

Agile Software Development is an umbrella term for a set of methods and practices based on the values and principles expressed in the Agile Manifesto. Solutions evolve through collaboration between self-organizing, cross-functional teams utilizing the appropriate practices for their context. AGILE provides a foundation for the teams to build software ,With the highest value ,With high quality ,With in the shortest time. an agile or growth mindset is an attitude that equates failure and problems with opportunities for learning .

A fixed mindset believes that basic skills, intelligence, and qualities are inherent and fixed. The Agile Manifesto, also called the Manifesto for Agile Software Development, is a formal proclamation of four key values and 12 principles to guide an iterative and people-centric approach to software development.

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value: 1. Individuals and interactions over processes and tools 2. Working software over comprehensive documentation 3. Customer collaboration over contract negotiation 4. Responding to change over following a plan That is, while there is value in the items on the right , we value the items on the left more (bold ones).

Scrum is a management and control process that cuts through complexity to focus on building software that meets business needs. Components ,SCRUM Roles ,SCRUM Activities , SCRUM Artifacts. Product Owner – Client's representative – Define the features of the product – Decide on release date and content – Accept or reject work results . SCRUM Master – Represents management to the project – Removes the impediments – Shield the team from external interferences. Dev Team – Cross-functional . QA, Programmers, UI Designers, etc. – Work collaboratively and share responsibilities. – Typically 5-10 people . Users/Stakeholders – Those who are going to use the product or have a vested interest in how it turns out.

There are many ways to store the product backlog:, As a collection of index cards or post,its on the wall ,On a flip-chart ,In a requirements management tool , In Excel. An iteration in a Scrum project is known as a Sprint. Before starting a Sprint the Team should come up with a Sprint backlog. The sprint backlog (release backlog) is a list of user stories identified by the Scrum team to be completed during the sprint.

This is a subset of Product backlog user stories defined only for a particular sprint. A burn down chart is a graphical representation of work left to do vs time. ,The outstanding work (or backlog) is often on the vertical axis, with time along the horizontal. ,That is, it is a run chart of outstanding work. It is useful for predicting when all of the work will be completed.

Each Sprint may be considered a project with no more than a one-month horizon. Like projects, Sprints are used to accomplish something. Each Sprint has a definition of what is to be built, a design and flexible plan that will guide building it, the work, and the resultant product. The work to be performed in the Sprint is planned at the Sprint Planning, its a collaborative work of the entire Scrum Team. – Time-boxed to a maximum of eight hours for a one-month Sprint.

Sprint Planning answers the following: What can be delivered in the Increment resulting from the upcoming Sprint? How will the work needed to deliver the Increment be achieved.The Sprint Retrospective occurs after the Sprint Review and prior to the next Sprint Planning. , Three-hour time-boxed meeting for one-month Sprint. There are many tools available to manage the SCRUM process development. Targetprocess ,Trello.

