Description

Use Visual Studio to create a solution with 3 projects. Here are the 3 projects should be named ‘App’, ‘Lib’ and ‘Test.

* The ‘App’ project will have a main() method and is the application that you are developing.
* The ‘Lib’ project is a library of reusable classes and functions – they will be used in ‘App’.
* The ‘Test’ project contains GoogleTest/GoogleMock code that is used to test ‘Lib’ project

Purpose

The first project should be a class library called ‘Lib’. This ‘Lib’ project should contain 2 files: Person.h and Person.cpp.

The second project should be a GoogleTest project. In the GoogleTest project, there should be a single file called ‘Test.cpp’

Create a Person class in the ‘Lib’ project with the members as shown below

* 1. Create a .h file for the interface
  2. Create a .cpp file for the implementation

1. Create a GoogleTest in the ‘GoogleTest’ project to test the following:
   1. If a Person object is created with invalid data passed in the constructor, the constructor will throw an exception
      1. For example, an empty string for first name, last name, or social security number will throw an exception
      2. An exception will be throw if the social security number is not a proper format. Proper format for social security numbers are NNN-NN-NNNN where N is a number 0-9. For example, a valid social security number is: 123-45-6789

Class Person

{

public:

// constructor

Person(const std::string & fName, const std::string &lName, const std::string & ssNum );

// Getter for First Name

std::string getFirstName() const;

// Getter for Last Name

std::string getLastName() const;

// Getter for Social Security Number

std::string getSSNum() const;

private:

std::string firstName;

std::string lastName;

std::string socialSecurityNumber

} ;