Software Deployment and Evolution

Assignment 1 - Grading Scheme

1. Report Overview: Summary / Key Findings [2 marks ~ half a page]

2. Software Deployment Model: [8 marks ~ 1 page, can be 1.5 including diagram]

   a. Model diagram presented with an overall explanation of *what it is*.

   b. Explanation of the *key activities* and brief explanation of *characterization framework*

   c. *Need* for deployment models? and What are the *limitations*? Argumentation is clear.

3. Heroku Deployment: [15 marks ~ 3 to 4 pages]

   a. What is Heroku? At least three Strengths and Limitations as a deployment platform. (3 marks)

   b. What technology stack did you use to solve the problem? (1 mark)

   c. How does Heroku work within the context of deployment. Provide details on commands that you have issued and what happens on Heroku. (8 marks)

      i. Packaging

      ii. Installation, and Activation

      iii. Update (How was this done?)

      iv. De-Activation and De-Install

   d. Data migration choices -- What? Why? (3 marks)

4. Ansible Deployment and Reflection [12 marks ~ 2 to 3 pages]:

   a. Brief description of Vagrant and Ansible - What are they? Why/How useful? (2 marks)

   b. Mapping of Ansible Script to the Carzagina Model — provide snippets of script or reference to longer in Appendix and organise using the key steps outlined in Carzaniga. (3 marks)

   c. Reflection -- What aspects of Carzaniga model map accurately, what areas of the model need an update to reflect a modern deployment environment/technology stack. (5 marks)

5. Deployment Requirements for Final Year Project: These requirements must be made against the deployment model considering all activities. [8 marks]

   a. Brief explanation of final year project

b. Environments (how many?, why?)

c. Level of automation for installing a package (What is manual, What is fully automated)

d. Level of automation for creating the package

e. Recommendation on tooling (to create packages, distribute/install package)

f. Configuration performed during installation

g. Package formats

h. Requirements for: Release, Install, Update, Activate, De-Activate, Adapt, Un-install

i. Sections are presented on Transactional Integrity and Support services

6. References (References and citations must use the Harvard or IEEE style) [5 marks]

If the citation and referencing style is used correctly for tables, images, articles full marks, **else zero**.

Penalties (Grammar / Spelling / Sloppy Presentation / Too long / Unreadable images)

Total Mark and Comments: _____