CZECH TECHNICAL UNIVERSITY IN PRAGUE

FACULTY OF INFORMATION TECHNOLOGY

ASSIGNMENT OF BACHELOR'S THESIS

Title:	Building (3D object) visualization using augmented reality on iOS
Student:	Samuel Šušla
Supervisor:	Ing. Martin P lpitel
Study Programme:	Informatics
Study Branch:	Software Engineering
Department:	Department of Software Engineering
Validity:	until the end of summer semester 2015/16

Instructions

Allow smart phone users to view buildings or others 3D objects at places where they are not physically located. The motivation is to visualize historical buildings in their original locations, shapes, and structures in 3D.
1. Do a research of possibilities of modern augmented reality and technologies available on iOS. In particular, study tools sceneKit, Vuforia, Unity, Metaio, OpenCV, and possibly others.
2. Choose one of the augmented reality tools with respect to the best user experience.
3. Design, implement, and document a demo application that will visualize a given building on a given place.

References

Will be provided by the supervisor.

L.S.

Ing. Michal Valenta, Ph.D.   prof.Ing. Pavel Tvrdík, CSc.
Head of the department   Dean

Prague December 8, 2014