

# Lesson 1-9: Use the Error List window

If you've been working with Visual Studio for some time, you've almost certainly encountered the *Error List* window at least once.

In this lesson you'll use the *Error List* window to quickly find and fix errors.

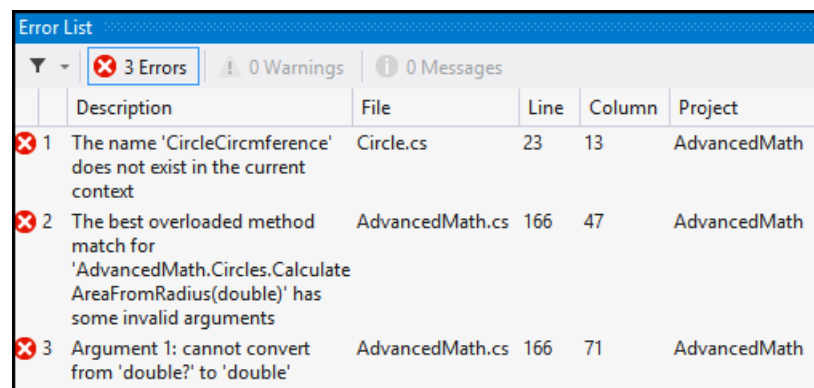
## 1 Open *AdvancedMath.sln* from your sample files folder.

This is a *Class Library* project, similar to the project that created the *MailModule.dll* file that you added to a project in: *Lesson 1-2: Add references to a project*.

## 2 Build the project.

Right-click *AdvancedMath* in the *Solution Explorer* and click *Build* from the shortcut menu.

Three errors appear in the *Error List* window at the bottom of the screen. Building a project causes the *Error List* window to display any errors that prevent the project from compiling.



Error List					
3 Errors   0 Warnings   0 Messages					
	Description	File	Line	Column	Project
1	The name 'CircleCircmference' does not exist in the current context	Circle.cs	23	13	AdvancedMath
2	The best overloaded method match for 'AdvancedMath.Circles.CalculateAreaFromRadius(double)' has some invalid arguments	AdvancedMath.cs	166	47	AdvancedMath
3	Argument 1: cannot convert from 'double?' to 'double'	AdvancedMath.cs	166	71	AdvancedMath

## 3 Examine the first error in the *Error List* window.

	Description	File	Line	Column	Project
1	The name 'CircleCircmference' does not exist in the current context	Circle.cs	23	13	AdvancedMath

The *Description* field tells you the description of the error. The error mentions a *CircleCircmference* name, which is an obvious misspelling.

The *File* field in the *Error List* window tells you that the error is contained in the *Circle.cs* file.

The *Line* and *Column* fields tell you where the error is located within the file. In this case the error is on line 22 at column 13.

The *Project* field tells you which project contains the error. The *AdvancedMath* project is the only project in this solution.

## 4 Quickly view the first error.

It wouldn't be difficult to manually find the error, but the *Error List* window is even more helpful.

Simply double-click the first error in the *Error List* window.

*Circle.cs* is automatically opened with the error highlighted.

```
public Circle(double? Radius, double? Diameter, double? Circumference,
{
    CircleRadius = Radius;
    CircleDiameter = Diameter;
    CircleCircmference = Circumference;
    CircleArea = Area;
}
```

## 5 Fix the first error.

Change *CircleCircmference* to **CircleCircumference** to fix the problem.

```
public Circle(double? Radius, double? Diameter, double? Circumference,
{
    CircleRadius = Radius;
    CircleDiameter = Diameter;
    CircleCircumference = Circumference;
    CircleArea = Area;
}
```

The error disappears from the *Error List* window.

## 6 View help for an error.

The *Error List* window allows you to quickly search Microsoft's help files for information about an error.

Right-click the first error in the *Error List* window and click *Show Error Help* from the shortcut menu (see sidebar if the *Error List* window isn't visible).

A web browser window is opened, showing information about the error.



## 7 Fix the remaining errors.

1. Close your web browser and return to Visual Studio.
2. Double-click the second error in the *Error List* window (*cannot convert from 'double?' to 'double'*).

This error is the root cause of the other error, so fixing it will fix both problems.

3. Change the underlined code:

```
CalculateAreaFromRadius(CircleToPopulate.CircleRadius);
```

...to:

```
CalculateAreaFromRadius((double)CircleToPopulate.
CircleRadius);
```

```
CircleToPopulate.CircleArea =
CalculateAreaFromRadius((double)CircleToPopulate.CircleRadius);
```

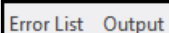
## 8 Build the project.

This time the project builds successfully and all errors disappear from the *Error List* window.

### note

#### If the Error List window doesn't appear

If the Error List window disappears from view, you can easily bring it back by clicking the *Error List* icon in the bottom-left corner of the screen.



### note

#### The cast conversion method

You fix an error in this lesson by using the *cast* conversion method to make C# recognize a value as a *double* type instead of a nullable *double?* type.

The *cast* conversion method is covered in Session 5 of the Essential Skills course in this series.