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Group - 6

a) Simple data processing project.

It can be considered as a *waterfall* model as the requirements are pre planned and need not change with time. As it is just a simple data processing project, it can be considered in waterfall model. This project plays a major role in automation of existing manual system.

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

A data entry system for office staff can be considered in **prototyping** model as the users of this system are novice and the UI should be user friendly. It also helps to make risk proof system.

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

features that use these basic features.

It can be considered as *incremental* model. In first phase we make some basic feature for the system and then assemble them to make some desirable features from this 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.

Because the needs are changing so frequently and the multiple teams working on the application can effectively keep up with the changing requirements, an *agile* model would be appropriate for accommodating changes in this application.

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.

This system can also be considered as an *Agile* Model as the new features are to be done frequently. Also there are many teams to work on a particular project which helps keep pace in the work.

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

This system can be considered as a **spiral** model as, it is required to reduce risk of accident in this system and spiral model best fits for this system.

g) A virtual reality system to support software maintenance

This system can be considered in **spiral** model as we can iteratively change the features of the system with time. The requirements are also prioritized in this system.

- h) A university accounting system that replaces an existing system
 This system can be considered in *waterfall* model as we already
 know the requirements. We are just replacing it with a new
 software.
- i) An interactive system that allows railway passenger to find train times from terminals installed in stations. This system can be considered as a prototyping model as this system has to be interactive and also user friendly. The UI also plays a major role for this system.
- j) Company has asked you to develop software for missile guidance system that can identify a target accurately. This system has to be considered in *spiral* model as we need to reduce the risk factor and also rise the accuracy of the system.

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.

When emergency changes are to be made to the systems, the system software is to be changed, this type of requirement can be included in *Agile* model, as it is best for changes in the system. Agile model helps rapid changes in the system.

I) Software for ECG machine.

Software for ECG machine can be included in *spiral* model as incremental improvement in the software helps improve accuracy of the software to utmost precision.

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

This project has to be included in *Waterfall* model as this is just a small-scale project with no changes to be made in due course. A waterfall technique would also be the most practical because this project will automate an already-existing manual system.