Department of Computer Science Software Engineering (CSC342) Tutorial 3 (Process Models)

Situation: A software engineer is assigned to a new client who needs software to sell medicines to customers using bar code technique for his small pharmacy. After interacting with the client, gathering the basic requirement and assessing the scope of work, the engineer comes to know that client requires sale and profit report between two given dates. Data input like medicine name, its generic name, date of expiry, its quantity, price etc is also part of the software. Engineer also knows that Bar Code scanner and printer are easily available in market and easily configurable and integrated with the system. He also comes to know that owner of the pharmacy is lay man and do not have understanding of the computer software development process. He analyzed that software is simple in nature but to ensure and verify the customer's requirements something working is required to engage and satisfy the customer in development process.

Question: Keeping in view The Software Engineering Process Models. Which model you thing is the appropriate one to choose in above situation? Justify your answer by giving the reason.

Hint: Following is a short list of Software Engineering Process Models. Recall them in your mind, participate in class discussion and try to reach to the conclusion by identifying the proper model which is suitable in the given situation.

- 1- Water Fall
- 2- Evolutionary Development

Ans: Evolutionary Model because the requirements need to be ensured through prototype (something working).

Situation: A software engineer is assigned to a new client who needs software application for GPS enabled Nokia mobiles. The basic functionality of the application is to inform the user about its current location with voice and text. For an example if user is in "Olaya" Street and he wants to get the information about his current location. This application will give this information by displaying text "You are in Olaya Street" and by pronouncing this text. After analyzing the requirements, Software Engineer comes to know that library (component) that accesses the GPS receiver to get the position coordinates is provided by Nokia. Also the component that receives coordinates and gives the location information in text form, is available for free by some third party. Moreover, a library that coverts text to speech is also available for developers.

Question: Keeping in view The Software Engineering Process Models. Which model you thing is the appropriate one to choose in above situation? Justify your answer by giving the reason

Hint: Following is a short list of Software Engineering Process Models. Recall them in your mind, participate in class discussion and try to reach to the conclusion by identifying the proper model which is suitable in the given situation.

- 1- Water Fall
- 2- Evolutionary Development
- 3- Reuse-Oriented Development

Ans: Reuse-Oriented Development because components required by the product are already available in the market and reuse of these components is required to develop the product.