IT314 – Software Engineering [Winter 2019-20]

Instructions:
- Please go through the lecture slides.
- Each student have to submit their assignments individually.

Lab 1: Choosing Software Process Models

Giving reasons for your answer based on the type of system being developed, suggest the most appropriate generic software process model that might be used as a basis for managing the development of the following system.

a) A simple data processing project.

b) A data entry system for office staff who have never used computers before. The user interface and user-friendliness are extremely important.

c) A spreadsheet system that has some basic features and many other desirable features that use these basic features.

d) A web-based system for a new business where requirements are changing fast and where an in-house development team is available for all aspects of the project.

e) A Web-site for an on-line store which has a long list of desired features it wants to add, and it wants a new release with new features to be done very frequently.

f) A system to control anti-lock braking in a car.

g) A virtual reality system to support software maintenance

h) A university accounting system that replaces an existing system

i) An interactive system that allows railway passenger to find train times from terminals installed in stations.

j) Company has asked you to develop software for missile guidance system that can identify a target accurately.

k) When emergency changes have to be made to systems, the system software may have to be modified before changes to the requirements have been approved. Choose a process model for making these modifications that ensures that the requirements documents and the system implementation do not become inconsistent.

l) Software for ECG machine.

m) A small scale well understood project (no changes in requirement will be there once decided).

Deadline for submission: 13 January 2020 (17.00 Hrs).