# Collaborative Mobile Media

Bauhaus-Universität Weimar

03. Medium & Mobile

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http://www.uni-weimar.de/medien/wiki/IFD:Collaborative\_Mobile\_Media\_SS13



# Summary

1. What is Medium
2. What is Digital Medium
3. Mobile Media
4. Cultural Heritage
5. Preservation
6. Presentations
6.1 – 1st Presentation
6.2 – 2nd Presentation
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Semester schedule, including holidays





One of the simplest definition of medium (or media – in its plural form) is

"a means by which something is communicated or expressed"

("definition of medium from Oxford Dictionaries Online," n.d.).

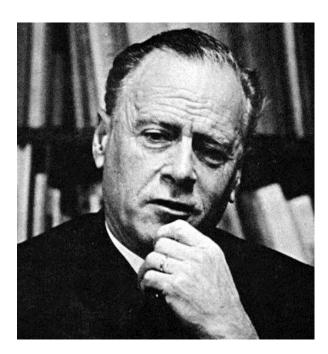
In other words, it can be interpreted as any item that carries some form of communication, such as paper, screen or radio. Media are strong tools in our society and play a strong role in enhancing the communication and expression between people.

An alternative definition by Hoenisch (2005), is that

"'media' includes any medium or object used to communicate a message or a meaning".

# McLuhan goes further and defines that

"The medium is the message"



### Marshall McLuhan

1964 - Understanding Media: The Extensions of Man

Image retrieved from http://www.classroom20.com/profiles/blogs/marshall-mcluhan-s-tribal



Video retrieved from <a href="http://www.youtube.com/watch?v=oMUuHNP8ixY">http://www.youtube.com/watch?v=oMUuHNP8ixY</a> Originally retrieved and edited from http://www.youtube.com/watch?v=ImaH51F4HBw

## Marshall McLuhan

(Edmonton 1911 – Toronto 1980)



- The medium is the message
- Global village
- Figure and ground media
- Tetrad of media effects
- Hot and cool media
- Predicted the World Wide Web

Image retrieved from http://www.classroom20.com/profiles/blogs/marshall-mcluhan-s-tribal

With those assumptions, the importance of the technological aspect is evident since it determines the way that the message is perceived. It is possible, therefore, to jump to the discussion of the relation between media and the environment.

There are several additional definitions of media, mostly gravitating around three main spheres:







the *technology* which works as a propagation support;

the *social* role of this support;

the *content* that is being transmitted.

What it means?



The term digital media, which is gaining evidence nowadays, results from the conjunction of these ideas.



The concept is commonly translated as **new media** and understood as phenomena represented by the addition of technologies in order to create and distribute all sorts of contents.

Digital media represent a change on the available technologies to distribute information as sound, video, photography and other sort of meaningful data, and also allows the combination and unlimited reorganization and re-distribution of content.

• "The digital is more than simply a technical term to describe systems and media dependent on electronic computation, just as the analog, which precede it, describes more than a proportional system of representation" (Lunenfeld, 2000, p. 15).

Pavlik (2008, p. 8) also defined that

"digital media as the systems of public communication, the systems of content production and distribution, and the computer and networked-based technologies that support and shape them",

but considering "public" not only the domain of the public, but also the private media production for public consumption.

The term digital media could also be understood as a substitution for the original "new media" concepts.

"(...) [F]ield of new media studies (sometimes called "digital studies") (...)" (Manovich, 2002, p. 10).

The term new media is often used in contrast to the "old" media: the analogical television, the radio and the newspapers. In simple words:

"New media are networked and digital" (Hearn, Tacchi, Foth, & Lennie, 2009, p. 9).

With all that in mind, this class concerns with digital media items as all sorts of equipment or gadgets based on binary computing, interactive or not, updateable or not, being able to display or manipulate any kind of information.

### **Definitions**



"Mobile media are not a new phenomenon. Books, newspapers, and magazines; portable music players such as an MP3-player or portable game consoles; or just an ordinary car radio can be classified as mobile media."

(Transatlantic Dialogue & European Institute for the Media, 2006, p. XI)

"The relevant question is what is actually moving: information, devices, or people? The mobile media (...) focus on (...) all three elements. People can move freely without being disconnected; devices are portable; and information moves freely and can reach specific recipients."



(Transatlantic Dialogue & European Institute for the Media, 2006, p. XI)



# The Evolution of Devices (Fling, 2009, pp. 1–10)

the Traditional Telephone



# The Evolution of Devices (Fling, 2009, pp. 1–10)

the Brick Era (1973–1988)



- Cordless
- Mobility

# The Evolution of Devices (Fling, 2009, pp. 1–10)

the Candy Bar Era (1988–1998)



- 2G Technology
- SMS
- Play "Snake Game"

# The Evolution of Devices (Fling, 2009, pp. 1–10)

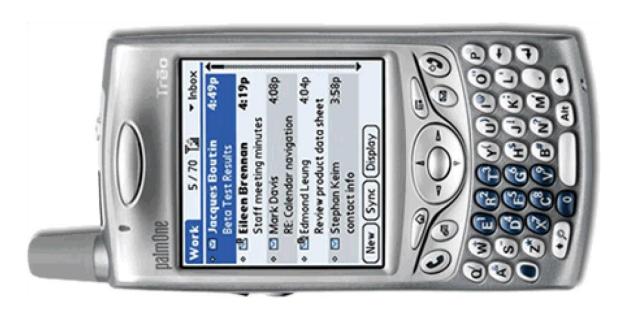
the Feature Phone Era (1998–2008)



- Photo Camera
- Listen Music
- Internet
- 2.5G

# The Evolution of Devices (Fling, 2009, pp. 1–10)

the Smartphone Era (from 2002)



- Larger Screen
- Wi-Fi
- **QWERTY**
- PDA-Style

# The Evolution of Devices (Fling, 2009, pp. 1–10)

the Touch Era (from 2007)



- Micro Personal Computer
- Touch Screen
- Gesture-Based Interactions
- 30

Tomi Ahonen, describes mobile as "the seventh mass media." (Ahonen apud Fling, 2009, p. 34)

- 1. The Printing Press
- 2. Recordings
- 3. Cinema
- 4. Radio
- 5. Television
- 6. The Internet
- 7. Mobile

"The seventh mass medium (...) is mobile technology. The mobile industry actually started around the same time as the Web, but it took it years for us to consider it a mass medium. The mobile medium is actually quite deceiving; it would be easy to see it as an extension of the previous media, but mobile is actually quite unique (...)." (Fling, 2009, p. 37)

- 1. The Printing Press
- 2. Recordings
- 3. Cinema
- 4. Radio
- 5. Television
- 6. The Internet

7. Mobile

- 1. The Pr
- 2. Record
- 3. Cinema
- 4. Radio
- 5. Televis
- 6. The Int

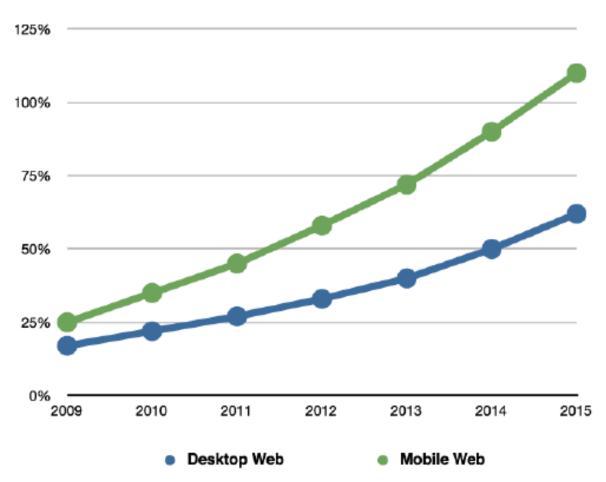


Mobile

Image retrieved from: http://media-cache-ec4.pinterest.com/550x/c4/06/0b/c4060b207e3757e04982373ff2a9a75f.jpg



"The growth of mobile phone usage and the development in mobile phone technology has probably had the most significant impact on the way we communicate with each other (with the exception of the internet) over the past 10 years or so." (Love, 2005, p. 7)



(Fling, 2009, p. 33)

(...) [U]sability of mobile computer systems can benefit from making them "context-aware" in the sense that contextual information is used to tailor information and functionality to the given situation (...).

(Kjeldskov & Paay, 2010, p. 14:2)

How to deal with information



#### What is Cultural Heritage?

 "Cultural heritage (...) is the legacy of physical artifacts (cultural property) and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations". ("Cultural heritage - Wikipedia, the free encyclopedia," n.d.)

It is far behind the time when, in order to enjoy a historical and cultural experience, it was necessary to visit a museum or to buy a guide to check the information about the monuments and historical buildings in a city.

Despite the importance of these institutions and options, the technology allows the expansion of the concept one step further, and the cities itself can be considered open air museums.

The spread and importance of mobile devices on every-day activities is well known, but its use for cultural preservation it is still not clear, from the effectiveness perspective.

The tangible and intangible elements of cultural heritage can be explored on two ways: from the heritage-source (as a museum) to the user, and from the user providing content for the heritage-source.

The mobile devices have an important role in the society.

"[m]ost of the current communication processes are based on the use of mobile devices. Some of the most used are tablet pc, pocket pc, smartphone, PDA (Personal Digital Assistant), and iPod. (...) Adapting the power of these technologies to the field of cultural heritage, allows the broadcast of local heritage to a worldwide level" (Cutrí, Naccarato, & Pantano, 2008, p. 440).

The mobile devices have already supplanted the preference of the users as interface to check the latest news (Indvik, 2010), but also is getting in the direction of "mobile learning" with touristic apps among other examples.

If in one hand the technology can bring the world in a small scale of a mobile screen by enhancing the museums and galleries possibilities, in other hand the portable technology can add elements to the real world, changing the perception and turning the entire city into an open-air museum. There are no more limitations about space, neither about the opening hours to provide to the visitors a complete and empowered cultural experience.

Some aspects about the culture preservation should be considered:

"There are many issues in the presentation of culture. One is the definition of culture itself, the second issue is to understand how culture is transmitted, and the third is how to transmit this cultural knowledge to people from another culture. In the case of virtual heritage, a fourth also arises, exactly how could this specific cultural knowledge be transmitted digitally?" (Champion, 2011, p. 131).

There are, in essence, two aspects of the cultural heritage to be preserved: the tangible and the intangible elements.

The **tangible** one could be divided in "Immovable heritage" – being land or land-based resources, such as buildings;



and "Movable heritage", touchable resources that can be detachable and transported from one place to another, as objects, documents, etc.

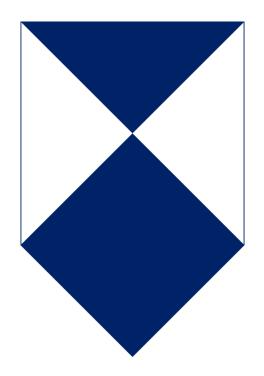


The **intangible** heritage is the non-material elements, such as culture, stories, language, dance, etc. (Ontario - Ministry of Municipal Affairs and Housing, n.d.).



### Cultural Heritage: Organizations





# Cultural Heritage: Organizations



"The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972"

("UNESCO World Heritage Centre - World Heritage," n.d.)

# Cultural Heritage: Organizations



"The Blue Shield is the cultural equivalent of the Red Cross. It is the protective emblem specified in the 1954 Hague Convention (Convention for the Protection of Cultural Property in the Event of Armed Conflict) for marking cultural sites to give them protection from attack in the event of 'armed conflict. The Blue Shield network consists of organizations dealing with museums, archives, audiovisual supports, libraries, as well as monuments and sites".

("About The Blue Shield," n.d.)





Mostly, the already developed applications and games using mobile devices to interact with urban spaces are dealing with the tangible elements of the culture. A mobile applicability could work for intangible and tangible elements, in order to enhance the knowledge regarding it (Champion, 2011, pp. 130-131).

So far, it is also important to point the wide range of different digital applications available (Laurillard apud Pachler, Bachmair, Cook, & Kress, 2009, p. 309), plus social and shared networks as YouTube, Twitter, etc. that could be used for heritage preservation's purposes.

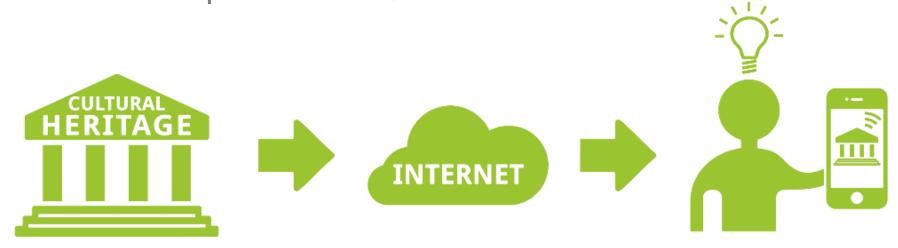
and Collaboration



#### Preservation & Collaboration

The dynamics and the relations among the cultural heritage promoters and the users through the mobile devices can be analyze as a two ways avenue were the information is floating.

 First, it is possible to observe the museums (or any other source of heritage content) using mobile devices to achieve the public and content production;



 Second, how the public can use their mobile devices to collaborate with the preservation of the intangible cultural values.

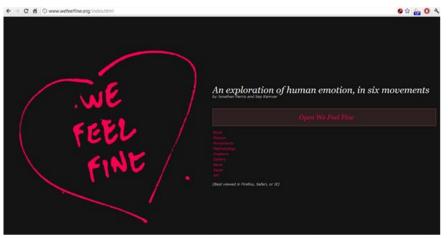


• How is it possible to filter and collect the available content for a meaningful purpose applied for cultural context?



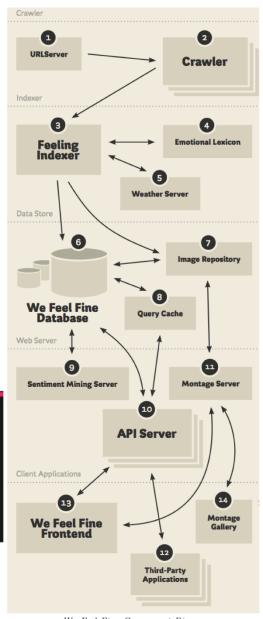
It is possible to find projects where search engines look into available and public published content, such as blogs entries, micro-blogging feeds, and other social networking platforms, in order to collect the desirable information, re-publishing with new purposes and format.

This is the case of the "We Feel Fine" project, which collects the "feelings" of users around the world.





http://www.wefeelfine.org/index.html



We Feel Fine Component Diagram

Here goes some examples about searching for "World Heritage" words on different platforms:

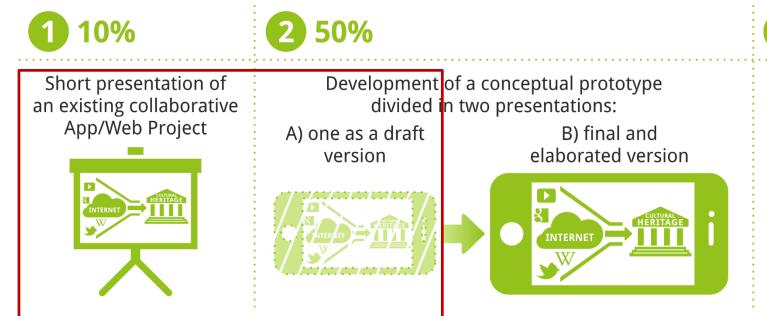
- Twitter: https://twitter.com/search?q=world%20heritage&src=typd
- Tumblr: http://www.tumblr.com/tagged/world+heritage
- Pinterest: http://pinterest.com/search/pins/?q=world%20heritage
- YouTube: https://www.youtube.com/results?search\_query=world+heritage
- Facebook: https://www.facebook.com/search/results.php?q=world%20heritage

# Presentations

for the next weeks



#### **Presentations**



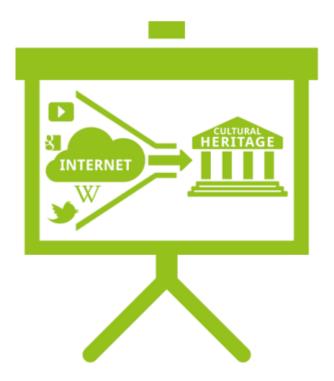


Submission of a short paper (3 to 5 pages, ACM or APA Style)



#### Mobile/Web applications for cultural purposes

- 5 min. presentation





#### Mobile/Web applications for cultural purposes

Each student will choose an application (for any of the mobile operational systems) or a web project and present for the class. Some items such as design, HCI and so one should be observed. If possible, the students should install and test it by themselves.



#### Mobile/Web applications for cultural purposes It CAN:

- Can be an app installed in your mobile
- (if not) can be based on developer information
- Can be a web-based project



#### Mobile/Web applications for cultural purposes It SHOULD:

- The presentation should show screenshots
- Should show the main features
- Should be applied for cultural preservation



## Mobile/Web applications for cultural purposes It MUST:

- Must be a collaborative/participatory app or web project, where the users can contribute and add content
- Must show technical information, filled in a mandatory table, as illustrated on next slide:



## Mobile/Web applications for cultural purposes It MUST: (mandatory table)

Itens	Answer
App's Name + Version	
Type (Museum, Guide, Game, etc)	
Operational System (OS) (Android, iOS, Windows, Web)	
How the user(s) contribute/collaborate with it?	
Free or Paid (and how much)	
Where it is Available (URL or market link)	



#### Mobile/Web applications for cultural purposes

Slides in a PDF format should be delivered electronically one day BEFORE the presentation: at 15<sup>th</sup> May – 23:59h.

All the presentations will be available in ONE computer, to make the presentation changing faster.



#### Mobile/Web applications for cultural purposes

#### What will be evaluated:

- Fulfillment of the mentioned items
- Relation between app x topic
- Presentation skills



Mobile/Web applications for cultural purposes Where you can find apps and projects:



https://play.google.com/store/apps



- https://itunes.apple.com/us/genre/ios/id36?mt=8
- http://www.apple.com/webapps/

or even directly on Google™...



The selection of apps will be based on "first come, first served", through our wiki page on:

http://www.uni-weimar.de/medien/wiki/IFD:Collaborative Mobile Media SS13/presentations

It means that if a project is already chosen and written in this page, the student should search for another one.



On next slides there is an example about how the presentation can be done (StreetDroids):















What is "StreetDroids"?

#### What it is?



StreetDroids is a context-aware mobile game, where users/players can contribute to its expansion through missions on different games scenarios (including cultural purposes), taking place in the real environment.

## How does the game works?





- Outdoor scenario:GPS based location
- Play and explore the city
- Treasure hunters style
- Based on missions, maps, puzzles and hints
- You can create your own content



What is the relation of this app with cultural purposes?

# Cultural Aspects



- This game has several adventure-maps, with several topics
- One of them is a historic one, based on the old city of Bremen in the Hanseatic time.





How it interacts with the environment / urban spaces?

# Interaction with the city



- This is a context-aware game, based on GPS.
- The user can interact with real objects placed on the city, such as statues, monuments and historical buildings.
- By playing a map, the user should colect items in the city, as a hunter game by solving puzzles.

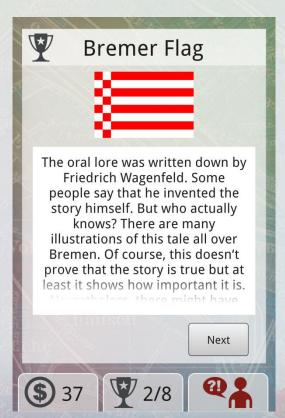


## Interaction with the city



 after solving a puzzle the user colects a historical item with its respective content.







How the user can interact or contribute with the content?



- The user can contribute with the game by creating their own maps and adventures.
- The topics are quite open



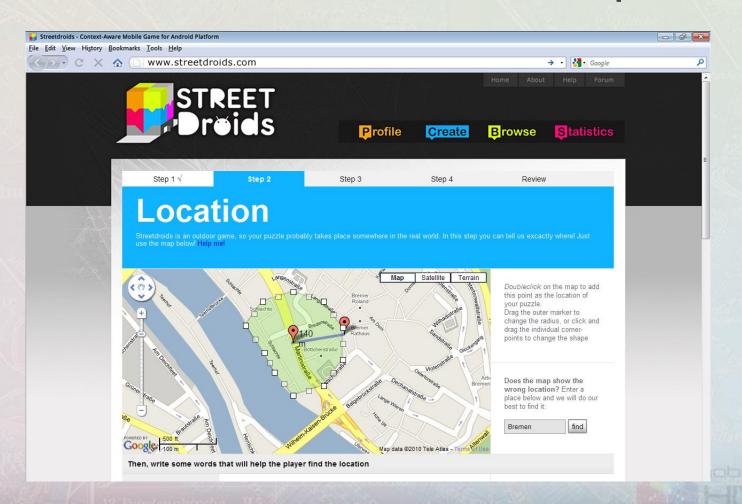


 There is a web-editor available at www.streetdroids.com



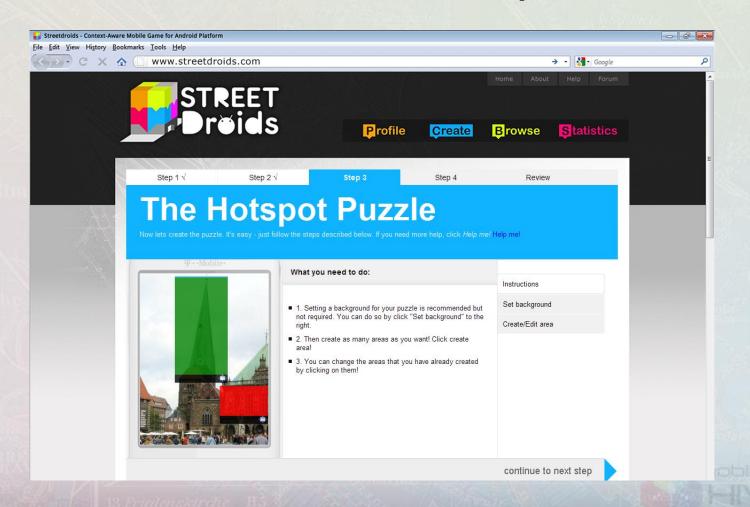


The user can create their own maps





The user can edit their own puzzles





The user can create their own characters





How the user can navigate in it, how many screens him/her should press to get the desirable content

# Playability









## Playability





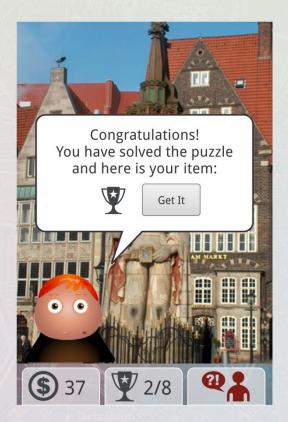


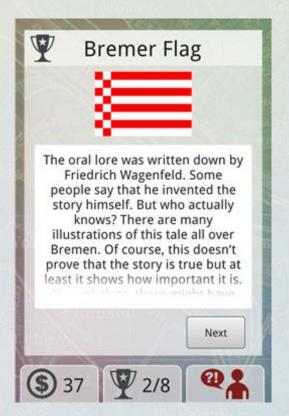


## Playability









# Video demonstration







What are the technical background (OS, Resolution, availability, etc.) and requirements?

# Technology



- This game was developed for Android Platform.
- The chosen device was "T-Mobile G1", one of the first Android phones.
- The screen resolution is 320 x480



# Technology



- This game was available for download directly from the website
   www.streetdroids.com
- Since 2011, this app is deactivated and unavailable for download



# \* Mandatory Table



Itens	Answer
App's Name + Version	StreetDroids v2.0
Type (Museum, Guide, Game, etc)	Context-Aware Game
Operational System (OS) (Android, iOS, Windows, Web)	Android
How the user(s) contribute/collaborate with it?	Through a web-editor, where the users can create content and edit puzzles and maps
Free or Paid (and how much)	Free
Where it is Available (URL or market link)	It was available at www.streetdroids.com, but since 2011 it is unavailable

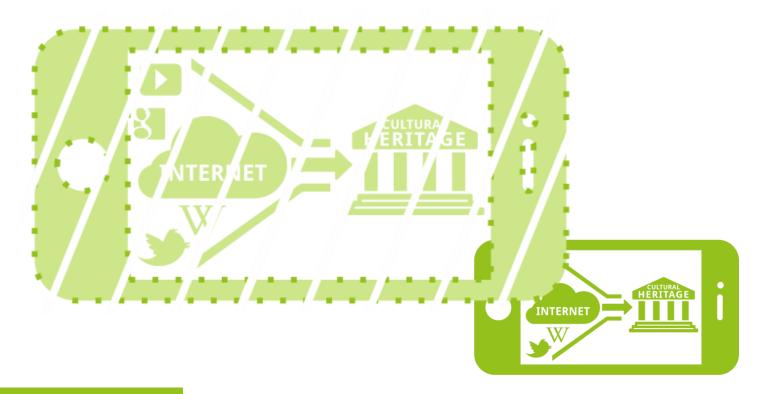


The end



## **Seminary presentation (draft)**

- 5 minutes (+ discussion)



## Seminary presentation (draft)



Each student should present a conceptual idea, developed for mobile devices, using collaborative/participatory activities, applied for cultural purposes.

It is encouraged to be developed using the *weimarpedia.de* content, but not restricted to.

### Seminary presentation (draft)



For this moment, it is just needed the app idea with navigation and content structure;

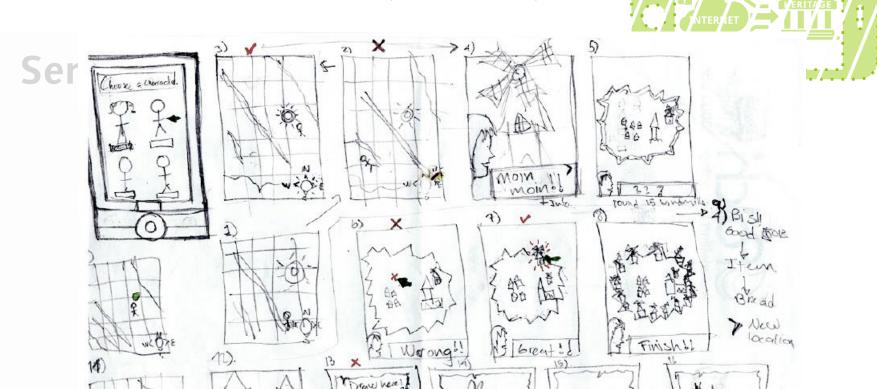
The main point is to present your idea, followed by discussion before doing the final version.

## Seminary presentation (draft)



For the first/draft version, should be explored the app idea and structure, in order to receive the feedback and possible adjustments suggestions for the final version.

# 2<sup>nd</sup> Presentation (30.05.2013)



Wrongla

# 2<sup>nd</sup> Presentation (30.05.2013)

### Seminary presentation (draft)



Slides in a PDF format should be delivered electronically one day BEFORE the presentation: at 29<sup>th</sup> May – 23:59h.

All the presentations will be available in ONE computer, to make the presentation changing faster.

# 2<sup>nd</sup> Presentation (30.05.2013)

## **Seminary presentation (draft)**



Questions you should think about:

- What is the main purpose of your app
- "Where is the beef?" = What is new about it?
- Why people would use it?
- How the users will collaborate with it?
- Is it related to culture (and preservation maybe) topic?

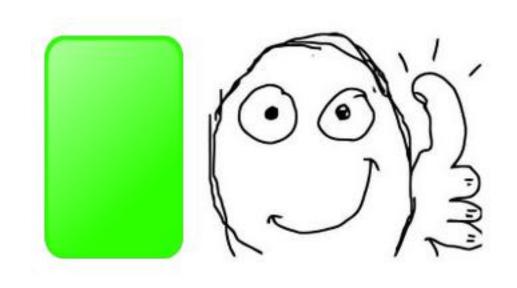


For both presentations each student will have 5 minutes

At the 4<sup>th</sup> Minute, it will be shown a Green card.

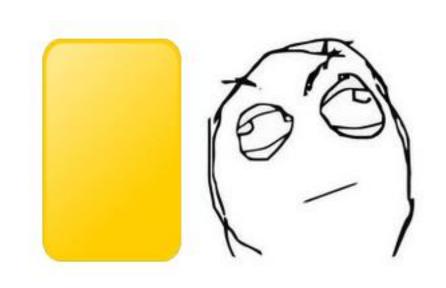
Here the time is fine

– it is just a reminder
that there is still one
minute to go.



At the 5<sup>th</sup> Minute, it will be shown a Yellow card.

Here the time is over and the student should hurry to finish the presentation.



At the 6<sup>th</sup> Minute, it will be shown a Red card.

Here the presentation will be interrupted.



#### References for further readings



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# Thank You!



# Collaborative Mobile Media

Bauhaus-Universität Weimar

03. Medium & Mobile



http://www.uni-weimar.de/medien/wiki/IFD:Collaborative\_Mobile\_Media\_SS13