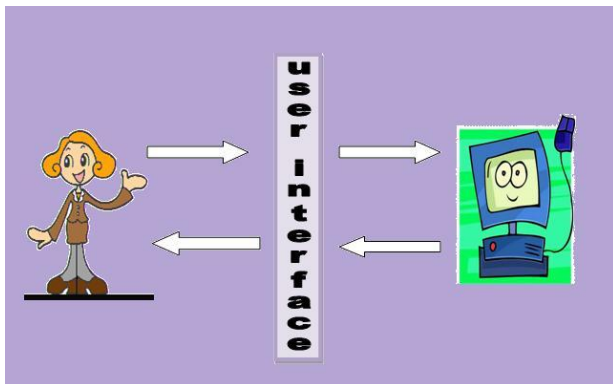


Human-Computer Interaction

Mid-term Project
(practical exercise)

Tamás Csapó

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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



Earlier apps from HCI: 2011, good

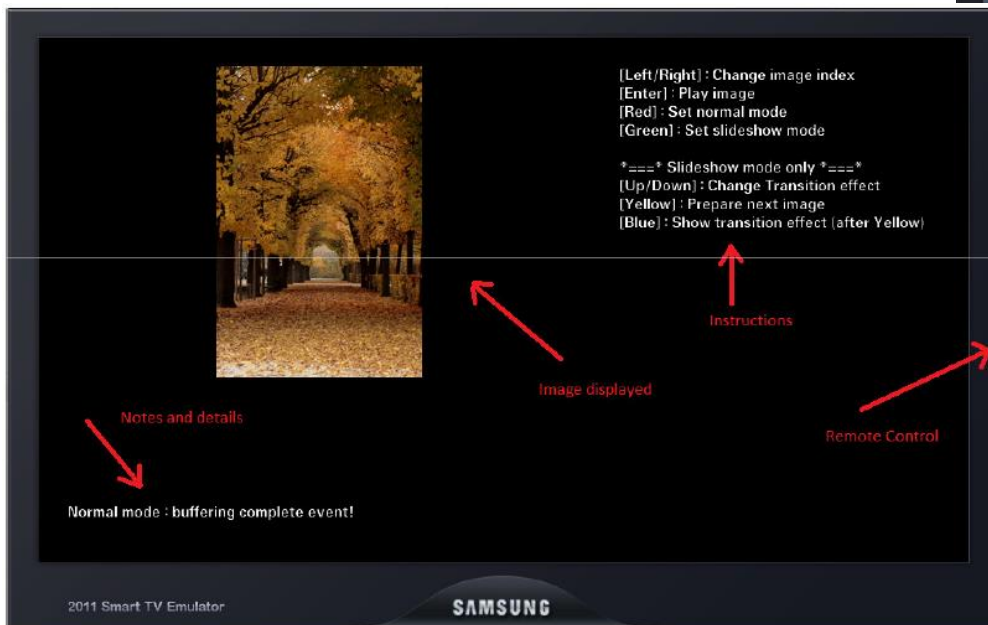
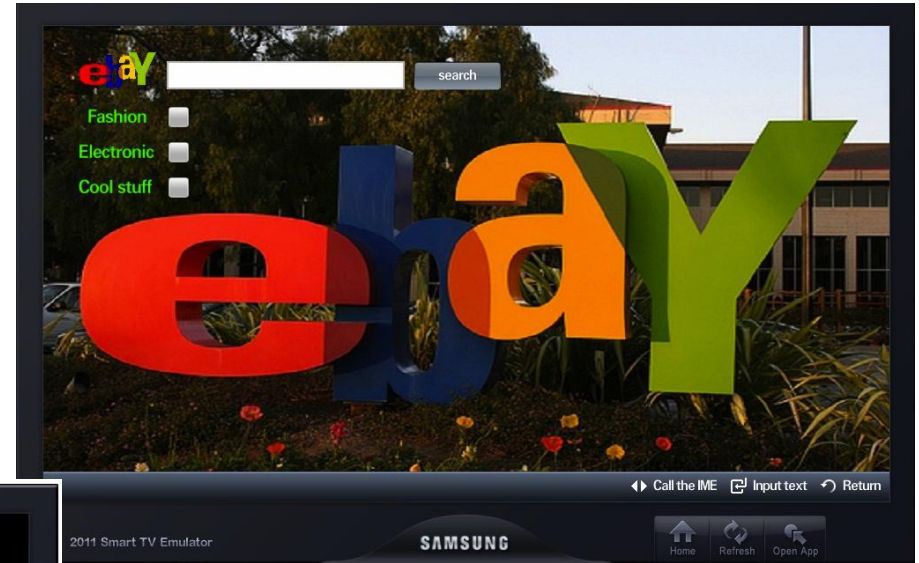
A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	_	-	?	!
0	1	2	3	4	5
6	7	8	9		

Type something to start searching...

	Affair		Af
	Americano		Ap
	Atomic Cat		B5
	Batman Cocktail		Ba

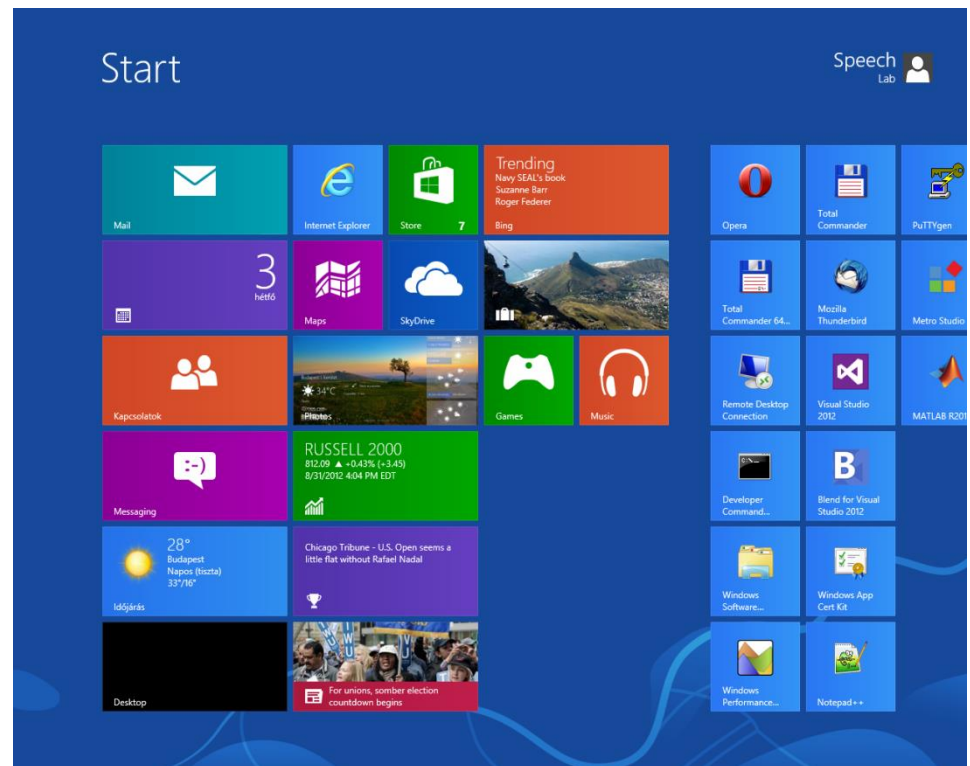
⏪ ⏩ ⏴ ⏵ Move between menu items ENTER Select menu item

Earlier apps from HCI: 2011, less good

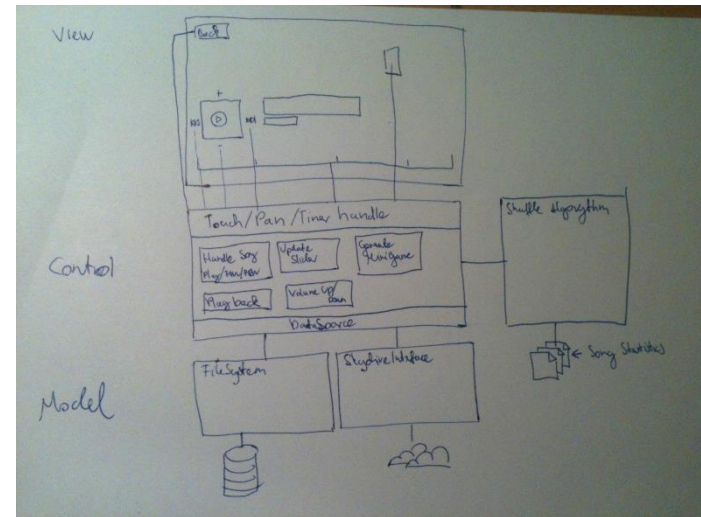
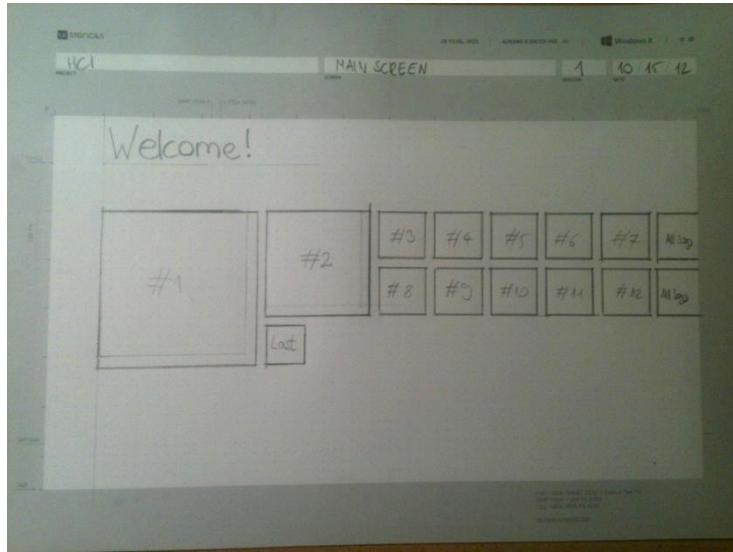


Earlier apps from HCI: 2012

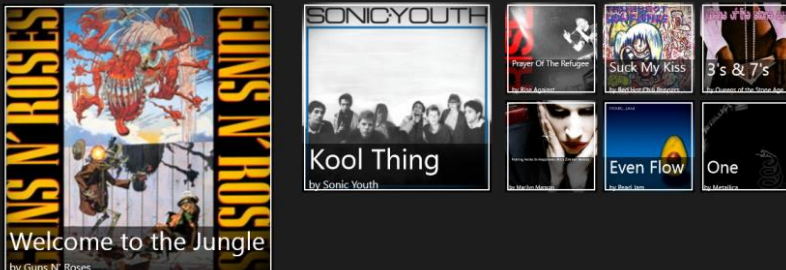
- **Windows 8, Metro design**
 - First version: 2012 October
 - Developer version
 - C# and XAML



Earlier apps from HCI: 2012, good



Start with choosing a song!



Earlier apps from HCI: 2012, less good

csoport mérkőzései

← Világbajnoki selejtező - Európa - A csoport

csapatoldal

Skócia (4 - 1 - 4 - 1) **1-1** Macedónia (4 - 4 - 1 - 1)

csapatoldal Fontosabb események a mérkőzésen

csapatoldal	Skócia	Macedónia
Kenny Miller	'43	'11 Nikolce Noveski
Charlie Adam	'60	'23 Agim Ibraimi
Kenny Miller	'58	'38 Ivan Trickovski
Charlie Adam	'58	'38 Ferhan Hasani
James Morrison	'66	'40 Ferhan Hasani
Jordan Rhodes	'66	'52 Nikola Gligorov
Jamie Mackie	'77	'53 Goran Pandev
Steven Naismith	'77	'70 Nikola Gligorov
		'70 Veliche Shumulikoski
		'78 Veliche Shumulikoski
		'89 Agim Ibraimi
		'89 Darko Tasevski

meccs Angola 0 - 0 Macedónia

játékos oldal

Fogadás a mérkőzésre fogadóirodák listája

feliratkozás értesítés

Hpsszabítás 1 Hpsszabítás 2 büntetők

Kezdés időpontja: 2012-09-11 21:00:00

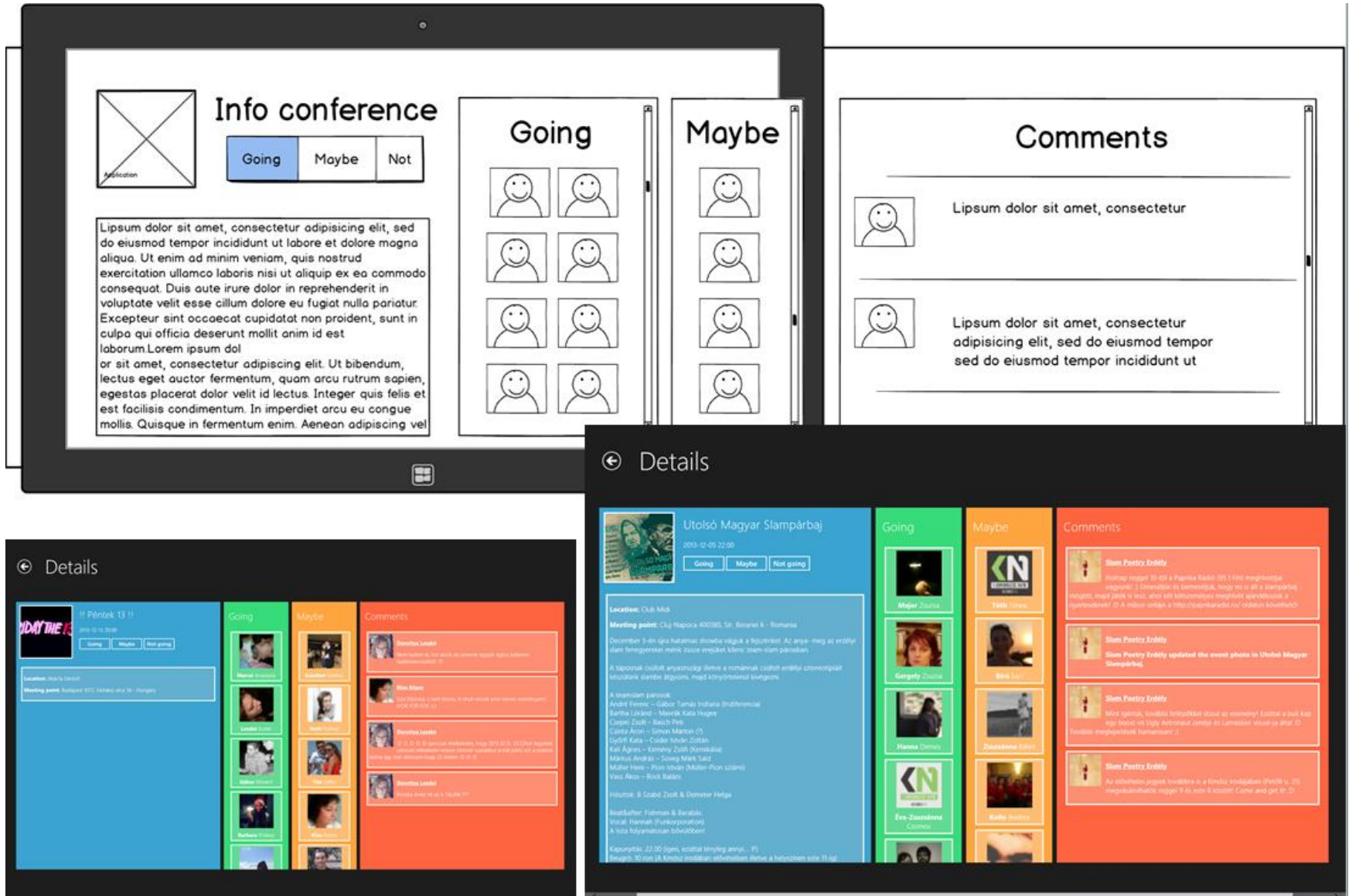
játékvezető o. Játékvezető: Sergei Karasev

stadion oldala Stadion: Hampden Park
Nézőszám: 32430

TV adó közvetítés kezdése tv műsor

**TIMILINE / ODDSTÖRTÉNET
LINEUP / CSERÉK / SÉRÜLTEK
BEÉRKEZETT TIPPEK
MECCSSTATISZTIKA / labdabirtoklás...stb**

Earlier apps from HCI: 2013, good



Earlier apps from HCI: 2014, good


добро утро!

Now you know how to say good morning in Bulgarian - Bulgaria

21:37

Friday

2014.12.12.

 Set alarm



Mostly Cloudy

3 °C

Feels like 1 °C

Europe/Budapest

Things to remember

Add new todo

Add

Smile



Drink coffee



Today's Coffee



 Pick Another

Flat White

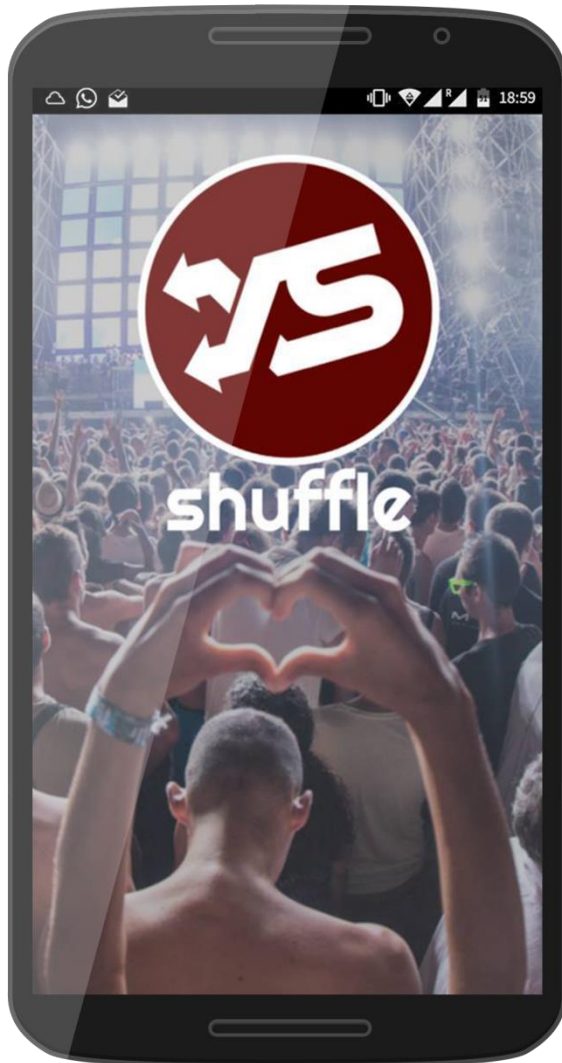
Earlier apps from HCI: 2015

- Small screen tablet / smartphone

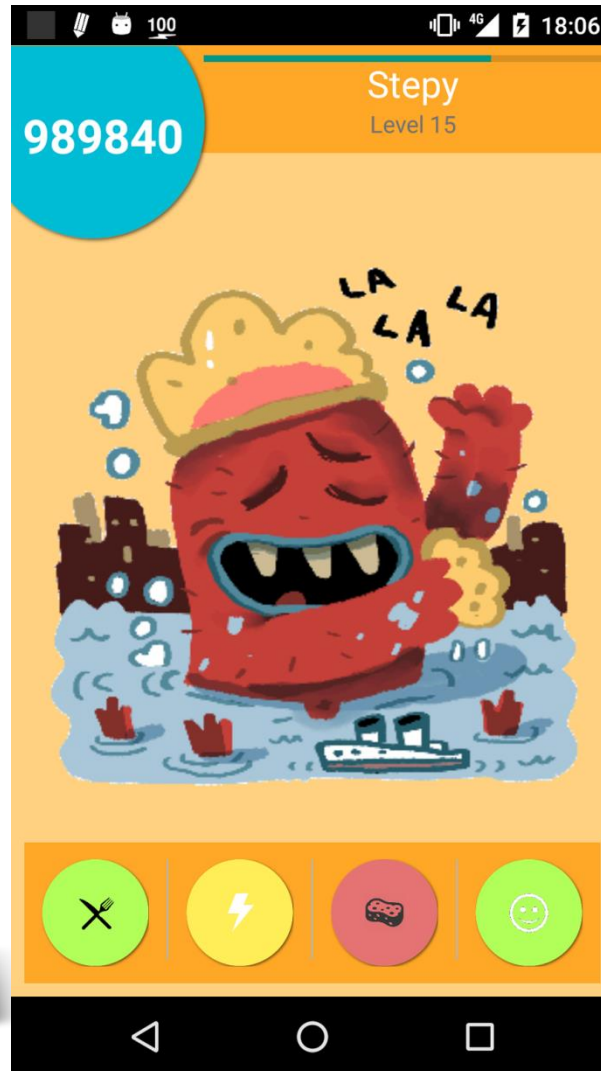
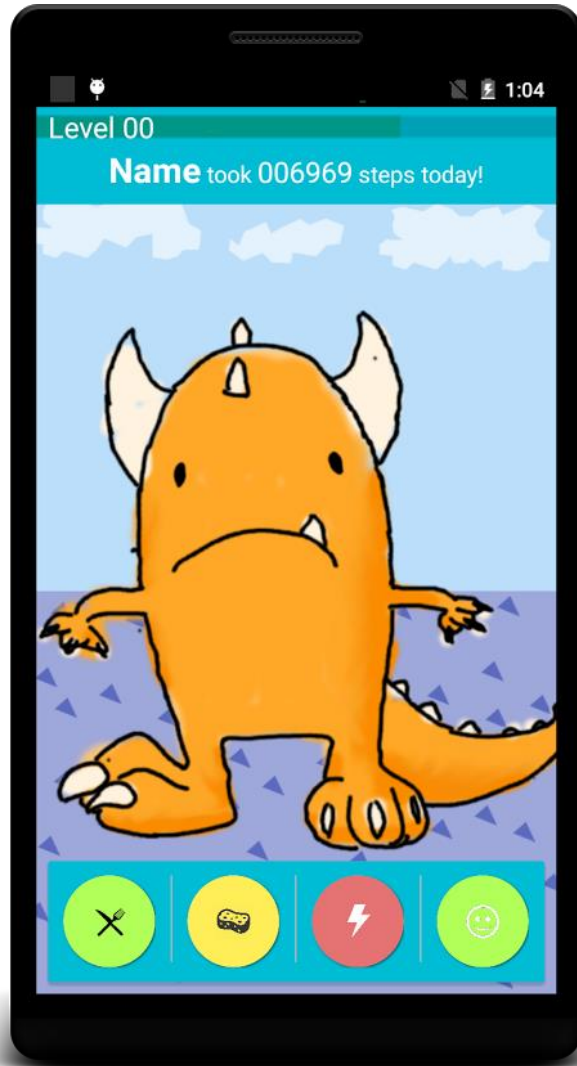


Earlier apps from HCI: 2015, good

Shuffle, <http://bit.ly/1lu59Ka>



Earlier apps from HCI: 2015, good



Earlier apps from HCI: 2016, good

feature: speech recognition & text-to-speech!

The screenshot displays the CookHead app interface. At the top, a red header contains the app name "CookHead" and a search bar. Below this, a navigation bar includes icons for home, help, heart, and a person icon. The main content area is divided into two columns. The left column features a large image of a stack of brownies, with a blue box highlighting a text prompt: "Say 'read description' or 'read ingredients' to active speech synthesis". Below the image are metrics for "People" (6 icons), "Difficulty" (5 stars, 3 filled), "Time" (45 min), and "Favorite" (heart icon). The right column shows the "Ingredients" list and a "Description" section, both with blue boxes highlighting play and stop buttons. A "Salads" section is visible on the left side of the app.

CookHead

Brownies

Say "read description" or "read ingredients" to active speech synthesis

Ingredients

400 g of Sugar	230 g of Unsalted butter
60 g of Cocoa powder	1 Teaspoon of Vanilla extract
4 Eggs	65 g of Flour
1/2 Teaspoon of Baking powder	1/2 Teaspoon of Salt
100 g of Walnut	

Description

Melt the butter or margarine and mix all ingredients in the order given. Bake at 350 degrees F (175 degrees C) for 20 to 30 minutes in a 9 x 13 inch greased pan.

Salads

People: 6 icons
Difficulty: 5 stars (3 filled)
Time: 45 min
Favorite: heart icon

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 waiter/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**