

UNIVERSITY OF WESTERN ONTARIO

DEPARTMENT OF COMPUTER SCIENCE

CS4470Y: SOFTWARE MAINTENANCE AND CONFIGURATION

FINAL PROJECT REPORT

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# Faulty: Fault Localization as a Service

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### Abstract

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## Introduction (*1.5 pages max*)

## Background and Related Work (*2 pages max*)

This project was conceived from research that Professor Kontogainnis had completed with past students regarding the task of determining faults in a large codebase using only past bug reports. Past students had experimented with multiple algorithms for processing large amounts of bug reports in order to come up with an index of files that are most likely to have a new bug within them.

The original system consisted of a collection of scripts written in Java, Python and Shell. The scripts were fairly distributed and had very little documentation. Most of the work was done in intermediate steps and did not fit well together as a system because too much user intervention was required between steps.

**Concepts, Terms, Definitions, Equations (*1 page max*)**

**Development Objectives (*0.75 page max*)**

**System Requirements (*2 pages max*)**

**Development Strategy (*2 pages max*)**

**Results (*10 pages max*)**

**Discussion (*1.5 pages max*)**

**Conclusions (*1 page max*)**

**Future Work and Lessons Learnt (*1 page max*)**