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Course Overview

Course Details

Course Name: Software Engineering & Project Management

Instructor: Maria Garcia

Created On: 16 June, 2025

Updated On: 16 June, 2025

Price: 8500 INR

Duration: 10 weeks

Modules: 10

Language: English, Hindi

Level: Intermediate

Certifications: Yes

Course Description

This comprehensive course bridges the gap between writing code and delivering successful software projects. You will learn the core principles of Software Engineering, exploring different Software Development Life Cycle (SDLC) models like Waterfall and Agile. We provide a deep dive into the Agile philosophy, with a practical focus on the Scrum framework.

The course covers essential engineering practices such as requirements gathering, software design, and architectural patterns. On the project management side, you will learn how to plan projects, estimate effort, manage scope, time, and cost, and mitigate risks. We'll cover key Agile practices like creating product backlogs, sprint planning, and conducting daily

stand-ups and retrospectives. You will also get an overview of essential tools like Jira and Git.

What You'll Learn:

- Software Development Life Cycle (SDLC) Models.
- Agile, Scrum, and Kanban methodologies.
- Requirements gathering and analysis.
- Software design principles and architectural patterns.
- Project planning, estimation, and scheduling.
- Risk management and quality assurance.
- Managing projects with tools like Jira.

Who Is This Course For?

This course is essential for aspiring software developers, team leads, and project managers. It provides the process and management knowledge needed to succeed in a professional development environment.

Course Curriculum Details

Module 1: Module 1: Introduction to Software Engineering

2 Lessons

1. What is Software Engineering?   **20min**

2. The Software Development Life Cycle (SDLC)   **25min**

Module 2: Module 2: Process Models

2 Lessons

1. Waterfall, Spiral, and V-Model   **30min**

2. Introduction to Agile   **25min**

Module 3: Module 3: Agile Deep Dive: Scrum

2 Lessons

1. Scrum Roles, Events, and Artifacts   **35min**

2. The Sprint Cycle   **30min**

Module 4: Module 4: Requirements Engineering

2 Lessons

1. Gathering and Analyzing Requirements   **30min**

2. Writing User Stories   **25min**

Module 5: Module 5: Software Design

2 Lessons

1. Architectural Patterns (MVC, etc.)   **30min**

2. Design Principles (SOLID)   **30min**

Module 6: Module 6: Project Management Fundamentals

1 Lessons

1. Scope, Time, and Cost (The Triple Constraint)   **25min**

Module 7: Module 7: Project Planning

2 Lessons

1. Work Breakdown Structure (WBS)   **20min**

2. Estimation Techniques (Story Points)   **30min**

Module 8: Module 8: Risk & Quality Management
2 Lessons

1. Identifying and Mitigating Risks   **25min**

2. Integrating Quality Assurance   **20min**

Module 9: Module 9: Project Execution and Tools
1 Lessons

1. Managing Sprints with Jira/Trello   **35min**

Module 10: Module 10: Final Project
1 Lessons

1. Plan a Software Project from Concept to Release   **2hr**

This curriculum is subject to minor adjustments to ensure the most up-to-date and effective learning experience.