

IT314 – Software Engineering [Lab Session I]

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 by taking examples (features, non-functional aspects, domain) 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).