# Spec Driven Development with Kiro

## Introduction

We are standing at the edge of a new era in software development - an era in which coding is no longer the center of our work. Instead of writing endless lines of code, we now guide powerful Al systems that do it for us. At the heart of this revolution is the Spec Driven Development (SDD) methodology, that is rapidly becoming the dominant way to build applications in the age of Al. Kiro IDE (by Amazon) takes this transformation even further. As the world's first Agentic IDE, it is filled with intelligent agents that automate tasks across the development lifecycle. From generating boilerplate to maintaining consistency, Kiro's agents allow developers to focus on the big picture while routine work happens in the background. All project-relevant documents requirements, designs, tasks, and code—live in the same environment, ensuring nothing gets lost and everything stays aligned. What makes Kiro truly revolutionary is its structured approach: requirements lead to design, design leads to actionable tasks, and tasks are completed step by step with AI support. This clear, disciplined flow ensures that software projects move faster, stay on track, and maintain high quality without the traditional overhead. This seminar will introduce you to Spec Driven Development with Kiro, showing how it transforms the role of the developer into a strategic designer and decision-maker. If you want to thrive in the Al-powered future of software engineering, this is the training you cannot afford to miss.

#### **Prerequisites**

This seminar was developed for software developers in one (or more) of the following programming languages: Python, Java, JavaScript, and TypeScript. There is also a requirement for having the Kiro IDE installed in advance and available for use. Please note that there is currently a waiting for getting the code that is required to start using the Kiro IDE.

### **Duration**

This seminar includes eight academic hours. It can be delivered either in one full day of 8 hours or in two separate meetings of 4 academic hours each.

### **Premium Training**

This seminar can be delivered either in Hebrew or in English. It can be delivered either online, or in a Hybrid way that allows the participants to choose whether to attend the meeting room where

the training takes place or to join online. During the training itself we use a Moodle based Learning Management System you connect using a web browser from anywhere.

#### The Lecturer

This seminar is delivered by <u>Haim Michael</u>, an experienced, well-known software development trainer with more than 25 years of experience in software development training, more than 30 years of experience in Java, more than 30 years of experience in JavaScript, more than 15 years of experience in TypeScript, and more than 15 years of experience in Python.

# The Topics

This seminar focuses on Spec Driven Developing using the Kiro IDE (by Amazon). This seminar starts with a short overview of Spec Driven Development vs. Vibe Coding, and overview the advantages and the disadvantages of each approach. Following this short intro we experience our Hello World with Kiro, and continue with in-depth coverage of Kiro capabilities and of rgw other related topics. The following is the list of topics we are going to cover. Each topic has a separated dedicated presentation.

Introduction

Vibe Coding

Spec Driven Development

Kiro IDE Jump Start

The EARS Notation

The Mermaid Markdown Language

The Steering Documents

The Specifications

Creating Our Hooks

The Kiro IDE Editor

Using The Chat

Setting Up MCP Servers