

PMI-ACP Exam Prep

Glossary of Agile Terms

ACP

Agile Certified Practitioner

Acceptance Test Driven Development

A method used to communicate with business customers, developers, and testers before coding begins.

Active Listening

To focus on what is said and provide feedback to communicate understanding

Adaptive Leadership

A leadership style that helps teams to thrive and overcome challenges throughout a project.

Affinity Estimation

A method used to quickly place user stories into a comparable-sized group.

Agile

To develop a goal through periodic experimentation in order to fulfill the need of a complex decision.

Agile Adaption

To adapt the project plan continuously through retrospectives in order to maximize value creation during the planning process.

Agile Coaching

To help achieve goals that is either personal or organizational.

Agile Experimentation

To use the empirical process, observation, and spike introduction while executing a project to influence planning.

Agile Manifesto

A statement that reflects Agile Philosophy that includes: individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to changes over following a plan.

Agile Manifesto Principles

A document that describes the twelve principles of the Agile Manifesto.

Agile Manifesto: Customer Satisfaction

To satisfy customers through early and continuous delivery of products, to test and receive feedback, to inform customers on progress, and to fulfill the customer's value by completing priority requirements.

Agile Manifesto: Welcome Changes

To allow quick responses to changes in the external environment, and late in development to maximize the customer's competitive advantage.

Agile Manifesto: Frequent Delivery

To deliver software frequently to the customer, allowing for a quicker product release, faster provision of value to the customer and shorter delivery timeframe.

Agile Manifesto: Collocated Team

To have individuals work together daily on a project to implement osmotic communication, focus, and receive instant feedback to achieve a common goal.

Agile Manifesto: Motivated Individuals

To give individuals the empowerment, environment, support, and trust needed to complete a task successfully.

Agile Manifesto: Face-to-Face Conversation

The most efficient and effective way to communicate in order to receive direct feedback and influence osmotic communication.

Agile Manifesto: Working Software

Working software enables the measurement of progress, enhance customer satisfaction, and maintain and improve the quality of the software to help support project goals.

Agile Manifesto: Constant Pace

To help team members establish a healthy work-life balance, remain productive, and respond to changes swiftly for progress during a project.

Agile Manifesto: Continuous Attention

To enhance agility and time spent on work requirements in order to retain a well-balanced work environment.

Agile Manifesto: Simplicity

Allows team members to focus on what is necessary to achieve the requirements needed to create and deliver value to the project and customer.

Agile Manifesto: Self-Organization

A team that knows how to complete tasks effectively, has dedication to the project, and is expert on the process and project.

Agile Manifesto: Regular Reflection

This allows a team to learn how to become more effective, what changes need immediate implementation, and behavior that needs adjustment.

Agile Mentoring

To pass on and teach based on experience, knowledge, and skills to other individuals in the team or that work for the organization.

Agile Methodologies

A way to complete a goal effectively and efficiently. Examples of Agile Methodologies include XP, Scrum, and Lean.

Agile Modeling

A workflow depiction of a process or system a team can review before it is turned into code. Stakeholders should understand the model.

Agile Planning

The most important aspect of the Agile project. Planning happens at multiple levels such as strategic, release, iteration, and daily. Planning must happen up-front and can change throughout the project.

Agile Practices

To make use of the Agile principles through activities.

Agile Projects

A project that occurs based on the Agile Manifesto and Agile Principles.

Agile Smells

Symptoms of problems that affect Agile teams and projects.

Agile Space

A space that allows team members to establish collaboration, communication, transparency, and visibility.

Agile Themes

Themes used to help the team focus on the functions of iteration.

Agile Tooling

To increase team morale with software or artifacts.

Analysis

To develop possible solutions by studying the problem and its underlying need and to understand the information provided.

Approved Iterations

After the deadline of iteration is reached, the team and stakeholders conduct a meeting for approval. Stakeholders approve the iteration if the backlog used supports the product increment.

Architectural Spikes

Spikes that relate to any area of a system, technology, or application domain that is unknown.

Artifact

A process or work output Ex. Document, Code

ASD

Exhibits continuous adaptation to the project and its processes with characteristics that include: mission focused, feature based, iterative, time-boxed, risk driven, and change tolerant.

Automated Testing Tools

These tools allow for efficient and strong testing. Examples: Peer Reviews, Periodical Code-Reviews, Refactoring, Unit Tests, Automatic and Manual Testing.

Being Agile

To work in a responsive way to deliver the products or services a customer needs and when they want the products or services.

Brainstorming

An effective and efficient way of gathering ideas within a short period of time from a group.

Burn-Down Chart

A chart used to display progress during and at the end of iteration. "Burning down" means the backlog will lessen throughout the iteration.

Burn Rate

The rate of resources consumed by the team; also cost per iteration.

Burn-Up Chart

A chart that displays completed functionality. Progress will trend upwards, as stories are completed. Only shows complete functions, it is not accurate at predicting or showing work-in-progress.

CARVER

An acronym to measure the goals and mission of the project with each letter meaning: Criticality, Accessibility, Return, Vulnerability, Effect, and Recognizeability.

Ceremony

A meeting conducted during an Agile project that consists of daily stand-up, iteration planning, iteration review, and iteration retrospective.

Change

To change requirements that increase value to the customer.

Charter

A document created during initiation that formally begins the project. The document includes the project's justification, a summary level budget, major milestones, critical success factors, constraints, assumptions, and authorization to do it.

Chicken

An individual involved but not committed to an Agile project.

Coach

A team role that keeps the team focused on learning and the process.

Collaboration

A method of cooperation among individuals to achieve a common goal.

Collective Code Ownership

The entire team together is responsible for 100% of the code.

Collocation

The entire team is physically present, working in one room.

Common Cause

An issue solved through trend analysis because the issue is systematic.

Communication

To share smooth and transparent information of needs.

Command & Control

Decisions created by higher up individuals in the organization and handed over to the team.

Compliance

To meet regulations, rules, and standards.

Cone of Silence

An environment for the team that is free of distractions and interruptions.

Conflict

Disagreements in certain areas between individuals.

Conflict Resolution

An agreement made after a conflict.

Continuous Improvement

To ensure that self-assessment and process improvement occurs frequently to improve the product.

Continuous Integration

To consistently examine a team member's work. To build, and test the entire system.

Coordination

To organize work with the goal of higher productivity and teamwork.

Cost Performance Index (CPI)

To measure the cost spent on a project and its efficiency. $\text{Earned Value} / \text{Actual Cost} = \text{CPI}$

Cross-Functional Team

Teams that consist of members who can multi-task well and complete various functions to achieve a common goal.

Crystal Family

An adaptable approach that focuses on interaction between people and processes that consists of families that vary based on team size, system criticality, and project priorities.

Cumulative Flow Diagram

A chart that displays feature backlog, work-in-progress, and completed features.

Customer

The end-user who determines and emphasizes business values.

Customer-Valued Prioritization

To deliver the maximum customer value early in order to win customer loyalty and support.

Cycle Time

The time needed to complete a feature (user story).

Daily Stand Up

A brief meeting where the team shares the previous day's achievements, plans to make achievements, obstacles, and how to overcome the obstacles.

Decide As Late As Possible

To postpone decisions to determine possibilities and make the decision when the most amount of knowledge is available.

DEEP

The qualities of a product backlog which include: detailed, estimate-able, emergent, and prioritized.

Deliverables

A tangible or intangible object delivered to the customer. Ex. Document, Pamphlet, Report

Disaggregation

To separate epics or large stories into smaller stories.

Dissatisfaction

The lack of satisfaction among workers such as, work conditions, salary, and management-employee relationships. Factors known as demotivators.

Distributive Negotiation

To reach a deal through tactics so both parties receive the highest amount of value possible.

Done

When work is complete, and meets the following criteria: complies, runs without errors, and passes predefined acceptance and regression tests.

Dot Voting

A system of voting where people receive a certain number of dots to vote on the options provided.

Dynamic Systems Development Model (DSDM)

A model that provides a comprehensive foundation for planning, managing, executing, and scaling agile and iterative software development projects based on nine principles that involve business needs/value, active user involvement, empowered teams, frequent delivery, integrated testing, and stakeholder collaboration.

Earned Value Management (EVM)

Earned Value Management, works well at iteration. It is a method to measure and communicate progress and trends at the current stage of the project.

Emergent

Stories that grow and change overtime as other stories reach completion in the backlog.

Emotional Intelligence

An individual's skill to lead and relate to other team members.

Epic Story

A large story that spans iterations, then disaggregated into smaller stories.

Escaped Defects

Defects reported after the delivery by the customer.

Expectancy Theory

An individual chooses to behave in a particular way over other behaviors because of the expected results of the chosen behavior.

Exploratory Testing

To inquire how software works with the use of test subjects using the software and asking questions about the software.

Extreme Persona

A team-manufactured persona that exaggerates to induce requirements a standard persona may miss.

eXtreme Programming (XP)

A methodology in Agile with one-week iterations and paired development.

Feature-Driven Development (FDD)

A comprehensive model and list of features included in the system before the design work begins.

Feature

A group of stories that deliver value to the customers.

Feedback

Information or responses towards a product or project used to make improvements.

Fibonacci Sequence

A sequence of numbers used in Agile estimating, 0, 1, 2, 3, 5, 8, 13, 20, 40, 100.

Finish Tasks One by One

Tasks must be finished in all iterations to meet the "Definition of Done" requirements as a way to track progress and allow frequent delivery.

Fishbone Diagram

A root cause diagram.

Five Whys

The root causes analysis technique that asks WHY five times. The problem is looked into deeper each time WHY is asked. Toyota developed this technique.

Fixed Time Box

Assigned tasks prioritized for completion based on an estimated number of days. Top priorities are usually completed first.

Focus

To stay on task, and is facilitated by the scrum master or coach.

Force Field Analysis

To analyze forces that encourages or resists change.

Functionality

An action the customer must see and experience from a system, which will add value to the customer.

Grooming

To clean up the product backlog by removal of items, disaggregation of items, or estimation of items.

Ground Rules

Unwritten rules decided and followed by team members.

Herzberg's Hygiene Theory

A theory that states factors in the workplace create satisfaction and dissatisfaction in relation to the job.

High-Bandwidth Communication

Face-to-face communication that also includes non-verbal communication.

High Performing Team

This team reaches maximum performance by creation of clear, detailed goals, open communication, accountability, empowerment, use of the participatory decision model, and the team consists of twelve dedicated members or less.

Ideal Time

The amount of time needed to complete an assignment without distractions or interruptions.

Incremental Delivery

Functionality conveyed in small phases.

Incremental Project Releases

To build upon the prior release of a goal, outcome, or product, not all requirements are met, but after all releases, the requirements will be met.

Information Radiator

Artifacts used to help maintain transparency of a project status to team members and stakeholders.

Information Refrigerator

Information that is not transparent or useful to the team and stakeholders.

Innovation Games

Practice used to induce requirements from product, owners, users, and stakeholders.

Integrative Negotiation

To reach an agreement collaboratively that creates more value for both parties by a win-win solution.

Interaction

Face-to-Face communication

IRR

Internal Rate of Return- a discount rate that makes the net present value of all cash flows from a project equal to zero. Used to determine potential profitability of project or investment.

Intraspectives

To inspect within, during a meeting with the Agile team to review practices, usually when a problem or issue occurs.

Intrinsic Schedule Flaw

Poor estimation that occurs at the beginning of iteration.

INVEST

The benefits of good user stories, which include: Independent, Negotiable, Valuable, Estimate-able, Small, and Testable.

Iteration

Work cycle, Scrum uses 2-4 weeks, XP uses 1 week.

Iteration Backlog

Work to complete in a particular iteration.

Iteration H

Iteration used to prepare the launch of software, and to test software.

Iteration 0

Iteration to complete tasks before the development work occurs, for technical and architectural spikes and to gather requirements into the backlog.

Iteration Retrospective

A meeting used in Scrum, the team discusses ways to improve after work is completed.

Just-In-Time

Used to minimize inventory cost by materials delivered before they are required.

Kaizen

Based on Japanese management philosophy, to continue improvement through small releases.

Kanban

A signal used to advance transparency of work-in-progress, a new task can begin once a previous one is complete.

Kanban Board

A chart that shows workflow stages to locate work-in-progress.

Kano Analysis

An analysis of product development and customer satisfaction based on needs fulfilled/not fulfilled vs. satisfaction/dissatisfaction.

Last Responsible Moment

To make decisions as late as possible in order to preserve all possible options.

Lean Methodology

To eliminate waste, an Agile method derived from manufacturing.

Little's Law

The law that limits work-in-progress efficiently with development of an appropriate cycle time.

Low Performing Team

This team has a lack of trust, no accountability, fear of conflict, less commitment, and less attention to details and results.

Lean Software Development (LSD)

This methodology focuses on the "Value Stream" to deliver value to customers. The goal is to eliminate waste by focusing on valuable features of a system and to deliver the value in small batches. Principles of Lean include: elimination of waste, amplify learning, to decide late as possible, deliver as fast as possible, empowerment of the team, to build in integrity, and to see the whole.

Maslow's Hierarchy of Needs

This theory suggests the interdependent needs (motivators) of people based on five levels in this order: Physiological, Safety & Security, Social, Esteem, and Self-Actualization.

Metaphor

To explain how a project will be completed successfully to stakeholders by use of real-world examples of systems and components.

Minimal Viable Product (MVP)

A product with only the essential features delivered to early adopters to receive feedback.

Minimal Marketing Feature (MMF)

The smallest feature of a product that provides value to the end-user.

Monopoly Money

To give fake money to business features in order to compare the relative priority of those features.

MoSCoW Analysis

An analysis used to help stakeholders understand the importance of each requirement delivered. MoSCoW is the acronym for Must have, Should have, Could have, and Would like to have.

Negotiation

To reach an agreement between two or more parties to resolve a conflict.

Negotiable

Anything opened to discussion.

NPV

Net Present Value- A value that compares the amount invested today to the present value of future cash receipts from the investment.

Osmotic Communication

To communicate by sharing an environment.

Pair Programming

When developers work together in XP Practice

Pareto Principle

Known as the 80/20 rule. For Agile projects, it means that 80% of all development should be spent on the top 20% of the features the customers need.

Parking Lot

A storage place for ideas that distract from the main goal during a meeting.

Participatory Decision Models

To have stakeholder's involvement in decision making with techniques such as a simple vote.

Persona

A depiction of the customer of system with applicable details about usage.

Personnel Loss

When an employer faces the loss of a human resource through death, injury, or disability of an employee.

Pig

A committed individual impacted by the outcome.

Plan-Do-Check-Act

Work cycle in smaller, quick iterations than traditional.

Planning Game

To prioritize work and estimate effort required by creation of a release plan in XP.

Planning Poker

A tool used to estimate team effort on user stories.

PMBOK Guide

A Guide to the Project Management Body of Knowledge

PMI

Project Management Institute

Positive Value

To maximize value through incremental work in order to gain competitive advantage.

Pre-Mortem

Team members asked to define reasons of a project's failure and to identify causes of failure missed in previous analyses.

Present Value

A way to calculate the time value of money.

Process Tailoring

To perfect agile processes for a particular project and environment.

Productivity

The effectiveness of production, usually measured with output per unit of input.

Productivity Variation

The difference between the planned and actual performance.

Product Backlog

The known features for a project.

Product Road Map

An artifact that displays planned project functionality.

Product Vision

A document that describes what the product is, who will use the product, why the product will be used, and how the product supports the strategy of a company.

Product Vision Statement

A statement that defines the purpose and value of the product.

Programmer

The role of a team member that writes the code, a role used in XP.

Progressive Elaboration

An approach for planning that occurs in cycles instead of upfront, which happens frequently.

Project

An enterprise planned and designed to create a product, service, or result.

PMP

Project Management Professional credential.

Prototyping

A model used to perfect requirements.

Qualitative

Descriptive data used for analysis.

Quality

The specifications and requirements of product or service measured against the standard product or service in the industry.

Quantitative

Numerical data used for analysis.

Refactoring

To adjust working code to improve functionality and conservation.

Relative Prioritization

A list of all user stories and features ordered by highest priority to the lowest priority.

Relative Sizing

To estimate the size of a story in comparison with another story.

Release

Iteration outcomes delivered to customers (end-users).

Release Plan

A document that describes the timeline of a product release.

Requirements at a High Level

Requirements are in the form of user stories, and collected at a high level to estimate a budget.

Requirements Prioritization Model

A model to rate each feature with the calculation of weighted formula defined by the team.

Requirements Review

To review the requirements so they fulfill the needs and priorities of stakeholders.

ROI

Return on Investment- The return an organization makes on an investment expressed by a percentage.

Risk

The uncertainty of an unwanted outcome related to the project.

Risk-Adjusted Backlog

A product backlog adjusted to help balance the risk and value factors of product.

Risk-Based Spike

This spike helps the team remove major risks, and if the spike fails every approach possible, the project is defined as “fast failure”.

Risk Burn Down

A chart that displays risk and success with feature vs. time.

Risk Impact

To analyze the consequences of the risk if they occur based on their probability.

Risk Probability

The likelihood that the risk will occur.

Risk Severity

How much the risk's consequences will influence the success or failure of a project. $\text{Risk Probability (\%)} \times \text{Risk Impact (\$)} = \text{Risk Severity}$

Role

A person's description that includes their function in an Agile project.

Rolling Wave Planning

To divide the planning phase into stages.

Root Cause Analysis

To investigate beyond the symptoms of the problem and to understand the root cause of the problem.

Root Cause Diagram

A diagram that correlates different factors and the symptom.

Satisfaction

The feeling of workers when their needs are fulfilled. Known as motivators.

Schedule Performance Index

The ratio of earned value to planned value. $EV/PV = SPI$.

Scope Creep

The uncontrolled changes or growth in a project's scope which goes beyond the initial agreement.

Scrum

A popular Agile methodology.

Scrum of Scrums

Meetings used to organize large projects with scrum masters from different teams.

Scum Master

The leader that helps the team to follow Scrum methodology.

Software Development Life Cycle (SDLC)

This cycle tends to be long and requires a lot of advanced planning.

Self-Directing Team

This team has the capability to make their own decisions, empowerment, mutual accountability, and collective ownership of a project, which leads them to be more productive and efficient.

Self-Organizing Team

Naturally formed teams that interact with minimal management supervision.

Servant Leadership

Leaders collaborate with the team and do anything the team does when needed.

Shu-Ha-Ri Model

Originated in Japan as a way to understand learning and mastery, Shu – obeying the rules, Ha – consciously moving away from the rules, and Ri – consciously finding an individual path.

Silo

Work that is isolated.

Social Media-Based Communication

Communication used conveniently to receive instant feedback, ideas, and requirements from a particular community.

Special Cause

A cause that occurs once because of special reasons.

Specification Breakdown

This occurs when requirements for the specification are incomplete or conflicting.

Spike

An experiment that helps a team answer, a particular question and determine future actions.

Sprint

A consistent iteration that lasts from one week to one month in order to measure velocity in Scrum.

Sprint Plan

A document that explains sprint goals, tasks, and requirements and how the tasks will reach completion.

Sprint Retrospective

A team-member meeting that occurs after each sprint to evaluate the product and process to improve efficiency and effectiveness.

Sprint Review

A meeting that occurs after each sprint to show the product or process to stakeholders for approval and to receive feedback.

Stakeholder

An individual with an interest in the outcome.

Stakeholder Management

To ensure stakeholders remain informed and that the achievement of their needs are met.

Standardized Test

A curved test used to measure knowledge and understanding, but constructed so the same test-taker will perform similarly each time.

Story Card

An index card that displays the user story.

Story Map

A prioritization tool that backlogged stories made smaller and organized by user functionality.

Story Point

A unit of measurement to estimate the difficulty of a user story.

Sustainability

A maintainable pace of work that is intense yet steady.

Swarming

When the team collaborates to focus on a single user story.

Tabaka's Model

A model originated in Japan to describe a team with values that include self-organization, empowered to make decisions, belief in vision and success, a committed team, trust, participatory decision making, consensus-driven, and construction disagreement.

Tasks

The smaller jobs to fulfill a user story, usually divided among team members.

Team

A group of individuals charged with the responsibility of delivery and value of a project.

Teamwork

Team members function in a way that is collaborative to complete tasks and reach a common goal, mostly achieved with strong communication.

Team Empowerment

A team that is empowered has collaboration, responsibility, and self-sufficiency.

Team Formation

Formation happens when a team creates ground rules and processes to build bonds and shared goals.

Team Participation

When the team discusses the requirements that will fulfill the customer's needs.

Team Space

An area for team members to collocate, usually a physical location, in some cases a virtual location is created.

Team Velocity

The number of story points completed during iteration, and used to determine the planned capacity.

Technical Debt

Technical decisions a team chooses to not implement currently, but must do so or face difficulty in the future.

Test-Driven Development (TDD)

A written acceptance test for a module with the code built to pass the tests in order to ensure correct performance.

Tester

Explains acceptance test to the customers then consistently measures the product against the test and records results for the team. (XP Role)

Theme

A group of stories, iteration, or release's idea determined by the customer and the team agrees with the idea.

Time-boxing

To set a fixed delivery date for a project or release.

Tracker

A role in XP that measures the team's progress, and communicates the measurements to the team.

Traditional Management

A top-down approach that consists of long cycles, heavy planning, and minimal customer involvement.

Transparency

To show everyone's involvement and progress to the entire team.

Trend Analysis

This analysis provides trends that will occur in the future to help control and implement continuous improvement.

Two-Way Communication

To allow communication between parties so their concerns and perspectives are given for effective feedback.

Unit Testing

These tests are used for continuous feedback to achieve quality improvement and assurance.

Usability Testing

An exploratory test which uses a test subject to understand the usability of software.

Users Involvement

The active involvement of users in the development cycle of a project so team members can receive feedback about the user's requirements.

User Story

At least one business requirement that increases the value for the user.

Validation

The way to make sure that the product is acceptable to the customer.

Value

The worth of a product, project, or service.

Value-Based Prioritization

To allow the PO or customer determine which function to implement first based on the value it delivers.

Value-Driven Delivery

To realize the values needed to deliver a project.

Value Stream Mapping

A tool used to analyze a chain of processes with the desired outcome of eliminating waste.

Variance

The measurement of how far apart data is from each other.

Velocity

The total number of features that a team delivers in iteration.

Verification

To ensure the product meets requirements and specifications.

Virtual Team

A geographically distributed group that does not meet physically.

Visibility

The team's work and progress must be transparent to all stakeholders.

War Room

A space where the team can work and collaborate effectively.

Waterfall

Resistant to change that requires heavy planning and sequential, traditional approach.

Wide-Band Delphi Estimating

An estimation technique for user stories. The PO presents user stories & discusses challenges. Each story's estimates plotted, and then the team comes to an agreement on the range of points.

WIP Limits

To limit work-in-progress so a team can do the following: maintain focus on completing work, maintaining quality, and delivering value.

Wireframe

A lightweight non-functional UI design that shows the customer the vital elements and how they will interact before coding.

WIP

Work-In-Progress- Stories that have started, which are displayed in workflows to show progress and what still needs to be completed.

Workflow

A series of phases or stages the team has agreed to execute for a project.

100-Point Method

A method that allows customers to score (total 100 points) different features of a product.