

# Candidate Basic App

We know this is a basic app, but there are candidates who fail to complete it or to follow the requirements.

Create a new ASP.NET MVC (.NET Framework) project using Visual Studio 2022.

Use .NET Framework 4.8.1.

Name the project “YourFirstNameYourLastNameApp” using your names where it makes sense.

Update all packages to current.

Create a view named Calculate to accept the input parameters for calculating the volume of a shape selected from a list.

The shapes are Cylinder, Cuboid, and Cone.

Limit the display to five (5) decimal places to the right.

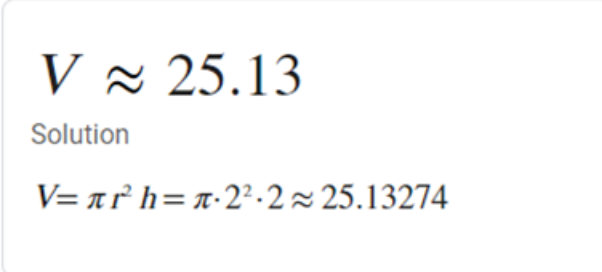
Limit the input to less than 1,000 for all values.

Include the following elements:

- Input box(es) that will accept the parameter(s) for the selected calculation. Retrieve the name of the parameter(s) to display based on the object selected in the list.
- Clear button that will clear any data in all input boxes without posting back.
- Calculate button that will send the input(s) to the controller to perform the calculation.

For the results display, include the parameters and the formula for the calculation.

For example, for a cylinder with radius=2 and height=2, then the result should appear centered on the screen similar to:



The screenshot shows a light blue rounded rectangle containing the following text:

$$V \approx 25.13$$

Solution

$$V = \pi r^2 h = \pi \cdot 2^2 \cdot 2 \approx 25.13274$$

In the results display, the system should be ready to accept a new selection from the list (nothing selected in the list).

Build with the expectation that this will be enhanced later to accommodate other calculations such as area and perimeter for 2D and 3D regular shapes.

We would like to log every time the “Calculate” button is pressed and the data sent to the controller.

Include the framework for logging the shape, parameters, and current local browser time for every calculation. It is not necessary to include log *writing*, but demonstrate where and how logging is accomplished. You may include a comment where the call to log would occur, but it should contain the necessary data.

Include this file renamed as “BaseInstructions.pdf” in the root of the project.

Zip the project – removing any unnecessary files.

Name the zipped file the same name as the project and email it to [fpettit@rlcommunities.com](mailto:fpettit@rlcommunities.com).