

Tutorial: Software Processes

Text book reading:

Software Engineering by Ian Sommerville, Chapter 2

1. Suggest the most appropriate **software process model** that could be used as a basis for managing the development of the following systems, justify your suggestion:
 - a. A system to control anti-lock braking in a car
 - b. A virtual reality system to support software maintenance
 - c. A corporate accounting system that replaces an existing system
 - d. An interactive travel planning system that helps users plan journeys with the lowest environmental impact
2. Explain why **incremental development** is the most effective approach for developing business software systems. Why is this model less appropriate for real-time systems engineering?
3. Consider the **reuse-based process model**. Explain why it is essential to have two separate requirements engineering activities in the process.
4. In **waterfall software development process model**, we complete one stage and proceed to the next stage. The engineer may revisit the previous stage if refinement is needed. However, it is important that the number of time the engineer revisit the previous stage should be limited. Using your own statement, explain why the number of revisit should be limited.
5. Explain why the **requirement engineering** is a critical stage in software process.