

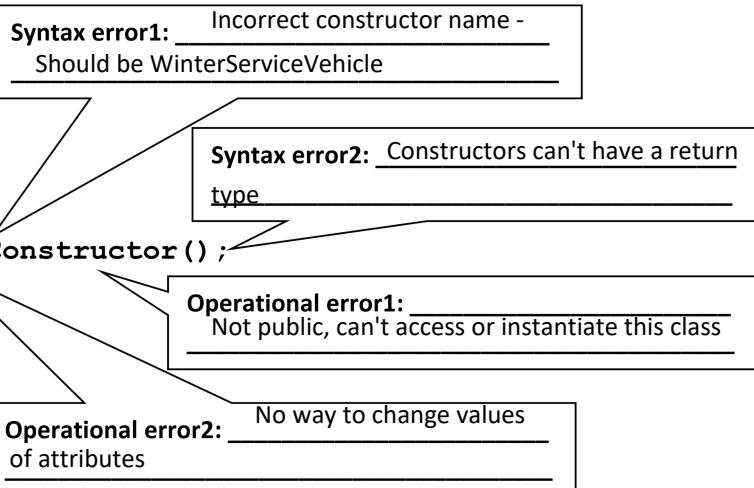
# Review-Activity2-Class-Constructors

Thursday, January 23, 2020 8:54 AM

## Review Activity 2 Writing Class Constructors

- 1) Consider the following code for a C++ class called **WinterServiceVehicle**:

```
class WinterServiceVehicle {  
    string type;  
    string brand;  
    string owner;  
    double value;  
    int yearPurchased;  
    double WinterServiceVehicleConstructor();  
public:  
    string getType();  
    string getBrand();  
    string getOwner();  
    double getValue();  
    int getYearPurchased();  
};
```



Identify two syntax and two operational (usage) errors regarding the constructor for this class. Fill in these errors in the text boxes provided above. Assume that no other functions except the ones specified above are available for this class, and there are no static instances of this class available.

- 2) Write a corrected version of the **WinterServiceVehicle** class. Include three different constructors, including one with no parameters, one where some of the parameters are set, and one where all the parameters are set. Include constructor definition for each. At least one constructor should have the values set using the style specified in Lecture Notes #1.

```
class WinterServiceVehicle {  
    string type;  
    string brand;  
    string owner;  
    double value;  
    int yearPurchased;  
  
    WinterServiceVehicle() {  
        type = "default";  
    }  
  
    WinterServiceVehicle( string new_type, int new_yearPurchased ) : type(new_type), yearPurchased(new_yearPurchased) {  
        value = "default value";  
        brand = "default brand";  
    }  
  
    WinterServiceVehicle( string new_type, string new_brand, string new_owner, double new_value, int
```

```
}

WinterServiceVehicle( string new_type, string new_brand, string new_owner, double new_value, int
    new_yearPurchased ) : type(new_type), brand(new_brand), owner(new_owner), value(new_value),
    yearPurchased(new_yearPurchased) {
}
```

(additional space for the corrected version of the **WinterServiceVehicle** class)

- 3) Consider the following C++ code that uses a corrected version of **WinterServiceVehicle**:

```
string WSV::getBrand() {
    return Brand;
}

int main() {
    WinterServiceVehicle *s;
    cout << s.getBrand();
    cout << s.owner;
    cout << s.getPrice();
    ...
}
```

Syntax error1: WSV should be WinterServiceVehicle

Syntax error2: getBrand is missing its parentheses ()

Syntax error3:  
Should be s.getOwner(); can't access private fields here

Identify three syntax errors in the given code. Fill in these errors in the appropriate text boxes provided above (i.e., fill in the values in the boxes that point to the affected code segments).

Note that there are no **typedefs** in the code.

