



Dr. Volker Riediger
M.Sc. Mahmood Al-Doori
M.Sc. Veronika Vasileva



— Engineering Web and Data-intensive Systems - Winter Term 2022/23 — Assignment 2.

From: Nov 24th 2022

To: Dec 5th 2022

1 Use Cases, Services, Navigation Model

In this assignment, we'll extend the system model of the OLAT cutout by various aspects. Cutout means that we only deal with a small fraction of the OLAT capabilities. You shall restrict your models to the functions available in the OLAT course for EWADIS.

We provide a reference solution for assignment 01 as an Astah model. The idea is that you add more diagrams and elements to the model to reach a comprehensive, consistent, linked model of the system.

Tasks:

a) Use Cases:

Create a UML use case diagram that shows the main roles and functionality of the OLAT cutout. You may use UWE stereotypes (navigational, personalized, transactional) to annotate the use cases.

b) Services of the business logic layer:

Create a UML component diagram for some (at least 8) operations that you would expect to be provided by the OLAT business logic layer. Specify the signatures of the operations in an interface. Represent the different layers as components.

c) UWE Navigation Model:

Use the UWE extensions to UML class diagrams for a navigation model of the OLAT course view and its descendant pages. It's not required (yet) to link the navigation model to processes or tasks.

Hints:

You have to extend the reference solution provided in the assignments folder as `olat-system.asta`. The domain model is represented as a class diagram. We've already created blank diagrams for the three tasks of this assignment. Those diagrams are located in the various sub-models.

UWE uses a lot of graphical representations for the stereotypes. However, in Astah, there's limited support to extend the diagram graphics. We suggest to use Astah's so-called *mini icons* to show the UWE stereotypes. If you think that this is not sufficient, or you feel that there is no appropriate icon, you may still use the textual stereotypes, e.g. `<<navigationclass>>` or `<<index>>`.

Please submit your solution as PDF files in your group folder `solutions/assignment02`.

Additionally, please add the `.asta model file`.

Please prepare to discuss your solution in one of the next exercises!