

Czech Technical University in Prague  
Faculty of Electrical Engineering

Department of Computer Graphics and Interaction

## DIPLOMA THESIS ASSIGNMENT

Student: **Mikhail Sukhotin**

Study programme: Open Informatics  
Specialisation: Software Engineering

Title of Diploma Thesis: **Mobile iOS application for a non-profit TV**

### Guidelines:

In cooperation with the producer and technician of the television station, write down the requirements for a web application. Analyze the requirements and propose their solution on the iOS platform. Describe the chosen technologies, discuss alternatives. Create a mobile application according to the requirements. Test the functionality of the application, use application prototypes for UI design. The functionality will include propagation of the project, possibility of financial donation, streaming of TV and audio content in multiple qualities including any necessary processing on the server, a map of points of interest linked with a server through a web service, and an administration interface for the server, and a Czech language quiz. The map function should be tested with data of realistic density.

### Bibliography/Sources:

Fous, Jiří. Zásuvný modul do webového prohlížeče pro proudový přenos audio-video dat. Bakalářská práce. Katedra počítačové grafiky a interakce FEL ČVUT, 2012.  
Austerberry, David. The technology of Video & Audio Streaming. Focal Press, 2005.  
HTTP Live Streaming Overview. Apple iOS developer documentation.  
Multimedia Programming Guide. Apple iOS developer documentation.

Diploma Thesis Supervisor: Ing. Tomáš Vondra

Valid until the end of the summer semester of academic year 2014/2015

prof. Ing. Jiří Zára, CSc.  
Head of Department

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prof. Ing. Pavel Ripka, CSc.  
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Prague, February 19, 2014