

Research About Agile Types (Extreme Programming)

Ali Adel Ali Hassan
Section 4

Extreme Programming

Definition:

It's an efficient and flexible way to develop software.

The name “Extreme” comes from taking elements from traditional software engineering practices to extreme levels.

XP Practices:

- Simple Design
- Pair Programming
- Constant Testing
- Ongoing integration
- Refactoring
- Coding Standards
- Small Releases

Simple Design

Simple design is a methodology where the rule is to keep things simple, this doesn't mean making things trivial, Instead it's a method of focusing on the task at hand, so it can arrive at a simple design that can be integrated easily with the rest of the design.

Pair Programming

It's the practice of having two people working simultaneously on all production code, thus reducing the chance of making mistakes.

Constant Testing

Whenever a task is completed it will be tested, to ensure that it works properly, by constant testing the risk of altering or editing the code reduces significantly.

Ongoing Integration

Like constant testing, whenever a task is completed it will be integrated with the rest of the system, to ensure that all units and subsystems can perform as a one functional system.

Refactoring

It's the practice of restructuring the program or implementing a feature without changing the behavior of the system.

Coding Standards

The purpose of coding standards is to produce software that has a consistent style, which in turn makes the software easier to understand and maintain.

Small Releases

Through continuous integration and other XP practices, small releases can be developed and delivered to the customer as an increment in short periods of time.

Conclusion:

The idea behind extreme programming is that it aims to deliver a reliable and trustworthy software product as fast as possible. In order to do that, extreme programming focuses on coding and testing to ensure that all aspects of the system works properly and efficiently.

Through the practices described above, Extreme programming can verify and validate with a very high level of certainty that the system matches the user requirements and that it's efficient and easy to maintain.

This level of confidence comes from that every unit was tested independently and tested multiple times with the whole system as it was integrated or other units were integrated.