VISUAL STUDIO CODE (PYTHON) INSTALLATION GUIDE FOR CHROMEBOOKS

Technology/Software used in Computer Science Principles

Description

New for the 24-25 school year, schools can use Linux on Chromebooks to install Visual Studio Code. Provided are instructions on how to install on a single machine with Admin Rights to make changes. At this time, we do not have instructions on mass installation or details on how to deploy from Google Admin. Please be mindful of your own security systems, policies and procedures if you choose to use Visual Studio Code for Chromebook, rather than a Windows or Mac Environment.

Requirements

- A Chromebook that has not reached End of Life updates
    - Auto Update Policy
    - Check your Chromebook's update schedule
- At least 12GB available disk storage
- Chrome OS 64-bit

## Procedure: Install Linux, Visual Studio Code (VS Code), and Python

1. When booting the Chromebook (for the first time or if asked to update), update the Chromebook to the latest version. This may require you to restart the Chromebook.

   Note: Google's Chromebook policy is to automatically check for updates.

2. Open **Settings**, search for "linux". If a "Linux development environment" is installed, select **Remove**.

3. In Settings, search for "chrome os". Select **Check for Updates** and update. This will likely cause the Chromebook to restart.

4. In Settings, search again for "linux." **Set up** and **Install** the Linux development environment. The minimum size for the environment is 10GB.

5. When Linux successfully installs, a terminal window will appear. Note: If the terminal shows a list of options, select **penguin**.
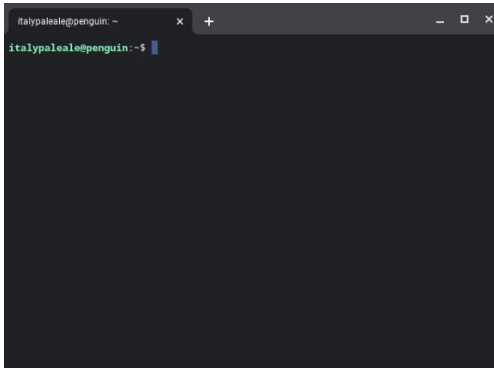
6. Recommended: Right-click on the terminal icon in the shelf and **Pin to Shelf**.

7. In the terminal, enter the following commands to update Linux packages:

```
sudo apt update
sudo apt -y install gnome-keyring
```

8. Determine the type of CPU on your Chromebook:

```
dpkg --print-architecture
```

9. On the Download Visual Studio Code - Mac, Linux, Windows page, select the installation file for your Chromebook architecture.

   • For amd64, select Debian Ubuntu **.deb x64**.
   • For arm64, select Debian Ubuntu **.deb Arm64**.

   After selecting the installation file, the download will automatically begin, and the browser will automatically navigate to a new page "Getting Started with Visual Studio Code."

10. Open your Downloads folder and double click the *.deb* file and **Install VS Code**. When complete, the VS Code icon will appear in the Shelf and Launcher.

11. Recommended: Right-click on the VS Code icon in the shelf and Pin to shelf.

   For more details, please visit Learning with VS Code on Chromebooks.

Install Python and Python Libraires

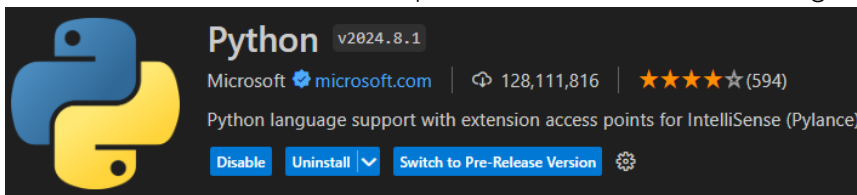12. In a Linux/Penguin terminal, enter the following command.

```
sudo apt -y install python3-pip python3-dev python3-venv
build-essential libssl-dev libffi-dev python3-pygame
python3-matplotlib python3-pandas
```

13. Start VS Code and select the **Extension** option in the left menu.

14. Search for "Python" distributed by Microsoft and select **Install**.

    Once installed, the extension panel should show something similar to:

    Python v2024.8.1
    Microsoft ✔ microsoft.com | ⏷ 128,111,816 | ★★★★☆ (594)
    Python language support with extension access points for IntelliSense (Pylance),
    Disable **Uninstall** ⌄ **Switch to Pre-Release Version** ⚙

15. Follow the onscreen instructions if you are asked to restart VS Code.

Test Python

16. In VS Code, select **File > New Text File**.

17. Copy and paste the following program to the new file.

```
print("Hello world!")
```

18. Save the program as *hello_world.py* in the default folder.

19. Select **Run > Run Without Debugging**. You should see output that includes the text "Hello world!" in the VS Code TERMINAL panel.

20. Create a **New Text File.**

21. Copy the *hello_world2* program to the new file and **Save** to a local file as *hello_world2.py*.

```
import PIL
import pygame
import matplotlib
import pandas

print("hello world 2")
```

22. Right-click on the *HelloWorld2* program in VS Code and select **Run**. The output may take a few minutes to appear.

Throughout the School Year

When students download files to use in VS Code, they must move them to Linux Files.