Philip Pesic

Week 5

September 18 2022

Week 5 Lecture 5 Notes

Constructor Functions

Constructor functions are functions that are declared in step 1 of a class and automatically called when an object is declared.

Ex: className objectName; cout << objectName.function();

Deconstructor functions

Constructor functions are functions that are declared in step 1 of a class and automatically called when an object is removed from ram.

Ex: ~className() {cout << x;}; int myFunction() {className objectName; return objectName}

//When this function is run, it will return the object value, but then return x before the object is removed from ram

Class Creation Methods

Method 1: Create every public function in the class: class myClass{int x; public: int func() {cout << x;};};

Method 2: Create only function headers and assign bodies in main: class myClass{int x; public: int func();}; int main() {int func()::{return x;};}

.h File Header

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The .h file header can be assigned to a file in order to make it importable to another program.

This is often used to import long classes so they can be separated from the body of the program.

Ex:

Class1.h //.h header for import

Class myClass{

int x = 1;

public:

int func() {return x;}

};

Main.cpp //.cpp header for body

#include <iostream>

#include “class1.h” //imports class program

Int main() {

myClass ob;

Cout << ob.func();

Return 0;

}

Output: x

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UML Class Diagram

The UML class diagram is a visual representation of a class. It can be used to visually represent the properties of a class and display them in a legible order.

Ex:

myClass
-int x = 1;
+myFunction: int {x: int} return x;