Task Tracker App Setup and Maintenance Guide
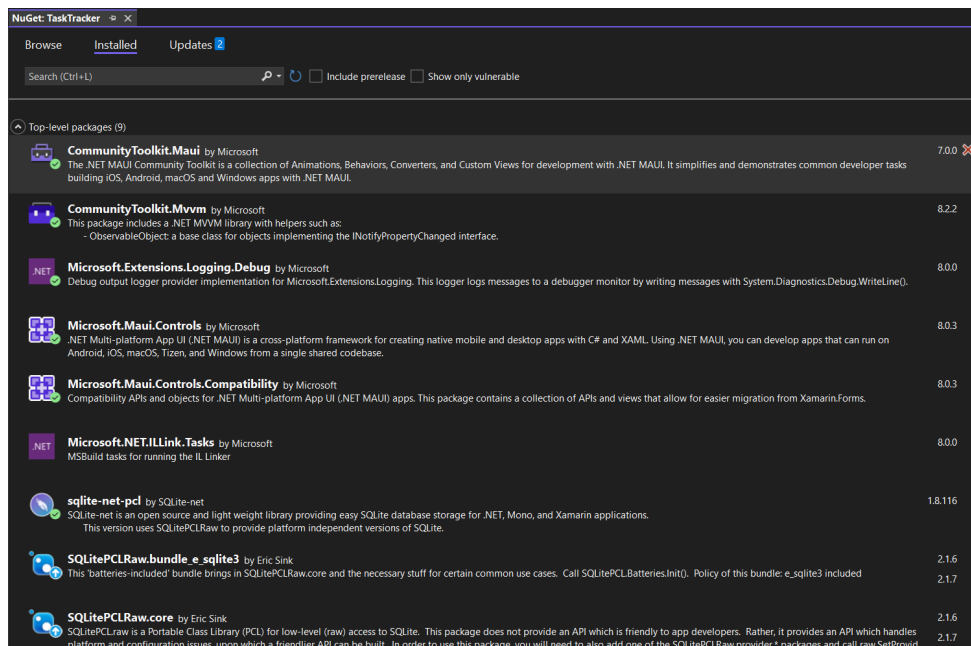
Purpose: Demonstrate the setup and packages used in the Task Tracker application.

Technologies needed:

The Task Tracker application is developed using .NET 8 in Microsoft Visual Studio. The solution comprises multiple projects, each with specific roles and dependencies. The primary project, Task Tracker, utilizes a suite of NuGet packages to enhance its functionality. These packages include CommunityToolkit.Maui, CommunityToolkit.MVVM, Microsoft.Maui.Controls, Microsoft.Maui.Controls.Compatibility, and sqlite-net-pcl, each contributing to the application's robustness and versatility.

Alongside the Task Tracker project, the solution includes the BusinessEntities project. This project, although more streamlined in its dependencies, also leverages crucial NuGet packages to align with the overall architecture. The packages integrated into the BusinessEntities project are CommunityToolkit.MVVM, Microsoft.Maui.Controls, Microsoft.Maui.Controls.Compatibility, and sqlite-net-pcl.

This structured approach in utilizing NuGet packages ensures that each project within the solution is equipped with the necessary tools and libraries to function effectively, maintaining consistency and compatibility across the application.

Targeted Projects:

The Task Tracker application is designed to operate optimally on specific iOS and Android platforms. To ensure smooth running of the application, your device or virtual machine should meet the following minimum operating system requirements:

iOS Minimum Target Framework: 11.0

Android: While there are no strict minimum requirements for Android devices, it is recommended to use Android 14 or higher, with API level 34. This recommendation is based on the development environment in which the app was built and tested.

Adhering to these guidelines will ensure the best performance and user experience when using the Task Tracker application.

Application

General

Assembly name
Specifies the name of the output file that will hold the assembly manifest.

$(MSBuildProjectName)

TaskTracker

Default namespace
Specifies the base namespace for files added to the project.

TaskTracker

iOS Targets

Target the iOS platform ⓘ
☑ Enable targeting of the iOS platform.

Target .NET Runtime ⓘ
Specifies the .NET runtime this platform targets.

net8.0

Minimum Target iOS Framework ⓘ
Specifies the minimum iOS framework this project targets.

11.0

Android Targets

Target the Android platform ⓘ
☑ Enable targeting of the Android platform.

Target .NET Runtime ⓘ
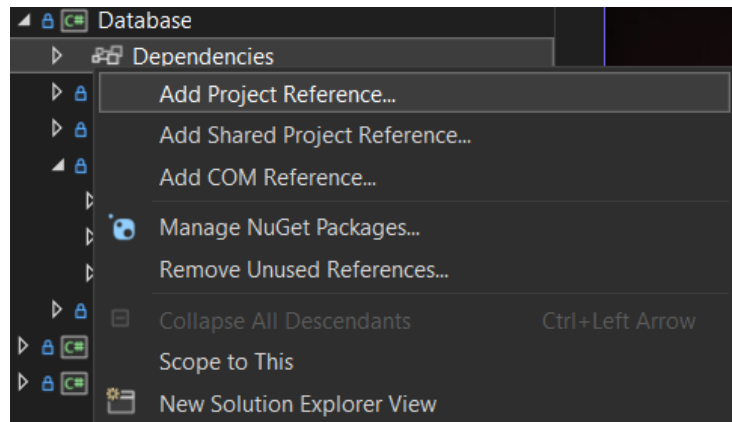Specifies the .NET runtime this platform targets.

net8.0

Target Android Framework ⓘ
Specifies the Android framework this project targets.

Minimum Target Android Framework ⓘ
Specifies the minimum Android framework this project targets.

Solution layout:

The Visual Studios application is divided into 4 projects to separate responsibilities and each project only has the necessary dependencies to other projects.

You can add other projects as a dependency by right-clicking on a project and selecting "Add Project Reference".

Project Dependencies (x indicates that project is a dependency):

Project Name	Database	UseCases	BusinessEntities	TaskTracker
Database Project			x	
UseCases Project	x		x	
BusinessEntities				
TaskTracker	x	x	x	