

# Operating Systems

CMPT 424

## -Lab 1

Goals	<b>Adding Shell Commands</b> This active learning exercise will help you make progress on the practical aspects of developing your operating system.
Instructions	<ol style="list-style-type: none"><li>1. Open up shell.ts in your Codespace or development environment.</li><li>2. Look at the existing commands and how they are implemented.</li><li>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.</li><li>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.</li><li>5. Test everything.</li><li>6. Test again.</li><li>7. Keep testing. Seriously.</li><li>8. Read chapters 2.2 and 21.8.2 in the 8<sup>th</sup> edition of our text.</li></ol>
Questions	Make a commitment to serious computer science and write up your answers in LaTeX. Commit both the .tex source and the compiled .pdf with answers to GitHub. <ol style="list-style-type: none"><li>1. What are the advantages and disadvantages of using the same system call interface for manipulating both files and devices?</li><li>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?</li></ol>
Resources	<ul style="list-style-type: none"><li>• <a href="http://www.typescriptlang.org">http://www.typescriptlang.org</a></li><li>• <a href="https://www.jetbrains.com/help/webstorm/typescript-support.html">https://www.jetbrains.com/help/webstorm/typescript-support.html</a></li><li>• <a href="https://www.sitepen.com/blog/2013/12/31/definitive-guide-to-typescript/">https://www.sitepen.com/blog/2013/12/31/definitive-guide-to-typescript/</a></li><li>• <a href="https://www.sharelatex.com/read/njjbdtyntksc">https://www.sharelatex.com/read/njjbdtyntksc</a></li></ul>
Grading	Your work on this lab will contribute to your grade for <i>iProject 1</i> .
Submitting	Commit your work to your <b>private</b> GitHub account in an appropriately-named folder. Make sure to tag your commit messages with the Issue number they address.

