

# IT314 Software Engineering

## Lab 1: Choosing Software Process Models

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- 1) A simple data processing project.
  - Model : Waterfall
  - In simple data processing we know basic requirements.
- 2) A data entry system for office staff who have never used computers before.  
The user interface and user-friendliness are extremely important.
  - Model : Prototyping
  - For novice system users, Prototyping is the good model
- 3) A spreadsheet system that has some basic features and many other desirable features that use these basic features.
  - Model : Agile
  - We can make desirable features more precise.
- 4) 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.
  - Model : Scrum
  - New business requirements change fast, So system need to change frequently.
- 5) 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.
  - Model : Scrum
  - We want to frequently change features.
- 6) A system to control anti-lock braking in a car.
  - Model : Waterfall
  - We have requirements that will not change.
- 7) A virtual reality system to support software maintenance
  - Model : Incremental Model
  - In this type of system requirements change after implementation.
- 8) A university accounting system that replaces an existing system
  - Model : Waterfall
  - we have set basic requirements that will not change.

- 9) An interactive system that allows railway passenger to find train times from terminals installed in stations.  
→Model : Waterfall  
→we have set basic requirements that will not change.
- 10) Company has asked you to develop software for missile guidance system that can identify a target accurately.  
→Model : Spiral  
→we have a guidance system, it has to be accurate so we analyze it many times.
- 11) 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.  
→Model : Spiral  
→ We can change the system and ensure documents.
- 12) Software for ECG machine.  
→Model : Waterfall  
→For ECG machine we have basic requirements that will not change.
- 13) A small scale well understood project (no changes in requirement will be there once decided).  
→Model : Waterfall  
→we have a small scale project with no change in requirement.