Object Oriented Software Engineering

Term Assignment

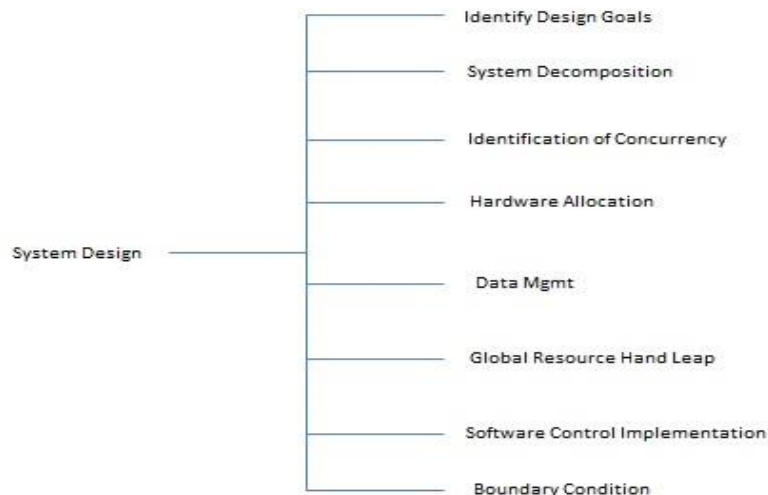| Name: Alamgir Khan	Id: 13379
Object Oriented Software Engineering	Assignment: 02
BS(SE) Section: (A)	20/09/2020

Question #1: Give an overview of System Design Activities diagrammatically.

Answer # 1:

Give an overview of System Design Activities diagrammatically.

System design is the phase that bridges the gap between problem domain and the existing system in a manageable way. This phase focuses on the solution domain, i.e. "how to implement?" It is the phase where the SRS document is converted into a format that can be implemented and decides how the system will operate. In this phase, the complex activity of system development is divided into several smaller sub-activities, which coordinate with each other to achieve the main objective of system development.

System Design
- Identify Design Goals
- System Decomposition
- Identification of Concurrency
- Hardware Allocation
- Data Mgmt
- Global Resource Hand Leap
- Software Control Implementation
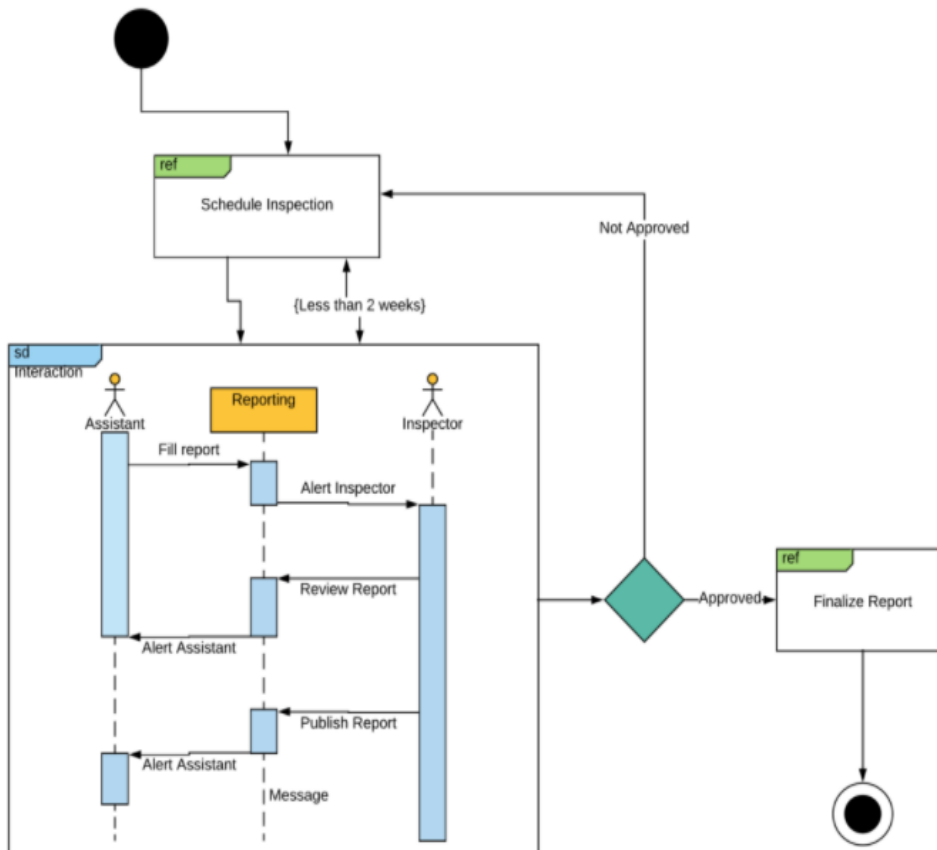- Boundary Condition

Interaction Overview Diagram:

Interaction Overview UML diagrams are probably some of the most complex ones. So far, we have explained what an activity diagram is. Additionally, within the set of behavioral diagrams, we have a subset made of four diagrams, called Interaction Diagrams:

- Interaction Overview Diagram
- Timing Diagram
- Sequence Diagram
- Communication Diagram

So, the interaction overview diagram is an activity diagram made of different interaction diagrams. Let's say that it is a mix of activity diagrams with interaction diagrams, however, most websites like to regard them as specialized activity diagrams. What this means is that you can use most annotations that are used within an activity diagram, with the addition of elements such as interaction, interaction use, time constraint, duration etc.

Explain any two Project Interaction Types along with examples.

Answer: 2

When considering whether or not you have a project on your hands, there are some things to keep in mind. First, is it a project or an ongoing operation? Second, if it is a project, who are the stakeholders? And third, what characteristics distinguish this endeavor as a project?

Projects have several characteristics:

Projects are unique.

Projects are temporary in nature and have a definite beginning and ending date.

Projects are completed when the project goals are achieved or it's determined the project is no longer viable.

A successful project is one that meets or exceeds the expectations of the stakeholders.

Consider the following scenario: The vice-president (VP) of marketing approaches you with a fabulous idea. (Obviously it must be "fabulous" because he thought of it.) He wants to set up kiosks in local grocery stores as mini-offices. These offices will offer customers the ability to sign up for car and home insurance services as well as make their bill payments. He believes that the exposure in grocery stores will increase awareness of the company's offerings. He told you that senior management has already cleared the project, and he'll dedicate as many resources to this as he can. He wants the new kiosks in place in 12 selected stores in a major city by the end of the year. Finally, he has assigned you to head up this project.

Your first question should be, "Is it a project?" This may seem elementary, but confusing projects with ongoing operations happens often. Projects are temporary in nature, have definite start and end dates, result in the creation of a unique product or service, and are completed when their goals and objectives have been met and signed off by the stakeholders. Using these criteria, let's examine the assignment from the VP of marketing to determine if it is a project:

Is it unique? Yes, because the kiosks don't exist in the local grocery stores. This is a new way of offering the company's services to its customer base. While the service the company is offering isn't new, the way it is presenting its services is. Does the

product have a limited timeframe? Yes, the start date of this project is today, and the end date is the end of next year. It is a temporary endeavor. Is there a way to determine when the project is completed? Yes, the kiosks will be installed and the services will be offered from them. Once all the kiosks are installed and operating, the project will come to a close. Is there a way to determine stakeholder satisfaction? Yes, the expectations of the stakeholders will be documented in the form of requirements during the planning processes. These requirements will be compared to the finished product to determine if it meets the expectations of the stakeholder.

If the answer is yes to all these questions, then we have a project.

Example:

Here is an example of a project that cut quality because the project costs were fixed. The P-36 oil platform (Figure 2.4) was the largest footing production platform in the world capable of processing 180,000 barrels of oil per day and 5.2 million cubic metres of gas per day. Located in the Roncador Field, Campos Basin, Brazil, the P-36 was operated by Petrobras.