



GUI Design, 15/09/2008, Eindhoven.

What I am going to
cover today?

The Problem Definition

Strategy. Personas & Scenarios

Scope. Requirements

Skeleton. Information Architecture. Interaction Design

Structure. Information Design. Interface Design

Surface. Visual Design

Design a web Based interface of the Games@large service for quick, easy and ubiquitous access to digital games By gamers at their homes.

as a prototype,
no connections to the server

free time, casual gamers;
singles, parents, kids,
teenagers, elderly

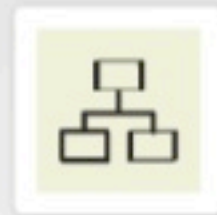
TV, PC, Nokia N800,
Philips Photo Frame



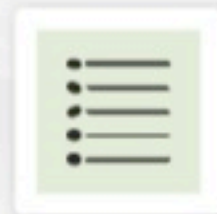
The Surface



The Skeleton



The Structure



The Scope



The Strategy



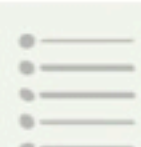
The Surface



The Skeleton



The Structure



The Scope



The Strategy

The strategy incorporates not only what the people running the project want to get out of it but what the users want to get out of the it as well.



The Surface



The Skeleton



The Structure



The Scope

The structure defines the way in which the various features and functions of the project fit together. Just what those features and functions are constitutes the scope of the interface. The question of whether that feature—or any feature—is included in the project is a question of scope.



The Strategy



The Surface

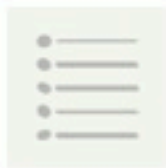


The Skeleton



The Structure

The skeleton might define the placement of the interface elements on our main screen; the structure would define how users got to that screen and where they could go when they were finished there. The skeleton might define the arrangement of navigational items allowing the users to browse categories of games; the structure would define what those categories actually were.



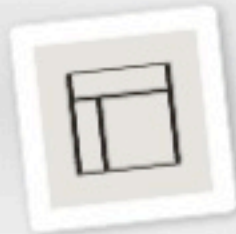
The Scope



The Strategy



The Surface

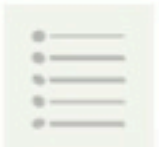


The Skeleton

Beneath that surface is the skeleton of the site: the placement of buttons, tabs, photos, and blocks of text. The skeleton is designed to optimize the arrangement of these elements for maximum effect and efficiency—so that you remember the logo and can find that favorites button when you need it.



The Structure



The Scope



The Strategy

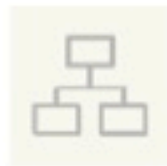


The Surface

On the surface you see a series of screens, made up of images and text. Some of these images are things you can click on, performing some sort of function such as taking you to a favorites section. Some of these images are just illustrations, such as a photograph of a book cover or the logo of the site itself.



The Skeleton



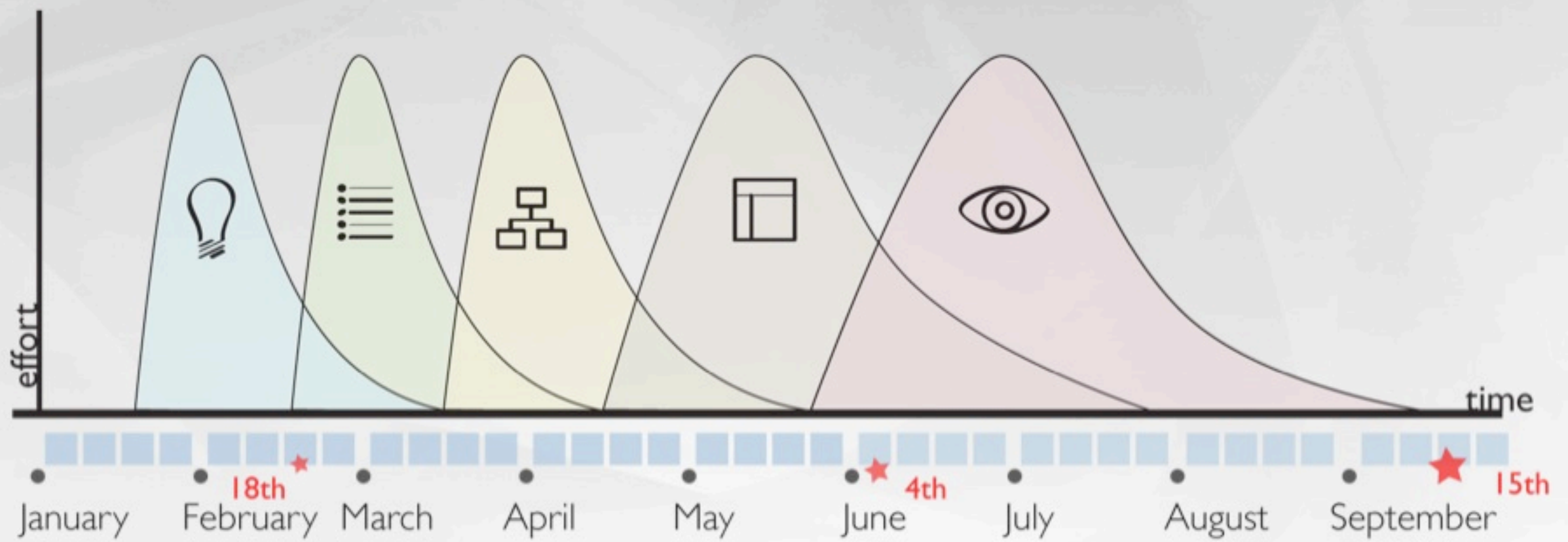
The Structure



The Scope



The Strategy





Business Objectives

Enrolling new gaming audiences
by content and game catalogues
(Goldsmiths)

User Needs

Human Centered Requirement
Analysis (TU/e and PiLab)

Focus Area and Usage Study (Goldsmiths)

Parents with Young Children



The decision to play is not spontaneous –
it was driven by the children

Between 35-54 years old

Casual Game Users make their
game play choices **spontaneously**,
and when they have the time
available.



Lois (40)



Peter (35)



Martin (15)

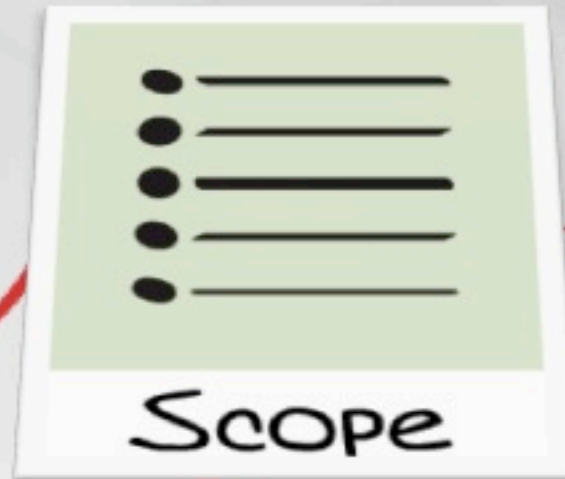


Ben (22)



Ted (76)


Functional
Specifications



Technical
Requirements

Content
Requirements





What will be the content?

Results of Goldsmiths Survey will inform

How do they select games?

What is the decision process of the users during finding games?

What kind of criteria do they use when selecting games?

What kind of problems are they facing with?

What kind of information is needed/desired?

What information is the most important?

Fun
Spec

Defined groups for users: popular Games, Party Games, New Games, Family Games, Elderly(brain teasers) Games, surprise me!, kids games.

Parental Control: maximum playing time, playing sessions (controlled by the parent), game contents, age contents, activity report, the game characteristics (game improves reading skills or motor skills of a child)

Profiles: Name, avatar picture, favorites, recently played, achievements, activity log, message (recommended games, G@L news and announcements, for the extended feature, sending individual messages, and game invitations), a game recommendation system according to the preferences of the user.

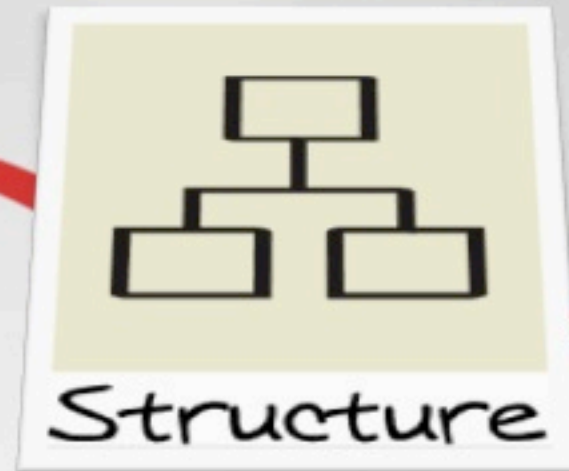
Settings: Themes for interface, language, software updates, display, sound, location

Game Information: title, thumbnail, screenshots, trailer, demo (depends on the subscription), PEGI rating, instructions (game controls), global rating, user rating, year, publisher, find similar games.

Content
Requirements



proper game
recommendation,
customization of the
interface
a context aware HELP

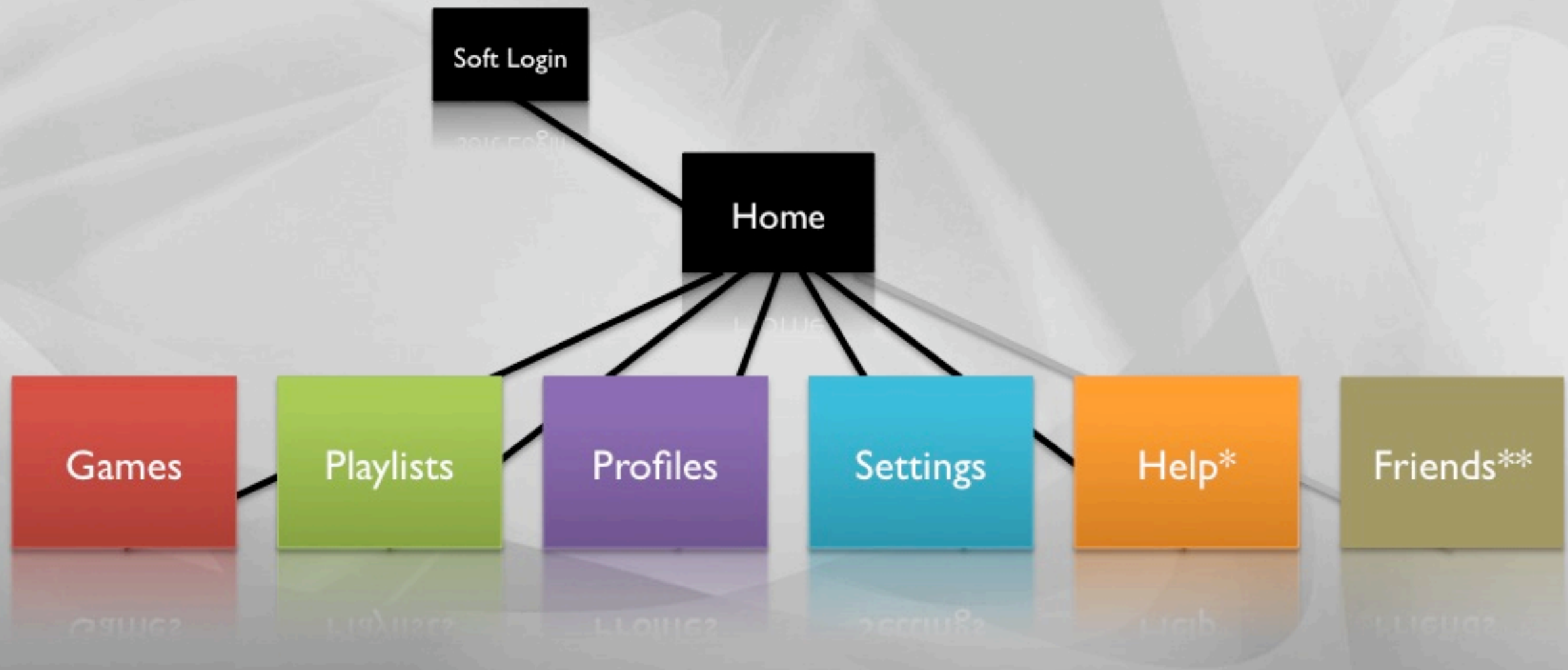


Interaction Design

Sketches and Storyboard
Paper Prototyping

Information
Architecture

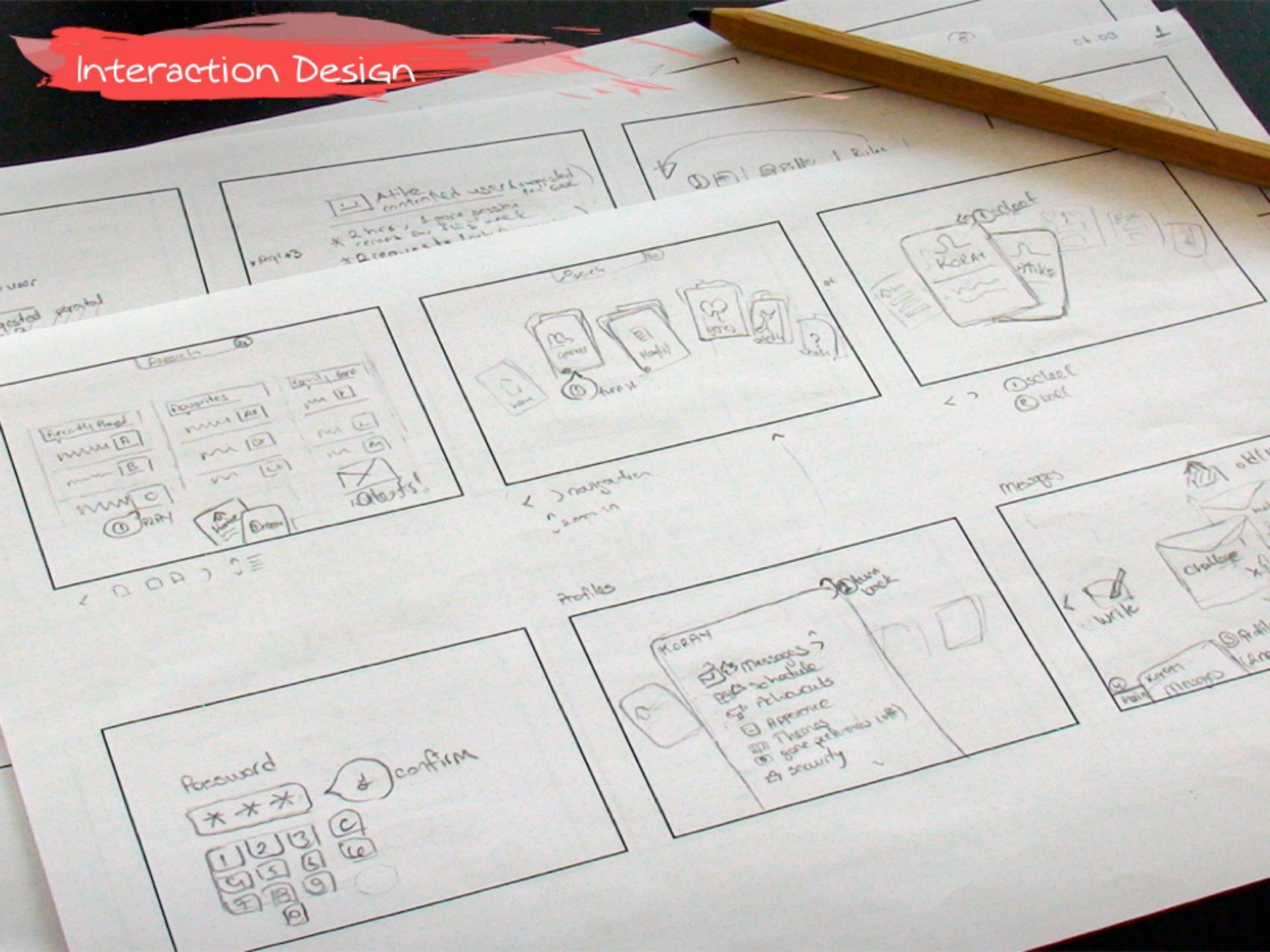
Main Information Architecture



* Help is context aware.

** Friends menu items are planned to be in the later edition.

Interaction Design



Paper Prototyping

Parental Controls:

Parental Controls: Schedule & Time:

☐ Child

	mon	tue	wed	thur	fri	sat	sun
8am							
9am							
10am							
11am							
12pm							
1pm							
2pm							

bed time

save



help



settings



select



back



Choose playing hours
by selecting the day
and hours.

Set rules:



Bed time



Homework time



Create a rule

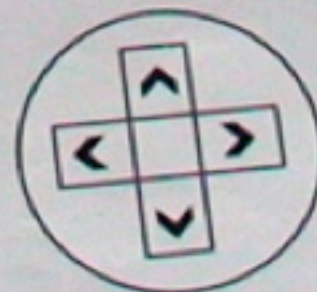
Do you want to add
flexibility?

No

Yes:

30 min 1 hr

custom



back

start



Paper Prototyping

Participants

1 pilot with usability analyst

4 casual gamers;

- 2 parents, 36 and 43 years old, both female.

- 2 married no kids, 26 and 30 years old, one female and one male.

Test set-up

A camera, paper screens, an observer*

If the users are agreed with the consent form, sessions are video typed.

One of them gave permission to record the session.

Interface Design

Medium Fidelity Prototyping
(1st iteration)



Information Design

Medium Fidelity Prototyping
(2nd iteration)

Navigation Design

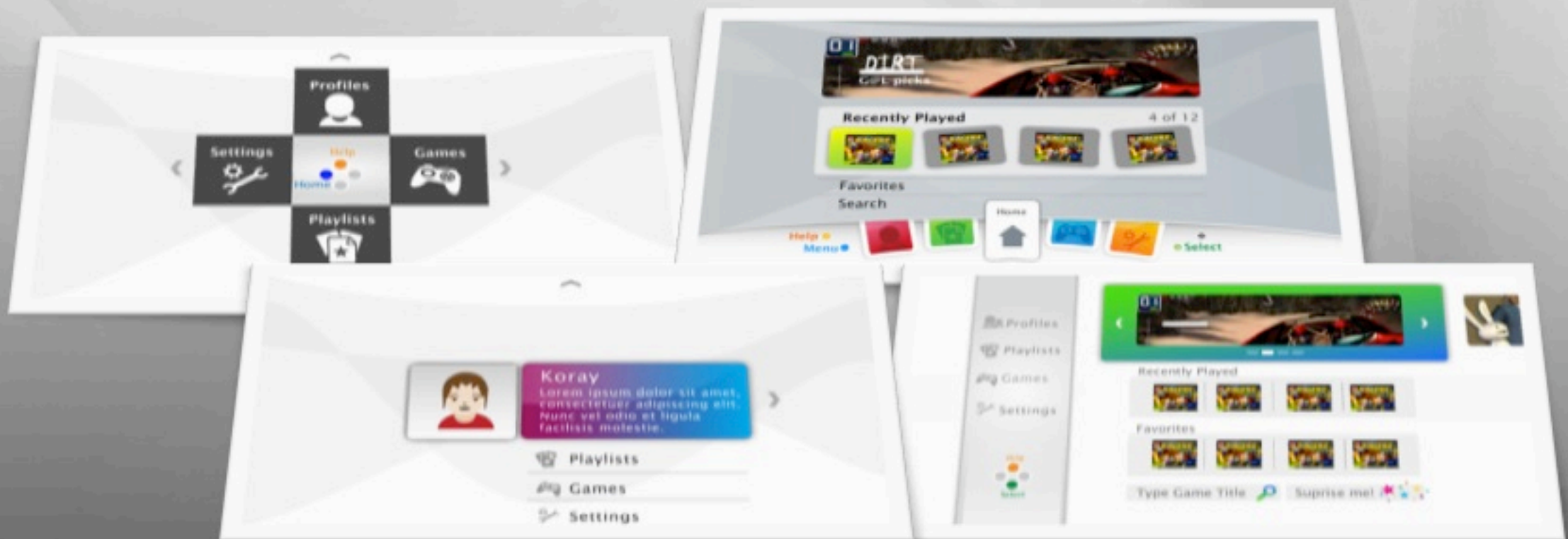
Paper Prototyping
Medium Fidelity Prototyping

Medium Fidelity Prototype

4 different interface approaches for TV.

Flash prototypes with:

- A main navigation screen referred as “home” – but, not all the alternatives have this screen,
- The menu and the submenu screens (profiles, playlists, games, settings),
- A screen for all games submenu,
- A detailed view of a selected game.

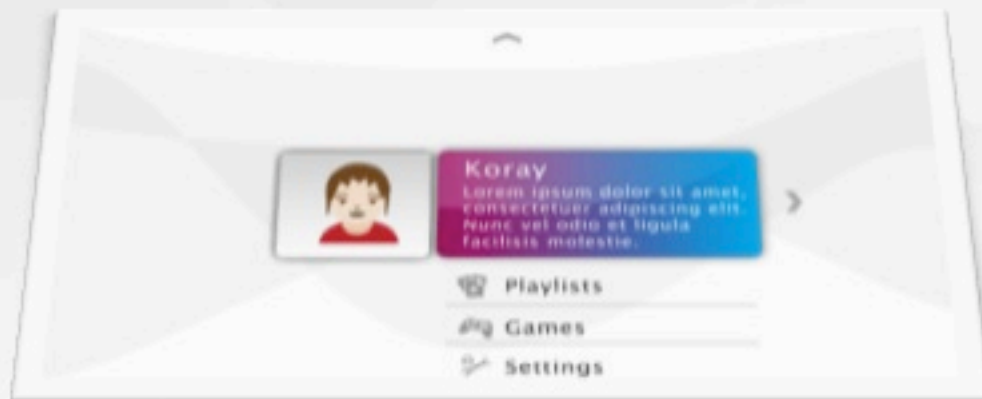


1st Evaluation with Experts

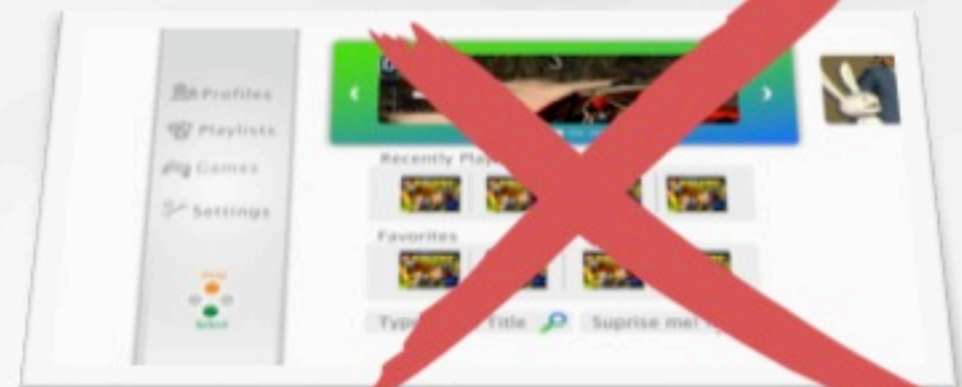


- poor consistency in graphics and interaction,
- not engaging

- complex navigation and information
- attractive graphics
- playful but not intuitive



- easy navigation, clean graphics
- flexible interface
- easy to learn



- confusing menu interaction
- boring layout and graphics

2nd Evaluation with Users

Two improved interface approaches according to expert reviews

23 participants selected among casual gamers (kids, parents, seniors, young couples...)

A questionnaire with 6 items (adopted from IBM Computer Usability Satisfaction Questionnaires)

7-point graphic scales items, anchored at the end points with the terms "Strongly agree" for 1, "Strongly disagree" for 7

The questions were combined one usability score, and one attractiveness score

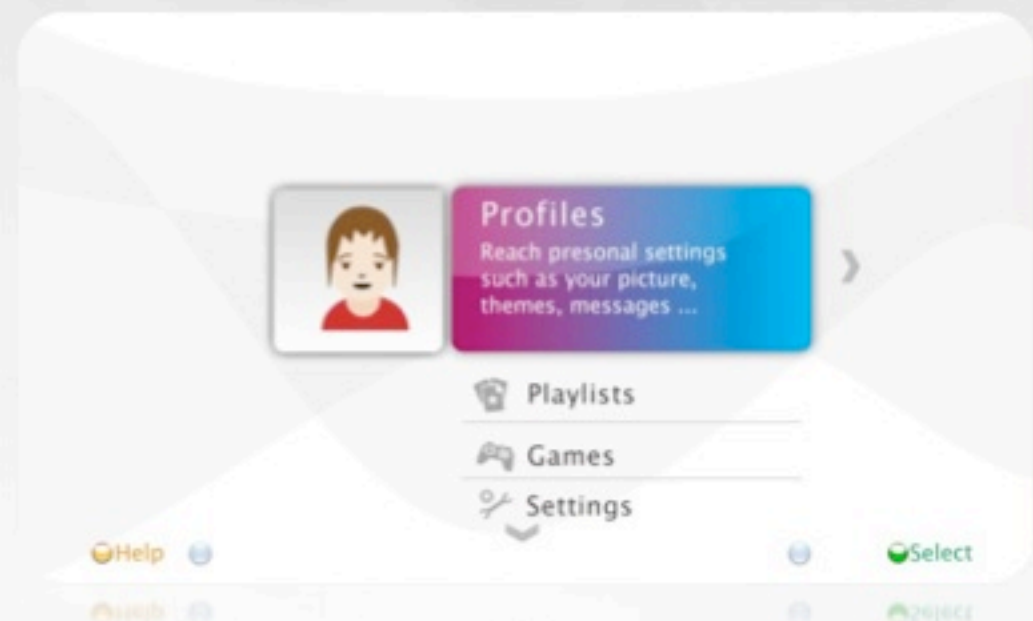
Interface A (cards)



Usability Score: 2.6

Attractiveness Score: 2.3

Interface B (matrix)



Usability Score: 1.8

Attractiveness Score: 2.3

Interface B is significantly better than interface A. $p=.008$



Visual Design and Implementation

Final graphic treatment of interface
elements

Adapting the interface for multiple devices

The background features a series of overlapping, translucent, light gray geometric shapes, primarily triangles and polygons, creating a layered, architectural effect. A prominent, thick, red brushstroke, resembling a paint splatter or a dynamic stroke, cuts horizontally across the center of the image. The text is positioned within this red stroke.

Example Screens for PC

Welcome. Please choose your language!



Netherlands



English

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.

➤ Next



Hebrew



Portuguese

games@
LARGE



Home



Help



Search



Minimize



Quit

Back ◀



Create Profile


To play, share, challenge
and communicate with others...


▶ Select


Please select by pressing
“green” button on the
gamepad. Use arrow keys
to move up and down.

▶ Start playing now.

games@
LARGE


 Home

 Help

 Search



 Minimize

 Quit

Please first choose your appearance.

Back ◀



Look a like


Select from our default avatars.

▶ Select

You can always change your avatar later from the profiles menu.

Draw from scratch


games@
LARGE


 Home

 Help

 Search



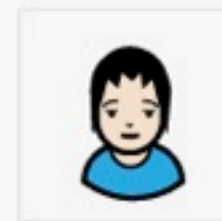
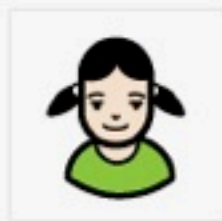
 Minimize

 Quit

Choose a look like

Select your favourite
avatar.

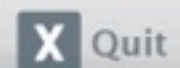
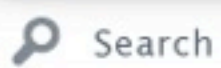
Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
In id augue.



Cancel

Confirm

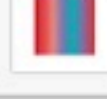
games®
LARGE



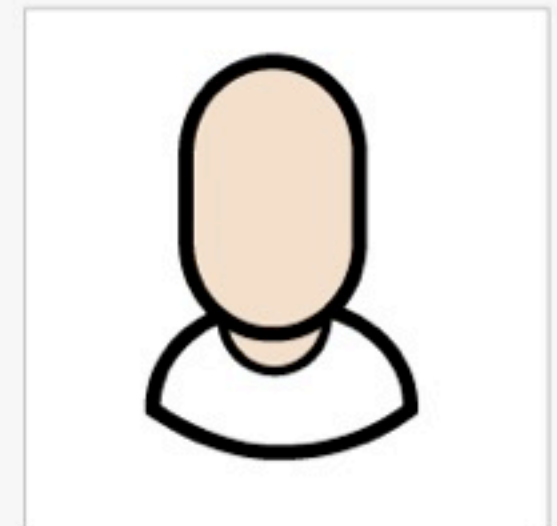
Draw from Screatch

Select your favourite
avatar.

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
In id augue.



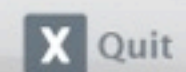
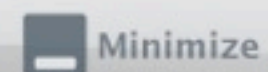
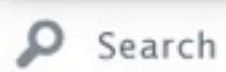
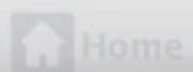
Lorem ipsum dolor sit amet, elit.
Donec mattis ultrices magna.



Cancel

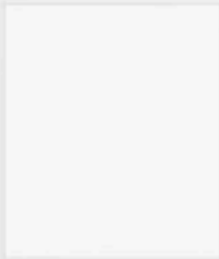
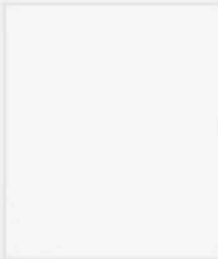




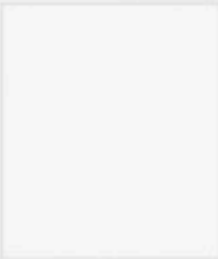
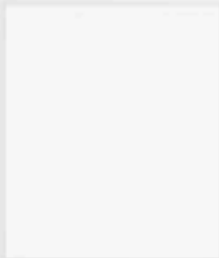
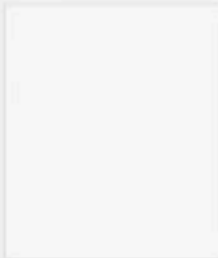
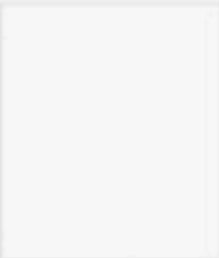
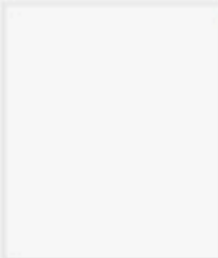
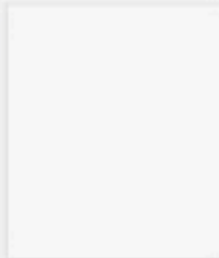
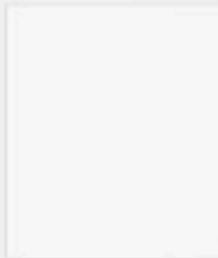
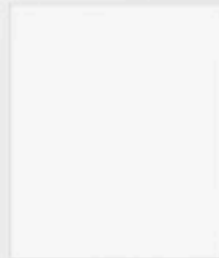
Confirm

games®
L'ARGE



Who will play?

Please, first select the profile(s) present in the room, and then press "start" button.

		 <input checked="" type="checkbox"/> Child	 <input checked="" type="checkbox"/> Mom	 <input type="checkbox"/> Dad	 Create New Profile	
						

Start

games[®]
LARGE



Home



Help



Minimize



Quit



Profiles



Games

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.

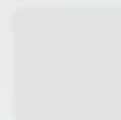
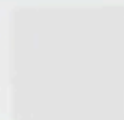


Playlists

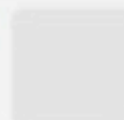
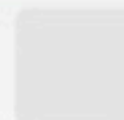
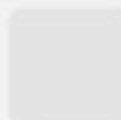
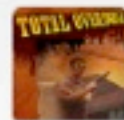


Settings

Last Played Games



Recommended Games



Surprise me!

Don't know what to play?
Take your chance!

games@
LARGE



Home



Help



Search



Minimize



Quit



Browse All Games



Games



Genre

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.



Multiplayer Games



Age Groups



Popular Games



New Games



Home



Help



Search



Minimize



Quit



Games



Genre



Party Games



Arcade Games



Sports Games



Kids Games

Racing Games

45 games.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXX.



Board&Cards Games



Brainteasers



Strategy Games



Adventure Games



Action Games



Simulation Games



Home



Help



Search



Minimize



Quit



Sprill Aqua Adventures



Play

Genre: xxxxx

Popularity: xxxxx

Year: xxxxx

User Rating: ★★★★★ [change](#)

Publisher: xxxxx

Playlist: [add](#)

Age Groups:

Games Like This



Overview

Controls

Screenshots

Trailer

Story

Once upon a time, fairy tales were valuable cautionary yarns filled with dire warnings and sage advice. However, over time, the stories have become so watered down with cute woodland creatures and happy endings that they have lost their true meaning and purpose. No more! Happily Ever After ends now!

In this episode, Little Red Riding Hood is sent by her mother to deliver some goodies to Grandma and told to not stray from the path or talk to strangers along the way. Of course, Little Red breaks both rules and ends up encountering one of the most fearsome creatures in the forest. What could possibly go wrong in Grimm's version of this classic tale?

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Home



Help



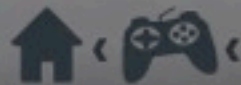
Search



Minimize



Quit



American McGee's Grimm: A Boy Learns What Fear Is



Genre: XXXXX

Popularity: XXXXX

Year: XXXXX

User Rating: ★★★★★ [change](#)

Publisher: XXXXX

Playlist: [add](#)

Age Groups:



Play

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Controls

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Games Like This



Home

Help

Search



Minimize

Quit



Profiles



Games



Playlists

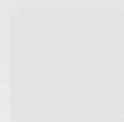
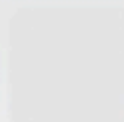
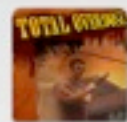


Settings

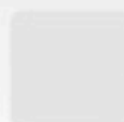
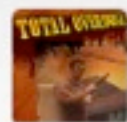
Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.



Last Played Games



Recommended Games



Surprise me!

Don't know what to play?
Take your chance!

games@
LARGE



Home



Help



Search



Minimize



Quit



Manage Profiles

3 Profiles



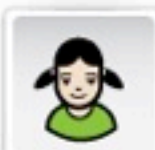
Dad

Admin Profile.



Mom

Admin Profile.



Child

Controlled Profile.



Add



Enable



Disable



Delete

Name & Birthdate

Password

Appearance

Activity Log

Parental Controls

Lorem ipsum dolor sit amet, consectetur elit. Donec mattis ultrices magna. Quisque at odio. Fusce commodo scelerisque mauris.

Select a look like

Draw from scratch

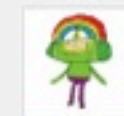


Current Picture

Your own uploaded pictures:

Upload:

Browse



✓ select

✗ delete

Cancel

Save



Home



Help



Search



Minimize

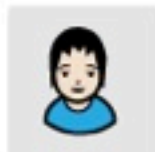


Quit



Manage Profiles

3 Profiles



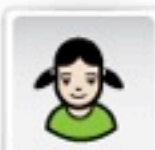
Dad

Admin Profile.



Mom

Admin Profile.



Child

Controlled Profile.



Add



Enable



Disable



Delete

Name & Birthdate

Password

Appearance

Activity Log

Parental Controls

Edit Parental Control Settings

Manage Playtime

Manage Content

Bonus

Approved Games

Reporting



View and edit weekly schedule

Age Categories

Please choose the age group that you think your child belongs to.



3+



7+



12+



16+



18+

Games for 3 years old and older

Content Types

Please choose the content type you want to avoid.



ALL



***@!**



Q



Q



Q



Q



Q



Q

Bad Language: like Grand Theft Auto, The Warriors

Cancel

Save



Home



Help



Search



Minimize



Quit



Manage Profiles

3 Profiles



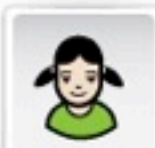
Dad

Admin Profile.



Mom

Admin Profile.



Child

Controlled Profile.



Add



Enable



Disable



Delete

Name & Birthdate

Password

Appearance

Activity Log

Parental Controls

Edit Parental
Control Settings

Manage Playtime

Manage Content

Bonus

Approved Games

Reporting



View and edit
weekly schedule

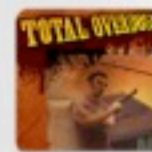
Lorem ipsum dolor sit amet, consectetur mattis ultrices magna. Quisque at odio.

Game Title:

Add

Lorem ipsum dolor sit amet, magna. Quisque at odio.

Browse the catalog



Name of the game



remove



Name of the game



remove

Cancel

Save



Home



Help



Search



Minimize



Quit



Profiles

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.



Games

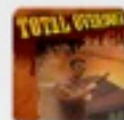


Playlists

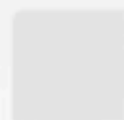
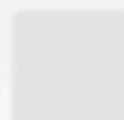
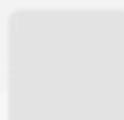
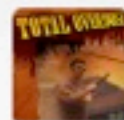


Settings

Last Played Games



Recommended Games



Surprise me!

Don't know what to play?
Take your chance!

games@
LARGE



Home



Help



Search



Minimize



Quit



Mom

Admin Profile

Password:



Child



Dad



Home



Help



Search



Minimize



Quit



 **Child**



Messages



Playtime



Achievements



Display Info



Preferences



Security

Sign Out

Game Preferences

Interface Themes

Choose the items you like or dislike by dragging them into the boxes below.



I like:



Strategy



Action



I don't like:



Sports



Cancel

Save



Home



Help



Search



Minimize



Quit



 **Child**



Messages



Playtime



Achievements



Display Info



Preferences

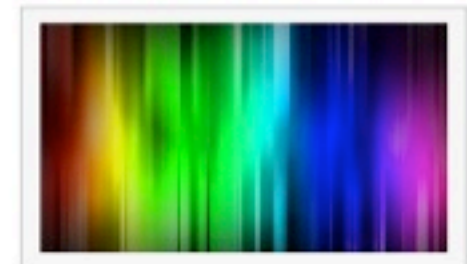


Security

Sign Out

Game Preferences

Background Themes




Cancel


Save

 Home

 Help

 Search

 Minimize

 Quit



Profiles



Games

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc vel odio et ligula.



Playlists



Settings

Last Played Games



Favourites



Surprise me!

Don't know what to play?
Take your chance!

games@
LARGE



Home



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 Profiles



Games

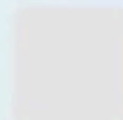
Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Nunc vel odio et ligula.



 Playlists

 Settings

Last Played Games




Favourites





Surprise me!

Don't know what to play?
Take your chance!


games@
LARGE


 Home

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 Minimize

 Quit



Playlists



My Playlist

Lorem ipsum dolor sit amet,
consectetuer adipiscing elit.
Nunc vel odio et ligula.



Child's Playlist



Dad's Playlist



Home



Help



Search



Minimize



Quit



My Playlist

You have 7 playlists in total



Recently Played



Favourites



Rated Games



Recommended Games



New List



Create New



Delete



Name of the game

remove ✕

Puzzle | 2008 | Everyone | Popularity: 7.7

Play

Info



Child recommended on yesterday



Name of the game

Puzzle | 2008 | Everyone | Popularity: 7.7

Play

Info



G@L recommended on 25/08



Home



Help



Search



Minimize



Quit

Level:

11

Lives:



Scores:

22080



PlayTime Left



Recommend



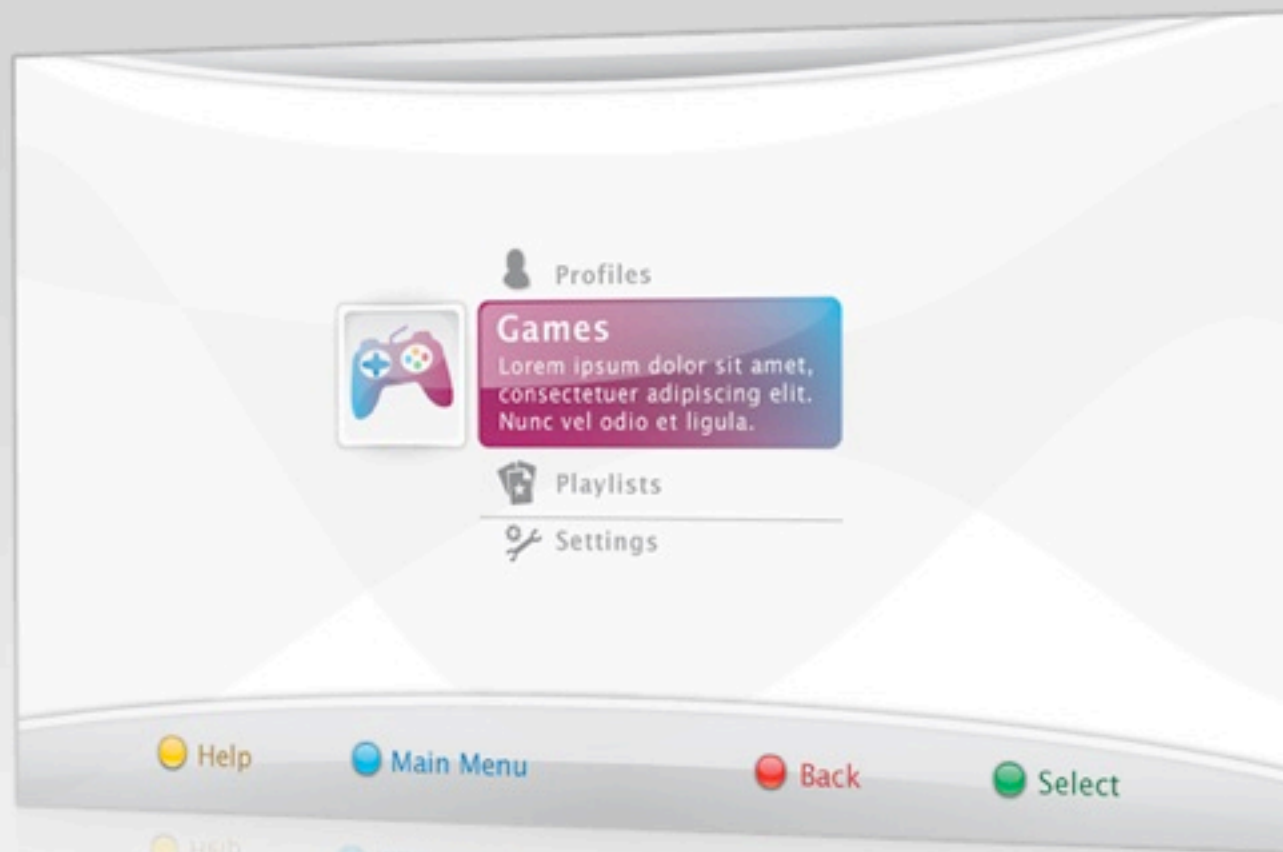
Favourites



Pause



Quit Game



Screens for TV

Screens for nokia and photoframe



720 px