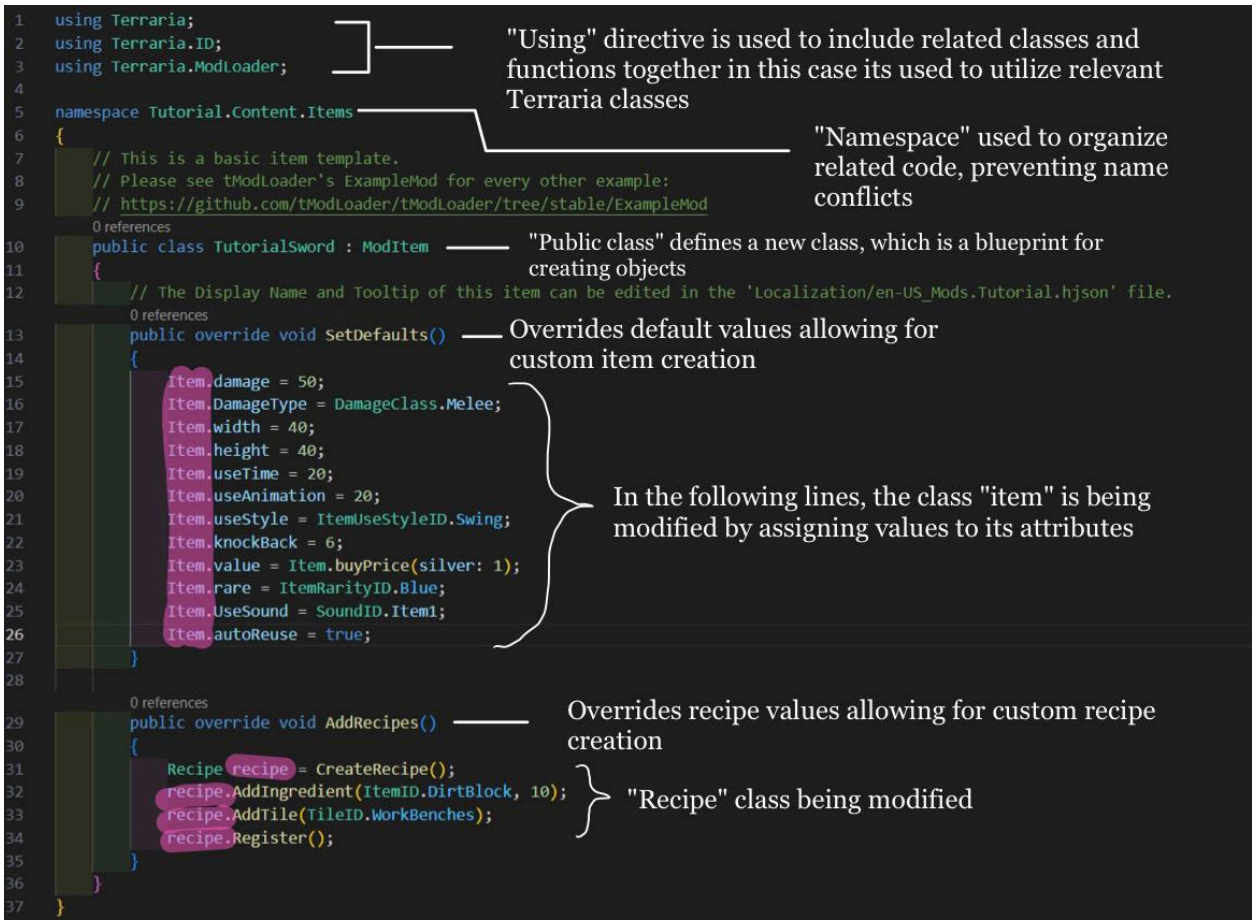
Step 3: Building and Reloading Your Mod

1. Open **tModLoader**, go to **Mod Sources** and select your mod.
2. Click **Build + Reload** to compile and test your mod.

3. Now, load into a world, collect 10 dirt blocks, and using a workbench, see if you can craft your basic sword.
4. If you can, you're set to begin modding!

Step 4. Creating New Items

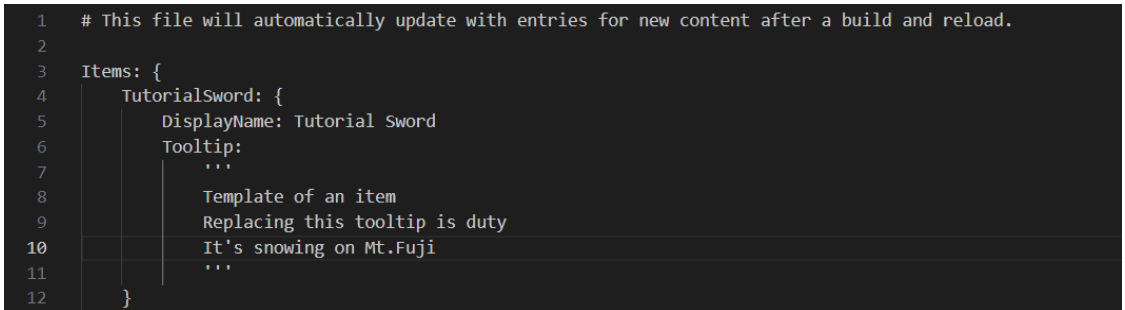
1. Return to VS Code and go to Content/Items/TutorialSword.cs.



This is the code for the Basic Sword!

This describes the sword's statistics like **functionality**, **damage**, **crafting recipe**, and **sell value.** To create a new item, create a new C# file (filename.cs) within Content/Items and follow the template provided!

2. Navigate to the **Localization** file.



This text file (for simplification purposes) defines item data. Once the game loads this file, it reads the item data and displays the items with the data. To add a new item and its respective data, add the item name within the first curly brace outside of “Items:” (Items: {)

Conclusion:

By following these steps, you have created a basic Terraria mod and learned the foundational skills necessary to create new items! As you become more comfortable, you can expand your mod by adding custom weapons, enemies, and game mechanics. For further learning, you can refer to the tModLoader GitHub Guide and Terraria Modding Forums. Make sure to build and reload your mod!