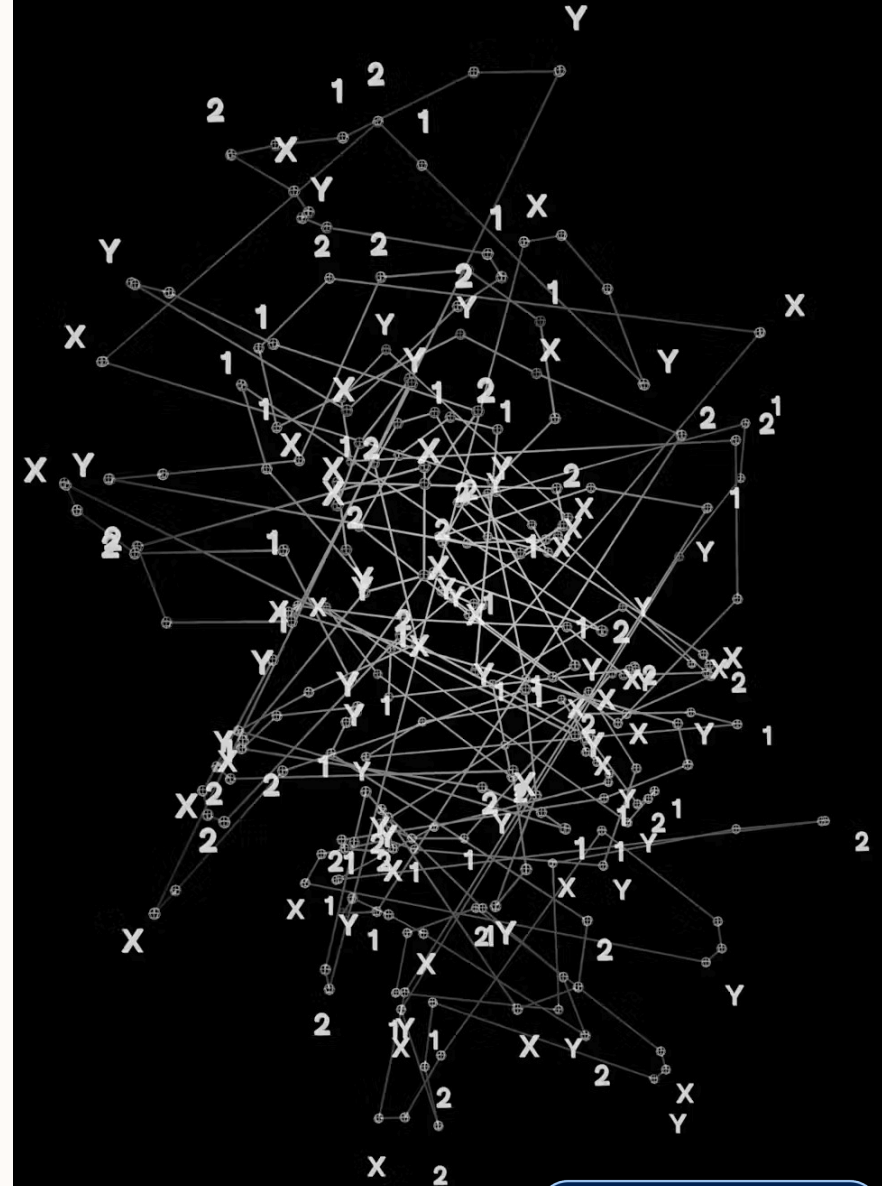# AI-Powered Web Development: Live Cohort Program

**Instructor: Mihirsinh Chauhan**

# Welcome to AI Crafter: Building the Future, Together

## Robust Portfolio

Graduate with a portfolio of functional projects, showcasing your tangible skills and achievements.

## Mindset

Develop the essential mindset of a true AI first products, ready to tackle complex challenges with confidence.

## Innovate, Build, Lead

Be empowered to innovate, build, and lead in the rapidly evolving landscape of AI-powered web development.

## Vibrant Community

Connect with a passionate network of peers and mentors, fostering collaboration and lifelong learning.

## Cutting-Edge Skills

Master the latest AI models and web technologies, staying ahead in a dynamic and evolving industry.

# Technology Stack Overview

Our chosen technology stack is specifically selected for its industry relevance, performance, and job-readiness, ensuring you gain skills highly sought after by employers.

### React (Frontend)

A powerful JavaScript library for building dynamic and interactive user interfaces.

### Go (Backend)

A fast, efficient, and reliable language for building scalable backend services.
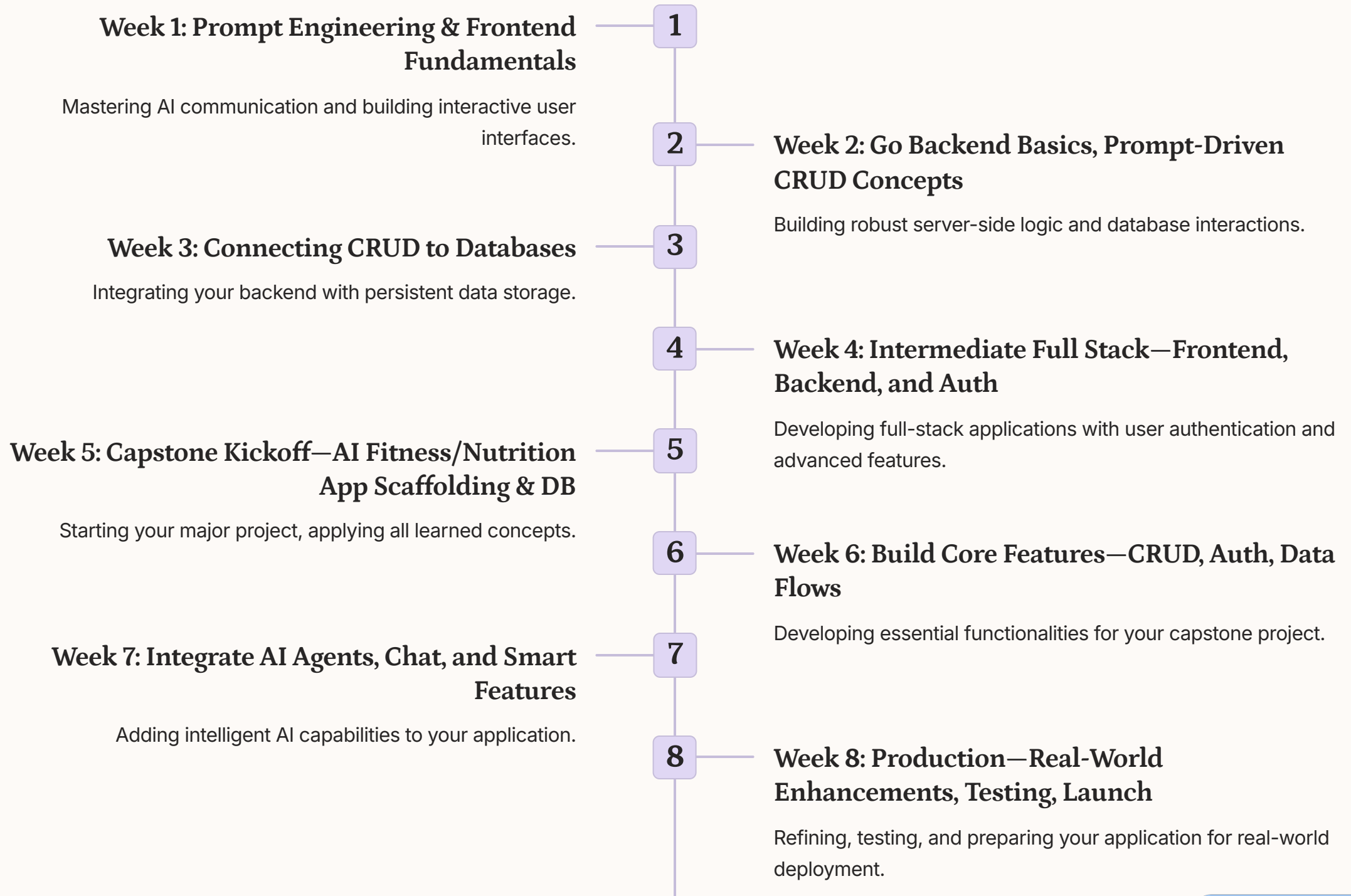
### Python (AI Features)

The go-to language for AI, machine learning, and data processing.

### Databases (SQL/NoSQL)

Mastering data storage and retrieval for robust application development.

# Course Structure & Module Preview

**Week 1: Prompt Engineering & Frontend Fundamentals**

**1**

Mastering AI communication and building interactive user interfaces.

**2**

**Week 2: Go Backend Basics, Prompt-Driven CRUD Concepts**

Building robust server-side logic and database interactions.

**Week 3: Connecting CRUD to Databases**

**3**

Integrating your backend with persistent data storage.

**4**

**Week 4: Intermediate Full Stack—Frontend, Backend, and Auth**

Developing full-stack applications with user authentication and advanced features.

**Week 5: Capstone Kickoff—AI Fitness/Nutrition App Scaffolding & DB**

**5**

Starting your major project, applying all learned concepts.

**6**

**Week 6: Build Core Features—CRUD, Auth, Data Flows**

Developing essential functionalities for your capstone project.

**Week 7: Integrate AI Agents, Chat, and Smart Features**

**7**

Adding intelligent AI capabilities to your application.

**8**

**Week 8: Production—Real-World Enhancements, Testing, Launch**

Refining, testing, and preparing your application for real-world deployment.

# Why AI + Coding Today?

**1** **AI Transformation**

AI is transforming every industry, including software development. Companies need developers who can integrate AI to create intelligent, user-centric products.

**2** **AI in Web Development**

Understanding how to leverage AI is crucial for building the next generation of digital experiences.

**3** **AI Tools in Development**

AI is revolutionizing the coding process with tools like GitHub Copilot, Cursor, Claude, and Gemini.

**4** **Career Opportunities**

The demand for developers skilled in AI integration is skyrocketing, opening up new and lucrative career paths across various industries.

**5** **Solving Complex Problems**

AI empowers developers to tackle complex challenges, automate tasks, and create intelligent solutions that drive real-world impact.

# Maximizing Your AI Crafter Journey

Success in this course hinges on active participation and a proactive mindset. We believe in **"learning by doing"** – the more you build, experiment, and share, the more you'll grow.

| 1 | 2 |
|---|---|

### Continuous Building

Don't just watch, build. Prototype frequently, even if it's imperfect.

### Experiment & Iterate

Try new approaches, test hypotheses, and learn from every iteration.

| 3 | 4 |
|---|---|

### Share & Collaborate

Show your work, seek peer feedback, and contribute to the community.

### Personal Projects

Apply concepts to your own ideas, using prompt logs for structured development.

# Getting the Most Out of Your Journey

This course is designed for hands-on learning, empowering you to build remarkable things. Here's how you can maximize your journey with us:

## Stay Engaged

Actively participate in weekly assignments and projects to solidify your practical skills.

## Team Up

Collaborate and share insights with your peers on group projects, leveraging collective intelligence.

## Reflect & Grow

Regularly assess your progress, identify challenges, and develop innovative solutions.

## Embrace New Tools

Continuously explore and adapt to the latest AI and web development technologies.

## Ask Questions

Never hesitate to seek clarification and support – our team is here to guide your success.

## Build & Play

Consistently experiment and enjoy transforming your AI-powered ideas into tangible creations.

# Career Paths: AI Product Manager vs. Software Developer

Understanding these distinct yet interconnected roles is crucial for navigating the AI landscape. Both are vital for bringing AI products to life.
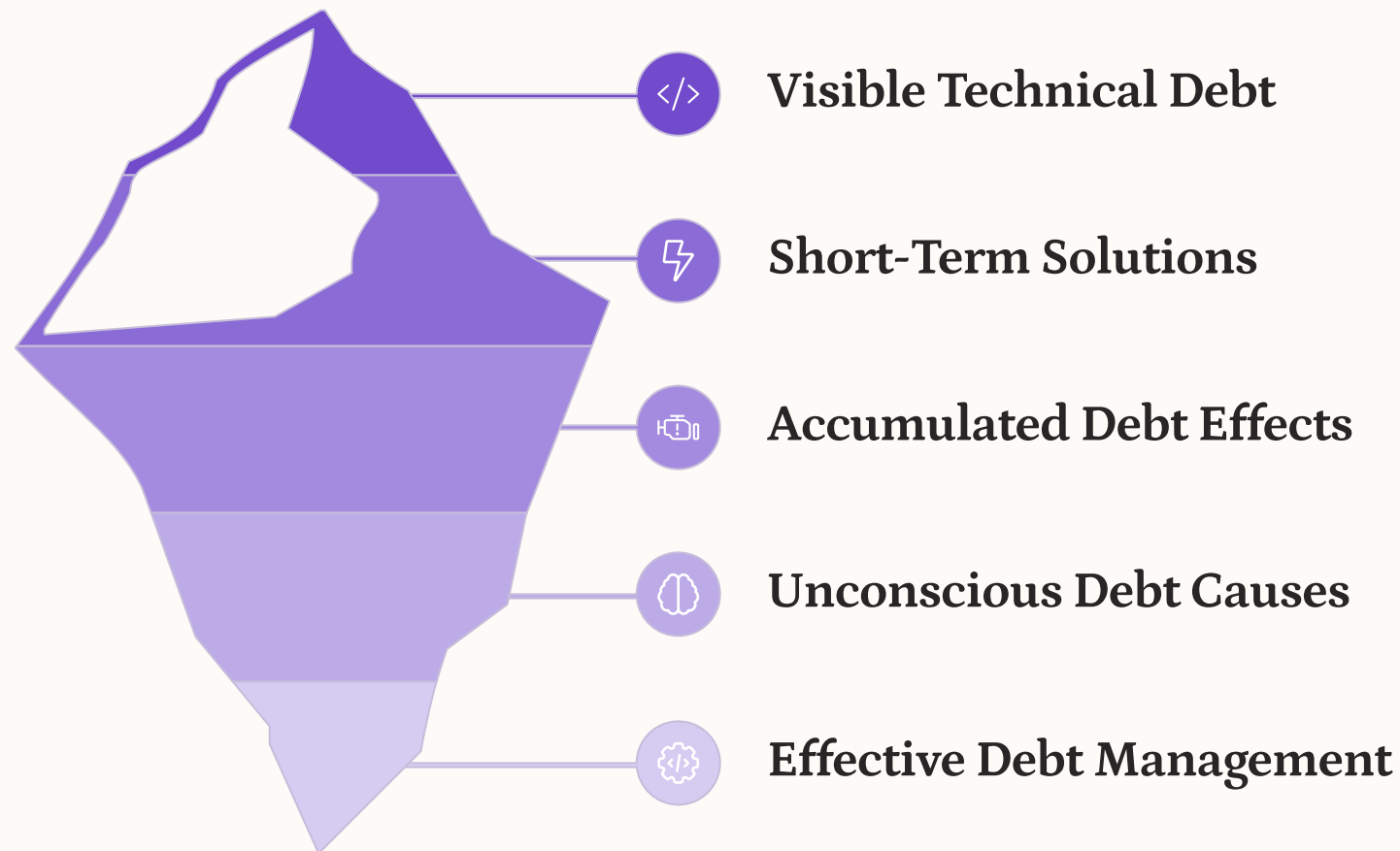
## AI Product Manager

- **Focus:** Defines the **what** and **why** of AI products, focusing on **market opportunities**, **user problems**, and **business value**.
- **Daily Work:** Conducts **market research**, defines **AI-driven features**, manages **product roadmaps**, and **communicates** with stakeholders.
- **Mindset: Strategic**, **user-centric**, **business-driven**, and focuses on **cross-functional leadership**.
- **AI Utilization:** Identifies **strategic AI opportunities**, defines features leveraging AI, assesses **ethical implications**, and measures **business impact**.

## Software Developer

- **Focus:** Responsible for the **how** of AI products, focusing on **technical implementation**, **code quality**, and **system architecture**.
- **Daily Work: Writes**, **debugs**, and **deploys code** for AI features, **integrates AI models**, and **optimizes algorithms**.
- **Mindset: Problem-solving**, **analytical**, **detail-oriented**, focused on technical feasibility and efficiency, and **continuous learning**.
- **AI Utilization: Develops** and **integrates AI models**, builds **infrastructure**, **optimizes performance** and **scalability**, and ensures **data integrity**.

# Navigating Technical Debt: A Crucial Skill

Technical debt, similar to financial debt, is incurred when development teams choose easy, short-term solutions instead of better, long-term approaches. While sometimes necessary for speed, it can accumulate and hinder future development.

- Visible Technical Debt
- Short-Term Solutions
- Accumulated Debt Effects
- Unconscious Debt Causes
- Effective Debt Management

# Let's Connect: Discussion & Q&A

Now it's your turn! Let's get to know each other and share our aspirations for this exciting journey.