Ollama Quick-Start Guide

Summary of the Ollama Starter Pack Contents:

1. Quick-Start Guide
2. Command Cheat Sheet
3. Prompt Engineering Guide
4. Bonus Project Ideas
5. GitHub Repository Link (Code Templates (Python scripts for each project)

A detailed, step-by-step installation guide for setting up Ollama on di erent operating systems (macOS, Linux, and Windows). Includes troubleshooting tips, basic configuration, and links to additional resources for deeper learning.

Step-by-Step Installation Guide

1. ***Installation on macOS***
   - Check System Requirements: Ensure macOS 10.15 or later. Install Homebrew if necessary.
   - - Install Ollama: Run 'brew install ollama' in the Terminal.
   - - Verify Installation: Check with 'ollama --version'.
   - - Set Environment Variables: Add Ollama to PATH.
2. ***Installation on Linux (Ubuntu/Debian)***
   - Update System Packages: Use 'sudo apt update && sudo apt upgrade -y'.
   - - Install Dependencies: Run 'sudo apt install build-essential libssl-dev -y'.
   - - Download Ollama: 'wget https://github.com/ollama/ollama/releases/download/latest/ollamalinux.tar.gz'.
   - - Verify Installation: Check with 'ollama --version'.
3. ***Installation on Windows (Using WSL)***
   - Enable WSL: Run 'wsl --install' in PowerShell.
   - - Set Up Linux Distribution: Update packages and follow Linux installation steps.

- - Add to PATH: Use 'setx PATH' in PowerShell.

Basic Configuration

Basic Configuration for Optimizing Ollama:

1. **Setting Environment Variables**
    a. Add to shell config: 'export PATH="/usr/local/bin:$PATH"'.
    b. Set cache directory: 'export OLLAMA_CACHE_DIR="$HOME/.ollama_cache"'.
2. **Adjusting Memory Usage:**
    a. Low-memory systems: 'ollama config set cache_size 512MB'.
    b. High-performance systems: 'ollama config set cache_size 2GB'.
3. **Enabling Debug Mode:**
    a. *Use 'ollama --debug' for detailed logs.*

Bonus Section: Additional Resources

Explore these additional resources for deeper learning and advanced usage of Ollama:

[GitHub Repository]

Essential Ollama CLI Commands with Llama3.2 Examples

1. **Start Ollama on your local system:**
    - Command: *ollama serve example: $*
        - *ollama serve*
2. **Create a new model from an existing one:**
    - *Command:* ollama create <new_model>
    - Example: Create a new model called 'custom-model':
        - *$ ollama create custom-model*
3. **Display details about a specific model:** *Command: ollama show <model>*
    - *Example: Show details of the 'llama3.2' model:*
        - *$ ollama show llama3.2*
4. **Run a specified model:**
    - *Command: ollama run <model>*
    - Example: Run the 'llama3.2' model:
        - *$ ollama run llama3.2*

5. **Download a specific model to your system:**
    - *Command: ollama pull <model>*
        - *Example: Download the 'llama3.2' model:*
            - *$ ollama pull llama3.2*
6. **List all downloaded models:**
    - *Command: ollama list*
        - *Example: Display a list of all installed models: $ ollama*
            - *list*
7. **Show currently running models** *Command: ollama ps*
    - *Example: Check the status of all running models: $ ollama ps*
8. **Stop a specified running model:** ○ *Command: ollama stop <model> Example: Stop the 'llama3.2' model:*
        - *$ ollama stop llama3.2*
9. **Remove a specified model from your system:**
    - *Command: ollama rm <model>*
        - *Example: Remove the 'llama3.2' model from your system: $ ollama rm*
            - *llama3.2*

Prompt Engineering Guide for Ollama Models

Overview of How Prompts Work and Why They Matter

Overview of How Prompts Work and Why They Matter:

Prompts are the input queries or instructions given to AI models like Ollama to generate responses.

The quality of the prompt directly impacts the output. A well-crafted prompt provides context, clarity, and

specific instructions, guiding the model to produce accurate and relevant results.

Understanding how to design e ective prompts is crucial for maximizing the performance of Ollama models, especially for tasks like summarization, Q&A, and creative writing.