Coding Challenge

I decided to do the coding challenge as a C# API and Angular front end as I’m comfortable in those two. Although technically all the calculations could be done within Angular, I created a service to mock the calculations of the areas for the given shape in C#.

The API project was created from a template in Visual Studio and modified from there. The Angular project was created with **ng new** and added the required code. The logo is the angular Logo from the generated angular app.

The API can be hooked up to any front end as long at conforms to the API docs.

All the code has been placed in a new public repository

<https://github.com/beatnyama/arc-test-application-angular>

Any issues in running the app or differences between what you see and the screenshots, please let me know.

***Assumptions:***

Part of the app to be developed in C#

***Future Improvements***

There is no test cases

No validation of data as its entered

Only a few shapes. Maybe allow dynamic adding of shapes and formulas

Everything can be redesigned given more constraints and requirements.

Everything can be written in a better way given more time.

***Running the App***

The solution is in two parts, one being the API and the other being the Front-end app. The solution can be opened in Visual Studio to run the API using F5. Instructions to run the Angular app are in the angular project readme file.

**Screenshots**

Graphical user interface

Description automatically generated

Graphical user interface

Description automatically generated with low confidence

Graphical user interface, application

Description automatically generated