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

- 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/]
  - Slides for the Git-tutorial [https://docs.google.com/presentation/d/1BbLSI-ef7dMi2m1JkWTn0fqjbXGo-il8sFQVr9LtUUnc/edit#slide=id.p]
  - VIS code host [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