

CIS540/543 Lab 1 Fall 2009

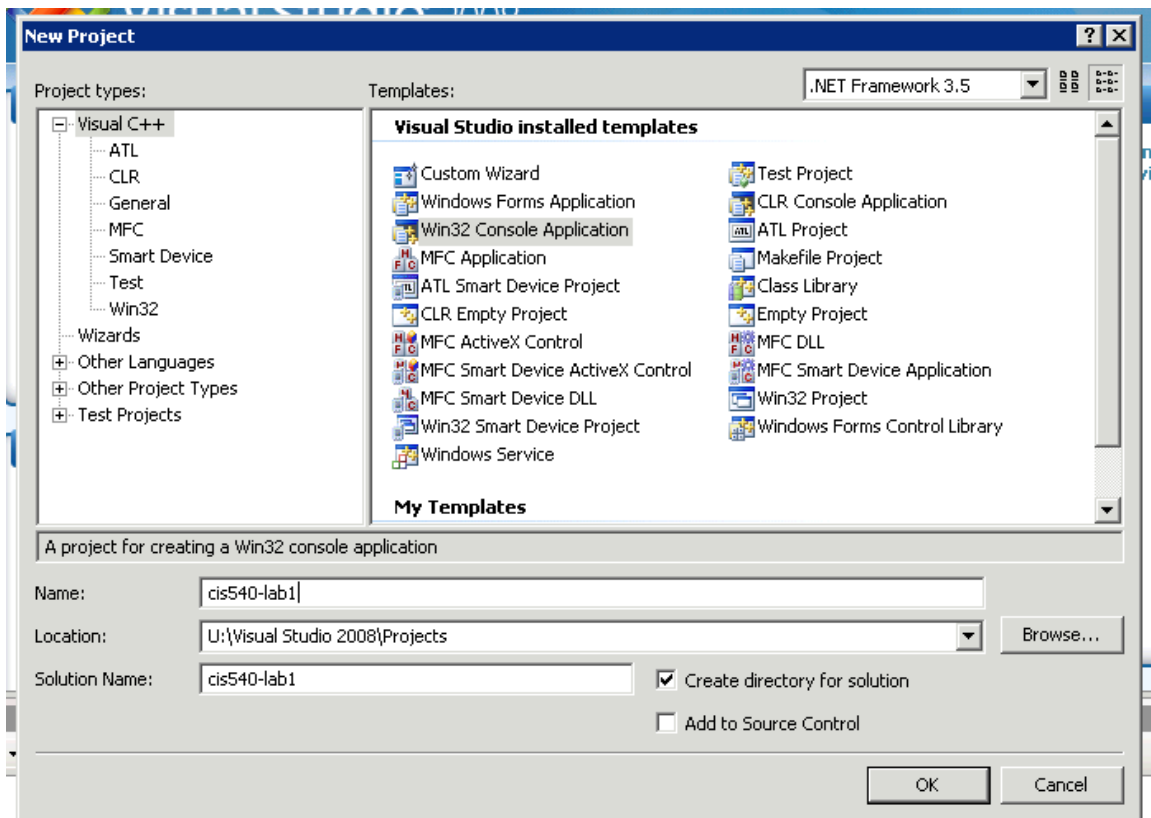
Objectives:

- Refresh C++ coding skills
- Create a C++ project in Visual Studio
- Brief refresher on classes and pointers

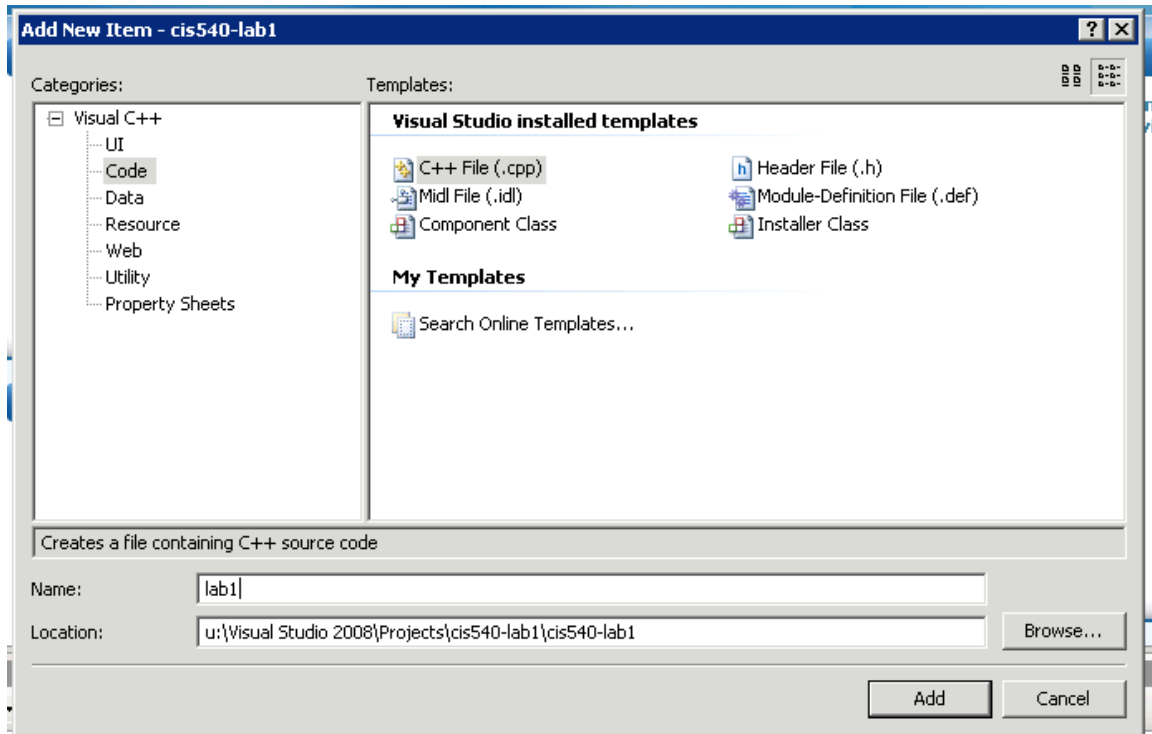
Exercise Part I, Intro to Visual Studio:

Create a simple C++ Console Application

Open *Microsoft Visual Studio 2008*, Click *File->New->Project: Visual C++, Win32 Console Application*. Choose a name and click *Next*. Under *Additional options*, check *Empty project*. Click *Finish*.



Right click *Source Files* folder in your new project, choose *Add->New Item*. Select *Code: C++ File*. Choose a name and then click *Add*.



Simple C++ program:

```
#include <iostream> // Provides cout
using namespace std;
int main() {
    cout << "Hello World!" << endl;
}
```

Click *Build->Build Solution*.

To run, click *Debug->Start Without Debugging*.

Exercise Part II, Classes & Pointers:

More complex program:

Fill in the sections labeled **TODO**.

```
#include <iostream> // Provides cout
using namespace std;

class Person {
    Person *mom, *dad;
    int age;
public:
    void setParents(Person*, Person*);
    void setAge(int age) {this->age = age;}
    // TODO: create a getAge function.
    Person* getDad() {return dad;}
};

void Person::setParents(Person* mom, Person* dad) {
    // TODO: Set mom and dad
}

void printDad(Person p) {
    // TODO: Print p's dad's age.
}

int main() {
    Person bob, sue, charlie;
    bob.setAge(35);
    sue.setAge(34);
    charlie.setAge(5);
    charlie.setParents(&sue, &bob);
    cout << "Hello World!" << endl;
    // Print charlie's dad's age

    printDad(charlie);
}
```