Extreme Programming
CSMI1

P. S.KARAMI   O. SABA   A. DIENG   A. WADE

University of Strasbourg

Mathematics and applications
February 7, 2023

Presentation Overview

Definition

Extreme programming (XP) has been designed and developed to meet the specific needs of software development by small teams with vague and changing requierements.
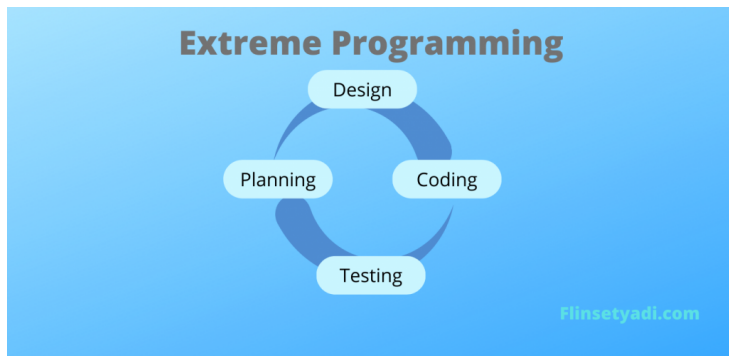

Figure 1: Extreme programming[1]

Applications

Xp is one of the Agile software development methoddologies applied by IT companies. It provides values and principles to guide the behaviour of the team. The team is expected to be self-organizing core practices where:

1. Each practice is simple and self-completing;
2. The combination of practices produces more complex and emergent behaviour.

How Does Extreme Programming (XP) Work?

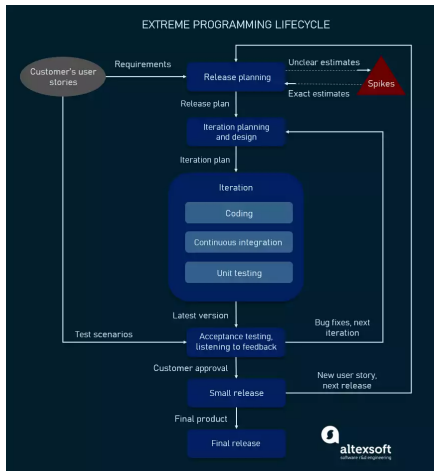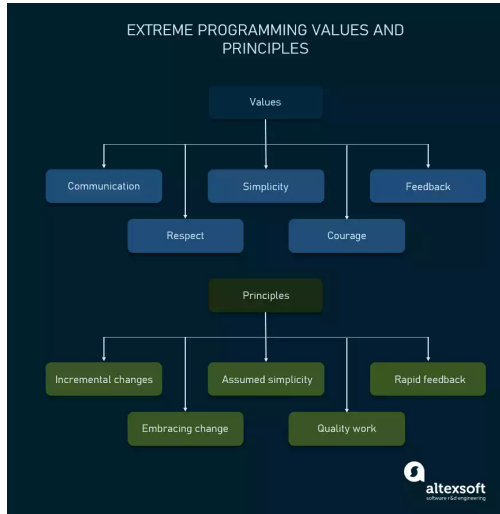How Does Extreme Programming (XP) Work?

Figure 3: Extreme programming [5]

Advantages and disadvantages

The main advantage of Extreme Programming is that this methodology allows software development companies to save costs and time required for project realization. Simplicity : the XP developers create extremely simple code that can be improved at any moment. Constant feedback is also the strong side.It is necessary to listen and make any changes needed in time.[1, 4]
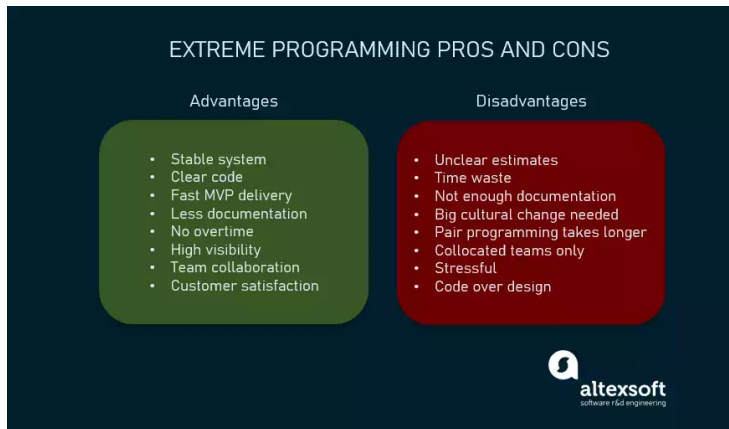
Figure 4: Table of advantages and disadvantages [4]

Comparison of XP with other frameworks

Extreme Programming	Agile Programming	Scrum Programming	Cascade Programming
• Shorter iterations • Flexible with the changes • Focus on technical practices • Custumer determines the order of feature development • Defined roles	• No intermdiaries between the customer and the team • Unknown risks • Major impact	• Longer sprints • No changes within sprints • Focus on managerial aspects • Self-organized teams that decide what features to work on first	• Involves large teams • Iterative, it runs the same lifecycle time after time until the final product is created

Figure 5: Comparison of XP with other frameworks [2]

Conclusion

There is no such thing as the best methodology. Project Managers must weigh project aspects against available methodologies to make an appropriate selection. If a certain development process has been working well then it will be wise to stick with it. Other methodologies like XP, Scrum, Argile or Waterfall can be reviewed to borrow some good and applicable ideas into the current methodology in use.[7, 8]

References

📄 www.wrytradesman.com/articles/IntroToAgileMethods.pdf

📄 www.extremeprogramming.org

📄 www.xprogramming.com/xpmag/whatisxp.htm

📄 www.selectbs.com/glossary/what-is-extreme-programming.htm

📄 https://www.altexsoft.com/blog/business/extreme-programming-values-principles-and-practices/

📄 Kenneth E. Kendall (2004)
Programmation extrême en pratique : Une approche à valeure humaine du système de gestion de conférence DSI , Ligne de décision Vol. 35

📄 Scott Withrow
Extreme Programming : Ces 12 pratiques rendent-elles parfaites
http://articles.techrepublic.com/5100-22-11-1046488.html

📄 B. Rumpe , P. Scholz
Mise à l' échelle de la gestion des projets de programmation extrême , Projets et bénéfices Numéro spécial sur la gestion des projets de programmation extrême, Vol. III (8), p. 11-18. ICFAI Press, Hyderabat , août 2003.

The End

Questions? Comments?