The two main software development methodologies I will be discussing is **Waterfall** and **Agile** Methodology.

**Waterfall** Methodology is a linear and sequential development methodology. Every stage of the development must be completed before advancing to the next stage. The stages involved are:

1. **Conception**: it is information gathering phase, understanding the needs, vision, and clear concept of the client.

2**. Initiation**: It is the documentation phase which entails documenting all the information gathered from the client that may be relevant to the project.

3. **Analysis**: The project analyzed in terms of the budget, risks factors, other dependence associated with the with project, completion date, and success matrix

4. **Design**: The design and design elements are specified, and specifications are developed and documented.

5. **Implementation**: This involves the building stage of the project and bringing it to life.

6. **Testing:** Testing the developed software for bugs and functionality

7. **Deployment**: Deploying the software to production

8. **Maintenance**: Regular maintenance are carried out to keep the product up to date, bug are fixed if the occur.

**Agile** software development was developed in response to the drawbacks of the waterfall. Agile provide a flexible working mechanism as compared to the waterfall

**Agile** Methodology requires developers to start with simple design of projects, a small development module. And each module has a completion target of bi-weekly or monthly. After completion of each module, the client evaluates the work and give feedback. Based on the feedback, the module is further analyzed, and fix any issue that might have occurred.

In today’s industry, the two methodologies are still practical but most software companies lean toward **agile** development, incorporating **DevOps** culture into their software development life cycle.