

Distributed Systems 2012 – Project

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Open Project



Project

- Find a partner group

Team up with up to **6 students**



- Choose your own topic. One constraint, it must contain:
 - Distributed component
 - Ubiquitous application
- Submission due **17 Dec 2012**
 - Submit: code, slides, and report
 - 5 – 10 minutes presentation



Register your Team

- Form groups of up to 6 students each
- Via the submission system
 - Create a new group
 - Add members
 - Submit project deliverables as before 17 Dec 2012, 9am



Project Report

- Only one report per Project team (3 – 4 pages)
- Focus on technical description of your work
 - Problem statement
 - Requirements
 - Architecture
 - Implementation
 - Usage



Project Presentation

- Prepare presentation slides (5 – 10 minutes)
- Focus on selling your idea
 - Motivation
 - General idea
 - How you realized it (e.g., what technologies)
 - Results
- Include a live demo whenever suitable
- Presentations will take place on 17 and 21 Dec 2012



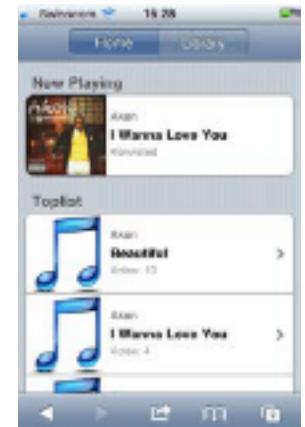
EXAMPLES

Selected projects from previous years

djCrowd – Interactive distributed music player

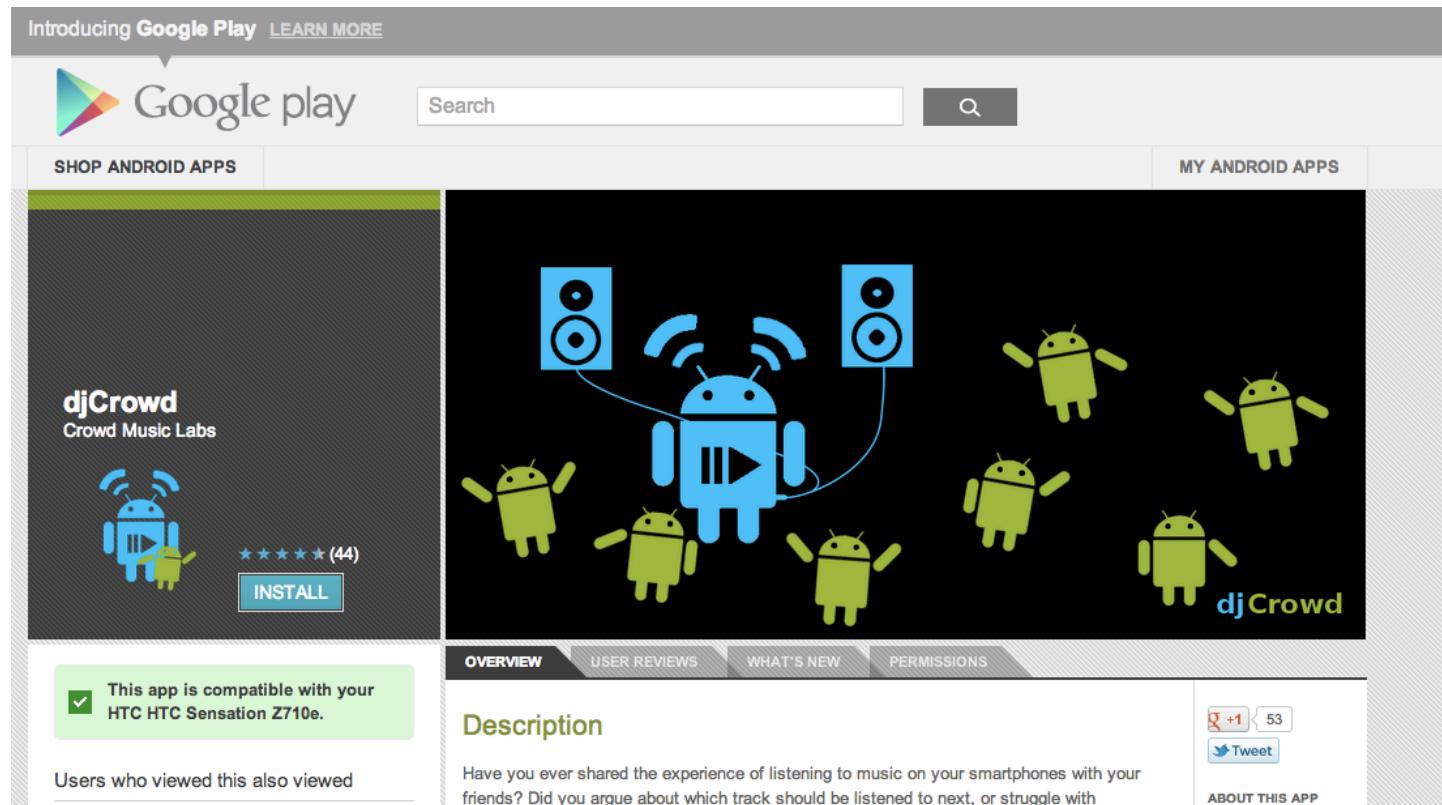
HS10: Luchin Doblies, Alexander Grest, Moritz Hoffmann, Jost Joller, Philipp Schmid, David Stolz

- Start up one phone as server
(connected to hi-fi system)
- Your friends can connect to the server
 - Check the song that is currently playing
 - See upcoming songs in the playlist
 - Modify playlist by voting for their preferences
 - Upload songs from their phones
- + Web interface to provide access for non-Android devices



djCrowd – Interactive distributed music player

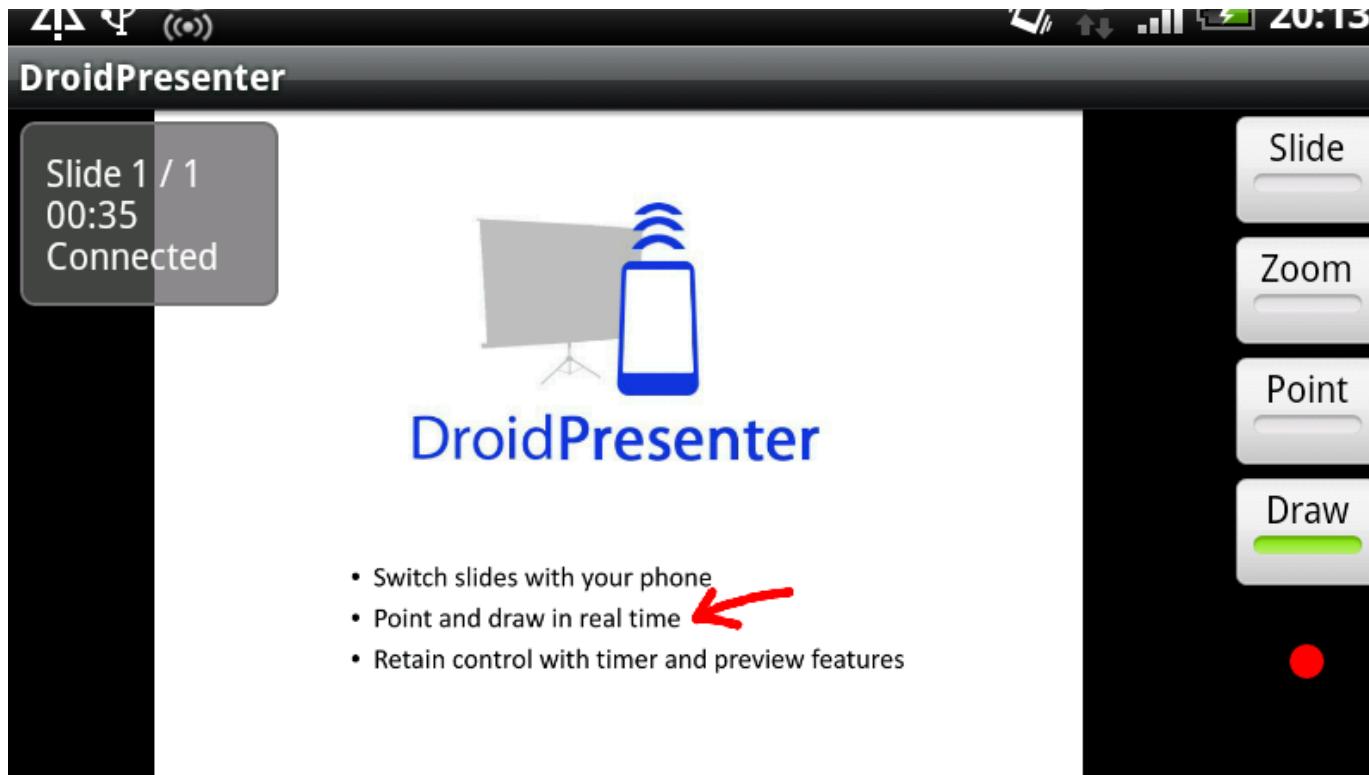
HS10: Luchin Doblies, Alexander Grest, Moritz Hoffmann, Jost Joller, Philipp Schmid, David Stolz



5000-10000 downloads on Google play. Rated 4,6 Stars

DroidPresenter – Presentations remote control

HS10: Andreas Tschofen, Leonhard Helminger, Mathias Buerki, Damian Karrer



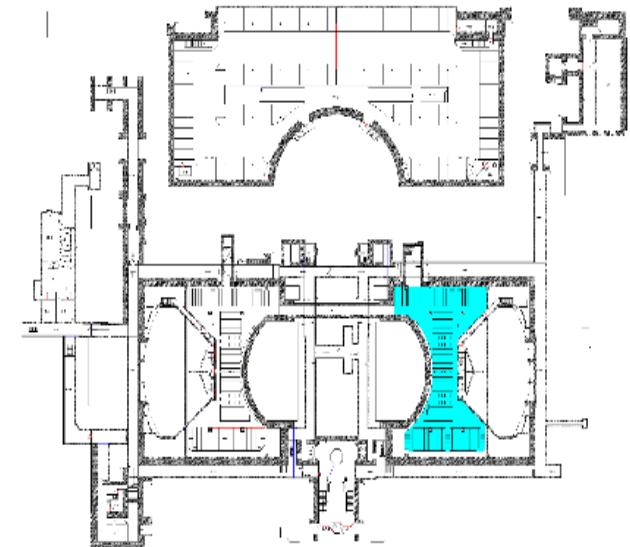
DroidPresenter allows you to draw in, point at, zoom in/out and control your presentation through your smartphone

ETH Survival Guide

HS11: Andrea Helfenstein, Andreas Briachli, Marc Egg, Pascal Spoerri, Steven Koeppel

- Localization service
 - ETH access points information
 - Building floor maps and room information

- Technical
 - Python server
 - REST services with JSON interface
 - Position marker overlays



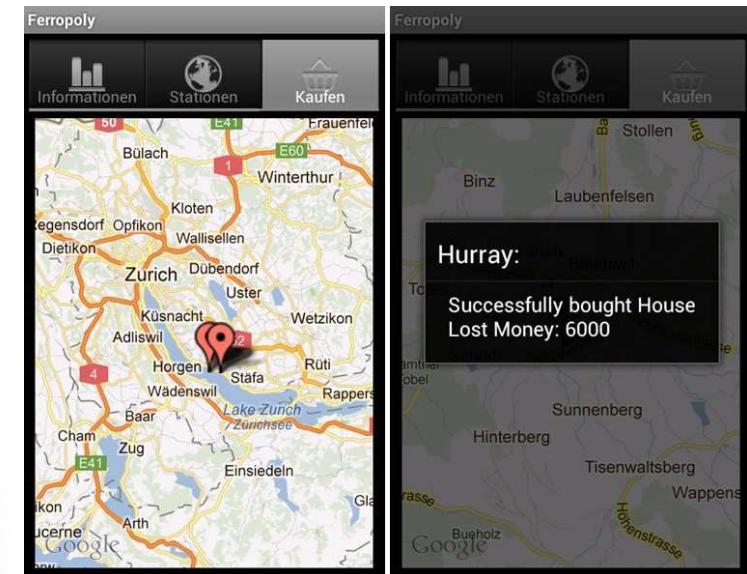
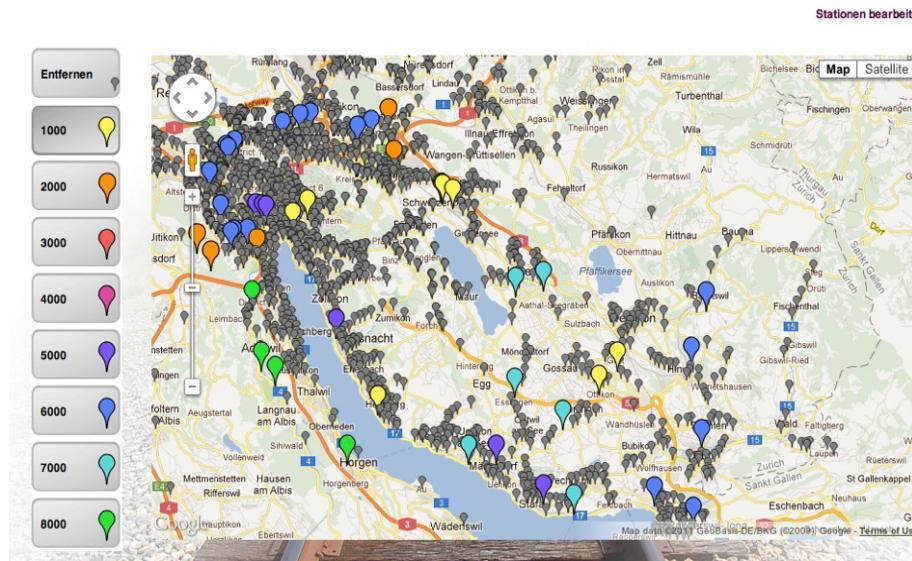
Ferropoly – Monopoly in the real field

HS11: Ameri Michael, Aras Ersan, Marti, Messmer Stefan

FERROPOLY

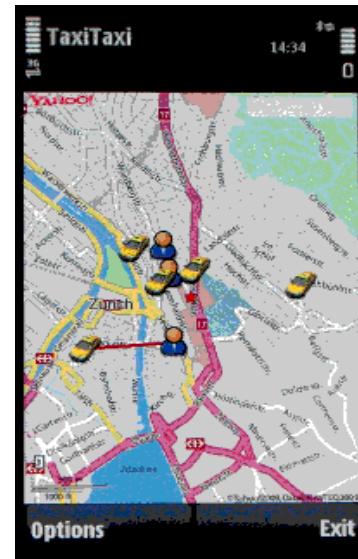


- Emulate Monopoly in the real world
 - Travel across Switzerland and buy train stations
 - Ruby on Rails server
 - REST services with JSON interface



Consensus-based Taxi

- Implementation for the consensus problem
- Distributed application to find the optimal cab

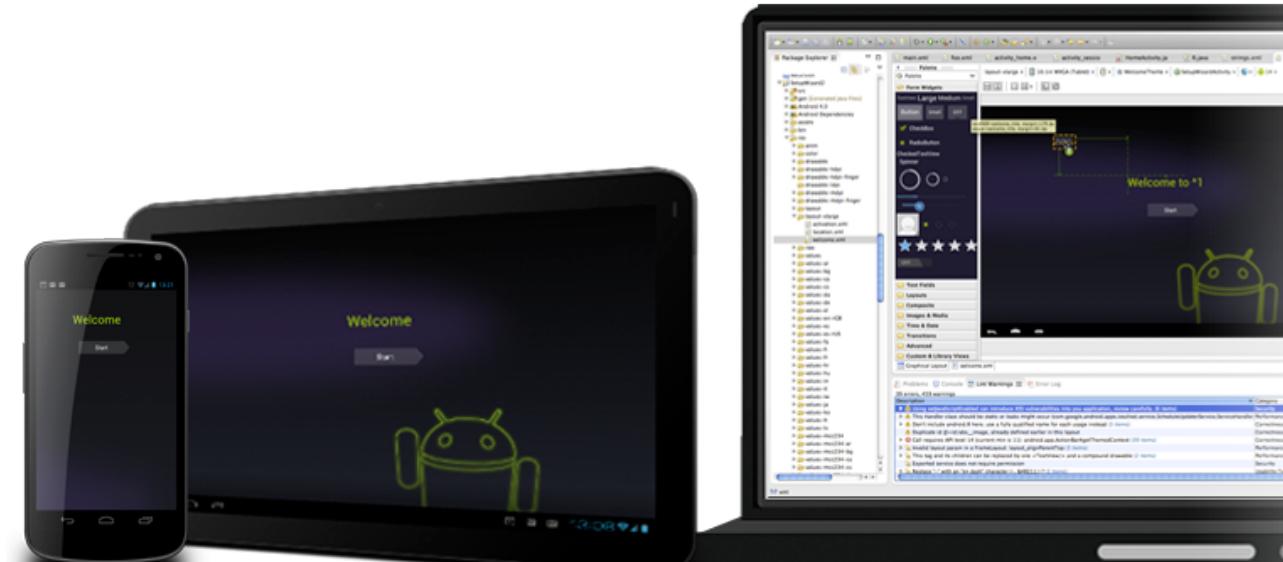


Final Remarks



- We recommend you to use Control Version Systems (e.g., Git, Mercurial, or SVN)
 - Github [\[https://github.com/\]](https://github.com/)
 - Slides for the Git-tutorial [\[https://docs.google.com/presentation/d/1BbLSI-ef7dMi2m1JkWTn0fqjbXGo-il8sFQVr9LtUUc/edit#slide=id.p\]](https://docs.google.com/presentation/d/1BbLSI-ef7dMi2m1JkWTn0fqjbXGo-il8sFQVr9LtUUc/edit#slide=id.p)
 - VIS code host [\[https://code.vis.ethz.ch/\]](https://code.vis.ethz.ch/)
- Deliverables
 - Code
 - Report (3 – 4 pages)
 - Presentation (5 – 10 minutes)
- Important Dates
 - Project starts **now**
 - Project due on **17 Dec 2012, 9am**
 - Your exact presentation slot will be specified later

Have Fun Programming!



<http://developer.android.com/images/tools-home.png>