

# IT-314

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Objective: Choosing Software Process Models.

a. A simple data processing project.

Ans. Waterfall: It is a small well understood problem with almost no changes in requirements.

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

Ans. Prototype: Because UI is very important this project.

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

Ans. Spiral: As the more desirable features can be added with each iteration after the basic software is created .

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.

Ans. Iterative: As time is of the essence.

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.

Ans. Evolutionary Prototype: The model accurately reflects the evolutionary nature of software development on projects with evolving requirements.

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

Ans. Waterfall: Is good with quality control, and fits other engineering processes.

g. A virtual reality system to support software maintenance.

Ans. Iterative: As this allows the software developer incorporate user feedback and addressing any issues that arise during the development process.

h. A university accounting system that replaces an existing system.

Ans. Waterfall: As it is replacing an existing system and the requirements are already known.

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

Ans. Prototype: UI is very important to this project.

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

Ans. Iterative: It can provide more flexibility and refining of the system with more tests.

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.

Ans. Agile: The system software can be modified before changes to the requirements have been approved with consistent documentation.

l. Software for ECG machine.

Ans. Waterfall: As the requirements are fully known and will not change.

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

Ans. Waterfall: As it is a small scale project and there are no changes to be made.