

Title: Multi-platform environment for mobile-game development

Author: Ivan Vacula

Department: Department of Software Engineering

Supervisor: RNDr. David Bednárek, Ph.D.

Supervisor's e-mail address: bednarek@ksi.mff.cuni.cz

Abstract:

Smart mobile devices are getting more and more popular these days. But there comes a problem with their expansion as well. Mobile operating systems differ from each other, as do mobile devices themselves, so development across multiple platforms is not simple. Situation is even worse when it comes to games. These need to use limited resources of a mobile device as much as possible, taking into account quick response to user actions, graphical execution et cetera. The first goal of this thesis is to compare existing solutions for multi-platform mobile game development. The second goal is to design a new system. This system must ensure targeting of multiple platforms during mobile game development. Included in this thesis is implementation of the system on two vastly different operating systems as well as implementation of a demonstration game.

Keywords: multi-platform, mobile, smartphone, game, development