# ***Telerik Academy***

## ***Teamwork High Quality Code***

### ***Team Labyrinth 2***

**Team members:**

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### ***Works By Assignment Description***

**1. Perform refactoring of the entire project**

Refactored all the methods, properties and variables names, to make them easier to understand using the best practices.

Refactored all the methods to have correct behaviors and easier to maintain

Separating classes which are in common files to their own separated files

**2. Implement design patterns**

Structural patterns : bridge, facade

Behavior pattern : stragtegy, observer(ResultsTable), memento (FileSerializationManager)

Creational patterns : abstract factory, singleton, prototype (ICloneable in ICell )

**3. Follow the SOLID and DRY principles**

**3.1.** DRY : There is no repeated Code in the project

**3.2.** SOLID:

*Single Responsibility*: This principle is applied to all the classes and methods.

*Open/Closed:* Working with interfaces only, so this make the code open for extension and closed for modification

*Liskov substitution:* Working with interfaces only, instead of classes, so everything are design by contracts

*Interface* *segregation:* Separating all big interfaces into small ones, so all the interfaces have maximum 6 methods (only Ifactory has more than 6 because it produces all the objects in project)

*Dependency Inversion*: All the classes are injected by constructor injection

**4. Design and implement unit tests**

### ***GIT Repository URL***

[**https://github.com/tlnguyen-com/labyrinth2**](https://github.com/tlnguyen-com/labyrinth2)