A functor is the object that carries the function. A functor is useful when its functionality is needed in more than one place or module, when its logic is being used withing different modules and/or functions..

a lambda function is an inline function, written for a specific purpose, therefore, no reusability outside its scope. Lambda functions are written inside other functions and have access to all variables available in that function. The lambda is useful when we need a more complex algorithm but used in just one specific condition within one single module. Using lambdas allows us no not having to declare and define a function for that logic is used just once. We can reuse a lambda function if we assign it to a variable.

In this Workshop, SpellChecker is a functor and fixPrice is an example of lambda.

If SpellChecker does not throw an error, it would still have to check if the error would occur and contour that problem; yet, the client must also verify if all the conditions are good to go before proceed with further commands.

E.g.: In our case, wherever we wrote CollectionType[index], we should check if index is in the range.

I think the error throw is a better design, since if simplifies the SpellChecker class AND the client. All the client has to do now is surround its logic with a try-catch block; much simpler that checking if the SpellChecker constructor has done his job the way it was expected..

Because both classes have many attributes in common, I mostly likely would create a base class (Media) from which the Movie and Book classes would derive and inherit members such as title, description, year, fixSpelling, this base class Media could also define some functions for interface, such as title() and operator<<.

When NO constructor is defined, the compiler will build a default constructor by itself. But not in this case, because we have a custom constructor.

Also, when declaring the array of Movies:

Movie movies[5];

The program will use the default constructor to build and allocate memory for the objects in this array, even if the objects are empty. Therefore, we should always have a default constructor, since we are not sure what is going to be implemented on client side.