# Agile Methods – Extreme Programming (XP)

## Objectives

- Changing requirements are high cost
- Establish strong engineering practices to improve the quality
  - Perform all types of test, if testing is good
  - Design all the time, if design is good
  - Do the simplest as possible, if simplicity is good
  - Perform reviews, if review is good
  - Encourage communication, if communication is good
  - Perform shortest possible iterations, if iterations are good

# XP Introduced – Standard Practices

- ✓ **Continuous Integration –** regularly integrate new code and use the automated testing to determine the status of the integration
- ✓ **Test Driven Development –** writes the test before development starts
- ✓ **On-site Customer –** make customer as a part of the team. Customer participate with the team on a daily basis
- ✓ **User Stories –** Quick and effective way to capture the customer requirement

## XP – Other Practices

- ✓ Collective Code Ownership
- ✓ Creating a Coding Standard
- ✓ Creating a System Metaphor
- ✓ Pair Programming
- ✓ Establishing Sustainable Pace

# XP Teams – Characteristics

## Self-organized

Team are empower to decide for themselves how they are going to execute the project without top down management and control

## Cross Functional

The idea is to have generalizing specialist as team members. These are team members who specialize in one area but have enough knowledge to participate in the other roles that are part of the XP Team.

## Collaborate

### Team Members

- Customer
- Coach
- Programmers
- Trackers
- Testers

# XP – Roles

### Customers

- ✓ Product Managers
- ✓ Domain Experts
- ✓ Business Analysts
- ✓ Interaction Designers

### Programmers

- ✓ Implementation Experts
- ✓ Generalizing Specialists
- ✓ 6-10 in one team

### Testers

- ✓ Quality Experts
- ✓ Unit Testing
- ✓ Integration Testing
- ✓ Acceptance Testing
- ✓ Exploratory Testing