

Czech Technical University in Prague
Faculty of Electrical Engineering

Department of Control Engineering

BACHELOR PROJECT ASSIGNMENT

Student: **Řeháček Denis**

Study programme: Cybernetics and Robotics
Specialisation: Systems and Control

Title of Bachelor Project: **Development of games for blind users**

Guidelines:

1. Familiarize yourself with user centered UI design
2. Implement 2-3 games based on adversory search in state space (e.g. tick tack toe, checkers etc.)
3. Implement the games in JAVA language
4. Test the games on a sample of 5 blind users

Bibliography/Sources:

- [1] Audio-Based Puzzle Gaming for Blind People, Jaime Carvalho, Tiago Guerreiro, Luis Duarte, Luis Carriço, University of Lisbon, 2012
- [2] Game Accesibility guidelines, <http://gameaccessibilityguidelines.com/>, 2016
- [3] Elmar Krajnc, Johannes Feiner, Stefan Schmidt, User Centered Interaction Design for Mobile Applications Focused on Visually Impaired and Blind People, FH JOANNEUM University of Applied Sciences, Werk-VI-Strasse 46, A-8605 Kapfenberg, Austria, 2010

Bachelor Project Supervisor: doc. Ing. Daniel Novák, Ph.D.

Valid until the summer semester 2017/2018

L.S.

prof. Ing. Michael Šebek, DrSc.
Head of Department

prof. Ing. Pavel Ripka, CSc.
Dean

Prague, February 21, 2017