CSCI 2963-01 Open Source Software

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Licensing

- Our Lecture Slides have greatly benefited from the previous classes taught by Dr. William Shroeder and Dr. Luis Ibanez at RPI

- Also thanks to Dr.TV Raman for helping me understand the critical issues.

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Overview

- Course Objectives

- Course Content

- Reading List

- Grading

Course Objectives

- Familiarize with Open Source Software Development

- Reading and Understanding "Good" Code

- Patch an existing Open Source Project

- Work on a team Project

- Aware of team dynamics including diversity issues

Course Objectives (contd)

- Be knowledgeable in at least one software stack.

- Prepare for a new RCOS project for the following semester.

Course Content

- Foundations of Open Source (History and Licensing)

- Software Management Tools (Version Control (git), Documentation Tools (markdown, markup), System Build, Specification and Testing, Collaborative Development

- Software Development Tools (Ipython, javascript (node.js)), Statistical computing(R, Rstudio), Database

Course Contents (contd)

- Software Applications (Web Development, Cloud Computing Platform, Mobile Applications)

- Open Hardware (Arduino, RaspberryPi)

- Projects

Lab Assistants (Masters of the Universe)

- Phanse Adeet '18

- Matthew Mawby '18

- Kevin Zhang '18

Guest Lecturers (so far)

- Patrick Masson OSI

- Prof. Wes Turner

- Robert Baron '15 and Jorel Lalicki

Class Format

- Tuesday Lectures/Discussions

- Friday in class labs – a mixture of programming, development, writing and discussion

Grading

- Quizzes 2 (24th February and 14th April) 30%

- Labs 10 – 30%

- Project 40%

- 93 and above A; 90 and above A-; 85 and above B+; 80 and above B; 75 and above B-; 70 and above C+; 65 and above C; 60 and above C-; 55 and above D+; 50 and above D.

Questions and Discussions

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