IT Software Engineering Lab - 02

ID: 201801434 **Lab: 02**

Name: Meet Shah

A) WATERFALL MODEL: A simple data processing Project: It uses the Waterfall model as the requirements are pretty clear before implementation and hence changes will not be required during the development phase.

B) A Data Entry System for office staff who have never used computers before. The user interface and user-friendliness are extremely important :
Prototyping model. As the user interface and user-friendliness are extremely important, we have to first get the user's point of view on each prototype.

C) INCREMENTAL DEVELOPMENT: A spreadsheet system that has some basic features and many other desirable features that use these basic features: Evolutionary Prototyping model is used since the software requires changes as per the desired features and hence if at one instant the client then we can update in the previous prototype.

D) SPIRAL MODEL: As we grow our requirement is changing so we will use spiral model .

E) INCREMENTAL WITH UI PROTOTYPING: Incremental model as we want to have a new release very frequently, so we cannot wait for all the requirements upfront.

F) WATERFALL MODEL: Anti-lock Braking System: This is a system which is safety-critical due to which it requires more analysis before implementation. It certainly needs a plan-driven approach to development with the requirements carefully analysed. A waterfall model is therefore the most appropriate approach to use, perhaps with formal transformations between the different development stages.

G) INCREMENTAL DEVELOPMENT WITH PROTOTYPING: Virtual Reality System: This is a system where the requirements will change and there will be extensive user interface components. Incremental development with, perhaps, some UI prototyping is the most appropriate model. An agile process may be used.

H) REUSE BASED APPROACH: University Accounting System: This is a system whose requirements are fairly well-known and which will be used in an environment in conjunction with lots of other systems such as a research grant management system. Therefore, a reuse-based approach is likely to be appropriate for this.

I) INCREMENTAL DEVELOPMENT: Interactive Travel Planning System: System with a complex user interface but which must be stable and reliable. An incremental development approach is the most appropriate as the system requirements will change as real user experience with the system is gained.

J) Waterfall Model It needs better planning and analysis

K) Spiral Model: is used as it allows one to revisit the requirements in every iteration.

L) Waterfall model: as the requirements are well known and clear.

M) A small scale well understood project (no changes in requirement will be there once decided): It uses a waterfall model as the requirements and design are well understood and does not change. So it does not need repetitive change.