

Lab 1: First Editor Tool

Name: _____

Mark: _____/100 = _____ %

Date Submitted: _____

Late Penalty: _____ %

Due Date: ____*EDIT*_Oct 11th 2017_____

Final Mark: _____ %

Purpose:

Familiarize the Students with Windows Forms and the creation of Designer Tools which assist production in creating data for games.

Requirements:

Assignment from previous weeks Lab times completed. Some modifications may be required to the object to meet requirements for this lab.

Part I (Week1): Setup

Create a Windows Form project in C++.

Start Designing out the form according to your mocks for the design assignment.

Requirements:

1. Create an additional C++ header file, which is a class containing the psuedo object designed for the previous design assignment fleshed out to a c++ object.
2. Must include:
 - a. A Dropdown/ Combobox listing all created objects.
 - b. A text entry to name a new object with a submit button (which populates the above dropdown/combo Box)
 - c. A group box which contains fields editable for the object
 - d. A picture representation of the object.
 - i. This should be updated per object through another Control of your choice
 - e. Label with the name of the object.
 - f. Checkboxes for bool properties (at least 1)
 - g. Radio buttons for State properties (at least 2 radio buttons mapped to a state enum)

Part II (Week 2): Object Coding

EDIT

1. Convert the C++ object created into a Managed C++/CLI class (using ref and ^) which contains the psuedo object designed for the previous design assignment.
2. Make sure to setup variables properly and use encapsulation for accessing them. (GET and SET properties)
3. Make sure that the organization of the variables are of the optimal organization for saving memory.
4. Create instances of your objects when the user saves and populate a list to view all instances created.
5. Create a print out in the main cpp using the functionality of your choosing which will print out the sizeof(your class here).

Part III (Week 3): Serialization

1. Add a Save button to your object section which opens a file dialog for saving
2. Serialize Objects to a save file with a .301 extension when Save is clicked
3. Add a Load Button to the form which opens a file dialog
4. De-Serialize Objects from the .301 object created from the serialization process

Grading:

Part I: 33%

20% - Form Design

6.5% - Cleanliness (Form and Code)

6.5% - Functionality / Code

Part II: 33%

6.5% - Form Design

6.5% - Cleanliness (Form and Code)

20% - Functionality / Code

Part III: 33%

3% - Form Design

10% - Cleanliness (Form and Code)

20% - Functionality / Code