মডিউল ১ এর এসাইনমেন্ট

**1. What is the Feasibility Study of the SDLC model & why is this important?**

**Answer:** Feasibility study determines if a software project is profitable, workable, and cost-effective.

There are three types of Feasibility Study. Those are,

1. Technical Feasibility Study: Technical Feasibility Study determines if our software project is technically possible to build or not.
2. Operational Feasibility Study: Operational Feasibility Study determines if our software project fulfils the customers demand/need or not.
3. Economic Feasibility Study: Economic Feasibility Study determines if our software project is able to generate financial profits for an organization or not.

Feasibility Study is important because we can identify the logistical, financial, and market challenges of a software project by performing these studies.

**2. Write 5 advantages of Agile Methodology.**

**Answer:** Five advantages of Agile Method:

1. This method converts big tasks into smaller iterations. That’s advantageous for us because we can update any part of our software in future.
2. In Agile Method, we can identify and predict risks in many ways. Also, we can make a plan to ensure that the project runs accurately.
3. In this method, testing is an integrated part of project execution phase. As a result, the overall quality of the final product will be greater.
4. Agile breaks the project into small phases that are manageable and flexible enough to allow the team to make changes immediately.
5. In Agile Method, we get involved with product owner and take feedback for every part of our work. So we can achieve customer satisfaction easily.

**3. Write short notes on SDLC model phase.**

**Answer:** Short notes on SDLC model phase:

* **Phase 1:** Planning and requirement analysis – Here we create an overview of the project and determine the requirements.
* **Phase 2:** Defining Requirements – Here we evaluate the requirements based on business needs and resources.
* **Phase 3:** Designing the Software – Here we create a well-planned user interface and architectural designs for our software.
* **Phase 4:** Developing the project – Here we implement the project with code based on our requirements and designs.
* **Phase 5:** Testing – Here we ensure if our project has bugs or not.
* **Phase 6:** Deployment – Here we deploy our project to live server.
* **Phase 7:** Maintenance – Here we fix bugs, improve and optimize our software project.