

Submission: See course shell for how and when to submit.

Creating a Car class

[Marks: 25]

A class is a self-contained piece of software that can function on its own.

Apology: UML and some newer languages specify the type after the identifier. C# on the other hand requires that you specify the type and then the identifier.

We will model a car in software.

Car	
Class	
Fields	
- year	: int
- model	: string
- isDrivable	: bool
- price	: double
Methods	
+ «constructor» Car(
year	: int,
model	: string,
price	: double,
isDrivable	: bool = true)
+ ToString()	: string

Description of field members:

1. **year**: this private member represents the year value of this object
2. **model**: this private member represents the model of this car
3. **isDrivable**: this private member indicates if this car be driven
4. **price**: this private member represents the selling price of this car

To restrict access, fields are normally decorated with the private modifier.

Constructor:

1. `public Car(string model, int year, double price, bool isDrivable = true)`: this is the constructor of this class. It takes five arguments and assigns them to the appropriate fields. You will assume that all the arguments will be sane (i.e. the values will not break your program).

Having a default argument is a common way to simplify class usage.

Description of action member:

1. `public override string ToString()`: this method overrides the same method in the base class. It does not take any argument but it returns a string representing this object. You get to decide how the output will look like. It is expected that all the values be displayed.

The code to test or exercise your application is called a Test Harness.

In your main method write the code to do the following:

1. Create at least four cars and print them. Remember to call the constructor with 4 or 5 parameters.