

Operating Systems

CMPT 424

-Lab 1

Goals	Adding Shell Commands This approximately one-hour active learning exercise will help you make progress on the practical aspects of developing your operating system.
Instructions	<ol style="list-style-type: none">1. Open up shell.ts in your development environment.2. Look at the existing commands and how they are implemented.3. Enhance the shellMan function so that your OS's man function works better than Alan's. This is a nice way to get familiar with the code.4. Add new commands as specified in your Issues and <i>iProject 1</i>. Demonstrate programming best practices or Alan will get bitchy. You won't like him when he's bitchy.5. Test everything.6. Test again.7. Keep testing. Seriously.8. Read chapters 2.2 and 21.8.2 in the 8th edition of our text.
Questions	Make a commitment to serious computer science and write up your answers in LaTeX. Commit both the .tex source and the compiled .pdf of with answers to GitHub. <ol style="list-style-type: none">1. What are the advantages and disadvantages of using the same system call interface for manipulating both files and devices?2. Would it be possible for the user to develop a new command interpreter using the system call interface provide by the operating system? How?
Resources	<ul style="list-style-type: none">• http://www.typescriptlang.org• https://www.jetbrains.com/help/webstorm/typescript-support.html• https://www.sitepen.com/blog/2013/12/31/definitive-guide-to-typescript/• https://www.sharelatex.com/read/njjbdtyntsc
Grading	Your work on this lab will contribute to your grade for <i>iProject 1</i> .
Submitting	Commit your work to your private GitHub account in an appropriately-named folder. Make sure to tag your commit messages with the Issue number they address.