Task 1: Select Your Operating System (OS)

Download and Install Windows 11

Visit the Windows 11 Download Page:

Navigate to Windows 11 Download.

Download the Installation Media:

Click "Download now" under the "Create Windows 11 Installation Media" section.

Run the Media Creation Tool:

Open the downloaded tool and accept the license terms.

Select "Create installation media (USB flash drive, DVD, or ISO file) for another PC" and click "Next".

Choose Your Preferences:

Select the language, edition, and architecture (64-bit) and click "Next".

Select the Media to Use:

Choose "USB flash drive" and click "Next".

Create the Installation Media:

Follow the prompts to create the installation media on your USB drive.

Install Windows 11:

Restart your PC and boot from the USB drive.

Follow the on-screen instructions to install Windows 11.

Task 2: Install a Text Editor or Integrated Development Environment (IDE)

Download and Install Visual Studio Code

Visit the Visual Studio Code Download Page:

Navigate to Visual Studio Code Download.

Download the Installer:

Click on the download link for Windows to download the installer.

Run the Installer:

Open the downloaded file and follow the installation prompts.

Accept the license agreement and choose the installation location.

Select additional tasks (e.g., adding VS Code to PATH) and click "Next".

Click "Install" to complete the installation.

Task 3: Set Up Version Control System

Install Git and Configure It on Your Local Machine

Install Git:

Go to Git Downloads and download the installer for Windows.

Run the installer and follow the installation prompts, choosing default options.

Configure Git:

Open Git Bash and run the following commands to configure your Git username and email:

git config --global user.name "Your Name"

git config --global user.email "your.email@example.com"

Create a GitHub Account and Host Repositories

Create a GitHub Account:

Go to GitHub and sign up for a new account.

Initialize a Git Repository:

Navigate to your project directory in Git Bash:

cd /path/to/your/project

Initialize a Git repository:

git init

Add your files to the staging area:

git add .

Commit your files:

git commit -m "Initial commit"

Push to GitHub:

Create a new repository on GitHub and copy the repository URL.

Add the remote repository and push your changes:

git remote add origin https://github.com/your\_username/your\_repository.git

git push -u origin main

Task 4: Install Necessary Programming Languages and Runtimes

Install Python

Visit the Python Download Page:

Navigate to Python Downloads.

Download the Installer:

Click on the download link for the latest version of Python for Windows.

Run the Installer:

Open the downloaded file and check the box to add Python to PATH.

Click "Install Now" and follow the installation prompts.

Task 5: Install Package Managers

Install pip for Python

Ensure pip is Installed:

pip is included with Python installations. Verify the installation:

pip --version

Upgrade pip:

Run the following command to upgrade pip:

python -m pip install --upgrade pip

Task 6: Configure a Database (MySQL)

Download and Install MySQL

Visit the MySQL Download Page:

Navigate to MySQL Installer.

Download the Installer:

Choose the appropriate installer and download it.

Run the Installer:

Open the downloaded file and follow the installation prompts.

Choose the "Server Only" option if you only need the MySQL server.

Follow the configuration steps, including setting the root password and default server settings.

Task 7: Set Up Development Environments and Virtualization (Optional)

Install Docker

Visit Docker Desktop Download Page:

Go to Docker Desktop and download Docker for Windows.

Run the Installer:

Open the downloaded file and follow the prompts to install Docker.

Set Up a Virtual Machine

Install VirtualBox:

Go to VirtualBox and download the installer.

Run the installer and follow the prompts to install VirtualBox.

Set Up a Virtual Machine:

Open VirtualBox and create a new virtual machine.

Follow the prompts to install the desired operating system and configure the environment as needed.

Task 8: Explore Extensions and Plugins

Explore and Install Extensions for Visual Studio Code

Open Visual Studio Code:

Open VS Code and go to the Extensions view by clicking the Extensions icon in the Activity Bar or by pressing Ctrl+Shift+X.

Search for Extensions:

Search for extensions that enhance your workflow. Examples include:

Python: ms-python.python

Prettier - Code Formatter: esbenp.prettier-vscode

GitLens: eamodio.gitlens

Install Extensions:

Click the Install button for the extensions you want to add.