



Bootcamp Journey

Use this document as a high-level overview of your journey.

This document will reference both these aspects:

- **Technical Skills Development**
 - Core ML/AI Concepts
 - Gen AI & Data Engineering
 - MLOps & Deployment
- **Project-Based Learning**
 - Agile Scrum Methodology
 - Team Collaborations
 - Real-world Applications

Project Timeline

Here is a high-level timeline of your 11-week journey.

Week 1 - 11 Agenda for AI PM Bootcamp

- **Week 1:** Learning and Onboarding Study all the AI knowledge:
 - [Training for AI Engineers](#)
 - [Engineers' Training Youtube Playlist](#)
 - [Training of AI Designers](#)

- [Designers' Training Playlist](#)
- Engineers: Working on [Job Assistant Agent](#) or [Discord RAG FAQ Chatbot](#)
 - Make sure to join **Office hours** to discuss your thoughts and issues with these projects. (every Saturday)
- **Week 2:** Learning and Onboarding Study all the AI knowledge:
 - Engineers/Data Scientists
 - [Training for AI Engineers](#)
 - [Engineers' Training Youtube Playlist](#)
 - Designers
 - [Training of AI Designers](#)
 - [Designers' Training Playlist](#)
 - **Designers:** Join Pitch Day & Team Match (within 24 fill out AI products interested in on [Team Match.xls](#) for Cohort 7) -
 - Designers and PM's need to reach out to each other and determine if they are a good match. Each team can initially have 2 designers. (1 - Senior + 1 - Junior)
 - Format: Full_Name(Role - Senior/Junior)
 - Senior 2 or more years of experience
 - After designers join the team: Discuss User Interview process [PM to lead this discussion] ⇒Prioritize Fast matching this week

- Main communication = Discord (check daily)
- Engineers: Working on [Job Assistant Agent](#) or [Discord RAG FAQ Chatbot](#)
 - Make sure to join **Office hours** to discuss your thoughts and issues with these projects.
- **Week 3:** Continue development
 - Designer building High-Fidelity Designs
 - User Interviews (continue)
 - Prepare for Week 4 presentation to Engineers/Data Scientists
 - Engineers: Working on [Job Assistant Agent](#) or [Discord RAG FAQ Chatbot](#)
 - Make sure to join **Office hours** to discuss your thoughts and issues with these projects.
 - Submit your code and video walk through of code logic and provide a running example by filling out this [Google Form](#)
- **Week 4:** Prepare and Join Pitch Day & Ranking
 - Designers & PM present to Engineers
 - Engineers join Zoom Pitch Day and fill out [Google Ranking form](#). (*Lead Engineers get Ranking choice priority*)
 - [Lead Engineer Responsibilities](#) =
 - Lead System Architecture Design (Bring thoughts to Office Hours)
 - Determine version control process in shared repository (Github) [And Git locally]
 - Assist other Engineers (not code for them but help with issues/hurdles)
 - Help PM's with technical hurdles

- **Week 5:** Cross-functional team collaboration. Agile feature development
- **Week 6:** Cross-functional team collaboration. Agile feature development
- **Week 7** Cross-functional team collaboration. Agile feature development
- **Week 8:** Cross-functional team collaboration. Agile feature development
- **Week 9:** Cross-functional team collaboration. Agile feature development
- **Week 10:** Testing and Demo ready
- **Week 11:** Demo!

Training Documents:

- [**Training for Engineers**](#) (*Click link*)
- [**Training for Designers**](#) (*Click link*)
- Transformers Illustrated
 - [The Illustrated Transformer – Jay Alammar](#)
- Andrej Karpathy's Neural Networks Zero to Hero
 - [Neural Networks: Zero to Hero - YouTube](#)
- HuggingFace Course
 - [Introduction - Hugging Face NLP Course](#)

Gen AI & Data Engineering (4 Days)

[Generative AI for Beginners | Microsoft Learn](#)

- **Day 1-2: LLM Fundamentals**
 - LLM architectures
 - Prompt engineering
 - Context length and limitations
 - RAG (Retrieval Augmented Generation)
 - Vector databases
- **Day 3: Data Engineering**
 - Data preprocessing
 - Text chunking strategies

- Embedding models
 - Vector similarity search
 - Data quality and validation
- **Day 4: Integration**
 - API integration (OpenAI, Anthropic)
 - Streaming responses
 - Error handling
 - Cost optimization
 - **Practical Exercises:**
 - Build a simple chatbot
 - Implement RAG system
 - Create custom training dataset
 - **Resources:**
 - LangChain Documentation
 - [Tutorials | LangChain](#)
 - OpenAI Cookbook
 - [GitHub - openai/openai-cookbook: Examples and guides for using the OpenAI API](#)
 - Vector Database Fundamentals
 - [What is a Vector Database & How Does it Work? Use Cases + Examples | Pinecone](#)

MLOps & Deployment (3 Days)

- **Day 1: Development Practices**
 - Git workflow
 - Code review process
 - Documentation standards
 - Testing strategies
- **Day 2: Deployment**

- Docker containerization
 - CI/CD pipelines
 - Model serving
 - API development (FastAPI)
- **Day 3: Monitoring**
 - Logging best practices
 - Performance monitoring
 - Cost tracking
 - Error handling
 - **Resources:**
 - MLOps Zoomcamp
 - [GitHub - DataTalksClub/mlops-zoomcamp: Free MLOps course from DataTalks.Club](#)
 - FastAPI Documentation
 - [FastAPI](#)
 - Docker for ML
 - [Docker For Data Scientists](#)

Project-Based Learning (Weeks 3-11)

- Agile Scrum Methodology (Week 3)

Please set aside 1 hour for Agile (Week 1&2)

[Understanding Agile Scrum.pdf](#)

[What Is Agile Methodology? | Introduction to Agile Methodology in Six Minutes | Simplilearn](#)

[What Is Agile Scrum Framework? | Scrum Framework Explained | Agile Methodology | Simplilearn](#)

[Master the Daily Scrum: Everything You Need to Know for](#)

Agile Success! ☀️ | Scrum Basics Simplified

What are the tools and techniques for documenting and tracking scope and change in agile?

■ **Sprint Structure:** (*team consensus*)

- 1-2 week sprints
- Standups (15 mins)
- Sprint planning (1 hour)
- Sprint review (20 mins)
- Retrospective (20 mins)

■ **Documentation Requirements:** (*team consensus*)

- Sprint backlog
- User stories
- Technical documentation
- API documentation
- Deployment guides

■ **Tools:** [PM's to choose]

- Any free Project tracking tool (JIRA, Monday etc.)
 - <https://clickup.com/>
 - Google Sheets
 - <https://linear.app/>
 - <https://taiga.io/>
 -
- Any choice of documentation tool
- GitHub for code management
- Team Collaborations (Weeks 4-11)
 - **Team Structure:**
 - Roles:
 - Full Stack Engineer
 - Front end Engineer
 - Back end Engineer

- Fullstack Engineer
- Data Scientist
- UX Designer
- Product Manager

- **Example Weekly Schedule:** (*team consensus*)

- Monday: Sprint planning/review
- 2 times Weekly: Standups
- Wednesday: Technical discussion
- Friday: Demo/documentation
- Real-world Applications (Ongoing)

- **Project Requirements:**

- Business value proposition
- Scalability considerations
- Cost optimization
- Security compliance
- User experience

- **Deliverables:** (*team consensus*)

- Working prototype
- Technical documentation
- API documentation
- Deployment pipeline
- Monitoring dashboard
- Final presentation

Onboarding Video Link By Anil Thomas: <https://youtu.be/ZBEoZYmMCMc>
[Cohort 5]

Success Metrics:

1. Functional prototype
2. Clean, documented code
3. Comprehensive testing
4. Clear documentation
5. Effective presentation
6. Team collaboration

Tools & Technologies

[\[05. Tools & Technologies.docx\]](#)

Mentor Kat Sao's Schedule & Recordings (Cohort 3)

Week 1: Friday, January 31 @11am - Duration: 1hr

Session Theme: Introduction, What to expect, Timelines, Q&A

https://youtu.be/_v6hyhS_U0U

Week 2: Friday, February 7 @ 11am - Duration : 30 mins Session Theme:

Q&A: General - (Session Canceled, No attendees)

Week 3: Friday, February 14 @ 11am - Duration 1hr Session Theme:

Prepping for Team Matching & I'm on a team, now what?

<https://youtu.be/d7bClwIXZsY>

Week 4: Friday, February 21 @ 10am - Duration 30 mins Session Theme: AI

Product Lifecycle <https://youtu.be/sc8g3RvwBBk>

Week 5: Friday, February 28 @ 11am - Duration 30 mins Session Theme:

Outcome Mindset & Delivering Value <https://youtu.be/ADjjqyM1zP4>

Week 6: Friday, March 7 @ 11am - Duration 30 mins Session Theme: Q&A:

Retrospective, how's it going? (no recording) No Recording

Week 7: Friday, March 14 @ 11am - Duration 1hr Session Theme: Q&A and

Retrospective - No recording

Week 10: Friday, April 4 @ 11am - Duration 1hr Final Session Theme: Demo

Practice & Retrospective - CANCELED