

## COMP 9782 Programming Fundamentals

**Lab-1-1 - Web development tools setup and Network software / techniques practice. (4% of the course mark)**

Name:

Student Number:

This lab is designed to give you practical, hands-on experience in installing tools required for web development. Throughout this lab, you are also going to be executing network software / techniques that the instructor has demonstrated in class.

### **Lab objectives:**

1. Familiarize yourself with the tools and software related to Web development.
2. Apply theoretical knowledge to real-world scenarios.
3. Foster a deeper understanding of Web development through active participation and experimentation.

### **Lab Prerequisite:**

1. **Download** and **extract** the **Lab-1-1.zip** file from **D2L**.
2. **Navigate** to the **directory** where the **files** were **extracted**.
3. **Rename** the **HTML** file and **append** your **first name** and **last name** at the **beginning** of the file.

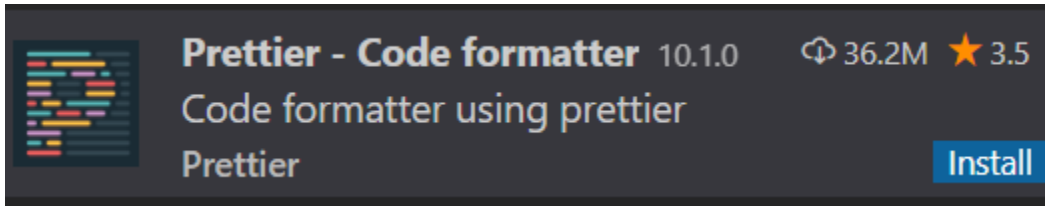
### **Visual Studio Code Installation:**

1. Navigate to: <https://code.visualstudio.com/#alt-downloads>
2. Download and install the version based on your **Operating System**.
3. Capture a screenshot showing the **version** of **Visual Studio Code** by clicking **Help > About**. Save it with the name **VisualStudioCode01.png**.

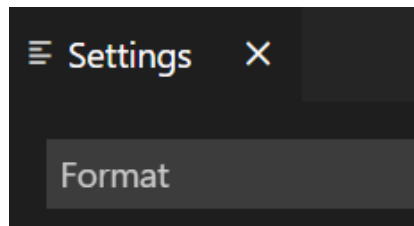
4. Install the **Prettier** extension.



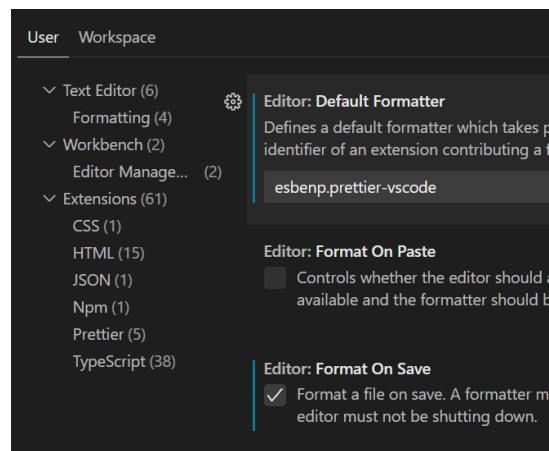
- a. Click on the extension icon.
- b. On the Extension Marketplace enter: **Prettier**.



- c. Click on **Install** to install the extension.
  - d. Capture a screenshot showing the **Prettier extension** was **installed** save it with the name **VisualStudioCode02.png**.
5. Configure the **Prettier** extension.
    - a. Click on **File > Preferences > Settings**.
    - b. Type **Format** and press enter.



- c. Set the **Default Formatter** to **Prettier**.
- d. Choose **Format On Save**



- e. Capture a screenshot of the settings save it with the name  
**VisualStudioCode03.png**

#### **IP Address Lookup:**

1. **Navigate** to: <https://www.iplocation.net/ip-lookup>
2. Scroll down until “**Geolocation data from IP2Location**” is visible.
3. Check the **ISP information**, does it match your **ISP vendor**?
4. Capture a screenshot showing the “**Geolocation data from IP2Location**”. The captured screenshot should be named **IPAddressLookup.png**.

#### **Domain Name Lookup:**

1. **Navigate** to: <https://www.site24x7.com/tools/find-ip-address-of-web-site.html>
2. Enter a **domain name** of your choice and click on **Find IP**.
3. Capture a screenshot showing the IP address found. The captured screenshot should be named **DomainNameLookup.png**.

#### **Online Traceroute:**

1. Navigate to: <https://traceroute-online.com/>
2. Enter a **domain name** of your choice and click on **Traceroute!**
3. How many hops before it reached the destination? Capture a screenshot showing the number of hops. The captured screenshot should be named **OnlineTraceroute.png**.

#### **HTML coding:**

1. **Copy all** saved **screenshots** to the **same folder** as the **renamed HTML file**.
2. Open the renamed HTML file via VSCode.
3. For **each screenshot** enter a **short description** using a **<p>** tag and an **<img>** tag with the **src** equal to the **screenshot file name**.