

## **Documenting My Setup**

### **A) SELECT YOUR OPERATING SYSTEM (OS)**

Here are the steps I followed to download and install Windows 11

#### **1. Checking system Requirements**

Before downloading Windows 11, I ensured that your PC meets the minimum system requirements. Key requirements include a compatible processor, sufficient RAM and storage space, DirectX 12 compatible graphics, and TPM version 2.0.

#### **2. Backing up important data**

I backed up data using an external hard drive, cloud storage, as it's always a good practice to back up your important files and data before installing a new operating system.

#### **3. Downloading Windows 11 ISO File**

I visited the official Microsoft website to download the Windows 11 ISO file (<https://www.microsoft.com/software-download/windows11>)

#### **4. Creating a bootable USB Drive**

After downloading the Windows 11 ISO file, I used a Windows USB/DVD Download Tool to create a bootable USB drive with the ISO file. Inserted a USB flash drive (with at least 8GB of storage) into my computer, selected the ISO file, and followed the tool's instructions to create the bootable drive.

#### **5. Accessing BIOS/UEFI Settings**

I restarted my computer and accessed the BIOS or UEFI settings.

#### **6. Change Boot Order**

In the BIOS/UEFI settings, navigated to the Boot or Boot Order section. Changed the boot priority so that the computer boots from the USB drive first. I saved the changes.

#### **7. Install Windows 11**

Restarted my computer with the bootable USB drive inserted. Windows 11 setup began automatically. I followed the on-screen instructions to select language, region, keyboard layout, and

other preferences. I chose "Custom Install" when prompted to select the installation type. Then selected the drive where I want to install Windows 11 and proceed with the installation.

#### 8. Completing Installation

Windows 11 was installed on my computer. Followed additional prompts during the installation process, such as creating a user account, setting up network preferences, and configuring privacy settings.

#### 9. Finalizing the Setup

Once the installation was complete, the computer restarted. I then removed the bootable USB drive and boot into my newly installed Windows 11 operating system. Completed the setup by signing in with my Microsoft account, configuring system settings, and installing necessary drivers and software.

#### 10. Updating Drivers and Software

After installing Windows 11, I ensured that all drivers (graphics, audio, network, etc.) are up to date. Additionally, I installed essential software and programs to enhance my Windows 11 experience.

### **B. INSTALL A TEXT EDITOR OR INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)**

Steps taken

- a. Install Visual Studio Code (VS Code) from <https://code.visualstudio.com/>
- b. Install the necessary extensions for your chosen programming language (e.g., Python, Java, C)
- c. Configure the editor settings to your liking (e.g., theme, font, layout)

Detailed steps on my github repository below

<https://github.com/ama-lyn/se-assignment-5-ama-lyn>

## C. SET UP VERSION CONTROL SYSTEM

*Steps taken to install git and configure it to my local machine*

### a) Download Git

- Go to the official Git website: <https://git-scm.com/downloads>.
- Click on "Windows" to download the Git installer.

### b) Run the Installer

- Locate the downloaded .exe file and run the installer.
- Follow the installation prompts.

Some key options to consider:

- Select Components: Ensure Git Bash is checked
- Choosing the default editor used by Git: select VS
- Adjusting your PATH environment

### c) Finish the Installation

Click "Next" through the remaining steps and then "Install".

### d) Verify the Installation

Open Git Bash

Type `git --version` and press Enter.

You should see the installed Git version.

### e) Configure Git

Open Git Bash.

Set your username: `git config --global user.name "Your Name"`.

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

*Created a GitHub account for hosting my repositories*

~ username ama-lyn

*Initialized a Git repository for my project and make your first commit*

Sample git repo <https://github.com/ama-lyn/se-assignment-5-ama-lyn>

## D. INSTALL NECESSARY PROGRAMMING LANGUAGES AND RUNTIMES

### *Steps to Download and Install Python on Windows*

#### *Step 1: Download Python Installer*

Open your web browser and go to Python's official download page.

You will see a button for the latest version of Python. Click the Download Python <version> button to download the latest version.

#### *Step 2: Run the Installer*

Find the downloaded installer file (python-<version>.exe) in your downloads folder and double-click it to run.

Check the box that says Add Python to PATH at the bottom of the installer window. This will allow you to run Python from the command line.

Click on Customize installation for additional options.

#### Customize Installation

Ensure that all optional features are checked, including pip, tcl/tk, IDLE, documentation, debug binaries, and for all users (requires elevation).

Click Next.

#### Advanced Options:

Check the following options

- ✧ Install for all users
- ✧ Associate files with Python
- ✧ Create shortcuts for installed applications
- ✧ Add Python to environment variables
- ✧ Precompile standard library
- ✧ Click Install.

#### *Complete the Installation*

Wait for the installation to complete. This may take a few minutes.

Once the installation is finished, click Close.

### *Step 3: Verify the Installation*

Open Command Prompt.

Check Python Version: In the Command Prompt, type `python --version` and press Enter.

You should see the installed Python version displayed.

Check pip Version: In the Command Prompt, type `pip --version` and press Enter.

You should see the installed pip version displayed.

### *Step 4: Install Necessary Packages*

Using pip: You can now use pip to install any necessary Python packages for your project.

## **E. INSTALL PACKAGE MANAGERS**

If applicable, install package managers like pip (Python).

## **F. CONFIGURE A DATABASE (MySQL)**

### ***Step 1: Download MySQL Installer***

- Visit the MySQL Download Page
- Choose Your Installer
  - a) You will see two installer options:
  - b) Web (smaller, downloads only the necessary files during installation).
  - c) Full (larger, contains all installation files).
  - d) For this guide, select the Full installer to ensure you have everything you need.
  - e) Click on the Download button.
- Start the Download
- Save the installer file to your desired location on your computer.

### ***Step 2: Install MySQL***

- Run the Installer: Locate the downloaded installer file (`mysql-installer-community-<version>.msi`) and double-click it to run.
- Setup Type: Choose the setup type, Developer Default is recommended as it installs MySQL server, MySQL Workbench, and other useful tools.

- Check Requirements: The installer will check for any missing dependencies or requirements. If any are missing, the installer will prompt you to install them. Follow the prompts to install the necessary dependencies.

- Click Next once all requirements are met.

- Installation: The installer will list all the products that will be installed. Click Execute to begin the installation. Wait for the installation to complete. This may take a few minutes.

- Configuration: After the installation, the Product Configuration screen will appear. Click Next to start configuring MySQL.

### *MySQL Server Configuration*

#### *Type and Networking*

- ✧ Select the Standalone MySQL Server option.
- ✧ Use the default port (3306) unless you have a specific requirement to change it.
- ✧ Click Next.

#### *Authentication Method*

- ✧ Choose the authentication method. Use Strong Password Encryption is recommended for better security.
- ✧ Click Next.

#### *Accounts and Roles*

- ✧ Set a strong password for the root account.
- ✧ Optionally, create additional user accounts with specific roles.
- ✧ Click Next.

#### *Windows Service*

- ✧ Configure MySQL server to run as a Windows service for automatic startup.
- ✧ Optionally, add the MySQL server to the Windows PATH environment variable.
- ✧ Click Next.

### *Apply Configuration*

✧ Click Execute to apply the configuration settings.

### *Installation Complete*

Once the configuration is applied, click Finish.

### ***Step 3: Verify the Installation***

#### Open MySQL Workbench

MySQL Workbench should have been installed during the process. Open MySQL Workbench from your start menu or desktop shortcut.

#### Connect to MySQL Server

Click on the Local instance MySQL connection (or create a new connection if it does not exist).

Enter the root password you set during the installation.

Click OK to connect.

#### Verify Connection

If the connection is successful, you will see the MySQL Workbench dashboard with the connected server.

#### Run a Test Query

In MySQL Workbench, click on the SQL icon to open a new query tab.

Run a simple query like `SELECT VERSION();` to verify that MySQL is working correctly.

You should see the MySQL version in the results pane.

## **G. EXPLORE PLUGINS AND EXTENSIONS**

Exploring available extensions, plugins, and add-ons for your chosen text editor or IDE to enhance functionality, such as syntax highlighting, linting, code formatting, and version control integration.

Refer to Assignment 5 ~<https://github.com/ama-lyn/se-assignment-5-ama-lyn>