

Part 12 - Namespaces

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Definition: Namespace

A name that uniquely identifies a set of objects so there is no ambiguity when objects from different sources are used together.

Namespaces are useful because if you have, for example, a `Dog` namespace and a `Furniture` namespace, and they both have a `Leg` class, you can refer to `Dog.Leg` and `Furniture.Leg` and be clear about which class you are mentioning.

Declaring a Namespace

To declare a namespace, all that is required is that you put `namespace` followed by a name at the top of your file.

declaring a namespace

```
namespace Tutorial
```

```
class Thing():  
    pass
```

This creates your class `Tutorial.Thing`. While coding inside your namespace, it will be transparently `Thing`.

To declare a namespace within a namespace, just place a dot `.` inbetween each other.

Recommendation

Declare a namespace at the top of all your files.
Use PascalCase for all your namespaces.

Importing Another Namespace

To use classes from another namespace, you would use the `import` keyword.
The most common namespace you will import is `System`.

importing from a namespace

```
import System
```

```
Console.WriteLine()
```

not importing from a namespace

```
System.Console.WriteLine()
```

Both produce the exact same code, it's just easier and clearer with the `import`.

✓ Recommendation

Don't be afraid to `import`, just don't `import` namespaces that you aren't using.

✓ Recommendation

When `importing`, `import` included namespaces first, such as `System` or `Boo.Lang`.
Then `import` your 3rd party namespaces.
Alphabetize the two groups separately.

If you are `importing` from another assembly, you would use the phrase `import <target> from <assembly>`, for example

importing from an external assembly

```
import System.Data from System.Data  
import Gtk from "gtk-sharp"
```

`System.Data` is part of an external library which can be added, `System.Data.dll`. `Gtk` is part of the `Gtk#` library, which, since it has a special name (with a dash in it), it must be quoted.

✓ **Recommendation**

Only use the `import <target> from <assembly>` if you are using one file and one file only. If you are using more than that, you should be using a build tool, such as [NAnt](#), which is discussed in [Part 19 - Using the Boo Compiler](#).

Exercises

1. Figure out a good exercise for this section.

Go on to [Part 13 - Enumerations](#)