#### Intelligent Engineering with AI

## Participant Prerequisites

This document outlines the prerequisites for participants, including necessary background knowledge, skills, and any required software or tools. This information should be communicated clearly to participants before the course begins.

### Background Knowledge and Skills

- 1. **Basic Programming Knowledge**: Participants should have a basic understanding of programming concepts. Experience with any programming language is acceptable, though familiarity with .NET languages like C# will be beneficial.
- 2. **Test-Driven Development (TDD) Basics**: Understanding the principles and practices of TDD will be helpful. This includes writing tests before code, understanding the Red-Green-Refactor cycle, and familiarity with testing patterns such as mocks and stubs.
- 3. **Software Development Practices**: Familiarity with general software development practices and methodologies, particularly agile methodologies like Scrum or Kanban, will be advantageous.

### Required Software and Tools

- 1. Development Environment:
  - **IDE**: Visual Studio Code.
  - Version Control: Git.
- 2. Frameworks and SDKs:
  - **.NET 8.0 (latest)**: Ensure the .NET Core SDK is installed.
- 3. AI Tools:
  - **GitHub Copilot**: Ensure you have access to GitHub Copilot.
  - ChatGPT: Access to ChatGPT for AI-driven code assistance and documentation.

### Required Access

Your laptop must have the capabilities and proper configuration before attending. If you do not understand any of this, please get in touch with your company's tech support for help.

- **Software Installation**: You should be able to install software on your laptop (Local Admin in Windows or Administrator in macOS).



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## Preparation Steps

### 1. Install Required Software:

- Download and install Visual Studio Code.
- Set up Git and ensure it is functioning correctly.
- Install the .NET Core SDK.
- Ensure GitHub Copilot is enabled in your Visual Studio Code.
- Ensure you have access to ChatGPT.

### 2. Review TDD Concepts:

- Familiarize yourself with the basics of TDD.
- Read introductory material on TDD if necessary.

#### 3. Join Pre-Course Communication:

- Ensure you can access any pre-course communication channels (e.g., Slack, email) where additional instructions or resources may be provided.

# Contact for Setup Issues

If you have any issues or questions regarding setup, please reach out to Jeff Dunay at jeff.dunay@leandogsoftware.com

