

**001** - Duration: 60 min, Mandatory: ***the project should compile and run without any errors.***

Create a Windows Forms project with the following name StudyYear\_Group\_LastName\_FirstName. For managing the reservations at a restaurant, you are asked to define two classes: a primary class Reservation (with 3 different types of properties) and a secondary class Restaurant (includes a collection or array of books).

At least one of the classes will include a constructor with parameters. **(1p)**

The user should be able to add new instances for the primary class using a secondary form (-75% if you are using the main form). The instances will be stored in the array / collection included in the secondary class.

Hint: you only need one instance of the secondary class. **(2p)**

The instances of the primary class will be displayed using a DataGridView control. **(1p)**

Perform validations on the data imputed by the user in the secondary form. The errors will be displayed using ErrorProviders. **(1p)**

Add the option to edit the items in the DataGridView by double clicking on them (use a secondary form). **(2p)**

Implement the IComparable or IComparable <T> interface to compare instances of the primary class based on a criterion at your choice. Keep the items displayed in the DataGridView sorted all the time in ascending order based on the chosen criterion. **(1p)**

Add a tool bar at the top of the application, allowing the user to serialize and deserialize the instance of the secondary class using the XML format. **(2p)**