SWEN 301 Structured Methods

Assignment 3
Software Development: An Evaluation
of KPSmart Development

due: midnight on 27 June 2016

Your team has designed and implemented a Software for Kelburn Postal Service. You are now asked to ***individually*** write and submit an essay that critiques the Analysis, Design and Implementation your team created, and the process that your team followed. This essay must not be written collaboratively by your team but rather must be attempted by each individual within the team. The assignment is worth 35% of your overall grade for the course.

Essay Content

Software Engineering is a discipline that attempts to solve the problem of creating satisfactory software in an environment where time, money and resources are constrained, and where requirements may change. To achieve this, various life cycles and methodologies have been proposed and put into practice. As a case study you have developed a specific solution for Kelburn Postal Service. In this essay you need evaluate your group's development process, and the resulting analysis, design and implementation artifacts that resulted from that process. A software life cycle does not end after the software is deployed. Software maintenance is an important activity to maintain the quality of software while it is being used. You will analyze your application and forecast maintenance activities that will be needed in the future. Your essay should consider possible alternative processes that could have been employed for the project, i.e., open source development, and analyse how they might change important aspects of the process and influence the outcomes. Your essay needs to demonstrate that you have understood the various software engineering activities discussed in the lectures. You should address specifically:

- Which process model your team has chosen for the project and why, and how your team used the process model,
- The experiences you made with using the process model and the lessons you learned from the project,

- How well your application meets the requirements gathered during the initial requirements analysis and what you have done to ensure your application meets the requirements,
- What kind of system is your application, i.e., S-system, E-system or P-system and why?
- What kind of maintenance activities may be needed to maintain the application. Recall that four types of software maintenance activities were discussed in the lectures.
- What process model would you use if the project were developed as an open source application, and why? Which Indirect Sale-Value model, discussed in the lecture, can be used for your application, and how?

You may use facts about team's development process and experience and the team's design and implementation to support the arguments and observations in your essay.

Format

Students must use the CRPIT template provided, and essays must be 6 to 8 pages long. Essays that are submitted but that do not meet these formatting requirements may not be marked, or may be penalised at the course coordinator's discretion. Templates for LaTeX and RTF-capable editors are available through the course home page.

Submission

Students must submit their completed essay by midnight on Monday, 27 June 2016. All essays must be submitted through the School's online submission system, and must be submitted as a **PDF** file. The name of the PDF file must be in the following format: *swen301_a3_200012345.pdf*, where the example student id is actually your own. Failure to follow this submission protocol will be penalised. Late submissions will also be penalised as specified in the course requirements.