SOFTWARE ENGINEERING 3XA3

Software Engineering Practice & Experience: Software Project Management

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McMaster University, Fall 2016

Laboratory 11 Doxygen

Revised: September 6, 2016

This lab will introduce Doxygen. However, for your projects, you are free to select any automatic documentation software that you prefer. Doxygen is a documentation generator that we will emphasize in the lab, but you are not constrained to use it going forward.

Components of Lab

1. Introduction to Doxygen

2. Doxygen Exercises

Details

Please review the following materials on Doxygen:

- An introduction to Doxygen : http://www.stack.nl/~dimitri/doxygen/

- You can download Doxygen from:
  http://www.stack.nl/~dimitri/doxygen/download.html

- Tutorials on Doxygen:

  - https://www.youtube.com/watch?v=qYTg_YOiPNA
  - https://www.youtube.com/watch?v=px4PTEFwioU

- In general, writing Doxygen comment blocks involves three main steps:

  - Writing comments at the beginning of each file containing file name, description, author, date, version, known bugs, etc.

  - Writing comment blocks to document functions/methods/classes. All functions/methods/classes must have a comment block containing a brief description, list of the parameters, author, date, return values, etc.

    – Writing comments for variables.

Read about Doxygen comment block styles for your chosen programming language and follow the examples at:
http://www.stack.nl/~dimitri/doxygen/manual/docblocks.html
An example for C-like languages:
https://www.icts.uiowa.edu/confluence/display/ICTSit/Doxygen+Examples

Exercises

- Select one of these files: `Box3D.Java`, `Box3D.py` and put comments in the code such that Doxygen incorporates them in the documentation it generates.

For The TAs (Students can ignore this section)

Before the conclusion of the lab, please make sure that you have tested each student to verify that they understand the basics of the lab exercise. For students that understand the basics, please give them a grade of 1 for this Lab Exercise.