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AGILE DEVELOPMENT

Agile development is an umbrella term for incremental, iterative development methodologies. The most common agile methodology is Scrum and will be the focus of this paper. While each methodology has its own specific benefits, they all share a common approach.

Agile was born in the seventies as a critical response to the waterfall method of software development. The waterfall methodology is broken into phases. First the project requirement and planning stage is explored at length. Then, the architecture and design is planned out to completion. And at long last, all the code is written. The major pitfall of this approach is that the client’s business realities and wishes may change along the way. Waterfall’s development approach locks developers into one direction. Also, the client may have to wait months or years before they see any tangible results.

Unlike the waterfall methodology, scrum incorporates all development activities into every iteration. The lifecycle is broken into two week or thirty day iterations called sprints. At the start of a sprint, one or more top functions are chosen from the product backlog. The product backlog is a list of all necessary functions needed to complete the software, ranked by priority. Requirements are reviewed, analyzed and planned, executed through code, and finally tested. At the end of the sprint, each team’s goal is to have a potentially shippable product. At this time developers have a retrospective meeting to reflect on their process and make any necessary adjustments. The direction of the software is also reviewed to respond to any client changes.

There are only three roles described by scrum. They are product owner, development team, and scrum master. The product owner is responsible for the overall direction of the project. They’re focused on the what, deciding what features of the product backlog will be worked on next. Development team members are the doers; they execute the plan. Members include programmers, designers, and test analysts. Lastly, the scrum master leads the how. They work closely with the development team to resolve any impediments and improve programming practices.

Agile development empowers developers to create the right software. Using this methodology allows for flexibility and customer feedback each step of the way. This ensures the end product will meet the customer’s needs rather than end up on a shelf.