MOD.003 Objects

(TINF21C, SWE)

Project: Modelling Wizard Improvements

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Change History

Version	Date	Author	Comment
0.1	28.04.2023	Fabian Kreuzer	Created
1.0	30.04.2023	Fabian Kreuzer	Finished

Scope

This module contains all the classes witch contain objects we use in our program.

Glossary

The Modelling Wizard for Devices is a stand-alone software that can be used to create or modify devices and interfaces. It can also be used to import CAEX 2.15 and CAEX 3.0 files that will be converted to the AMLX (.aml; .amlx; .xml;) package.

Module Requirements

Requirements

- LF40: Display a GUI and accept user input
- LF50: Display the attributes of selected device
- LF60: Edit the attributes of a device

Module Context

This module contains the models for the application. It holds everything we need to display, as well as classes which can help us adapt some standard C# .Net or WinUI3 objects into our program.

Analysis

The main use is the Instance class. This class holds the current state of the program like the enabled options or the currently loaded file data. It also holds the datamodels used throughout the program. These datamodels are used in the GUI and the processes since the GUI displays the data and the processes process it.

Design

We designed this as a library of classes which each hold the corresponding objects.

Library holds everything what is needed to get a RoleClass with all subClasses, their subclasses and so on. It also holds the attributes of these classes.

Attachments is an object used to store an attachment into the instance. It has a name and its content is in base64.

Instances is where we save the current state of the program like the currently loaded Role-/Interface- and SystemUnit-Classes. We also save the standard libraries. All is saved as a library object there. The attachments of the current instance are saved as an attachment object.

Module Tests

Req.-ID	Test suite	Status
LF40	TS-001	success
LF50	TS-001	success
LF60	TS-001	success