

Assignment II

Due Date: 7th, June 2021, 11:59 pm

Topics (LOs):

1. Apply prototyping techniques
2. Apply effective problem-solving strategies to foster programming skills

Weighting = 25% of the Final Mark.

Total Marks = 100.

Group Project

You may do **anything** of your choice for this assessment. ‘Anything’ includes modifying or enhancing an existing project. You are free to use any public domain code, as long as, you acknowledge the source AND clearly identify what your original contributions are. Your project must:

- (a) include some analysis and design work.
- (b) have Graphical User Interface (at least three *forms*).
- (c) demonstrate your understanding of class’s, objects, OOP and other C# features taught in this course.

You could do project in a **group** (a team of two). You will need to discuss the chosen topic with your lecturer in order to get it approved.

What to hand in?

- The project solution file, source code and executable in electronic format.
- All design documentation. (Requirement specification, CRC cards and/or Class diagram).
- A Readme file: Outlining how your program should be used (Compile and Run). Limitations if any.

Project Topics

You may select **ONE** of the option from the following:

- A game or widget of your choice. You will get introduced to many topics at lecture classes.
- Extend Assign 1 with GUI and more features.
- A simple management system such as: School Management System, Flight Reservation System, Appointment Booking System, Inventory Management System, Supply Chain Management System.
Please note: In the real world, a bigger team builds these projects. You should only attempt to build a part of the whole system for this assignment.
- Anything that you wish to work on! Please discuss it with the Lecturer first.

Grade Criteria

- A professional application is not required!
- To pass the assessment the application must provide core functionality and reflect a genuine effort.
- An 'A' grade requires a non-trivial application that accurately and elegantly implements the design and meet the project specifications.

A Note on Plagiarism

- Be aware that dishonest practices will not be tolerated and will be dealt in accordance with WelTec policy.
- Code that is not original is usually very easy to identify.

Indicative Marking Schedule

Criteria	Max. Marks
Problem decomposition and design of classes, thereby code (OO) <ul style="list-style-type: none">• Requirement specification/ Problem definition• CRC cards• Class diagram	15
Where feasible, use of C# features taught in this course <ul style="list-style-type: none">• Classes, Objects• Inheritance, Polymorphism• Generics, Collections• LINQ• Delegates/Events• Tasks, Parallel constructs	35
GUI (Graphical user Interface) <ul style="list-style-type: none">• At-least three forms• Uses multiple/different GUI components• Use of colors and images	35
Impression (coding style, workload, presentation)	15

Marks could spread around above subtopics further according to the complexity of project.

Submission

Submission should be done electronically via Moodle (course page): Zip it into a single folder →upload to the submission folder on the course page.