#### Programming of Interactive Systems assignment 1

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## assignment 1

"A smart home is [a home] equipped with lighting, heating, and electronic devices that can be controlled remotely by smartphone or computer: you can contact your smart home on the Internet to make sure the dinner is cooked, the central heating is on, the curtains are drawn, and a gas fire is roaring in the grate when you get home. "

-- Oxford dictionary



#### smart home control panel

# **assumption:** the control interface will run on a panel inside the smart home



image from smart-home-blog.com/

image from www.cedia.org/

#### assignment 1 : what to do

- 1. graphical representation of house and rooms
- way to control/program 2 aspects (e.g. temperature and light).
- 3. at least one drag-and-drop interaction
- 4. undo/redo functionality for all actions
- 5. and **3 extensions** for a very good mark

#### assignment 1 : advice

- before starting define the limits of your project
  - more functionalities ?=? better marks/product
  - realization of your ideas/concepts that are clear, easy to use and work well together in the interface
- implementation
  - test your code
  - always have a stable version (« release »)
  - avoid unexpected states in the interface
  - give feedback to avoid user errors
- you can be creative (you are encouraged!!!), but always within your abilities. Simplify if needed.

#### assignment 1 : submission

In 2 parts

- a storyboard of your techniques (on paper or slides before implementation). Due **18 Oct**.
- a code and brief description that describes the main functions of the techniques/interactions. Due 8 Nov.

see announcement online on how to submit

#### user-centered design



#### storyboard: a visual scenario (story)



Whenever the DIR beeps, it indicates that a match is identified. In this case, a buyer is found. It also shows the buyer's location and their actual relative distance.



Joe introduces himself.



Joyce asks Joe about the price for the book.

Excuse me!! Are you soling CSC 118 Territork ?? CSC 118 Territo

At the same time, the buyer's DIR is behaving the same way. They can then easily locate each other.



Joe does not believe his eyes, because Joyce is exactly the same type of girl he always dreams of!!



Joe is totally defeated under Joyce's beauty.



He takes out the DIR from his pocket.



The DIR shows a sparking indicator on the screen. This shows Joyce's location at this moment.



On the friends list, Joyce's name is highlighted indicating that she is near him. Joe selects her name to view her location.



Joe decides to follow the map of the DIR to meet Joyce.





He goes downstairs.

student assignment for communication device

## storyboards

Illustrate a design scenario

Describe the interaction in easy to read segments Define the key elements and a coherent order Decide what details to show



Ex. http://webzone.k3.mah.se/k3jolo/Sketching/sk31.htm,

http://stavchansky.net/work.php?wID=42&cat=3

#### a possible storyboard structure



## this type of storyboard focuses on detailed interaction sequences

from the book "Sketching User Experiences: The Workbook"

#### a possible storyboard structure



#### this type focuses on a complete interaction

http://grouplab.cpsc.ucalgary.ca/grouplab/uploads/Publications/Publications/2012-NarrativeStoryboard.Interactions.pdf

#### a possible storyboard structure





Both are important in interaction design. We'll talk about them more in a few weeks

For you assignment focus more on the "detailed interaction sequences"

#### assignment 1

If you run into problems contact your TA and/or Anastasia, the earlier the better

Good luck!

