

# Database Systems

CMPT 308

## - Lab 1: PostgreSQL - 20 points

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| Goals        | <ul style="list-style-type: none"><li>• Install PostgreSQL and pgAdmin4.</li><li>• Practice getting around in the PostgreSQL and pgAdmin environments.</li><li>• Practice getting around in and using GitHub.</li><li>• Explain some key concepts we covered in class.</li><li>• Get some easy lab points.</li></ul>  |
| Instructions | <ol style="list-style-type: none"><li>1. Download PostgreSQL from <a href="http://www.postgresql.org">http://www.postgresql.org</a> and install it on your computer.</li><li>2. Short essay: Data vs. Information - Select a database in use today (real or imagined) and identify the elements of “data” stored therein and describe how the database organizes the “data” into “information”. Give contrasting examples of “data” and “information” that illustrate the meaninglessness of “data” without context and organization. Talk about the value the “information” provides once the component data is given context.</li><li>3. Short Essay: Data Models - Briefly describe the hierarchical and network pre-relational data models. Explain their shortcomings in relation to the relational model. Considering this, what do you think of XML as a model for data storage?</li></ol> |
| Resources    | <ul style="list-style-type: none"><li>• Chapter 9.1-2</li><li>• PostgreSQL - <a href="http://www.postgresql.org">http://www.postgresql.org</a></li><li>• Installation guides - <a href="https://wiki.postgresql.org/wiki/Detailed_installation_guides">https://wiki.postgresql.org/wiki/Detailed_installation_guides</a></li></ul>  |
| Submitting   | <p>Take a screen shot of the pgAdmin tool up and running on your computer. Be creative as to how you will show that it’s on your computer. Submit the screen shot and your essays as a PDF document. (Only PDFs will be accepted. Seriously.)</p> <p>Push your work to your GitHub repository <b>before</b> the due date (see syllabus). Remember to include your name, the date, and the assignment in the (copious, meaningful, and accurate) check-in messages. Then e-mail Alan the url of your GitHub repository.</p>  |

