



Moasure Converter

Sample App

Overview

The objective was to build a quick and simple app to demonstrate a Xamarin Native app built with MvvmCross. I wanted to solve a basic problem that was in some way related to Measure but could be implemented in a few hours; a converter for units of length seemed perfect.

I was planning to implement both an Android and iOS UI layer, but given the short time and the fact that I'm an Android user personally, I focused solely on the Android UI layer.

Features

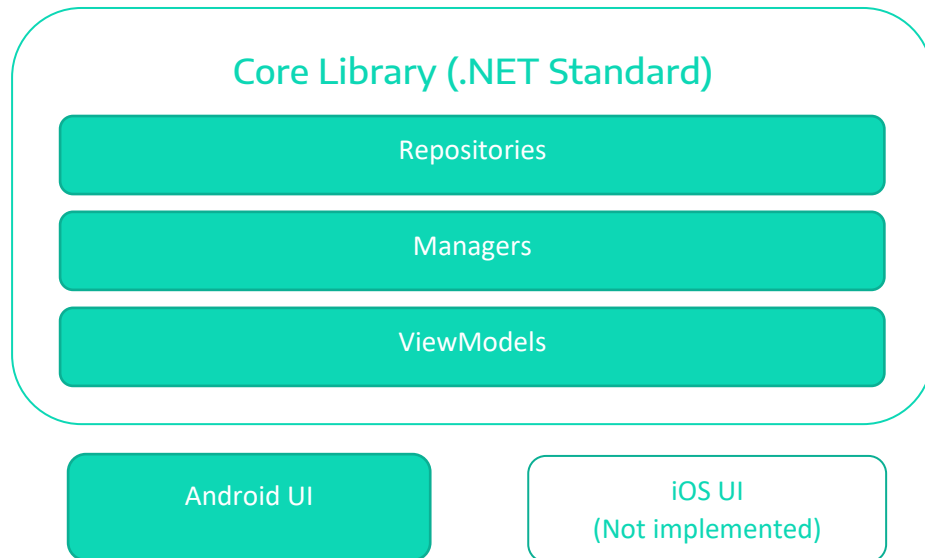
- Quickly convert between units of length
- Units that are supported:
 - Metres
 - Centimetres
 - Inches
 - Feet
 - Yards
 - Lego Units
- Easily swap the source and target units

Tools & Technology

- Visual Studio 2022 Preview 6
- Xamarin 17.0.0.175
- MvvmCross
- Adobe Illustrator
- Android Studio
- <https://shapeshifter.design/>

Architecture

I was keen not to over-engineer such a simple application, but still wanted to demonstrate the general gist of how I'd architect such an app.



Things I'd have done with more time

- An iOS UI layer
- Unit tests (especially the managers and viewmodels)
- Conversion of compound units (e.g., feet and inches)
- Inclusion of SkiaSharp – I've used Skia a little, but never SkiaSharp - I like the look of it. I'm guessing the 3d projections in the Moasure app are done with SkiaSharp?
- An additional app to make use of the device sensors (accelerometer etc)