CMPT 436 Project

General

- Goal: Explore a technology related to the class in greater detail
  - E.g. WebServices
- Project work should be equivalent to 2 assignments
- Project should be completed within 1 month
- Deadline - 1st of December
  - Submit 2 page report (pdf file)
    - ½ page = Detailed description of experiment setup
    - ½ page = Detailed description of experiments
    - 1 page = Presentation of key results and conclusions
  - Submit link to 10 minute video presentation of your project
    - Explain in the presentation
      - Goals,
      - Experimental setup,
      - experiments,
      - results & conclusion

Evaluation

- 25% experimental setup
- 25% experiments
- 50% explanation of results & conclusions

Projects

- 2 Options:
  - Standard project -> compare REST and SOAP performance
    - This is the recommended project
    - Single person project
  - Own project
    - You can choose to work on something else
      - Need to have instructor approval
        - Need to have short description of project
        - Need to outline goals & experiments
        - Need to demonstrate that you can complete project within time frame
      - N people can be on this project

Standard Project - WebServices

- Select a SOAP & REST platform
  - E.g. the ones shown in class
- Define an experimental setup
  - Load Generator (one machine)
  - WebService host
  - Different machines e.g. docker playground, own machine …
- Define experiments
  - Test behaviour based on arrival rates, data types, data volume,
  - Rerun experiments at least 3 times
  - Explore how to handle network and node failures
  - Explore Scalability
- Write report
  - Present results in a graph/spreadsheet
    - Throughput, overhead
    - How to connect N clients
    - Discuss strength and weaknesses of SOAP and REST
    - When would you use SOAP/REST

Your Own Project

- Example
    - Cloud Computing
        - Explore how to use cloud-services from google, amazon, azure, ..
    - Mobile Apps
        - Explore alternatives to Xamarin OR explore advanced features of Xamarin
    - IoT
        - Build a IoT applications e.g. watering plants
    - ….
- Come and see me as soon as possible to discuss your project
    - Identify number of people working on it
    - Identify goals, setup, experiments, …