# Welcome to the Code Iterator AI Tool!

## Hey there!

Welcome to the documentation for the Code Iterator AI Tool. This handy little web app is here to help game developers like you! Whether you’re polishing up existing code or looking for a spark of inspiration, this tool makes generating code snippets with AI easier than ever.

## What's Inside?

The Code Iterator AI Tool comes packed with features to make your coding workflow smoother:

- Code Input: Just paste in your code — simple and easy.

- Prompt Input: Describe what changes you want.

- AI Suggestions: The tool provides minimal Python snippets tailored to your prompt.

- Code Integration: Like the suggestion? Just click to integrate it into your code instantly.

## Project Structure

Here’s a look at what makes up this tool:

1. Backend (Flask): The core engine that processes prompts and generates code.

2. Frontend (HTML/JavaScript): The user interface where all the magic comes to life.

## Backend (Flask)

Before you get started, make sure you have these installed:

- Flask

- Requests

To install:

pip install flask

pip install requests

## What does the backend do?

Here’s a high-level overview:

- Initializes the Flask app.

- Receives your code and prompt.

- Sends your request to the AI model.

- Returns the minimal code snippet.

Key Endpoints:

- / : Renders the main page.

- /suggest : Accepts your code and prompt, then returns a generated snippet.

## Frontend (HTML/JavaScript)

What You’ll Need:

- Prism.js for syntax highlighting.

Frontend Features:

- A form to input your code and prompt.

- A button to get suggestions.

- Display and integrate the AI-generated snippet.

The frontend sends your prompt to the Flask backend and displays the result using syntax highlighting. You can even click a button to append the new code directly into your code editor box.

## Final Thoughts

The Code Iterator AI Tool makes it easy for developers to experiment with code changes without breaking a sweat. Just paste, prompt, preview — and you’re done! Whether you’re building a game or debugging one, let AI help speed up your workflow.