Invisible environments: How to conduct qualitative research within digital spaces

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Science Museum, London

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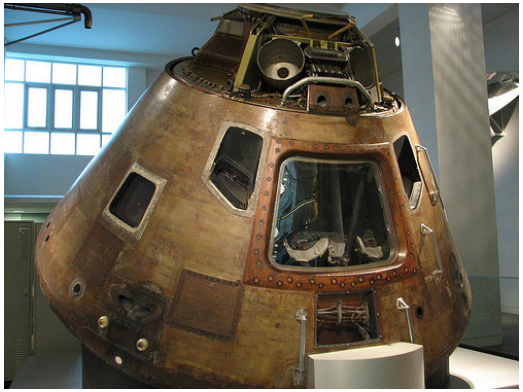
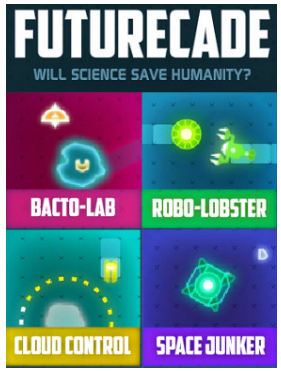
Today

1. What are invisible environments
2. Stages of digital testing
   - Wire frame testing, questionnaires, accompanied surfs
3. Useful example of why this is worth it
4. Top tips



The Science Museum is both a building and, in the digital age, an idea.



SCIENCE MUSEUM LEARNING

What is the role of an Audience Researcher and Advocate?

To help deliver cultural products such as exhibitions, interactive exhibits, resources, digital products and events that are **educational**, **enjoyable** & **accessible** for their intended audience…

through understanding visitors' **needs**, **wants** and **expectations**

Let’s hear from you

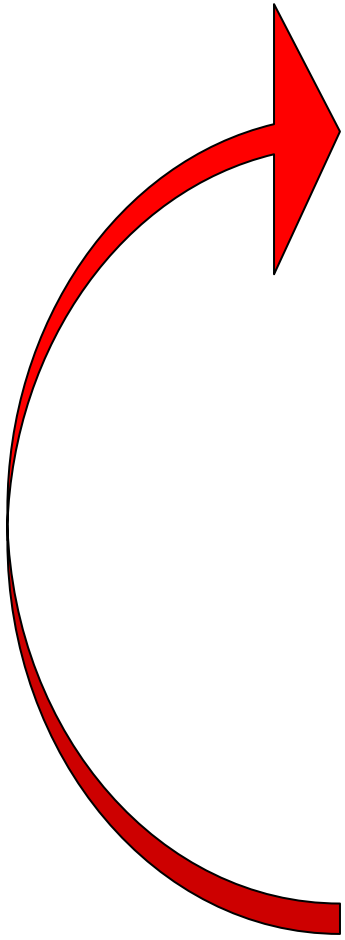
What are invisible environments?

What are invisible environments?

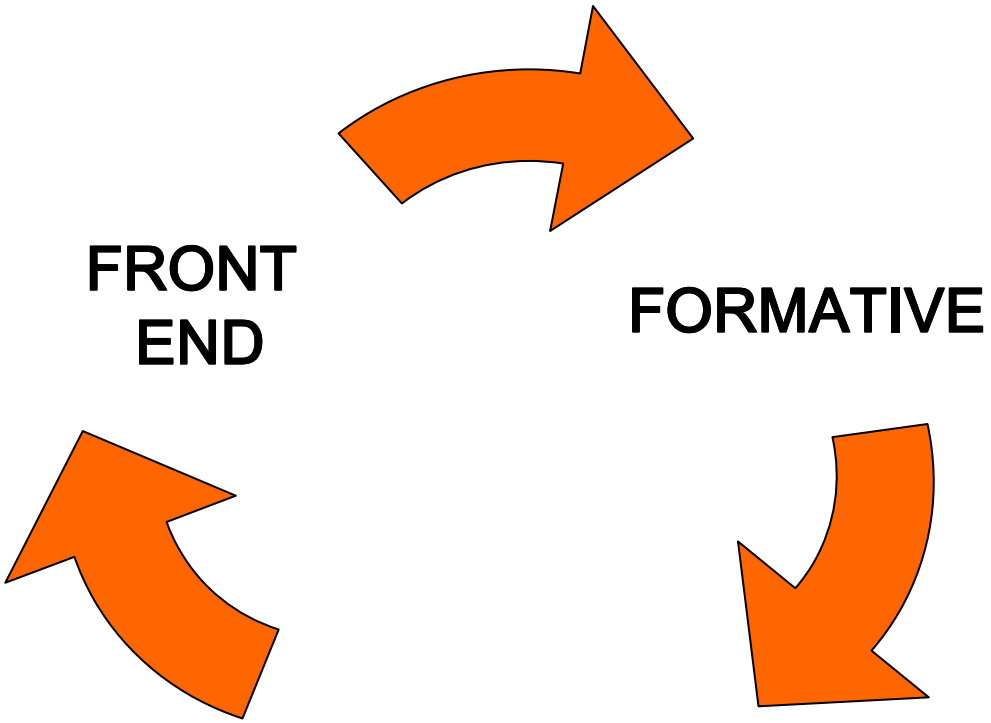
- Websites e.g.
  - Institution websites
  - Collections websites
  - Educational resources
- Apps
- Online games
- Social media

Seven Stages of Digital Evaluation

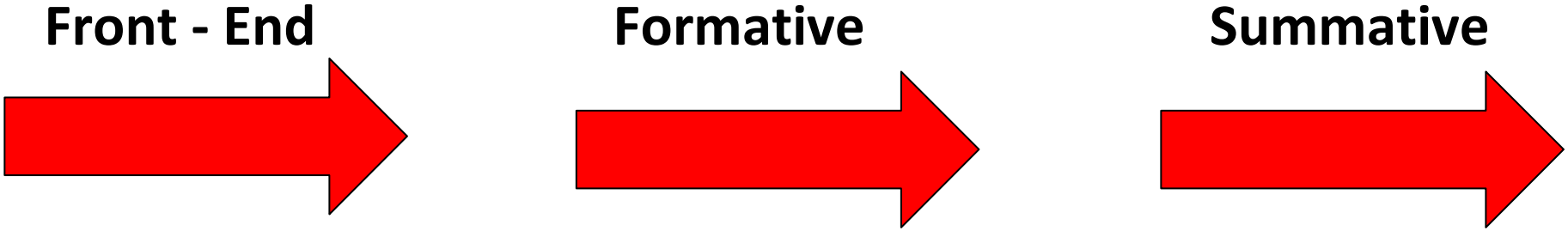
Seven Stages of Digital Testing



1. Front End
2. Information Architecture (IA) Wireframe Testing
3. Wireframe Testing of Subsections
4. Look and Feel (Design)
5. Functionality Prototype Testing
6. User Testing Full Prototype/Beta Version of Site
7. Summative Evaluation


FRONT
END
FORMATIVE
SUMMATIVE

Seven Stages of Digital Evaluation



1. Front End

2. **Information Architecture (IA) Wireframe Testing**
3. **Wireframe Testing of Subsections**
4. **Look and Feel (Design)**
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6. User Testing Full Prototype/Beta Version of Site

7. Summative

Qualitative Research Methodology

Wireframe testing

Accompanied surfs

Questionnaire writing

- Small numbers
- Low tech
- Practical research

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A website on the History of Medicine

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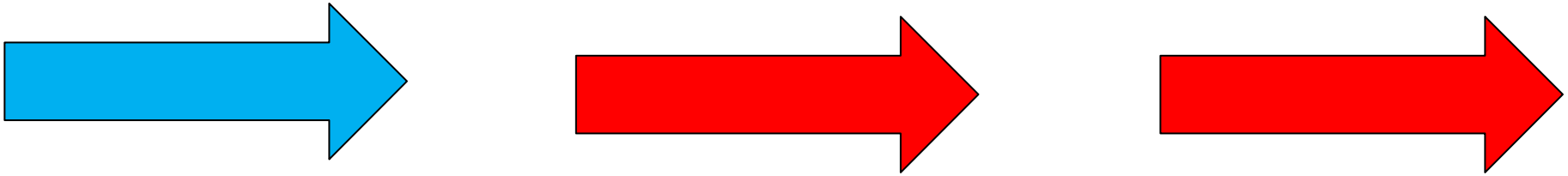
A website on the History of Medicine

Front - End → **Formative** → **Summative**



1. Front End

Methodology

- Focus Groups
- Desktop Research
- User testing similar sites

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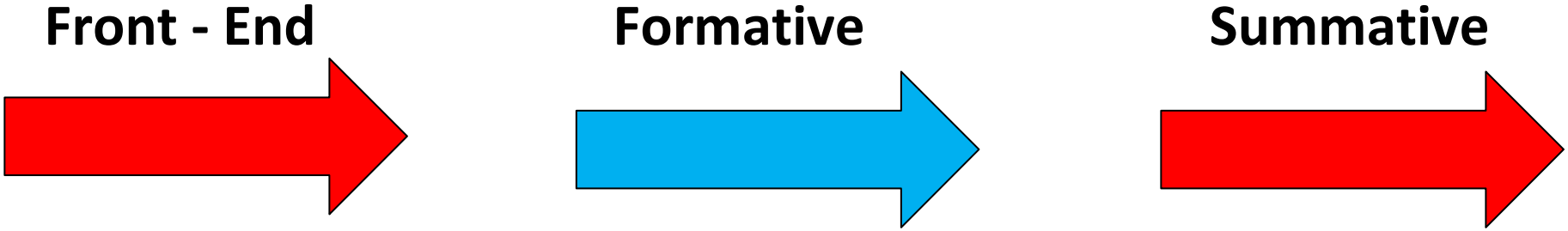

2. IA Wireframe Testing

Methodology

- Wireframe testing

Sickness and Health website

History of Medicine Through Time

Home | Themes and Topics | People | Objects | Techniques and technologies | Timeline | Search >

Welcome

Information about who the website is for and what they can find here.

About this project

Background info

Read more

Teachers

content tailored for teachers please click on the links below

Link 1 | Link 2 | Link 3 | Link 4

Collecting Medicine

Content on Henry Wellcome and his collection

Image

The Wellcome Collections

What it means to be well

Find out more about this subject

Read more

Image

Funded by:

Wellcome Trust

Logo

About the Wellcome Trust

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How did you find that?

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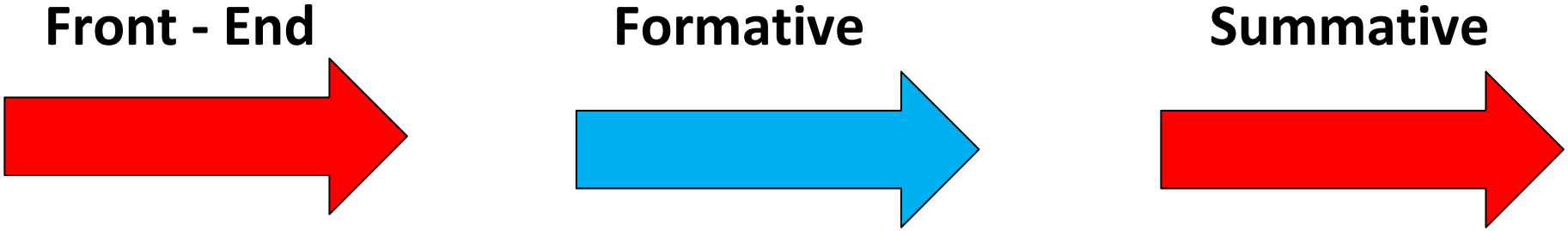


2. IA Wireframe Testing

3. Wireframe Testing of Subsections

Methodology

- Wireframe testing with **task based questions**

Wireframe Testing of Subsections - Tasks

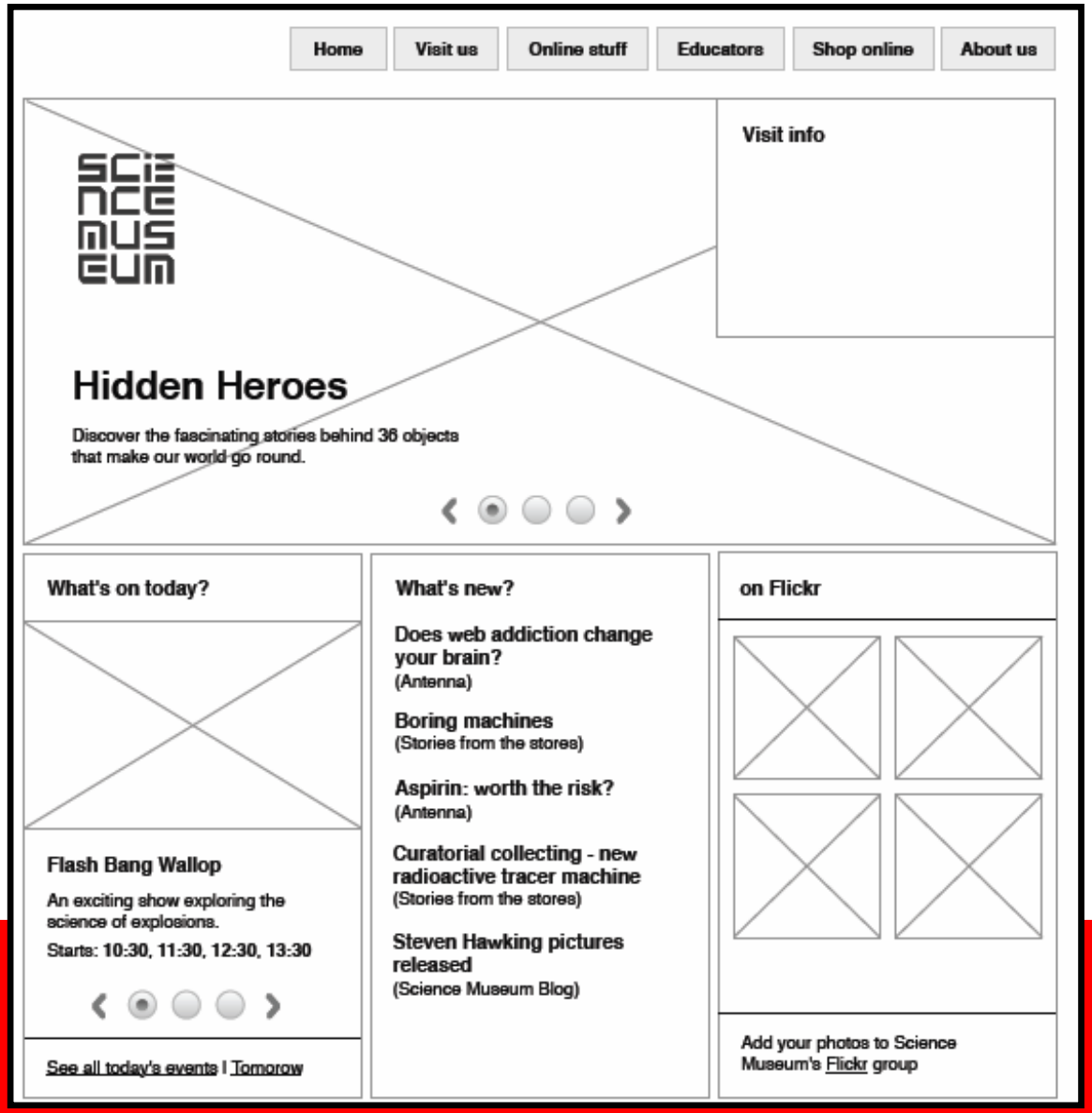
Teacher tasks:

- You want to prepare a lesson on the Black Death. Show me how you would use the site to gather information.
- You want your students to prepare a presentation on the life and work of Edward Jenner. Show me where you would point them to on this site to get them started.

Undergraduates:

- You are writing an essay on Paris Medicine. Show me how you would use this site to research your essay.
- How would you cite this site in your bibliography?

Think of two tasks to test a wireframe for a general visitor to a cultural organisations homepage



What tasks did you come up with?

- Some examples:
  - I would like you to plan your visit using the wireframe I have shown you?
  - How would you go about find out the opening hours of the Science Museum?

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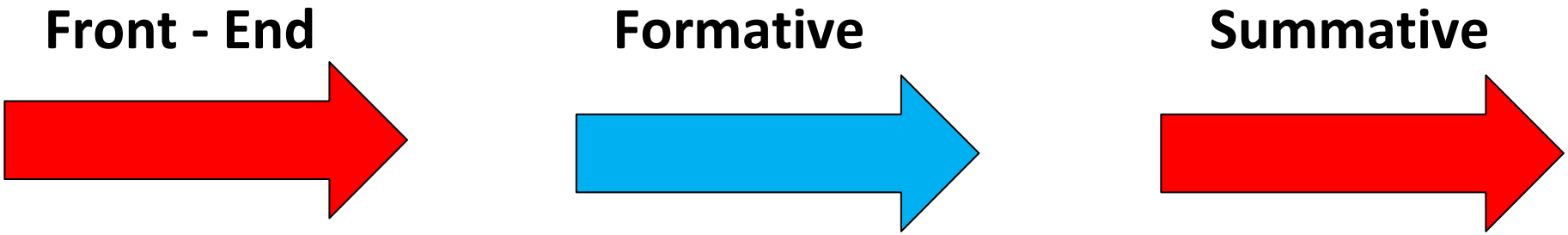
A website on the History of Medicine



2. IA Wireframe Testing

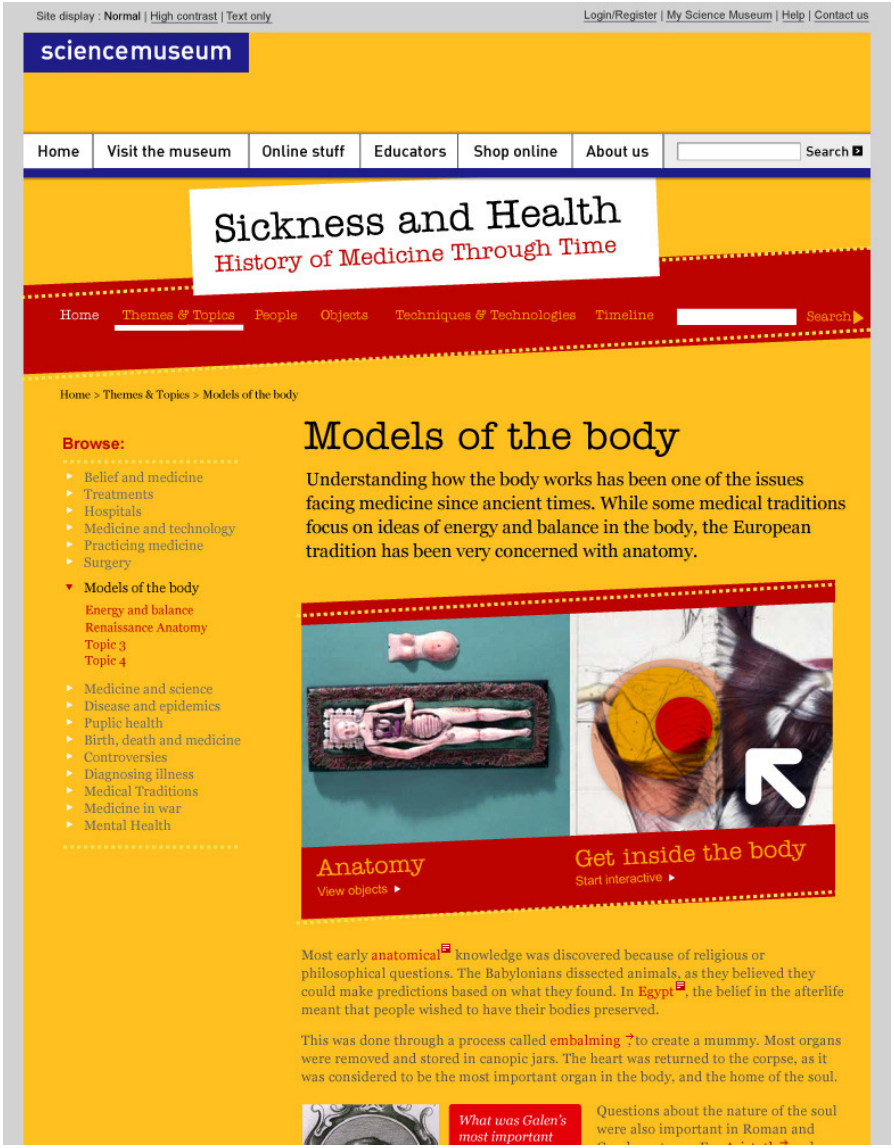
3. Wireframe Testing of Subsections

4. Look and Feel (Design)

Methodology

- Wireframe testing

Site display : Normal | High contrast | Text only
Login/Register | My Science Museum | Help | Contact us
sciencemuseum
Home
Visit the museum
Online stuff
Educators
Shop online
About us
Search
Sickness and Health
History of Medicine Through Time
Home / Themes & Topics / People / Objects / Techniques & Technologies / Timeline / Search
Welcome to the Sickness and Health website, a great resource and online learning tool for formal learners, teachers and students. The site contains over 4,000 objects covering more than 3,000 years of human history.
Read more about this project
What it means to be well
Find out more about this subject
Read more
Teachers
For content tailored for teachers please click on the links below
Link 1 | Link 2 | Link 3 | Link 4
Collecting Medicine
Wellcome's eccentric collection of objects contain a wide variety of weird and wonderful objects.
The Wellcome Collection
Funded by:
This project had been part funded by the Wellcome Trust foundation.
About the Wellcome Trust
Trepanning, the world's oldest surgical procedure
More info
NMSI | Copyright | Enquiries / Freedom of Information | Site Map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sciencemuseum
Home
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Online stuff
Educators
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Sickness and Health
History of Medicine Through Time
Home
Themes & Topics
People
Objects
Techniques & Technologies
Timeline
Search
Home > Themes & Topics > Models of the body
Browse:
Belief and medicine
Treatments
Hospitals
Medicine and technology
Practicing medicine
Surgery
Models of the body
Energy and balance
Renaissance Anatomy
Topic 3
Topic 4
Medicine and science
Disease and epidemics
Puplic health
Birth, death and medicine
Controversies
Diagnosing illness
Medical Traditions
Medicine in war
Mental Health
Models of the body
Understanding how the body works has been one of the issues facing medicine since ancient times. While some medical traditions focus on ideas of energy and balance in the body, the European tradition has been very concerned with anatomy.
Anatomy
View objects
Get inside the body
Start interactive
Most early anatomical knowledge was discovered because of religious or philosophical questions. The Babylonians dissected animals, as they believed they could make predictions based on what they found. In Egypt, the belief in the afterlife meant that people wished to have their bodies preserved.
This was done through a process called embalming to create a mummy. Most organs were removed and stored in canopic jars. The heart was returned to the corpse, as it was considered to be the most important organ in the body, and the home of the soul.
What was Galen's most important
Questions about the nature of the soul were also important in Roman and

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A website on the History of Medicine

Look and feel questions

- What do you think about the way this webpage looks?
- What do like most / like least most about the way it looks?
- What sort of person do you think might use this website?
- What age group do you think this website has been designed for?
- What do you think that each of these words mean ?
  - Themes and topics / Timeline / Teachers

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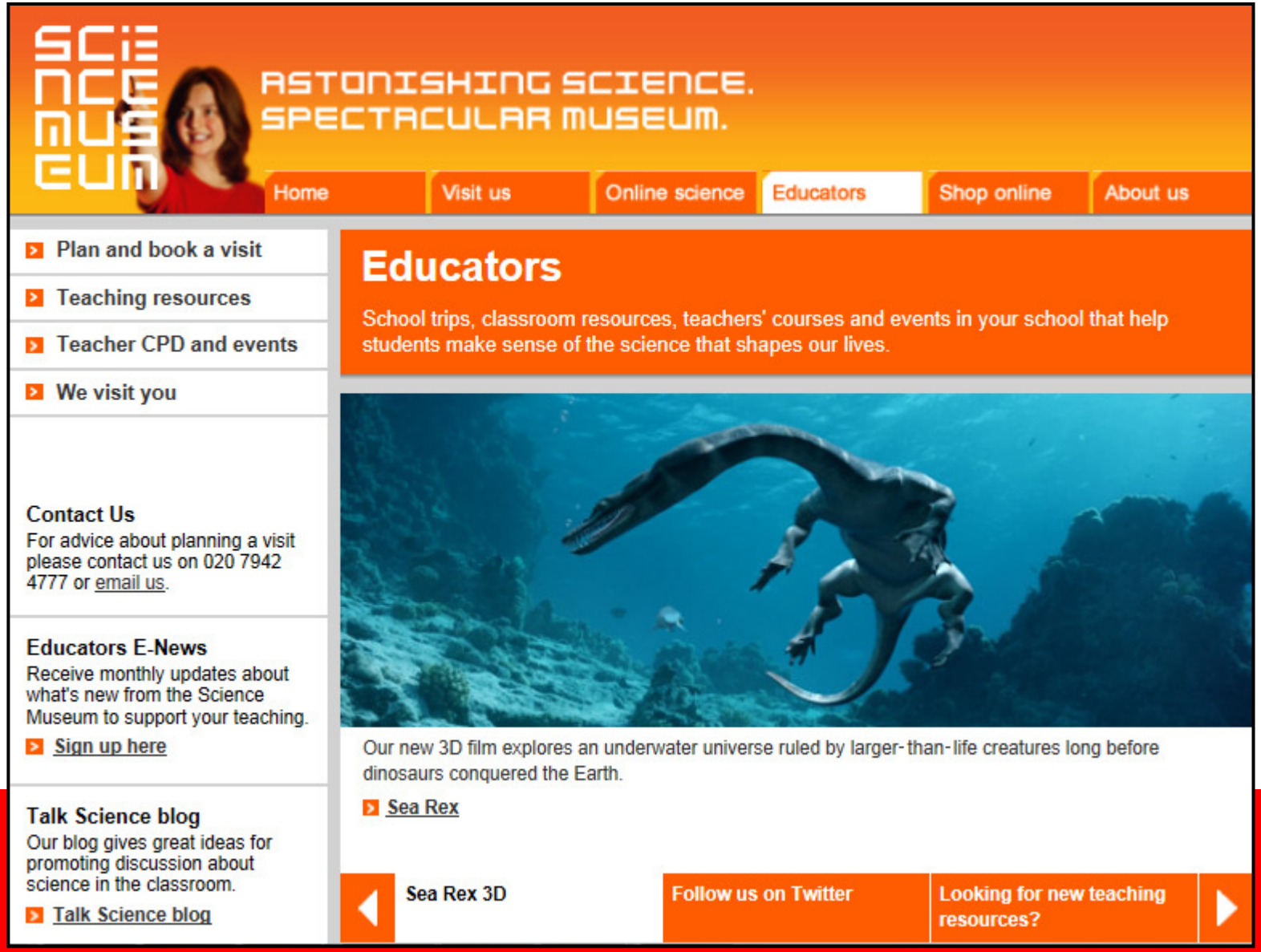
Look and feel questions

- Which of these words would you use to describe the way this looks – choose as many as you want?

Engaging	Boring	Exciting	Childish
Entertaining	Irrelevant	Fun	Trivial
Mundane	Surprising	Oversimplified	Motivating
Appealing	Adult	Confusing	Interesting
Informative	Disappointing	Uninspiring	

☐ None of these words Any other word _____

Write 2 look and feel questions
Science Museum's educators website



Write 2 look and feel questions

- Reactions
- Audience appropriate?
- Affect usability?

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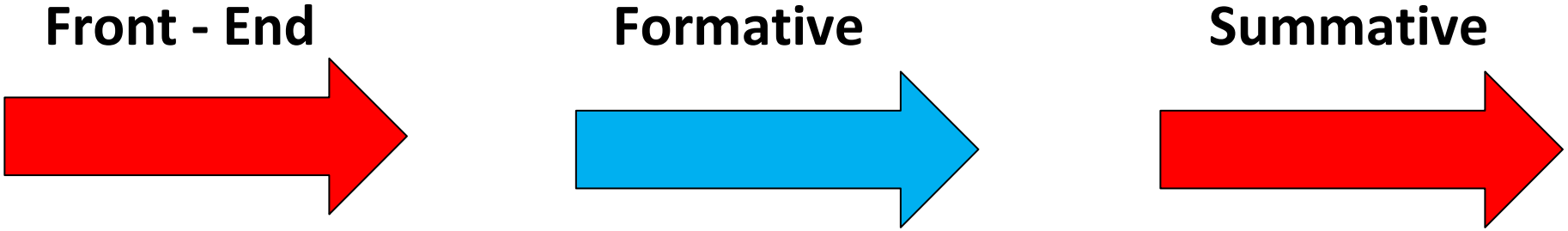

2. IA Wireframe Testing

3. Wireframe Testing of Subsections

4. Look and Feel (Design)

5. Functionality Prototype Testing

Methodology

- Accompanied surf

Accompanied surf

- Observation – Task
  - Get them to think aloud!
- Usability / Navigation
- Appropriate for the target audience
- Reactions
- Recommendations / comments

Write your own accompanied surf

- BBC
- Guardian
- Telegraph

Write your own accompanied surf

1. Task
2. Navigation
3. Design
4. Audience appropriate
5. Reaction

Test it out!

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A website on the History of Medicine

Front - End → **Formative** → **Summative**

2. IA Wireframe Testing

3. Wireframe Testing of Subsections

4. Look and Feel (Design)

5. Functionality Prototype Testing

6. User Testing Full Prototype

Methodology

- Accompanied surfs
- Robustness testing

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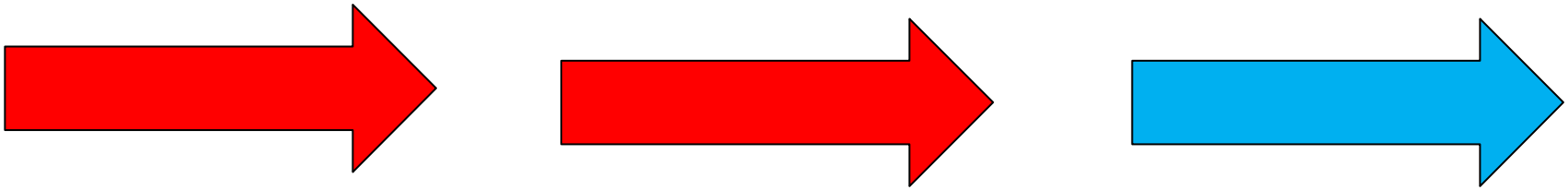
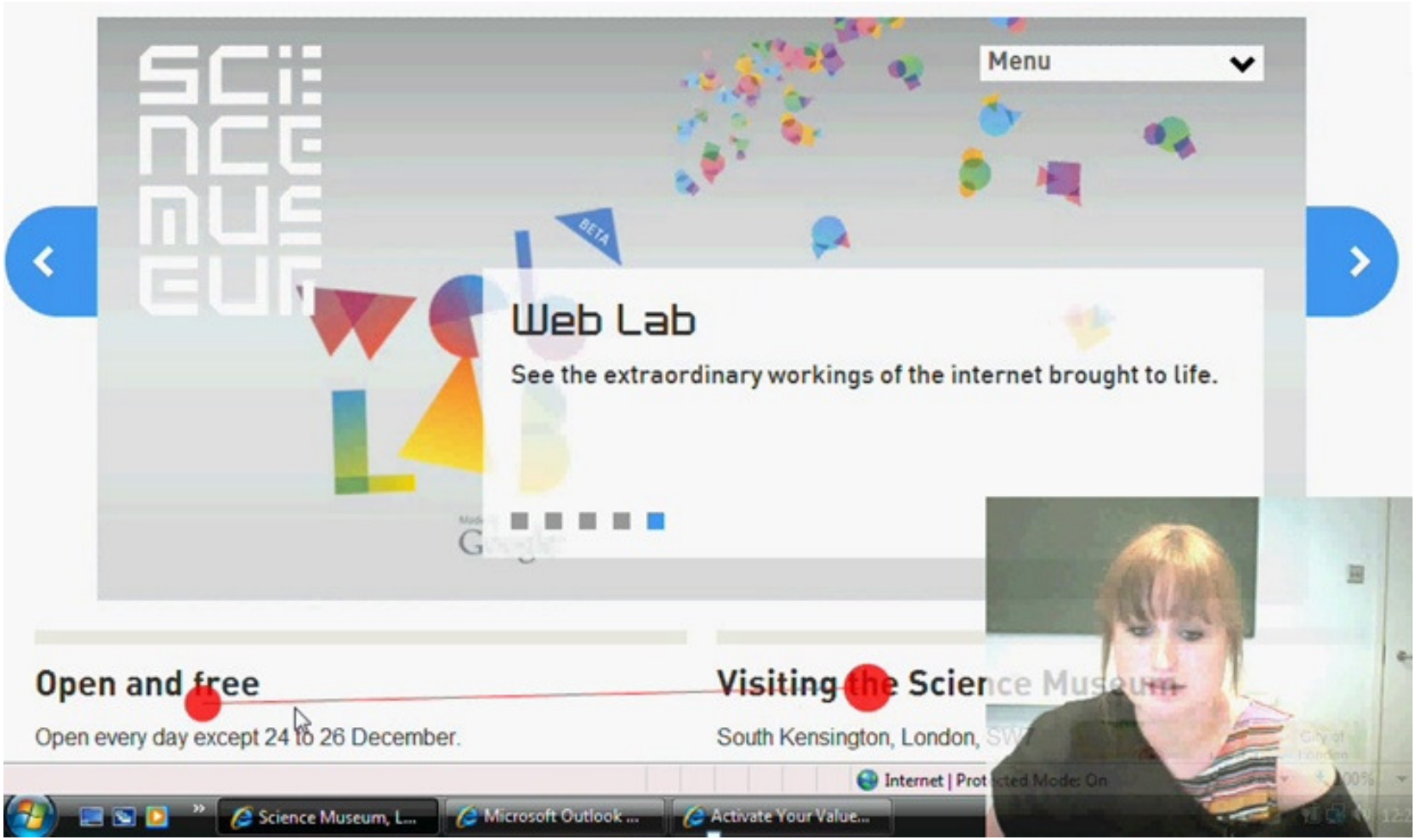


7. Summative Evaluation

Methodology

- Accompanied surfs
- Focus groups
- Online surveys

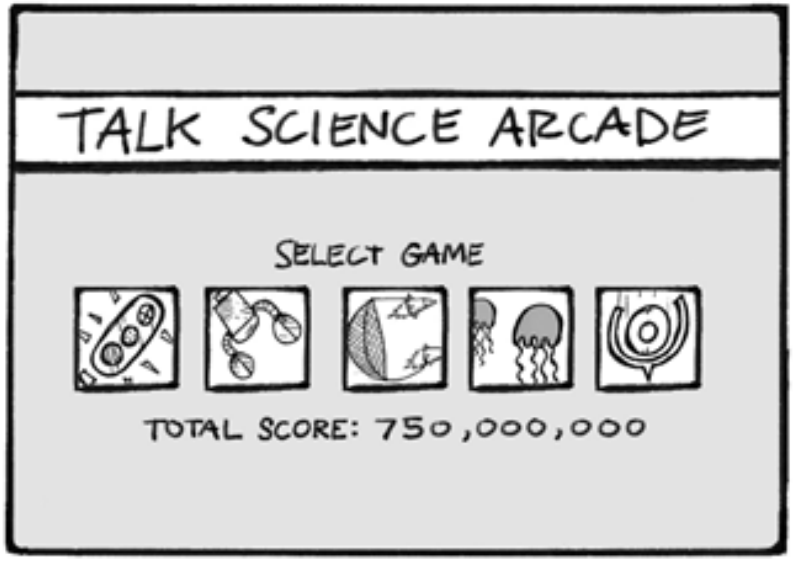
Evaluation Technology



Futurecade

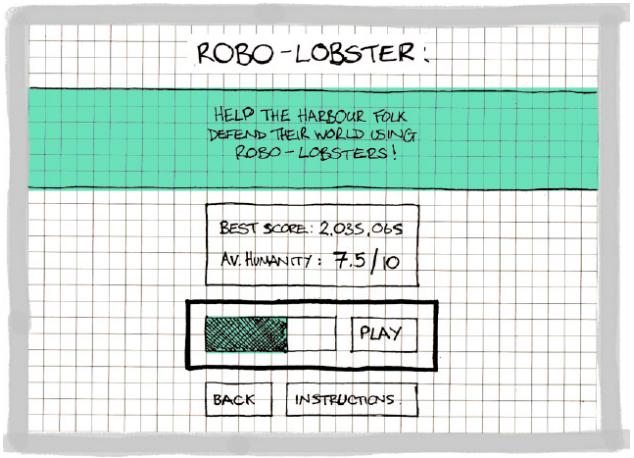
Front end → Formative → Summative

- **Focus groups**
- **Review of past evaluations**
- **Literature reviews**

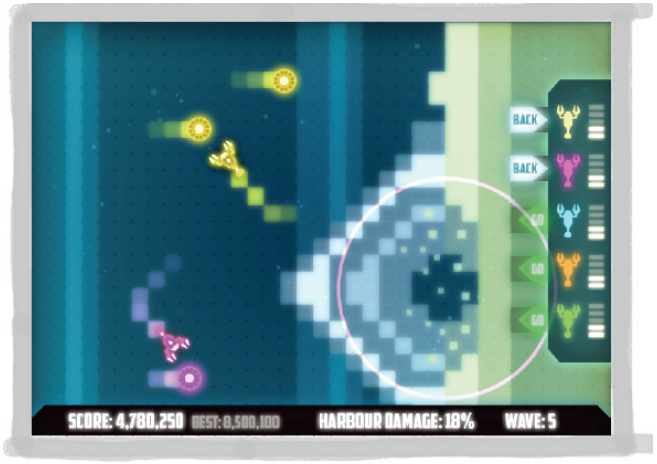


Futurecade

Front end → **Formative** → Summative



- **Wireframe testing**
- **Prototype testing**



Futurecade

Front end → Formative → **Summative**

- Focus groups
- Online survey
- Social media comments

Digital Evaluation Top Tips

- Don’t get distracted by the peculiarities of a **single user**. Quotes only to be used if they represent a trend.
- This type of **test is unnatural**, make some allowances.
- Users **need to be relaxed**. Websites make people tense.
- Don’t be afraid to **prompt**.

Web Evaluation Top Tips

- You need to be an **expert** in the site before you start
- Make sure the user is constantly **thinking out loud** or you will miss out on vital information.
- **Pilot** your questionnaire before you start testing.
- Ensure designers and project team are informed about the **timings** required for testing.

Any final questions or thoughts?

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