AI Buddy (Visual Studio) Extension & Hosting DeepSeek LLM Locally

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| Department: | Software Development |
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| Author: | Bert O’Neill |
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| SharePoint |  |
| Document Goals | Provide a user guide, on setting up Ollama, hosting a LLM (locally) and integrating the *AI Buddy* extension within Visual Studio. |

# Revision History

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| --- | --- | --- | --- |
| Date | Version | Description | Author |
| 18/02/2025 | 1.0 | Initial draft | Bert O’Neill |
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# Introduction

This document provides details on how your company can setup a LLM Hoster locally, and connect the Visual Studio AI Buddy extension to it. For e.g. be able to prompt a DeepSeek LLM with the security of knowing that you’re prompt hasn’t left your company’s servers.

## Purpose

This Document provides a comprehensive overview on how your company can keep its AI prompts secret and not leak any sensitive information, even when using a LLM model from DeepSeek.

## Scope

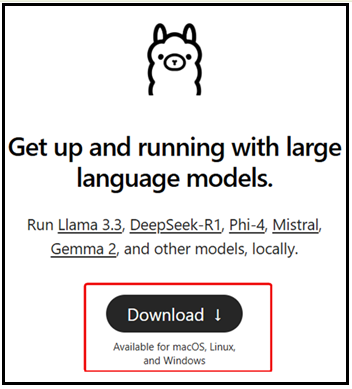
The scope of this document is to convey the steps involved in connecting to and using AI prompts from within Visual Studio to your local Hoster.

# Prerequisites

* Knowledge of a LLM Hoster (like Ollama)
* Know your Hoster API
* Know your Hoster’s API key
* Know the (Ollama) LLM model you wish to use (for e.g. DeepSeek-R1).

# LLM Hoster (Ollama) Setup

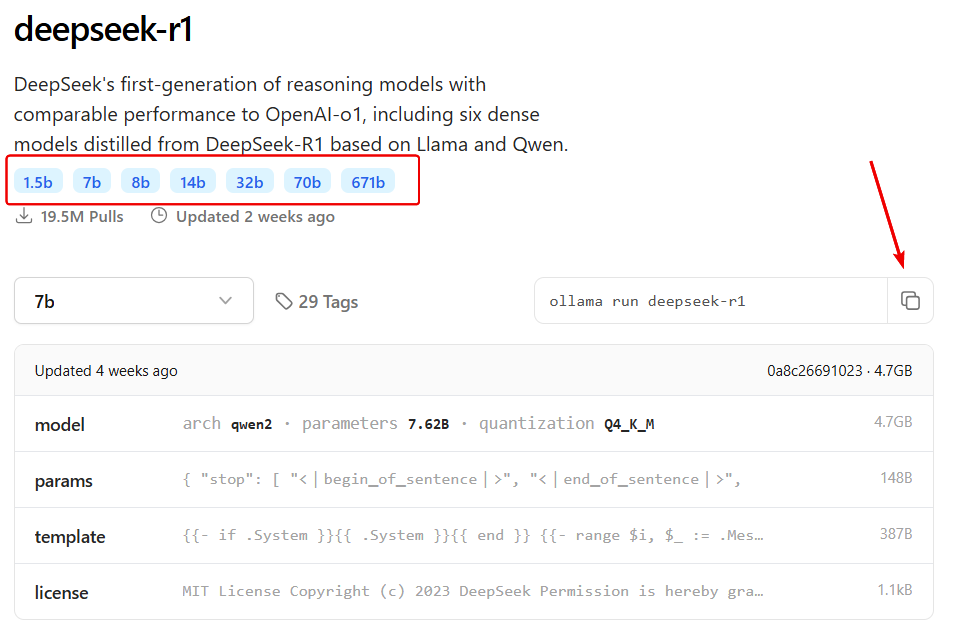
Download and install Ollama using the latest installer for your environment - <https://ollama.com/>

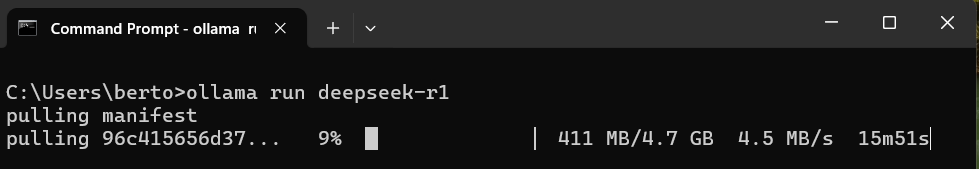


# Download LLM and Start Hoster

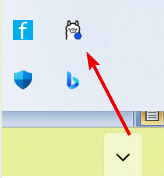
Select the appropriate LLM - <https://ollama.com/search>

Or go directly to the DeepSeek model - <https://ollama.com/library/deepseek-r1> and select the appropriate parameter related model. Then click on the copy button (red arrow). Paste this command into a Terminal\Command dialog.

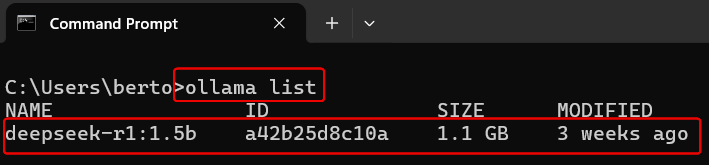




When the model has been downloaded and running, you can verify that Ollama is running from the System Tray:

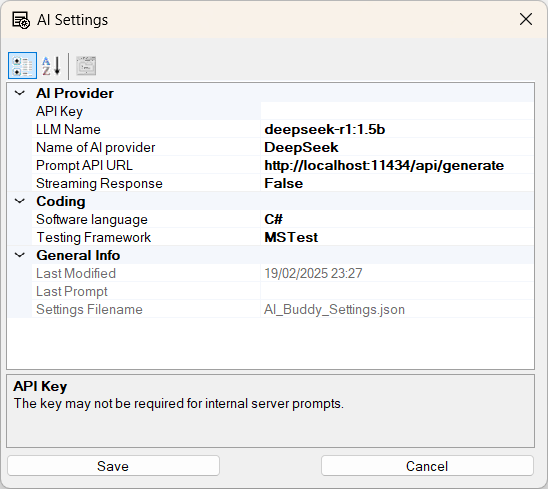


Or from a command prompt run the command ollama list – this will list the available models:

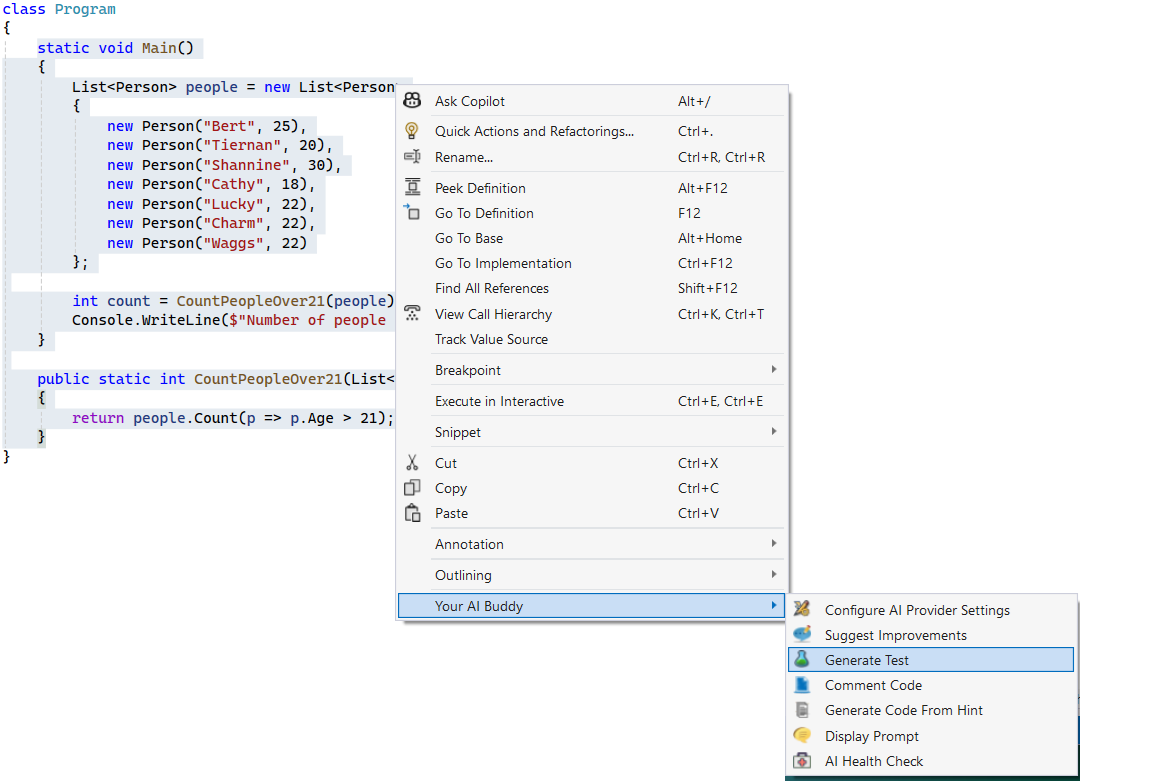


# Install *AI Buddy* Extension (Visual Studio)

# Using AI Buddy



Generate Unit Test For Highlighted Code

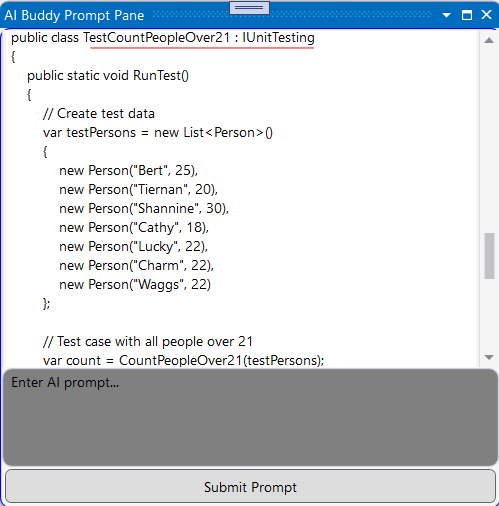


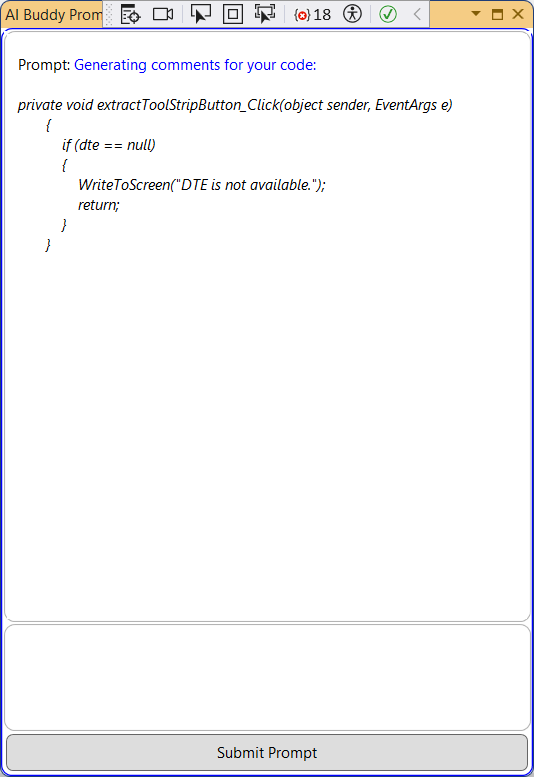
Your selected code will be pasted into a generic prompt for DeepSeek to analysis. An hourglass will appear as DeepSeek is generating a response.

A screenshot of a computer program

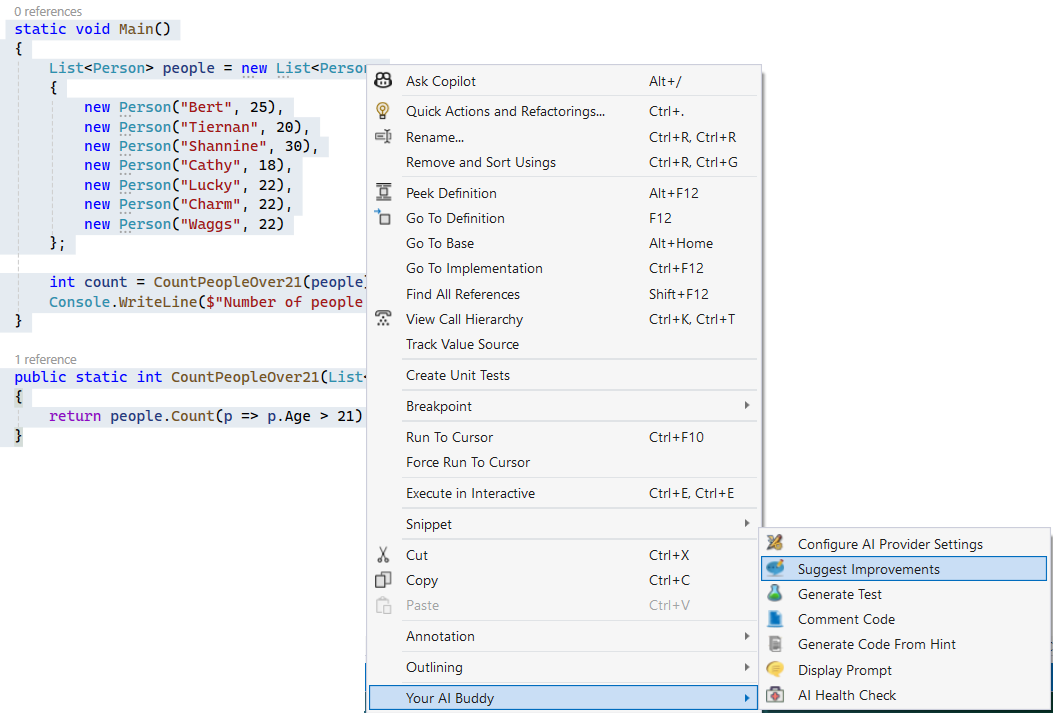
AI-generated content may be incorrect.

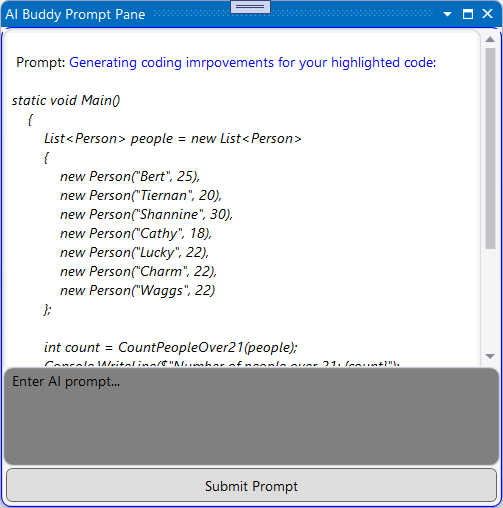
This will then generate several Unit Tests based on your Testing Framework and programming language of choice (which you supplied in the Settings dialog). From here you can copy and paste the code into your test class.





Suggest Coding Improvements

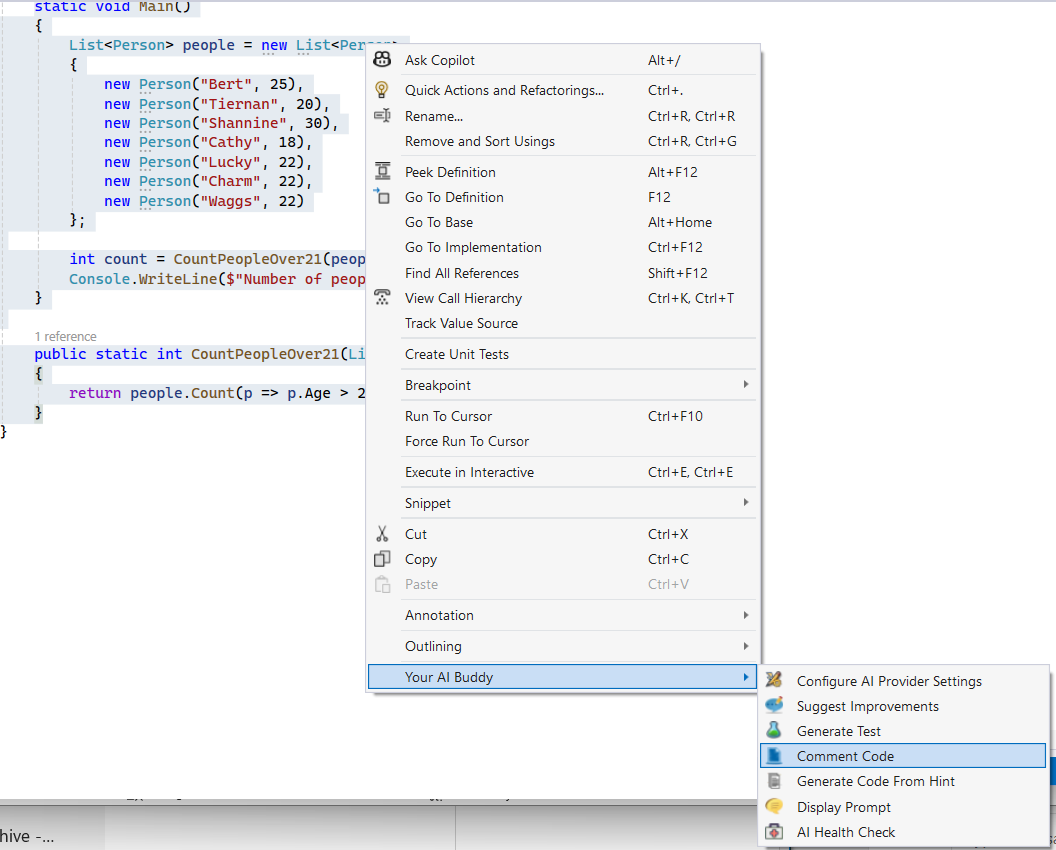




A screenshot of a computer error

AI-generated content may be incorrect.

Comment Code



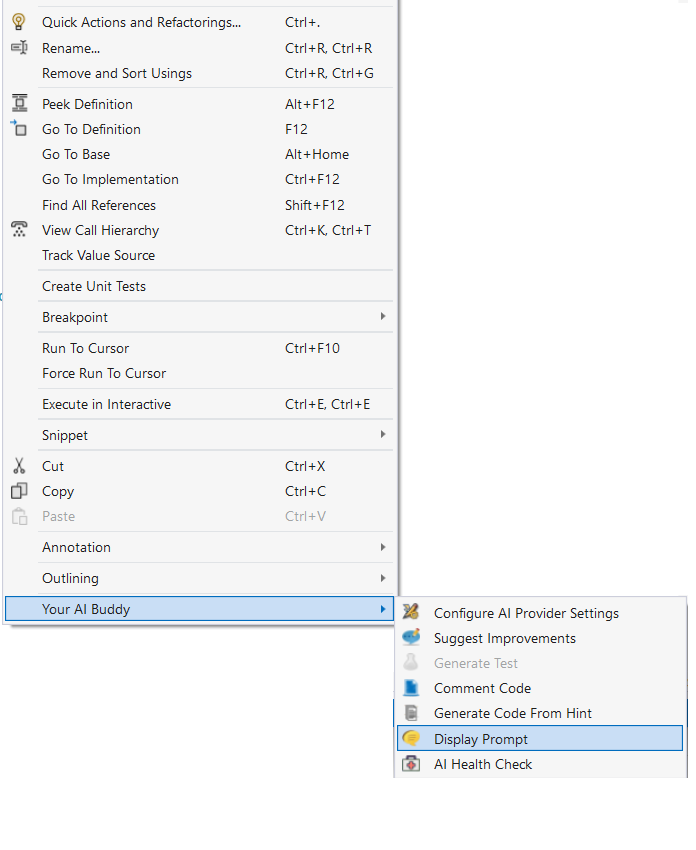
A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

AI Prompt Dialog



A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

Pasting an image and prompting AI to work with image

Open a Display Prompt as normal, click into the prompt box and paste your image into it (Ctrl V)

A screenshot of a computer

AI-generated content may be incorrect.

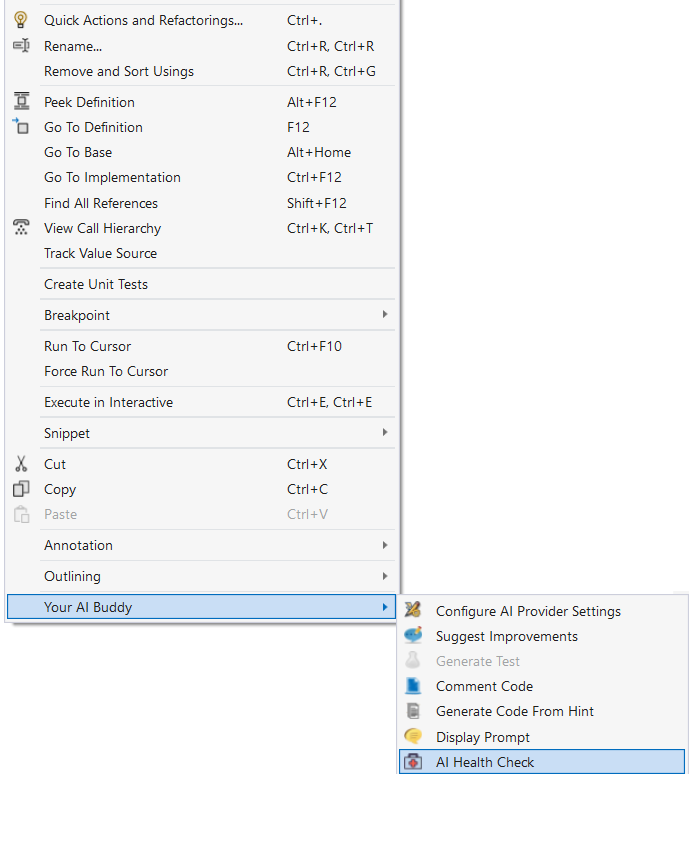
A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

Health Check



A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer error message

AI-generated content may be incorrect.