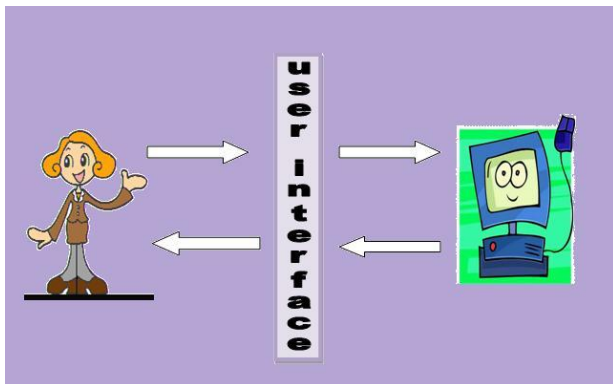# Human-Computer Interaction

Mid-term Project
(practical exercise)

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Sep, 2021

Mid-term project (practical exercise)

- Requirement for signature
- Groups of 3 students (~12 groups)
  - Strong cooperation
- Main goal for the end of the semester:
  - Use the lecture material in practice
  - One running program with User Interface
  - Platform: small screen tablet (max 10") (e.g. Windows 10, Android, iOS, or anything else)
  - Plan & design, implementation, evaluation
  - Human-Computer Interaction aspects

USER INTERFACE EXAMPLES OF EARLIER GROUPS

Earlier apps from HCI: 2011

- **Samsung SmartTV**
  - Several available SmartTV platforms
  - Programming: HTML / JavaScript
  - Limited interface options

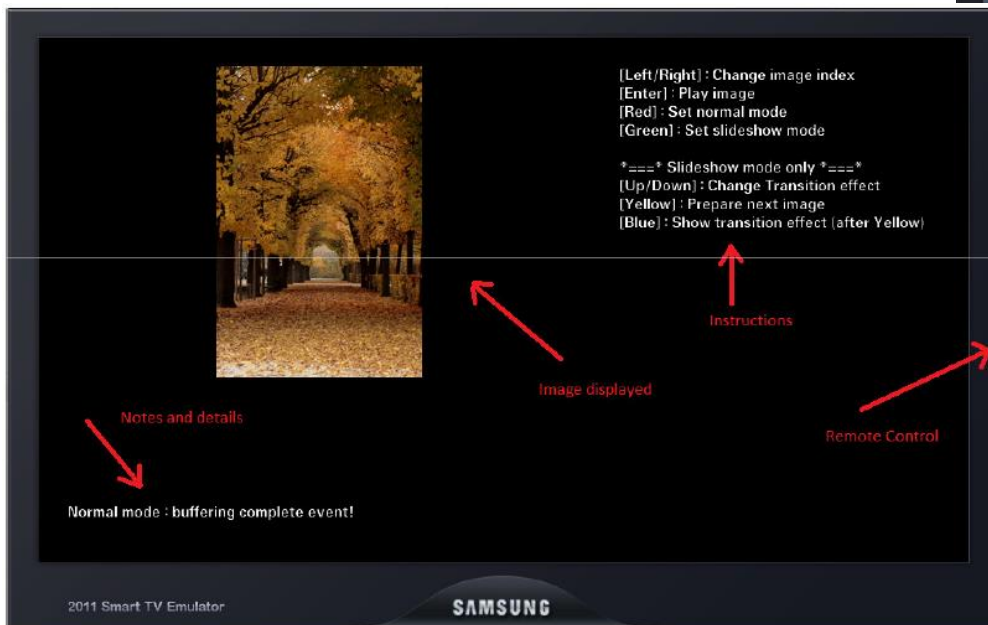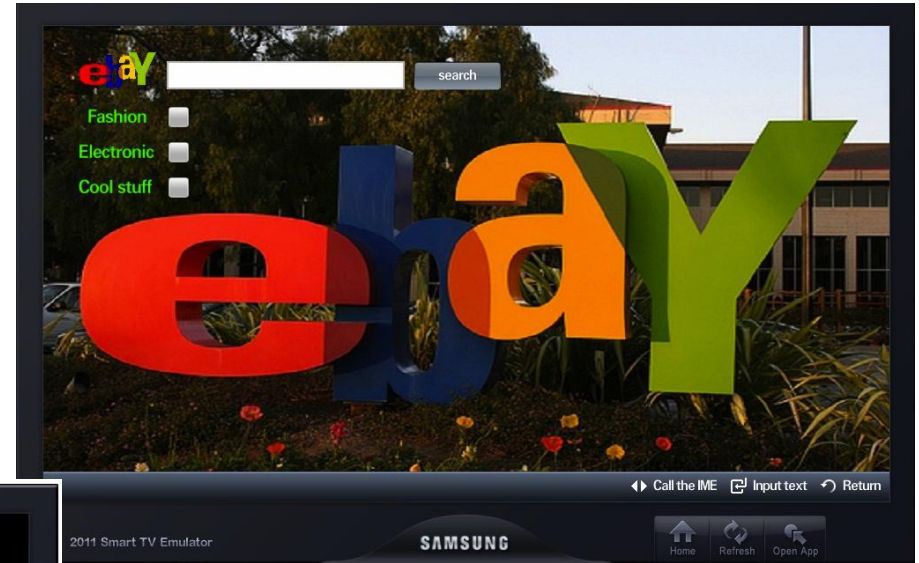http://www.dcclothesline.com/wp-content/uploads/2015/01/samsung-smart-tv-2.jpg

Earlier apps from HCI: 2011, good

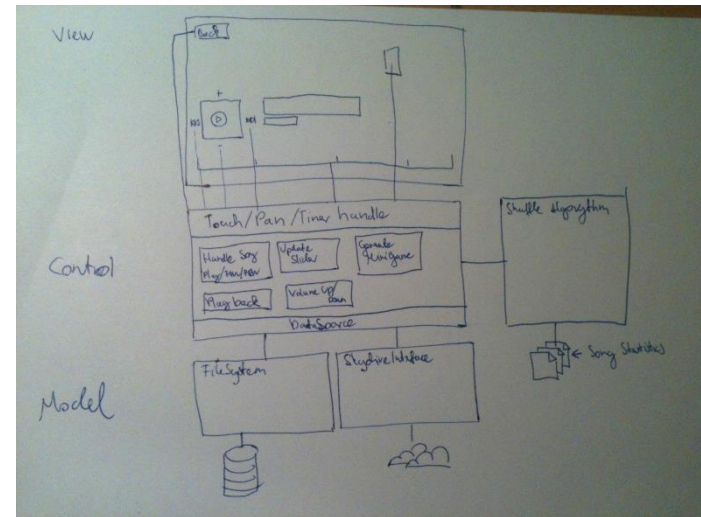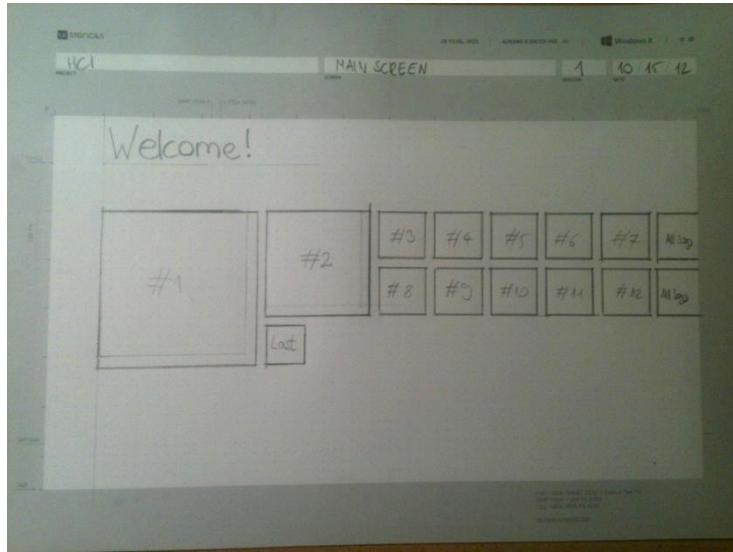# Earlier apps from HCI: 2011, less good

Earlier apps from HCI: 2012
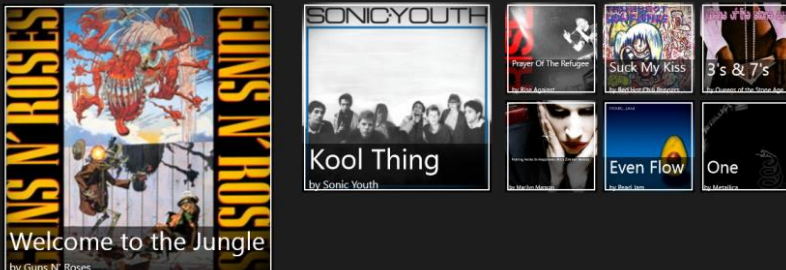
- **Windows 8, Metro design**
  - First version: 2012 October
  - Developer version
  - C# and XAML
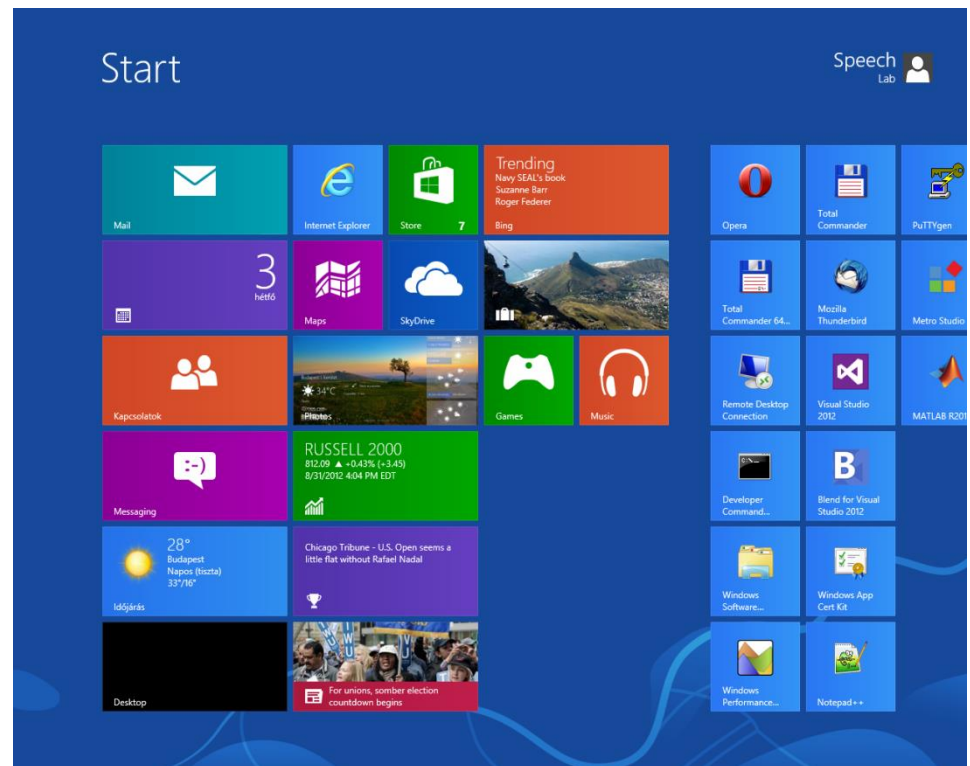
Earlier apps from HCI: 2012, good

Earlier apps from HCI: 2012, less good

Earlier apps from HCI: 2013, good

Earlier apps from HCI: 2014, good

Earlier apps from HCI: 2015

- **Small screen tablet / smartphone**

Earlier apps from HCI: 2015, good

Shuffle, http://bit.ly/1Iu59Ka
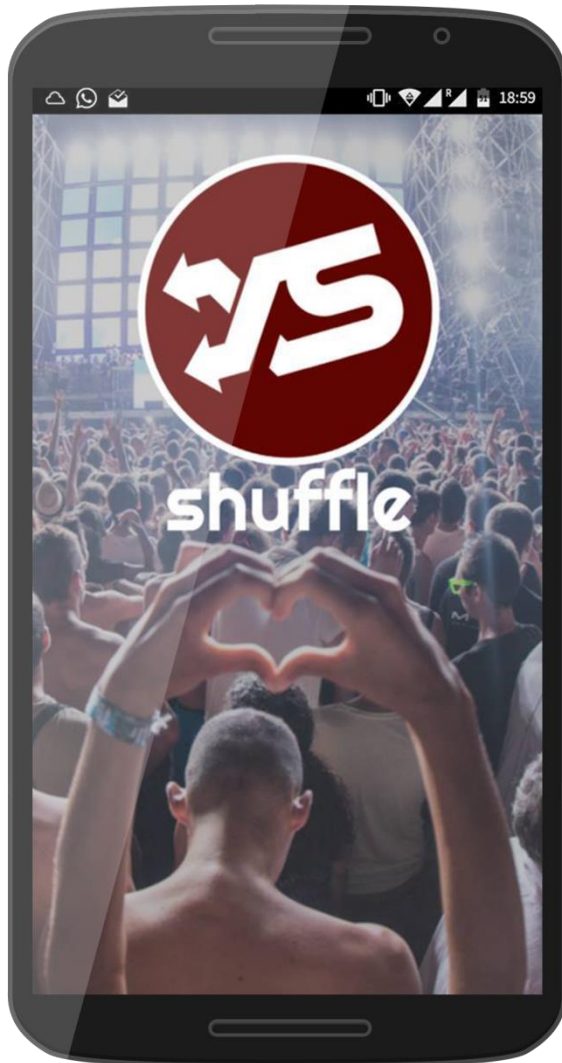
Earlier apps from HCI: 2015, good
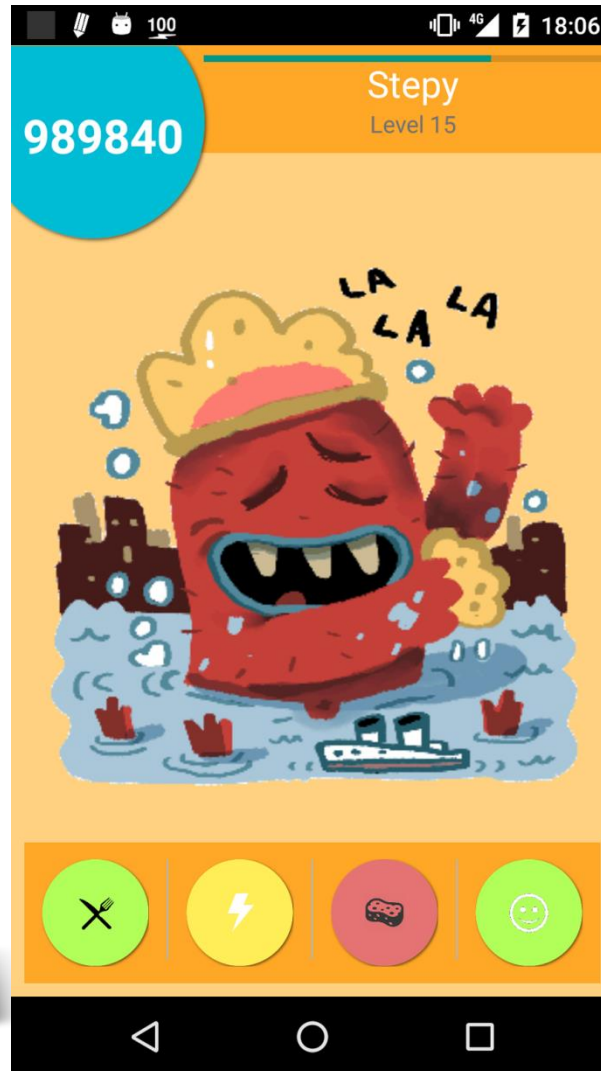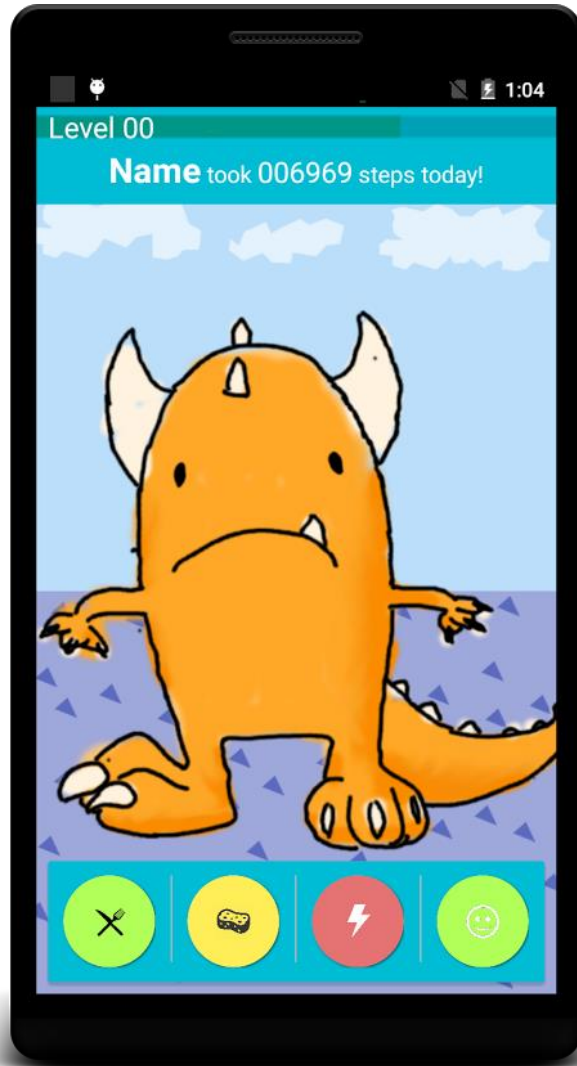
Earlier apps from HCI: 2016, good

feature: speech recognition & text-to-speech!

Mid-term project 2021

- You can choose from 3 offered topics
    1) Smart ordering in a restaurant
    2) Morning app
    3) Smart city related

- Additional requirement: speech modality
    – use Text-to-Speech Synthesis OR
    – use Automatic Speech Recognition

Mid-term project 2021

- 1) Smart ordering in a restaurant
  - User side and/or restaurant side (client + backoffice)
  - Single user / multiple users / adults / children
  - How to order the menu efficiently, without a waitor/waitress

Mid-term project 2021

- 2) Morning app
  - Smart alarm clock / wakeup TODO list
  - News reading / morning coffee suggestion / etc
  - Weather info / do you need an umbrella today?
  - Route planning to work
  - Anything that can help the user during the morning preparation

Mid-term project 2021

- 3) Smart city related
  - Smart home, home automation
  - Smart billing
  - Can be related to Smart city secondary specialization
    (e.g. user interface for a specific hardware)

Let's create groups!

- Design, implement and evaluate User Interface
- You can choose from 3 offered topics
    1) Smart ordering in a restaurant
    2) Morning app
    3) Smart city related
- Must use speech technology (TTS or ASR)
- **Upload until Sep 13 Monday 8:00**