C++ Notes

Understand the need of inheritance

* Class is used to describe properties and behaviors of an object.
* Property names and values.
* Behavior mean actions.

Properties methods

Price fuel type

Engine colour

Capacity

Price setprice()

Fuel type setfueltype()

Engine setengine()

Colour setcolour()

Capacity setcapacity()

Getprice()

Get fuel type()

Alarm navigator

safeguard

Sports car

Price fuel type engine

Color capacity

Inheritance

* It is a process of inheriting properties and behaviors of existing class into a new class
* Existing class = old class = parent class = base class
* New class = child class = derived class

Class Base\_class

{

};

Class Derived\_class:visibility\_mode base\_class

{

};

Example

Class car

{

};

Class sportscar:public car

{

}

Types of inheritance

* Single inheritance
* Multilevel inheritance
* Multiple inheritance
* Hierarchical inheritance
* Hybrid inheritance A

Single inheritance

Class A

{

}; B

Class B:public A

{

};

Multilevel inheritance A

Class A

{ B

};

Class B: public A

{

}; C

Class c:public B

{

};

A1

Multiple inheritance

A2

Class A1

{

};

Class A2

B

{

};

classB: public A1,public A2

{

};

A

Hierarchical inheritance

Class A

{

};

B2

B1

classB1:publicA

{

};

classB2:publicA

{

};