

OBJECT ORIENTED PROGRAMMING

LABORATORY 10

This laboratory will be focused on the project implementation and project hand-in.

We will discuss the following aspects

- How to upload your code on gitlab from command line?
- How to perform code review? Optional: how to use pull requests on gitlab?
- How to write a project Readme? A thing of two about Markdown language: <https://www.markdownguide.org/getting-started/>
- How to write tests? Optional: How to use Test Explorer in visual studio? <https://docs.microsoft.com/en-us/visualstudio/test/run-unit-tests-with-test-explorer?view=vs-2019>

PROJECT

Implement “undo-redo” functionality in your project.

Next time: project hand in.

- ✓ - Your project should follow a layered architecture (repository – controller – user interface);
- You should have at least the following features implemented:
 - ✓ Add an item. When adding data about an item you should perform input validation;
 - ✓ Remove an item by id;
 - ✓ Display all items; when displayed the elements should be nicely aligned (use stream manipulators!); ?
 - ✓ Filtering: display items with some properties (you should use lambdas for this); you should allow the choose between two filters; when displayed the elements should be nicely aligned (use stream manipulators!);
 - ✓ Throw (and handle) at least two exceptions in your code;
 - o Undo-redo;
 - o Persistence at the repository level: read (when application starts) and save (when application ends) data from csv file;
- ✓ - Class diagram;
- When presenting the project you should have at least 7 items in your repository;
- No memory leaks;
- ✓ - Tests; at least 80% code coverage (except for the user interface);
- ✓ - All functions and classes should be documented!