Extreme programming is one of the most popular agile methods. The first extreme programming project took place in 1996. So far in more than 20 years, extreme programming has been adopted by many different industries and enterprises of different sizes around the world and has successfully played a significant effect.

Extreme programming emphasizes teamwork. In a highly collaborative team, managers, customers, and developers are all equal partners. Extreme programming creates a simple and effective collaborative environment that allows teams to maximize their productivity. Teams organize themselves to solve problems as efficiently as possible.

Extreme programming promotes software projects in five ways: communication, simplicity, feedback, respect, and courage.

- Programmers who practice extreme programming constantly communicate with customers and other programmers.
- They keep the design simple and clean.
- They test the software from day one and get feedback from the tests.
- They deliver the system to the customer as early as possible and respect the customer's right to suggest changes.
- They take small steps, and each small success builds respect and trust among team members.
- On top of this, extreme programming practitioners dare to respond to changing needs and technologies

The rules for extreme programming:

Plan

- Write user stories.
- Make a release schedule based on the release plan.
- Do frequent small releases.
- Decompose the project into iterations.
- Drive each iteration with an iteration plan.

Management

- Provide dedicated open office space for the team.
- Sustainable rhythm.
- Start each day with a stop.
- Team development speed is measurable.
- Sit the team together.
- Adjust flawed rules.

Design

- Simple principle.
- Create a system metaphor.
- Use CRC cards in design communication.
- Use the Spike method to reduce risk.

- Don't overdesign or add unnecessary features too early.
- Refactor the code as much as possible.

Programming

- The customer is closely involved in teamwork.
- Follow coding specifications.
- Write tests first.
- Build production code through pair programming.
- Only one pair of programmers can integrate code at a time.
- Continuous integration.
- Choose a machine dedicated to code integration.
- The code is collectively owned.

Test

- All code must have unit tests.
- All unit tests must be run before release.
- Find a Bug and add a unit test.
- Conduct acceptance testing and publish test results regularly.

Extreme Programming values

Extreme programming (XP) is built on a few fundamental values. The rules we discussed earlier are to maximize the natural extension and outcome of these values. XP is not a rigid set of rules, but a way of working that is aligned with personal and corporate values. Based on the XP values listed below, practitioners of EXTREME programming can add their own rules to adapt to changes in practice.

Simple

Doing what must be done is too much of a good thing. To maximize the value of your investment. Take simple, small steps to achieve goals and troubleshoot problems. Create something to be proud of, and maintain it for a long time at a reasonable cost.

Communication

Everyone is part of a team, and team members should have face-to-face communication opportunities every day. Whether it's requirements analysis or coding, everyone can work together. Solve the problem with the best solution.

Feedback

Deliver on the promise of each iteration by releasing working software. Demonstrate the software as early as possible and as often as possible, then listen and make changes accordingly. Adapt the development process to the project, rather than rigidly following established processes.

Respect

Everyone is a valuable member of a team and deserves to be respected and given respect. Even simple enthusiasm is a contribution. Developers should respect the professionalism of their customers (and vice versa), and managers should respect the rights and obligations of developers in their work.

Courage

A true reflection of project progress and status. Don’t make excuses for failure, because our goal is success. There’s no need to fear because we're in this together. Embrace change.

References:

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