

IBM **Accelerator**  
Talent Identification Program

*Week 1: Frontend Technology Introduction*  
*Pre-session Materials*

## Required Software and Tools

This is the required software needed to complete the week 1-5 labs and assignments.

- **Install Vscode** <https://code.visualstudio.com/download>
- **Install Node** <https://nodejs.org/en/download/>
  - See link for detailed step by step for mac and windows install <https://kinsta.com/blog/how-to-install-node-js/> or watch the YouTube video provided here [Install node on windows10](#)
- **Install NPM:**
  - Run the installation in the terminal command prompt:  
npm install.
- **Install Material UI** copy and paste this command in your terminal:  

```
npm install @mui/material @emotion/react @emotion/styled
```

For more information, see [link](#)
- **Install Git** for macOS, windows and Linux <https://git-scm.com/downloads>
  - For Mac, follow the Homebrew instruction.

## Getting Started with GitHub

This document provides information on how to get started with GitHub, which is a provider of Internet hosting for software development and version control using Git. To leverage your experience and facilitate the management of assignments, we are using GitHub in combination with GitHub Classroom.

GitHub Classroom tracks and manages assignments in your dashboard, grade work automatically and help students when they get stuck --all while using GitHub, the industry-standard tool developers use.

## Creating your GitHub Personal Account

You can create a personal account, which serves as your identity on GitHub.com, or an organization, which allows multiple personal accounts to collaborate across multiple projects.

For the purpose of working with the IBM Accelerate assignments, you can choose GitHub Free for personal accounts.

1. Go to: <https://github.com/>
  - If you want to create a new personal account, make sure you are currently signed out of GitHub.
1. Click on **Sign up for GitHub**.
2. Follow the prompts to create your personal account or organization.
  - Enter your email.

- Create a password.
  - Enter a username.
  - Click on **Continue**.
  - Select your preference for product updates and announcements. For example: "n"
  - Click on **Continue**.
1. Verify your account.
  2. Click on **Create account**.
  3. Check your email and enter the verification code. You can also click the link inside the verification email to start using GitHub.
  4. You can start using GitHub.

## Generating a New SSH Key and Adding it to the SSH-Agent

Follow the steps described [here](#) to avoid being prompted for a username and password (personal access token) when working with Git.

## Additional Information

Below is a list of helpful resources that would help you prepare for the upcoming lectures, labs, and assessments. \*You are not required to go through all these guides and tutorials, but they are provided to help you throughout the program if needed.

- Introduction to HTML and CSS [video](#)
- HTML Syntax Guide: [https://www.w3schools.com/html/html\\_intro.asp](https://www.w3schools.com/html/html_intro.asp)
- CSS Syntax Guide: <https://www.w3schools.com/css/default.asp>
- JavaScript Syntax Guide: <https://www.w3schools.com/js/default.asp>
- Github Cheat Sheet: <https://education.github.com/git-cheat-sheet-education.pdf>
- React Introduction: <https://react.dev/learn>

## Common Terminal/Command Prompt Commands

Throughout the Accelerator Program, you will be interacting with a Linux based terminal or Windows' command prompt depending on your machine. Here are some common commands that you may find useful while completing the labs.

- Linux - <https://www.guru99.com/linux-commands-cheat-sheet.html>
- Windows - <https://serverspace.us/support/help/windows-cmd-commands-cheat-sheet/>

| Linux Commands<br>(git Bash)     | Windows Commands<br>equivalent (cmd)             | Description  |
|----------------------------------|--|--|
| ls                               | dir  | Lists all files and directories in the present working directory                           |
| cd or cd ~                       | cd or cd ~                                       | Navigate to HOME directory   |
| cd ..                            | cd ..  | Move one level up  |
| cd                               | cd   | To change to a particular directory  |
| cd /                             | cd \   | Move to the root directory   |
| cat > filename                   | type > filename                                  | Creates a new file   |
| cat <filename>                   | type <filename>                                  | Displays the file content  |
| mv <filename> <new file path>    | Move <filename> <new file path>                  | Moves the files to the new location  |
| mv <filename><br><new_file_name> | ren <filename><br><new_file_name>                | Renames the file to a new filename   |
| sudo                             | Open <i>run-as-administrator</i> command prompt. | Allows regular users to run programs with the security privileges of the superuser or root |
| rm <filename>                    | del <filename>                                   | Deletes a file   |
| clear                            | cls  | Clears the terminal  |
| mkdir <directoryname>            | md <directoryname>                               | Creates a new directory in the present working directory or at the specified path          |
| rmdir or rm                      | rmdir  | Deletes a directory  |
| mv                               | move   | Renames a directory  |