

## LAB 1 by 201801015

- A. Waterfall model: because most requirements for data processing are decided while planning.
- B. Since it is not a complete full fledged software project used by experts so waterfall, spiral, Component based model can not be used at all. prototyping and user friendliness is needed so prototyping model is best suited
- C. Incremental Model is the best suited for this project because in the first version of software we can release basic functionalities, in subsequent phase bases on reviews and feedback further desirable features can be added.
- D. Business software systems are usually complex, software intensive, and frequently being changed when business goals or processes are changed. So incremental development is better. Real-time systems usually involve many hardware components which are not easy to change and cannot be incremental. Also real-time systems are usually safety critical which need to be built based on well planned processes.
- E. Incremental model since new features can be released in new versions. UI prototyping can also be employed.
- F. The Waterfall Model is best suited for this type of project because this project requires a safety-critical system. So we need to first analyze the requirements, its design ,verification before launching this product.
- G. The best software process for a virtual reality system to support software maintenance would be an incremental model with some UI prototyping. We may also use an agile process. Because, the requirements of the system will change and it will not be predictable. And it will also contain a significant amount of UI components.
- H. Model: Reuse Oriented Model.  
We already have experience in the requirements of the system. Also the existing system must have been working in coordination with other important software, so building from the scratch is inefficient and full of hassles.
- I. Incremental model is best for this because the requirements will change as the users will experience it.
- J. Incremental Model: Because for testing in real life we can release new version for the experiment then form observation we can improve the software to target missile accurately
- K. Incremental Model. In this model changes can take place easily. Incremental models are the best modification in older versions that are feasible and can be easily managed. This model entails development as well as maintenance.
- L. Waterfall model because maintenance and design are important. In ECG machine, we need to proceed phase-wise to get the complete software. This will help in reading the electrical pulses and printing it on the screen. Hence, phase oriented approach goes better.
- M. a small scale well understood project, Scrum is the most suitable model for this type of project. Since in Scrum, The iterations are usually 2-4 weeks long and they are preceded with thorough planning and previous sprint assessment. No changes are allowed after the sprint activities have been defined.