Software Management Methods

Interview Questions & answers:
- What do you know about the **Waterfall** method?
- Did you work in a **Agile team** ? What are the things you liked about Agile?
- What is your software management method? What methodology did you follow ?
- Agile or Waterfall? Which one do you prefer?

What is a software method?

- A software management method is essentially **a set of principles and rules** to processes for managing a project.
  - There are several software methods in the IT industry.
  - All the project management methods have **unique rules and principles** that **describe how to follow the SDLC.**
  - Each software method has a strict rule to **manage**, **plan**, and **control** software development **procedures** .
  - The different software methods for IT companies:
    - waterfall
    - Agile
    - V-model
    - etc

SDLC - Waterfal method

Waterfal Method History

- The "Waterfall" method is from the **Construction Industry** to the **IT Industry**.
- A product has to be developed **step by step** in the construction industry. People should work carefully on each step because they cannot go back to the previous step to fix errors based on the Waterfall method rule.

Step 1   Step 2   Step 3
Step 4   Step 5   Step 6
Step 7   Step 8   Step 9

Construction Industry

Waterfal Method in IT

- The Waterfall method was the first software method used to develop softwares.
- In a waterfall model, each phase must be completed before the next step can begin, and there is no overlapping in the stages.
- It is very simple to understand and use.
- In "The Waterfall" approach, each step of the SDLC process is divided into separate steps.
- The Waterfall method emphasizes making plan before taking action
- Each step depends on the **outcome** of the previous stages to precede
- Waterfall guarantees success when the **projects are small** with **clear requirements**.

Advantages

- ▸ **Easy** to **understand** and **implement**. There is no need to train the team and familiarize them with the Waterfall methodology.
- ▸ The **start and end points** for each phases are **set**, which makes it **easy** to **measure** progress.
- ▸ The **stability** of the model makes project management easier.
- ▸ Since all phases occur without any overlap, hence it **reduces** the project **complexity**.
- ▸ **Careful** planning of project development **structure reduces** the number of problematic **issues**;
- ▸ **Quality and Detailed Documentation.**

Disadvantages

- ▸ **Poor software result** for long duration and large projects.
- ▸ If the customer's requirements are not clear, then it could create significant complications later in the project development life cycle.
- ▸ **Little to No Changes.** Once the requirement is finalized, any changes in requirements would not only be difficult but also costly