# Assignment 1: Introduction to AI Agents & smol Framework

# **Learning Objectives**

By completing this assignment, you will:

- Set up essential accounts for AI development
- Learn the fundamentals of AI agents through hands-on experience
- Build your first AI agent using the smol framework

#### **Tasks**

## 1. Account Setup (10 points)

Create accounts on the following platforms:

- <u>Hugging Face</u>
- OpenAI
- Anthropic
- Google AI (Gemini)

For each platform, save your API keys securely - you'll need them later.

## 2. Complete Hugging Face Course (40 points)

- 1. Enroll in the <u>Hugging Face Agents Course Unit 1</u>
- 2. Complete all sections in Unit 1
- 3. Take screenshots of your completion status
- 4. Write a brief summary (200-300 words) of what you learned

#### 3. Build Your First Agent (50 points)

Create a simple but creative AI agent using the smol framework. Your agent should:

- Implement at least one custom tool
- Use chain-of-thought reasoning
- Solve a specific, well-defined problem

Example project ideas:

- A recipe converter that adjusts ingredients based on serving size
- A coding assistant that explains and refactors code
- A travel planner that suggests itineraries based on constraints

#### **Submission Requirements**

- 1. Source code of your agent
- 2. README.md explaining:
  - What your agent does
  - How to run it
  - Example inputs and outputs
- 3. Brief reflection on challenges faced and how you overcame them

## **Evaluation Criteria**

- Account setup with proof (10%)
- Course completion with reflection (40%)
- Agent implementation:
  - Functionality (20%)
  - Code quality (15%)
  - Creativity (15%)

# **Submission Instructions**

Submit your assignment as a git repository on github containing:

- Course completion proof and reflection
- Your agent's code repository

# **Due Date**

Two weeks from assignment date

# **Resources**

- <u>smol Framework Documentation</u>
- Chain of Thought Prompting Guide
- Python Environment Setup Guide