

Practical Course (Fachpraktikum) Developing Tools for Digital Art and Content Creation

During this practical course, students will develop interactive tools for digital art and content creation (referred to as **asset creation** tools hereafter).

The students will first be introduced to asset creation approaches as well as plugin development for exemplary digital asset creation tools, namely, **Blender** and **Unity 3D**. Then, the students (in groups) will come up with multiple ideas for asset creation plugins that achieve for instance:

- Making certain steps in an asset creation workflow easier (e.g., texturing, level-design, or interfacing between different tools).
- Exploring novel ways of creating specific digital assets (e.g., specialized brush tools).
- Improving the accessibility of the resulting creation with little to no extra cost (e.g., semi-automatically embedding audio or haptic cues).
- Using unconventional input or output for the creation process (e.g., custom input devices).

The course involves in-class presentations and peer-feedback.

Learning goals

Being able to programmatically interface with asset creation software for art, games, online content, or other digital media. Depending on the chosen tool(s) to develop for, the students learn the plugin development paradigms and parts of the software architecture of established digital art tools. This also entails that the students learn the basic usage and technical terms of the chosen tool(s).

Pre-requisites

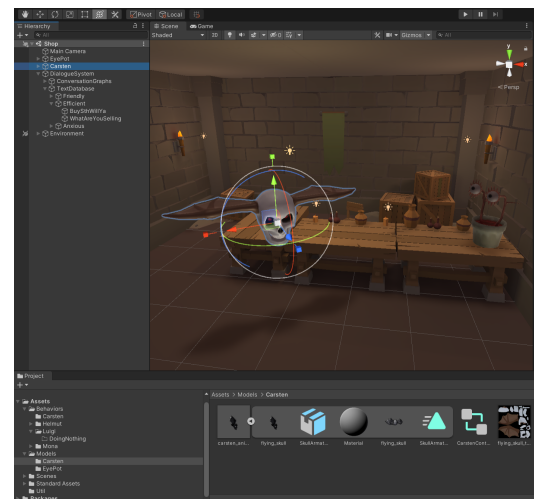
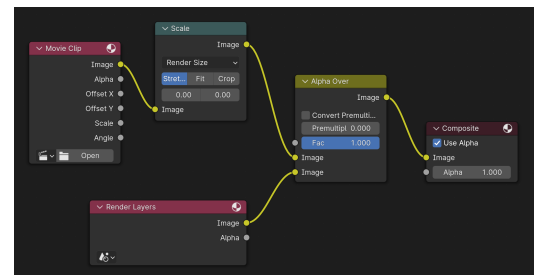
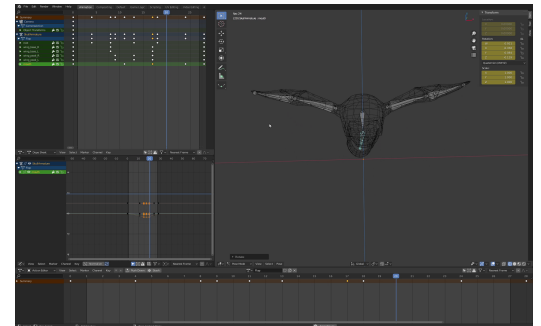
Required: Strong programming skills. We will be using Python and CSharp for the introductory examples. No previous knowledge in a specific programming language is required. However, strong general programming skills and the ability to quickly pick up programming languages and concepts are crucial.

Advantageous: Basic knowledge in Computer graphics.

Optional: Interest and/or basic skills in the practice of digital art. We will do a very light introduction to 3D modeling in Blender to learn about practical 3D modeling concepts. However, the main focus will be the plugin implementation. Modeling skills or other practical skills in digital art forms are *not* required.

Other information

Language: English; **Workload:** 4 SWS / 6 LP



Contact

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