1. Agile ​Development​ Definition

* Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product. Agile Methods break the product into small incremental builds. These builds are provided in iterations. Each iteration typically lasts from about one to three weeks. Every iteration involves cross functional teams working simultaneously on various areas like: Planning, Requirements Analysis, Design, Coding, Unit Testing and Acceptance Testing.
* At the end of the iteration, a working product is displayed to the customer and important stakeholders.
* Agile is based on the adaptive software development methods, whereas the traditional SDLC models like the waterfall model is based on a predictive approach. Predictive teams in the traditional SDLC models usually work with detailed planning and have a complete forecast of the exact tasks and features to be delivered in the next few months or during the product life cycle.

1. Advantages of Agile model

* Customer satisfaction by rapid, continuous delivery of useful software.
* People and interactions are emphasized rather than process and tools. Customers, developers and testers constantly interact with each other.
* Working software is delivered frequently (weeks rather than months).
* A face-to-face conversation is the best form of communication.
* Close, daily cooperation between business people and developers.
* Continuous attention to technical excellence and good design.
* Regular adaptation to changing circumstances.
* Even late changes in requirements are welcomed.
* Functional criteria corrections are introduced in the production phase to ensure competition​.
* The project is split into quick and transparent iterations.
* Quick introduction of the first edition of the software.

1. Disadvantages of Agile model

* In case of some software deliverables, especially the large ones, it is difficult to assess the effort required at the beginning of the software development life cycle.
* There is lack of emphasis on necessary designing and documentation.
* The project can easily get taken off track if the customer representative is not clear what final outcome that they want.
* Only senior programmers are capable of taking the kind of decisions required during the development process. Hence it has no place for newbie programmers unless combined with experienced resources.
* Difficulties in calculating the ultimate expense attributable to permanent adjustments.
* The staff should be extremely competent and customer-oriented.
* New specifications could be in tension with the current architecture.

1. When to use the Agile Model?

* When frequent changes are required.
* When a highly qualified and experienced team is available.
* When a customer is ready to have a meeting with a software team all the time.
* When project size is small.