

# **Interface Design for Mobile Devices Workshop [IDMD]**

Future Places | Porto







Mobile devices and network infrastructures open the possibility for new forms of information access or storytelling while visiting physical places. The workshop addresses this new trend by exploring the user interface design opportunities and challenges for different devices, taking also into account the underlying information architecture or storyline. In the workshop, participants will have the opportunity to develop a project in user interface design and information structuring for exploring a physical location.

## I. Session 1 | October 13 {9:30-12:30}

1. Presentations: trends, background, expectations
2. Technical background and infrastructure
  - Mobile devices
  - Network infrastructures
  - Georeferenced information
3. IDMD: concepts & references
  - Task Analysis
  - Usability issues | Heuristics
  - Design Guidelines

## I. Session 1 | October 13 {14:00-17:30}

### 4. Case studies

InStory

IDMD 2008 | ESTGP seminars

### 5. IDMD *Challenge*

Concept

Structure

Design templates

### 6. Teams + tasks

### 7. Field work: site-specific resources

## II. Session 2 | October 14 {9:30-12:30}

1. Field work: site-specific resources caption and manipulation (cont)
2. Work in progress monitoring: questions, clarifications, additional references and guidelines

## **II. Session 2 | October 14 {14:00-17:30}**

- 3. Tests & adjustments
- 4. Presentation [ongoing proposals]
- 5. Comments & suggestions
- 6. Limitations
- 7. Future work
- + Iterations

# **“Challenge”:**

## **Design Proposal**

### **[mobile phones, PDAs]**

Concept | Structure

Visual Interface



# Project proposal guidelines [team work]

**I. CONCEPT** Title+description: ideia, history, functionalities

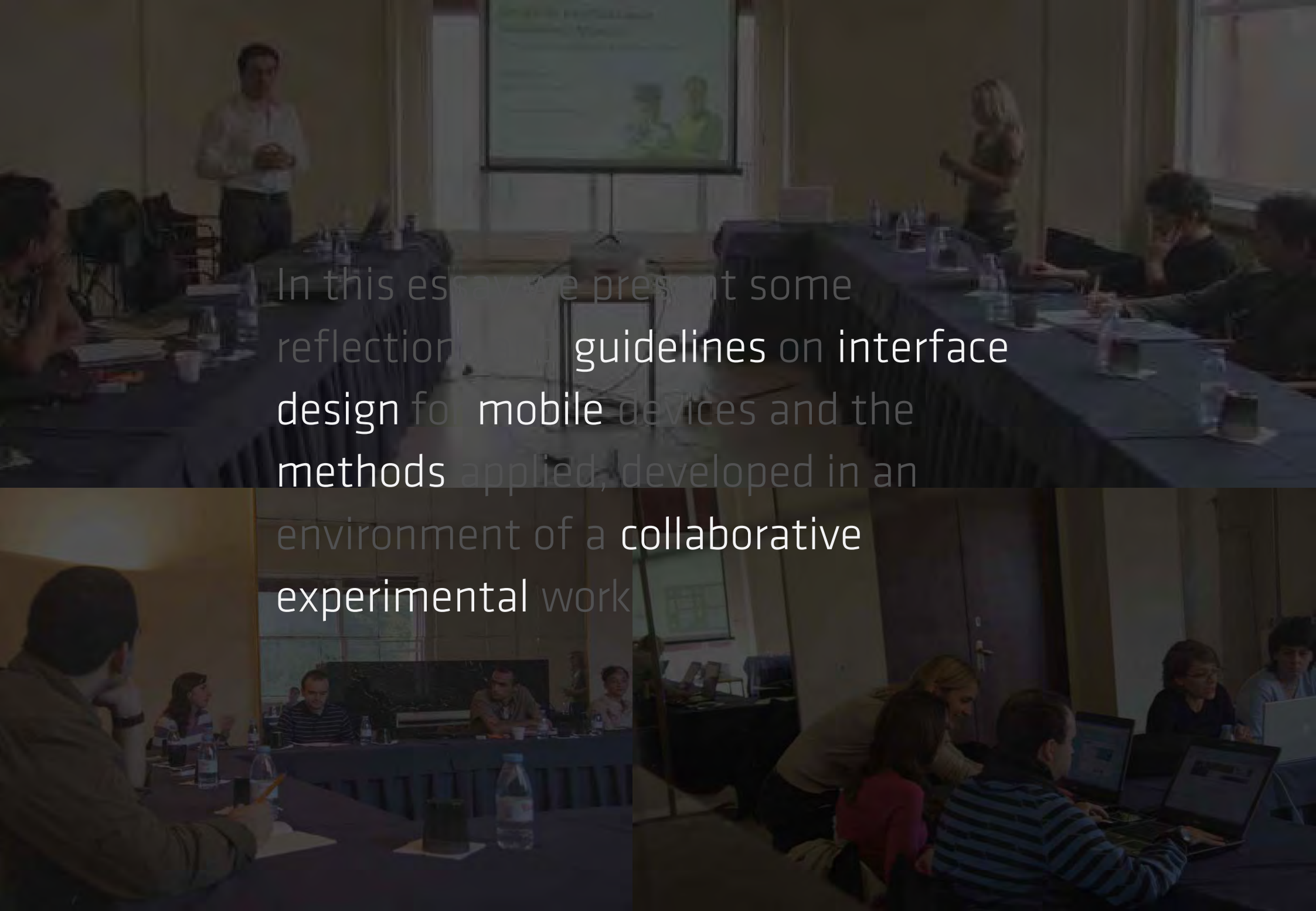
**II. STRUCTURE** Information architecture and interaction design

**III. INTERFACE** Optimized interface models, implicit navigation: 1. Home, 1st level  
2. Contents, info 2nd level | 3. Georeferenced, map  
4. User data | 5. Game

# **Interface Design for Mobile Devices**

Future Places 2008

Proceedings



In this essay we present some reflection on guidelines on interface design for mobile devices and the methods applied, developed in an environment of a collaborative experimental work

IDMD starts by setting a solution and describing the workflow, defining the information architecture followed by visual design. Specifying the solution - by describing the concept, defining the users, and identifying the subset of features - will act as a reference and a filter for the options to consider. Features and functionality must be set by highlighting the essential, what really matters to users ***in motion***

# IDMD workshop 2009 outcomes

Participants

Project proposals





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**Project name**

U POST

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**IDMD 2009 Workshop group**

Joana Dias, Paolo Battino, Paulo Ricca, Sérgio Mendes

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## CONCEPT

*Enhance individual **localized intervention** through a physical portal for one's thoughts.*

## Urban Manifest

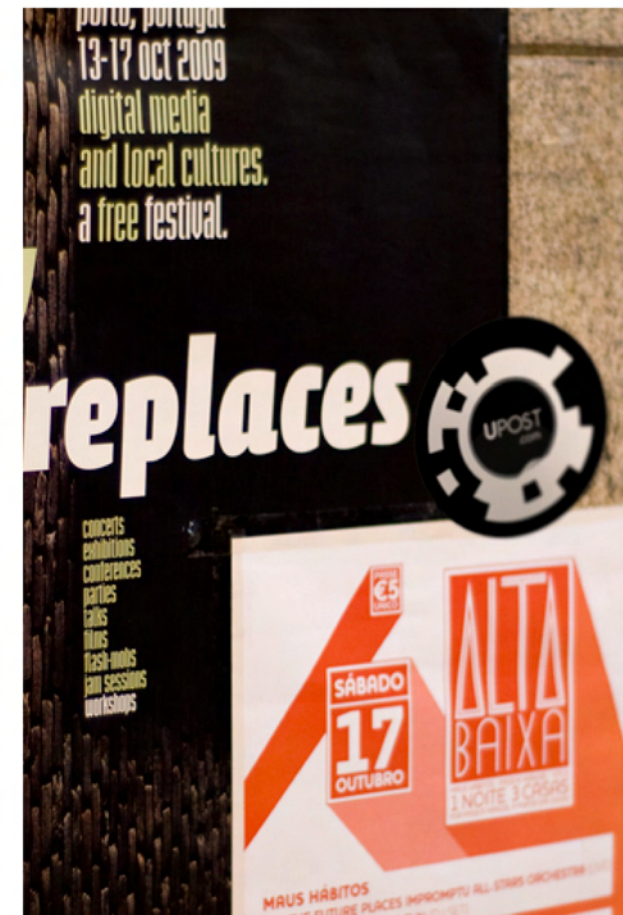




## INTERFACE

## Urban Manifest

- > Markers are physical objects, merged into our everyday life.
- > We can't avoid seeing them, like graffiti, posters, traffic lights...





## INTERFACE

## Urban Manifest

- > Used in conjunction with mobile device, markers become links to digital resources, between physical and digital world.
- « **Top-down**   **Bottom-up** »







## INTERFACE

## Urban Manifest

- > Top-down communication is produced by a hierarchically superior entity, like an institution.
- > Bottom-up communication can be produced by everyone, like a blog entry.

« **Permanent**   **Temporary** »





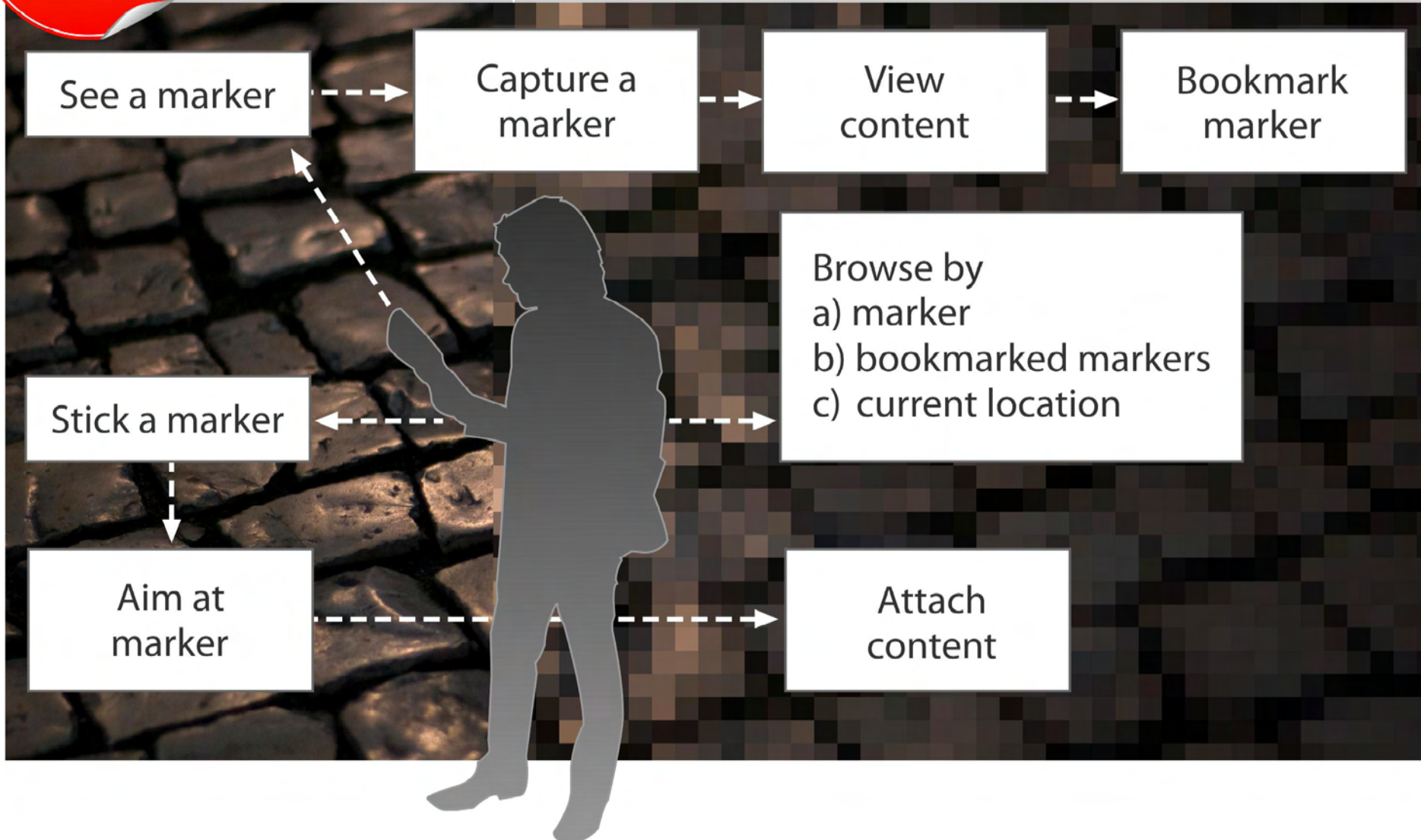


## STRUCTURE

## Urban Manifest

PHYSICAL SPACE

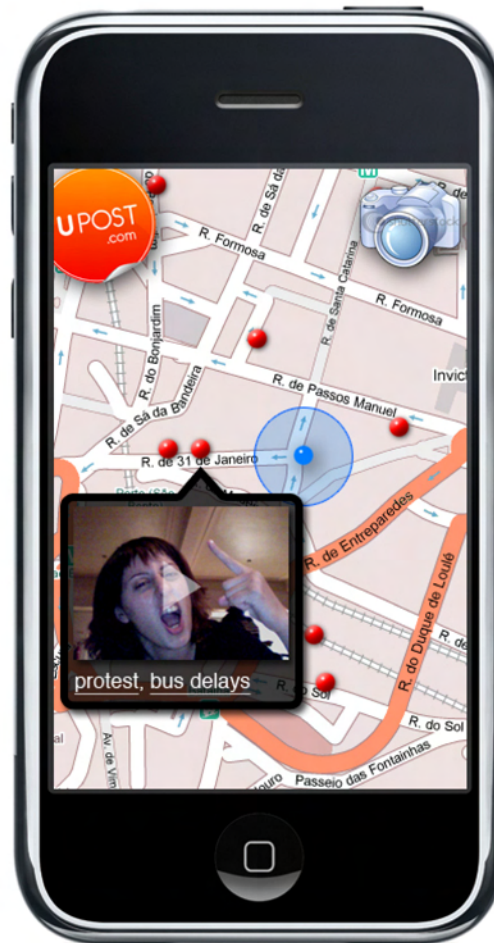
DIGITAL SPACE





INTERFACE

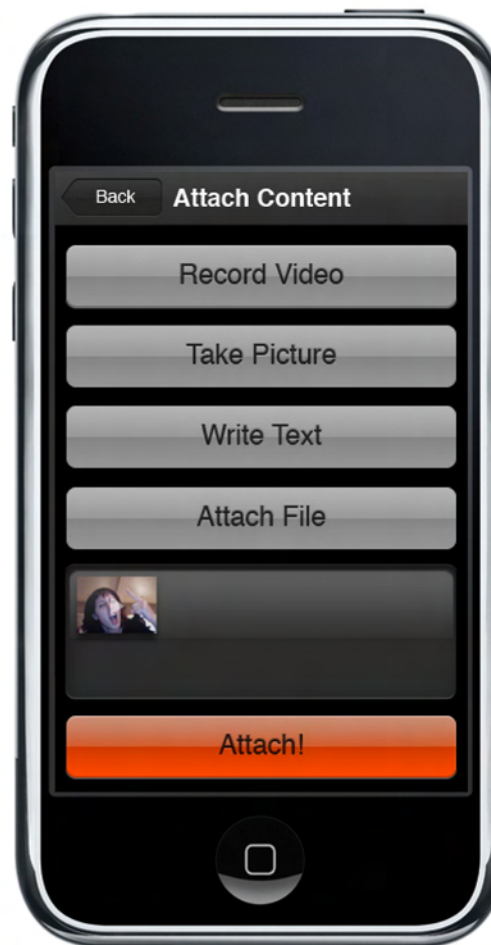
*Urban Manifest*





INTERFACE

*Urban Manifest*



# HURLY-BURLY

MIC UP YOUR WORLD!

- I. TEAM
- II. CONCEPT
- III. STRUCTURE
- IV. INTERFACE

**Future Places 2009**

Interface Design for Mobile Devices

Workshop

Faculdade de Jornalismo e Ciências da

Comunicação . Porto

**UT Austin | Portugal**

INTERNATIONAL COLLABORATORY FOR EMERGING TECHNOLOGIES, CoLAB

# HURLY-BURLY

MIC UP YOUR WORLD!

## I. TEAM

II. CONCEPT

III. STRUCTURE

IV. INTERFACE

Ana Parada - Tecnologies

João Cordeiro - Sound

Katerina Marková- Visual Arts





# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

II. CONCEPT

III. STRUCTURE

IV. INTERFACE

Social Network

Acoustic Relation between Users

Application for Iphone and Ipod (touch)

**Hurly-Burly:**

busy

boisterous activity

*(in Apple Dictionary. Copyright © 2005–2009 Apple Inc.  
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# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

**II. CONCEPT**

III. STRUCTURE

IV. INTERFACE

Keywords

Locative media

Soundart

Social networkings

Soundscape

Data visualization

Interaction design

Data sonification

# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

**II. CONCEPT**

III. STRUCTURE

IV. INTERFACE

Hurly-Burly proposes an acoustic relation between users (“friends”), by collecting and distributing, in real-time, their soundscape.

For the user, the result is a mixed hurly-burly collection of environmental sounds, with a visual representation based on the sound description of each stream.

Metaphor: Friends < - > Territory/world (acoustic)

# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

II. CONCEPT

III. STRUCTURE

IV. INTERFACE

1. Import/invite your “friends” from your collection of social networkings.
2. Once you start HB on your Iphone, the microphone *opens* and starts uploading audio, in real-time, into a server; the same is valid for all other users.
3. At the same time, you start receiving a mix of all the audio streams sent by your “friends”. Getting, this way, your personal friendship acoustic world (soundscape).

# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

II. CONCEPT

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IV. INTERFACE

4. Also, a visual representation of the acoustic world appears on your device, based on the individual sound of each friend (automatically tagged on the server) and their geo-location (local references); forming your world map.
5. Each of your “friends” is then represented in the map, not according geo-location but sound-location (you can access them individually, soloing their streams )
6. An “invisible” mode is possible: you can ear your acoustic world (without soloing friends); but you don’t send audio out of your mic.)



# HURLY-BURLY

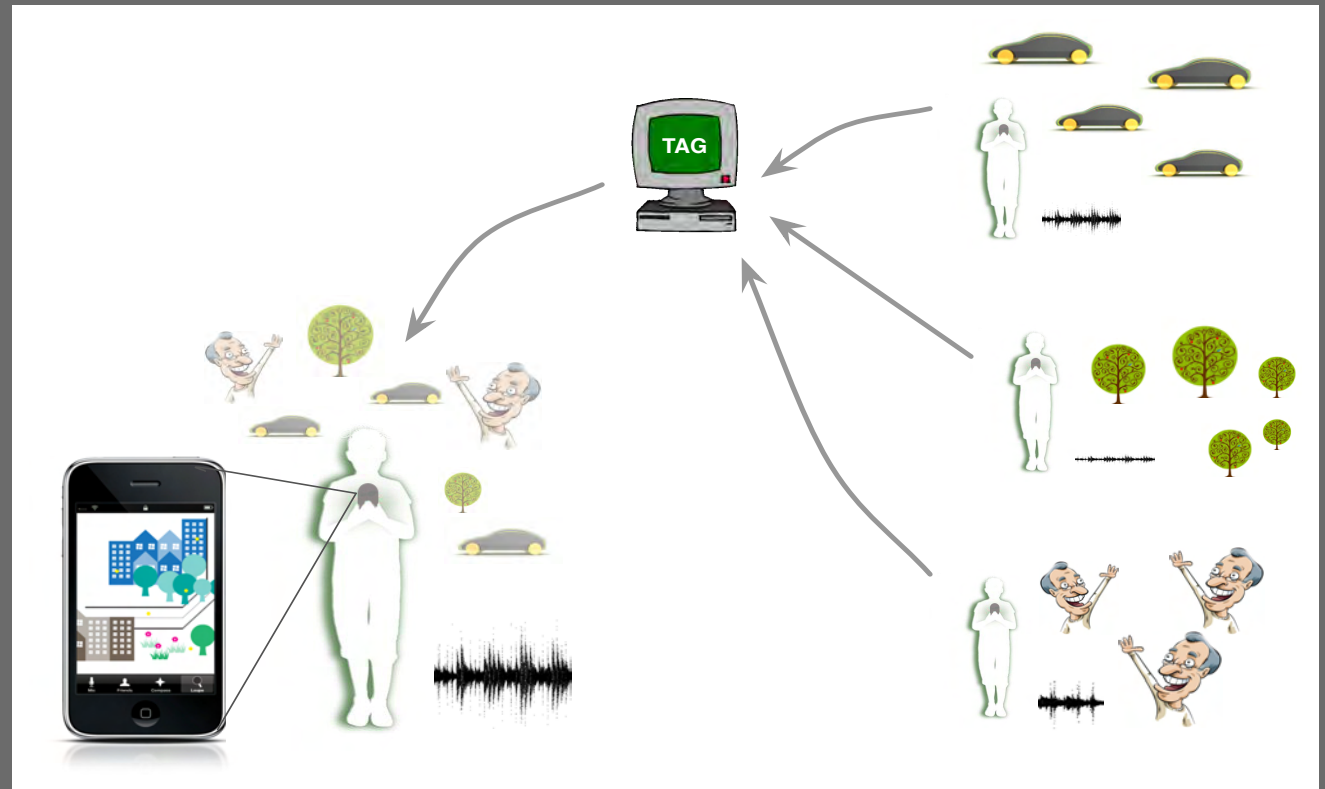
MIC UP YOUR WORLD!

I. TEAM

II. CONCEPT

**III. STRUCTURE**

IV. INTERFACE



# HURLY-BURLY

MIC UP YOUR WORLD!

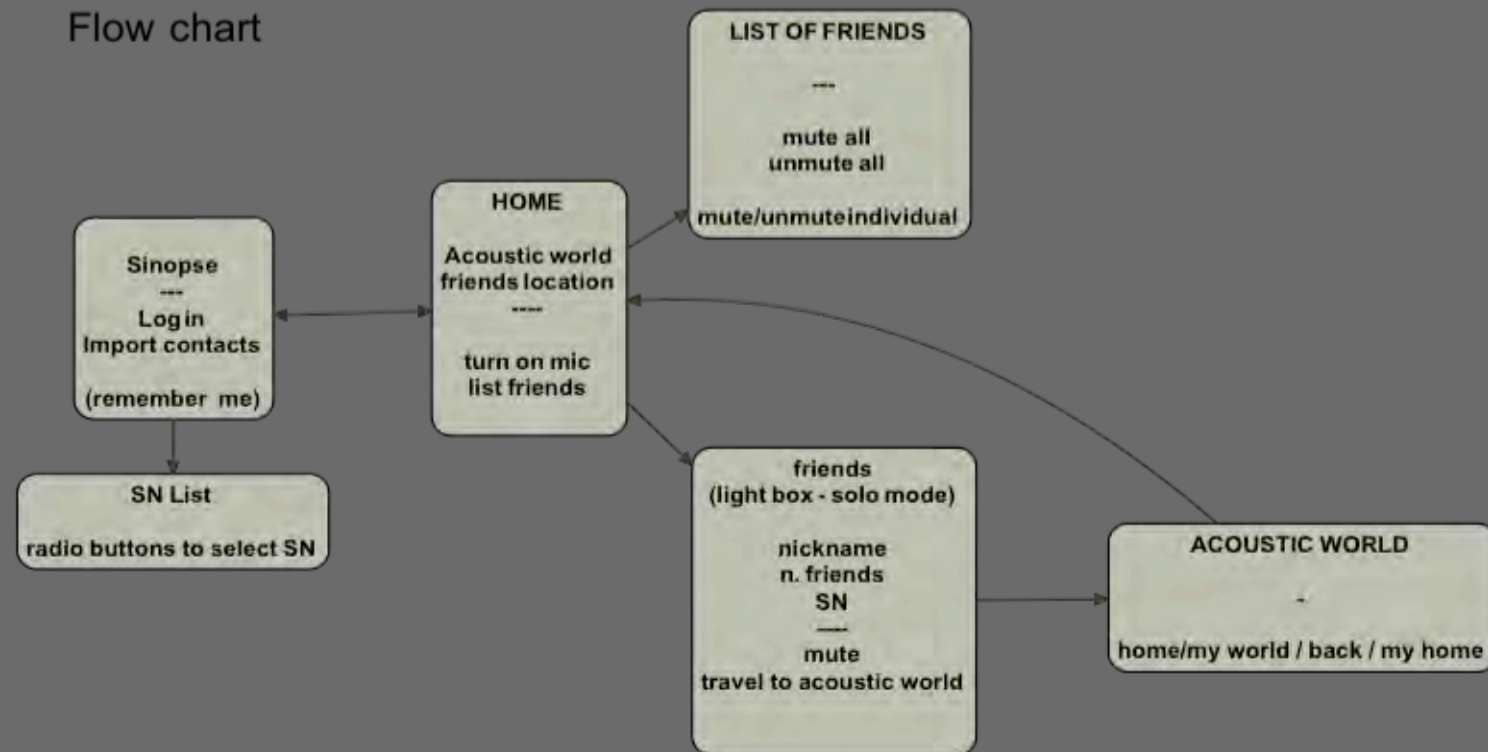
I. TEAM

II. CONCEPT

III. STRUCTURE

IV. INTERFACE

Flow chart



# HURLY-BURLY

MIC UP YOUR WORLD!

I. TEAM

II. CONCEPT

III. STRUCTURE

IV. INTERFACE



# HURLY-BURLY

MIC UP YOUR WORLD!

... and see how it sounds

## Future Places 2009

Interface Design for Mobile Devices

Workshop

Faculdade de Jornalismo e Ciências da

Comunicação . Porto

UT Austin | Portugal

INTERNATIONAL COLLABORATORY FOR EMERGING TECHNOLOGIES, CoLAB

# iPass

The mobile solution for your local mobility

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Workshop Interface Design for Mobile Devices  
Future Places 2009



Kátia Sá

Joao Beira ([www.joaobeira.com](http://www.joaobeira.com))

Joao de Melo

# iPass

The mobile solution for your local mobility

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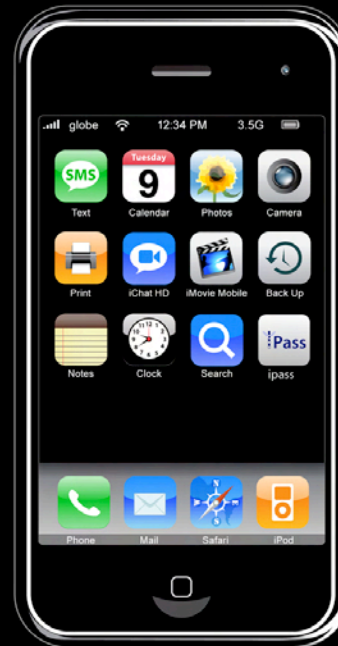
iPhone Application to unify the local network transportation by  
Metro, Bus and Train

Ecosolution to the intermodal transportation local network

Geo-Referenced GPS system

Real Time location tracking interface

Database information with maps, schedules and services



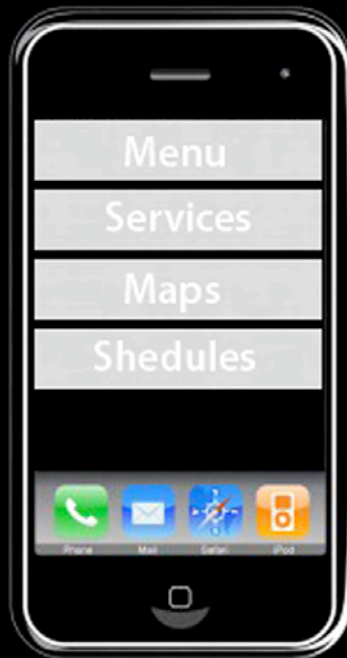
• iPass icon App





# iPass

The mobile solution for your local mobility



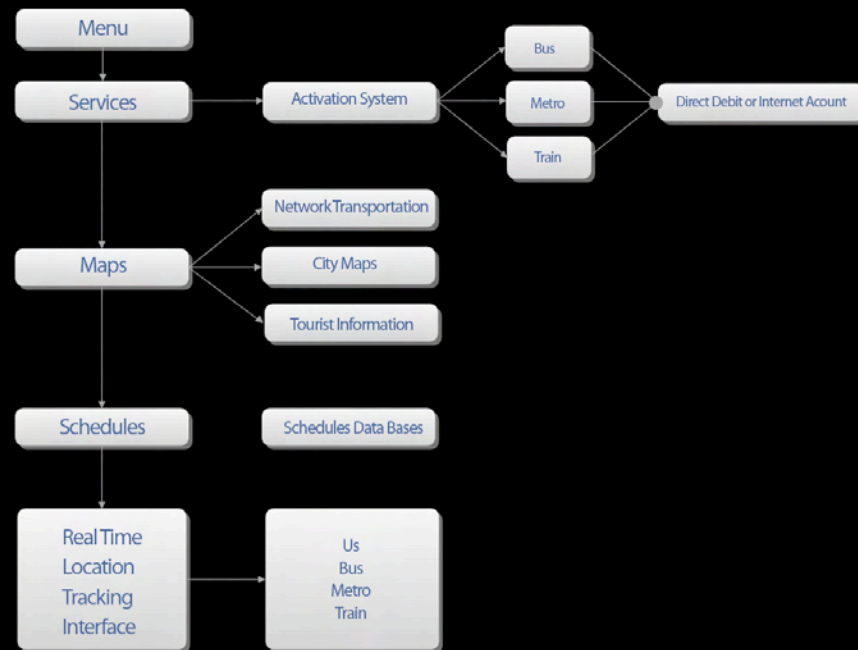
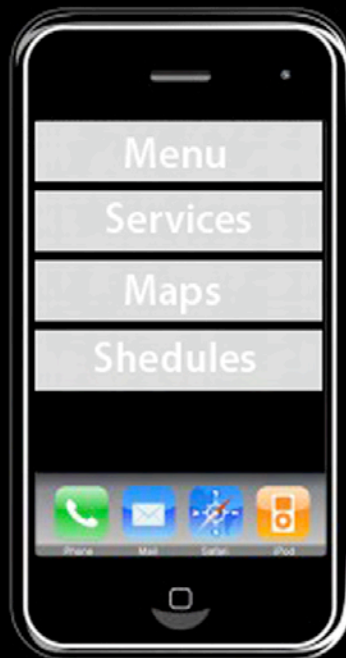
Mobile transportation and Ticket information

Real Time location tracking interface

3 Main Areas:  
Tracking GPS, Maps and Schedule

# iPass

The mobile solution for your local mobility



# Interface Design for Mobile Devices

## Workshop Future Places | Porto | Outubro 2009

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Adriana Pereira | Pedro Messias | Vítor Silva

# DareMeUp!

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## Name

Dare Me Up!

## Goal

Getting users off their bottoms and improving their mood, by daring them to complete adrelanine-inducing physical challenges ('dares') in adventure sports.

## Target audience

The masses. Any user above 18 years of age can register, both the extreme athlete and the couch potato.

# DareMeUp!

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## Dares

A 'dare' is a physical challenge in an adventure sport that is issued either by a friend or by the system, upon a user's request.

## Points

Points may be awarded both to the user who successfully completes a dare and the user who issues the challenge.

## Performance

Point are awarded to the user who takes up the challenge based on successful completion and performance, as measured by the mobile device's sensors.

# DareMeUp!

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## Mood

Points are awarded to the sender based on the receiver's satisfaction (positive mood change) upon completing the task. Mood is also used by the system to generate dares.

## Competition

Point rankings compel users to compete against each other. Statistics of every kind can be searched through.

## Performance

Users can use points earned to buy equipment and services from affiliates (companies that provide the adventures sports services), which get publicity in return.

# DareMeUp!

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## Supported platforms

iPhone / Windows Mobile / Android / Symbian.

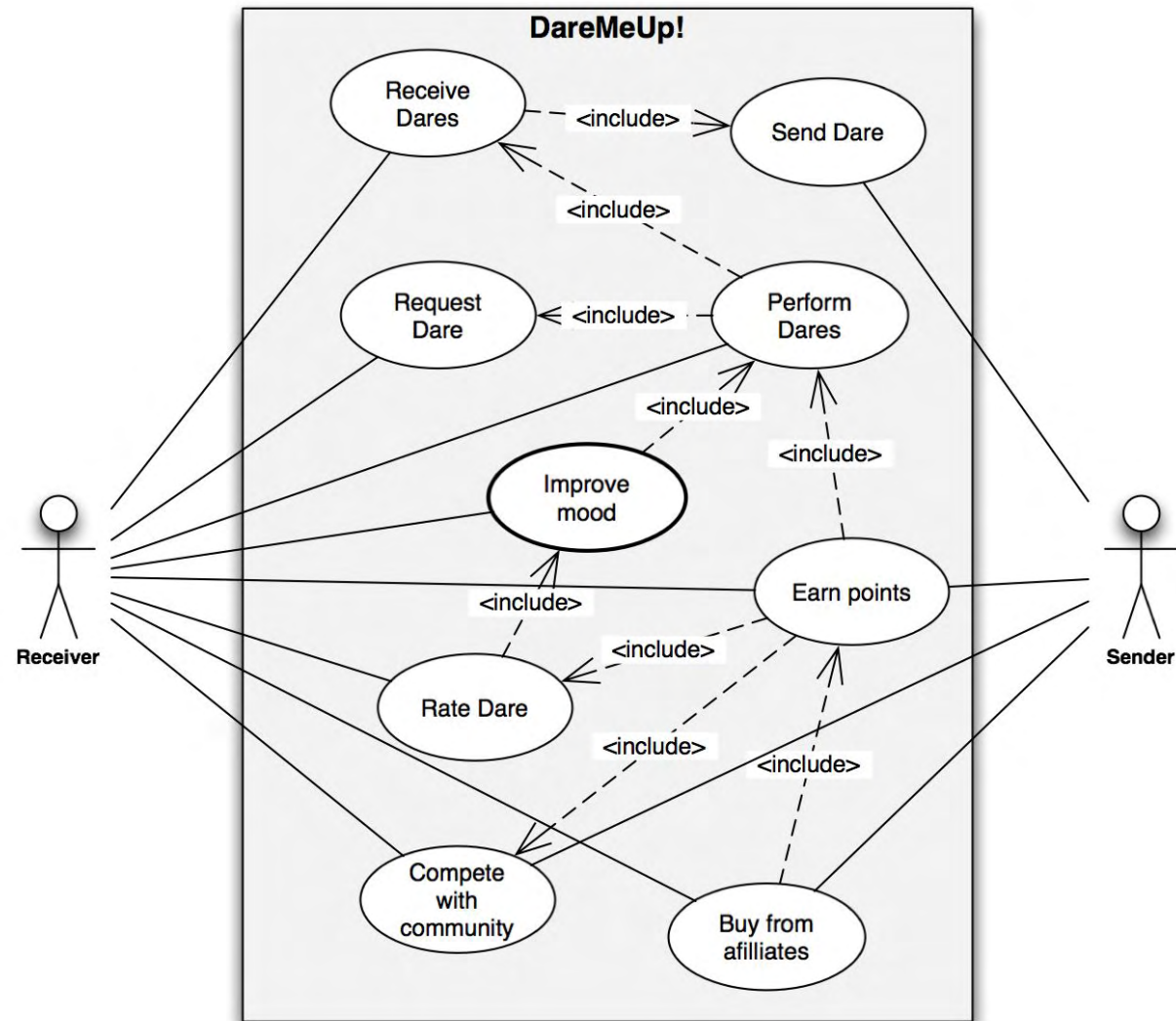
## Required hardware features

- \* **GPS** > record path, validate task completion, measure performance, chose destination;
- \* **Motion sensors** > measure performance
- \* **Camera** > validate task completion, feed community



# DareMeUp!

## Use cases



## Information architecture

### **01. Profile**

- . Personal data

### **02. Dares**

- . Request dare
- . Send dare
- . Received
- . Sent
- . Completed

*(continues)*

## Information architecture

### **03. Messages**

- . New message
- . Received
- . Sent
- . Drafts

### **04. Community**

- . Friends
- . Top users
- . Recent activity

*(continues)*

## Information architecture

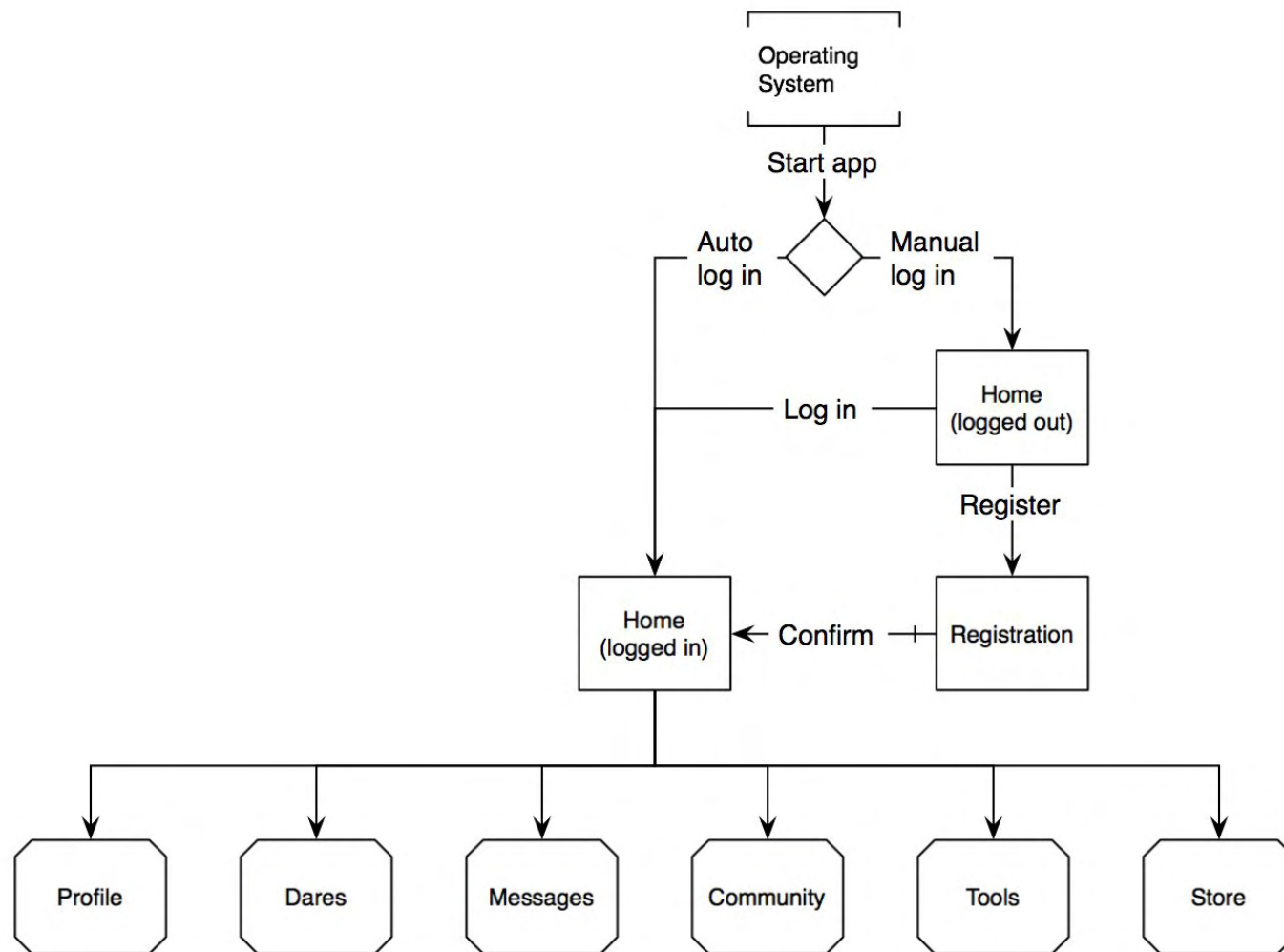
### **05. Tools**

- . Calendar
- . Weather
- . Maps
- . ...

### **06. Store**

# DareMeUp!

## Information architecture Home

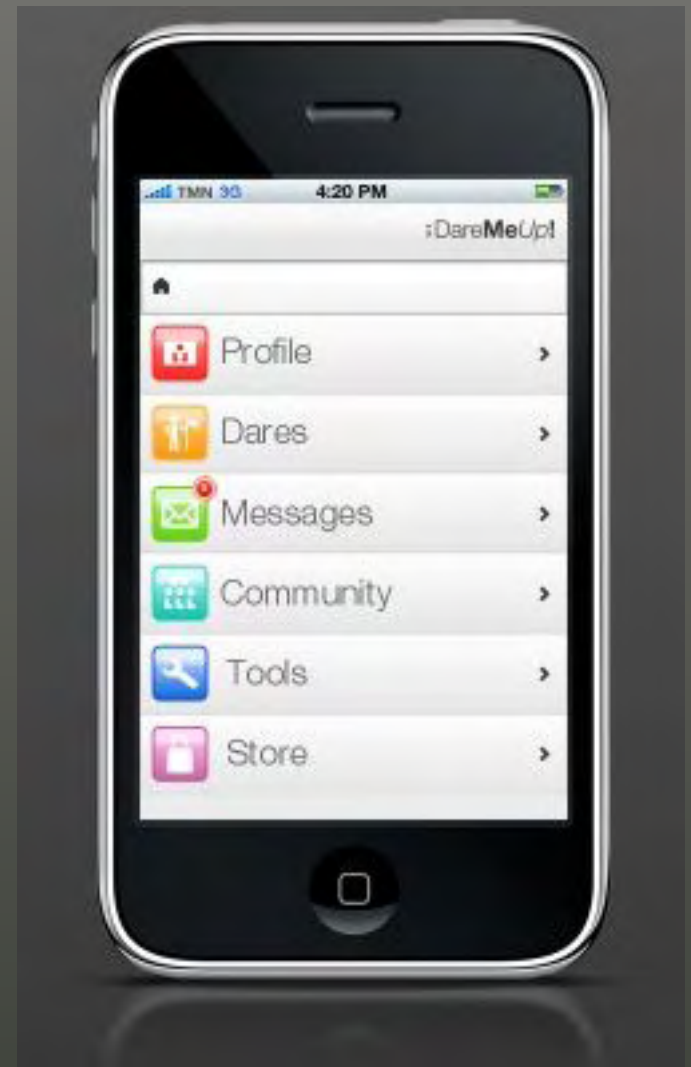


# DareMeUp!

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## Screen shots

### Home screen

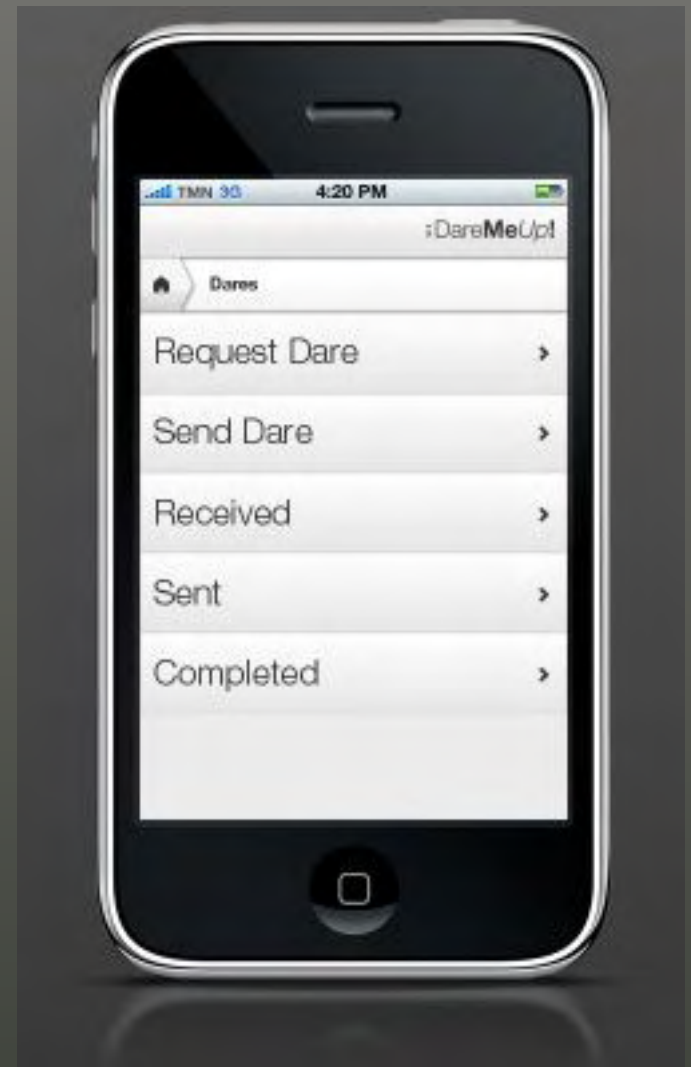


# DareMeUp!

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## Screen shots

Home screen





# DareMeUp!

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## Screen shots

### Home screen



# DareMeUp!

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## Screen shots

Home screen



# DareMeUp!

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## Screen shots

Home screen

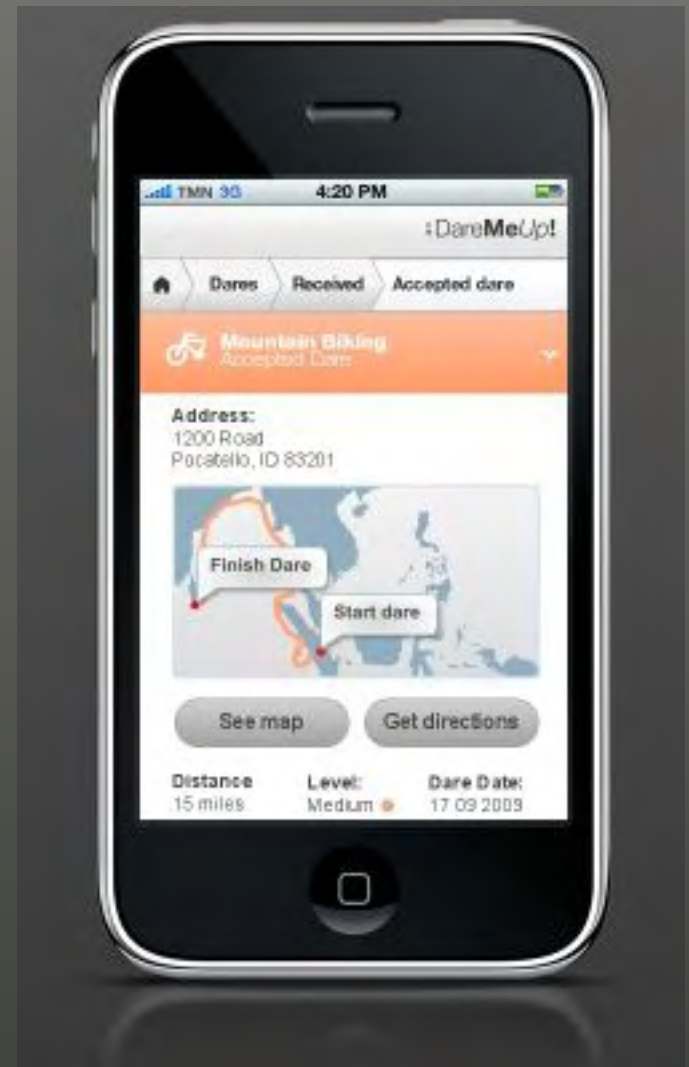


# DareMeUp!

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## Screen shots

### Home screen



# DareMeUp!

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## Screen shots

Home screen



# DareMeUp!

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## Screen shots

### Home screen





INTERFACE DESIGN FOR MOBILE DEVICES

FUTURE PLACES 2009

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ANDREIA SOUSA | DANIEL SANTOS | JORGE MARQUES



## I. CONCEPT

### **\_TRAVEL TEASER**

\_dois utilizadores em simultâneo mostram as suas Personal Views de um espaço geográfico povoado de informação multimédia, através de dois modos de navegação.

\_two simultaneous users show their Personal Views of a geographic space populated by multimedia information in two user-experience modes.

**\_modo Follow: live|online (Main Feature) | bilateral**

\_permitir que os utilizadores enquanto se deslocam por determinado espaço físico partilhem a sua navegação visual (vídeo live) pelo mesmo, bem como conteúdos multimédia que existam no percurso, enquanto interagem em simultâneo com percursos-multimédia de outros utilizadores.

**\_Follow mode: live|online (Main Feature) | bilateral**

\_allow users to share their visual navigation (live video) while they displace in a certain geographic space. They can access to existing multimedia content while they simultaneously interact with multimedia-pathways of other users.

## **\_modo Tease Me: stream | unilateral**

\_os utilizadores podem também aceder aos *teases* (pegadas multimédia) que outros utilizadores deixaram, na área periférica à localização onde se encontram no momento. A aplicação está em *stand-by* e interpela o utilizador sempre que encontra um *tease* perto do utilizador.

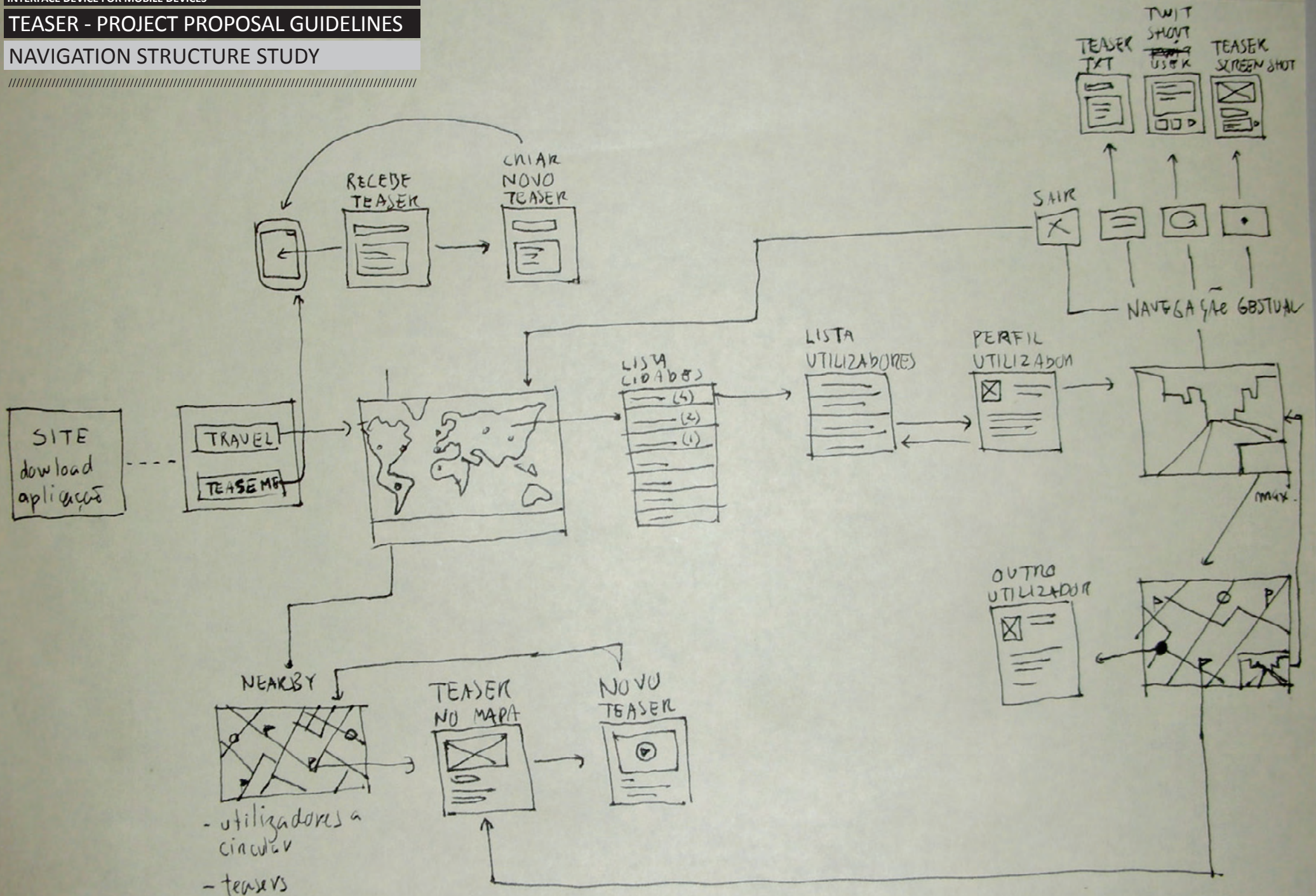
## **\_Tease Me mode: stream | unilateral**

\_users can access to *teases* (multimédia footprints) that other users had left in the peripheral area to the current user location. The application is in a stand-by mode and warns the user each time it finds a *tease* around.

# TEASER - PROJECT PROPOSAL GUIDELINES

## NAVIGATION STRUCTURE STUDY

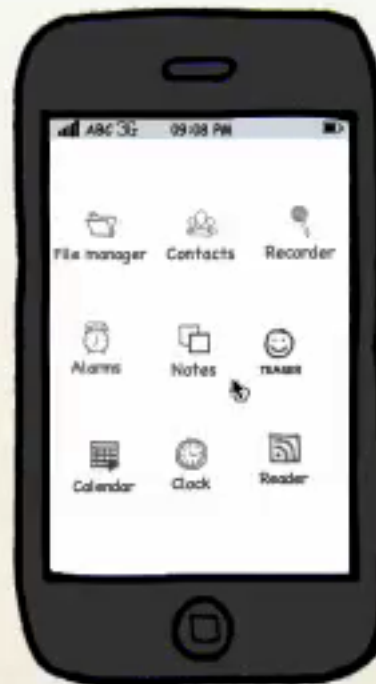
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APPLICATION ICON



GEO INTERFACE





Users can follow a Personal View of a selected user



Simultaneously users can show their own unique Personal View to other users



Users can switch to map mode and check-out the nearby teases and other users Personal Views





**INTERFACE DESIGN FOR MOBILE DEVICES**

**FUTURE PLACES 2009**

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