CDP // ELEVATED FRAMEWORK

Despite the constant increase in the use of computers in architect offices, it is still widely unutilized in the early design stages. The biggest problem is not only the lack of appropriate Humane-Computer-Interfaces but also the limited possible use case scenarios. Furthermore, complex Software solutions and unfitting workflows restrict the creative process and hinder the design process. The goal of the „CDP-Project // Elevated Framework“ is to bridge the gap between the established design tools utilized by architects and the digital tools.

The focus of the "Elevated Framework" topics is to bring new and exciting technologies to the framework and to improve and expand on existing ones. With these improvements, the architect will be capable of bringing even more of the established design tools to a digital environment and have a greater support for the creative process.

Topics:

- **Topography**: The goal for this topic is to integrate topographical information into the CDP and find appropriate ways for its visualization and interaction with the other GIS data.
- **VPL**: As part of a previous IDP, a visual programming language was developed to enable users, to create simple plugins for the CDP without having any traditional programming knowledge. The goal of this topic is to extend this language, so that users can create complex simulation and analysis plugins.
- **Render Pipeline 3.0**: The goal of this topic is to transition the visualization code to native OpenGL and enable the creation of complex shaders and visualization techniques, which would greatly assist in the design process.
- **CDPP 2.0**: The goal of this topic is to extend the existing CDP TCP/UDP Protocol to communicate more of the underlying data structures and visualizations to and from the Platform.