Computational Skills – Task 4

When working with Github, VS Code, and other development tools, there are a range of technical issues that developers may come across. These can include issues with installation, setting up accounts, configuring compilers and IDEs, identifying errors, and debugging.

The installation process can sometimes be tricky, particularly for those who are not familiar with it. Problems that may arise during installation include compatibility issues with the operating system, missing dependencies, and incorrect configurations. To overcome these problems, it is important to ensure that the developer is using the latest version of the tool they are trying to install, and that their operating system is up-to-date. They should also make sure they have all the necessary dependencies in place before installing.

Once the development tool is installed, the next step is usually to set up an account. This can include creating a new account, logging into an existing account, or linking the tool to an existing account such as Github. Developers may experience issues with setting up accounts, such as not being able to log in due to incorrect login details, or not being able to link the tool to an existing account due to a lack of permission. To overcome these issues, developers should ensure they have the correct login details and that they have the necessary permission to link the tool to their existing account.

After setting up an account, the developer will typically need to configure their compiler and IDE. This can include setting up paths, adding extensions, and configuring settings. Problems that may arise during this process include incorrect paths, extensions that don't work as expected, and settings that don't apply correctly. To overcome these issues, developers should ensure they are following the correct instructions for configuring the compiler and IDE and that they are using the correct settings. They should also ensure they have the latest version of the extension they are trying to use and that it is compatible with the version of the tool they are using.

After the compiler and IDE are configured, the developer will then start coding. During this process, they may come across errors that need to be identified and fixed. These errors can include syntax errors, semantic errors, and logic errors. Identifying errors can be challenging, particularly for new developers who may not be familiar with the tool or the programming language they are using. To overcome these issues, developers should ensure they are familiar with the tool and the programming language they are using and make use of the built-in debugging tools provided by the tool.

Finally, once errors are identified, the last step is to debug the code. Debugging can be a difficult task, particularly for complex applications. Issues that may arise during debugging include not being able to reproduce the error, not being able to identify the cause of the error, and not being able to fix the error. To overcome these issues, developers should ensure they are familiar with the debugging tools provided by the tool and have a good

understanding of the code they are working with. They should also use breakpoints and other debugging tools to isolate the problem and fix the error.

In conclusion, when working with Github, VS Code, and other development tools, developers may come across a range of technical issues. These can include issues with installation, setting up accounts, configuring compilers and IDEs, identifying errors, and debugging. Developers should ensure they are familiar with the tool and the programming language they are using and make use of the built-in debugging tools provided by the tool to overcome these issues.

I found myself running into an array of problems I needed to overcome since beginning my journey into the world of computer science and regularly finding myself on random reddit threads and YouTube videos of random people who have also faced the same basic issues with granting permissions on my Macbook to even allow me to use github and VS code on my desktop as opposed to using the web browser-based IDEs.

This has taught me that part of what makes computer science exciting is the problem-solving element and the feeling that comes with finally understanding why your code isn't compiling was simply because you misspelt a word in the header file, or simply didn't have the correct header file in the first place or missing a closed bracket on a random line.

I have faced issues every step of the way and I enjoy the learning process from complete novice to hopefully one day an expert in this field. Starting out I didn't even know what a computer terminal was or how to navigate it. It was exciting typing my first "cd desktop" And proceeding with "ls" and seeing all my files on my desktop via my terminal. Made me feel like Neo in the first matrix chasing the white rabbit's foot.