

My thesis deals with terrain modelling and scene displaying. The main subject of modelling is the terrain as well as objects, that can be found on it. Terrain data may be random so they cannot include information about the position of each object (e.g. a tree or a bush). This is the aim of our modelling; given the entry data, we must be able to generate objects at positions that would be as close to reality as possible. The last, but certainly not least part of the project is displaying the model-scene with the possibility of a walk-through. We will be introduced to various object types, possibilities of displaying optimization and we'll explore the "Level of detail" techniques. The result is an application displaying the described techniques on an example scene with a few types of brushwood including the possibility of an interactive walk-through.