AlYamamah University

College of Engineering and Architecture

Computer Engineering Department

**SWE 202: Introduction to software engineering**

**Assignment 1**

Student Name: NANDINI BOGINENI

Student ID:202112115

Question 1/ What is the most important difference between generic software product development and custom software development?

**A: Generic software, as the name suggests, is catered to be sold to the general public. Its specifications are owned by the developer who developed the software. Custom software, on the other hand, is specifically designed based on the client’s requirements and specifications. It Is specified and sold to the client and not to the general public**.

Question 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?

**A: The idea of Incremental Development is of developing an implementation, receiving real-time customer feedback from this, and then rapidly changing it based on the reviews continuously given. It is the most effective approach for business software systems as the cost to accommodate development changes are reduced, customer feedback is rapidly given, and this in turn makes the software more productive, useful, and interactive for the users who use it. Real-time systems engineering deals comparatively more with hardware than with software. That is why, rapid change can be a constraint to it and hence, incremental development is less appropriate for systems engineering.**

Question 3/ When would you recommend *against* the use of an agile method for developing a software  
system?

**A: Agile methods should not be used for large-sized projects, as scaling for large systems is difficult. They need proper planning and documentation and cannot rely on continuous changes as it will be a time constraint and not be productive and defining the contract will also prove to be difficult. It should also not be used if team members are not well versed in agile methods, if there are many customers involved in the process, or if there are multiple stakeholders.**