

Testat 4

Programming in Java

SS 2020

Learning objectives:

You optimize your object orientation by:

You separate GUI, business logic and the data management

You handle exceptions

Construction of a graphical user interface for Testat 3

Before starting your programming, create a UML class diagram and place it as a PDF file "Testat-4_ClassDiagram.pdf" in the project folder docu

Build a graphical user interface for the program from attestation 3.

Use the NetBeans Designer and make the program look like you are used to from PC applications. This means:

The program has a main window with a typical menu bar:

FILE	BASIC DATA	HELP
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- One subitem in FILE is at least "Exit program".
- Sub-items in BASIC DATA are:
 "Manage Flights" "Manage Dishes" "Manage ..."
- Subitems in HELP are "Help" or "About".

When user clicks on one of these management sub-items, the window fills with a table representation of the objects. There are also buttons for the most important functions (so-called **CRUD** functions, see below) **Note: Item "Manage ..." does not have to be implemented! When user clicks this item, the program should show a message window with text "not yet implemented!" (same as in Testat 3)**

C → Create = create a new flight (or dishes).

So, your window somewhere just has a button **new**. (best at the bottom)

Clicking this button opens a small dialog window to create and setup a new object. This small dialog window has the buttons **save** and **cancel** at the bottom to save the object (or cancel users work)

R → Read = show the objects (this function is already implemented by the table itself)

U → Update = modify given objects

No button necessary! User selects a line and simply clicks on the column entry that needs to be changed

D → Delete = the user needs a button **delete**. This button deletes the selected object.

A question window (so-called confirmation dialog) must be displayed **BEFORE**:

"Really delete? Yes/No" You only delete an object, if user clicks on button "Yes", otherwise do not delete!