Virtual Old Prague is a web-based application for browsing Prague's centre modelled in VRML. This thesis extends the project with support for interior areas and impostors, simplifi ed pieces of geometry used in place of distant models. Interiors are based on existing VOP structure. Automatic generation of interior walls is added, as well as ceilings and lighting. Interiors can be added to the existing model without the need to remodel existing houses. Depth-augmented impostors are introduced into the system. Their geometry is a fully 3D shape based on actual geometry they replace. This allows for better displaying of depth discontinuities compared to a traditional at impostor. A single texture, a pre-rendered image of replaced geometry, is used for the impostor, thus keeping its size small. A Java program is provided for automatic generation of impostors from the model. Two regimes are introduced for using impostors during browsing, with di erent visual quality and performance requirements. Results of performance tests are presented, comparing use of impostors to the original system.