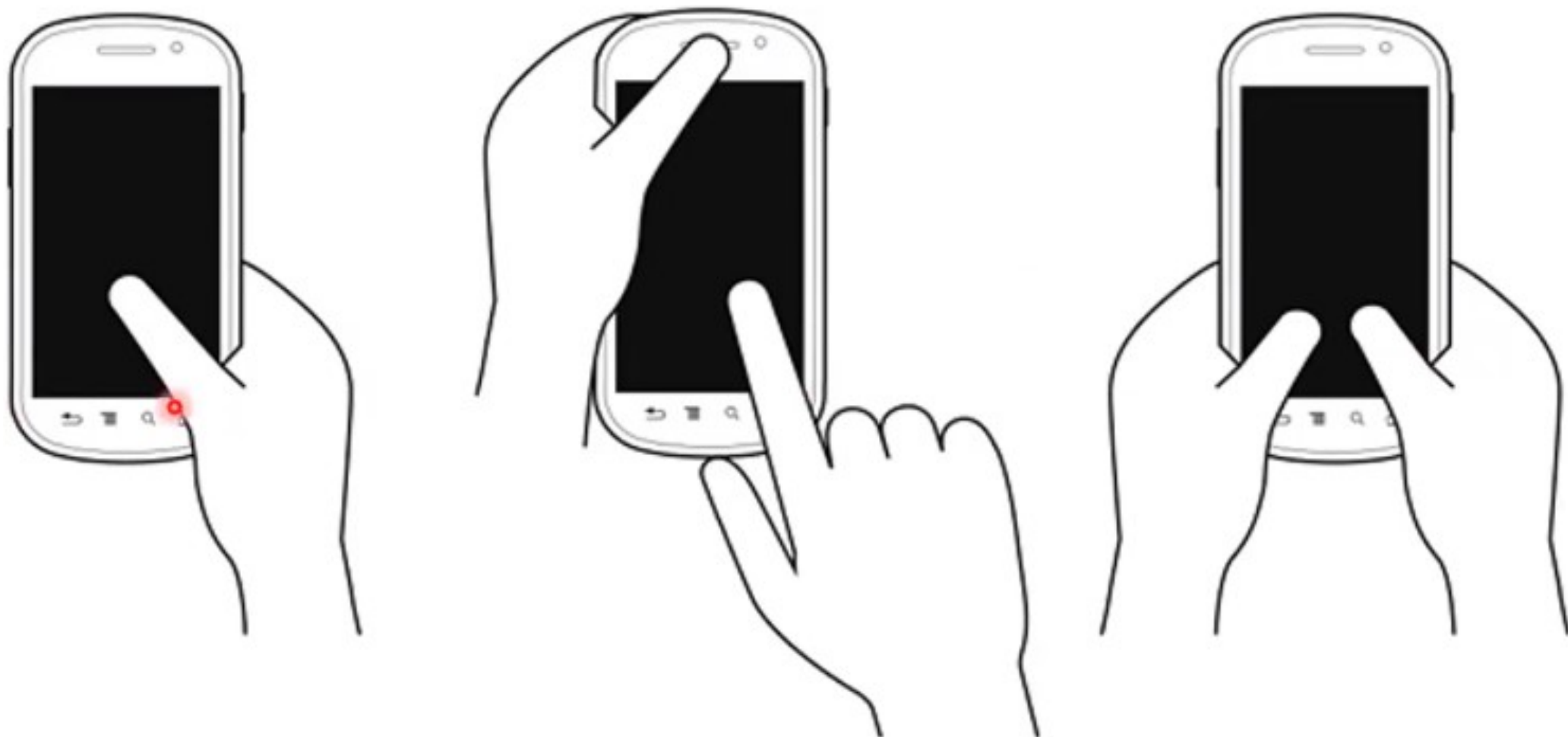


# What about Fitts for mobile?

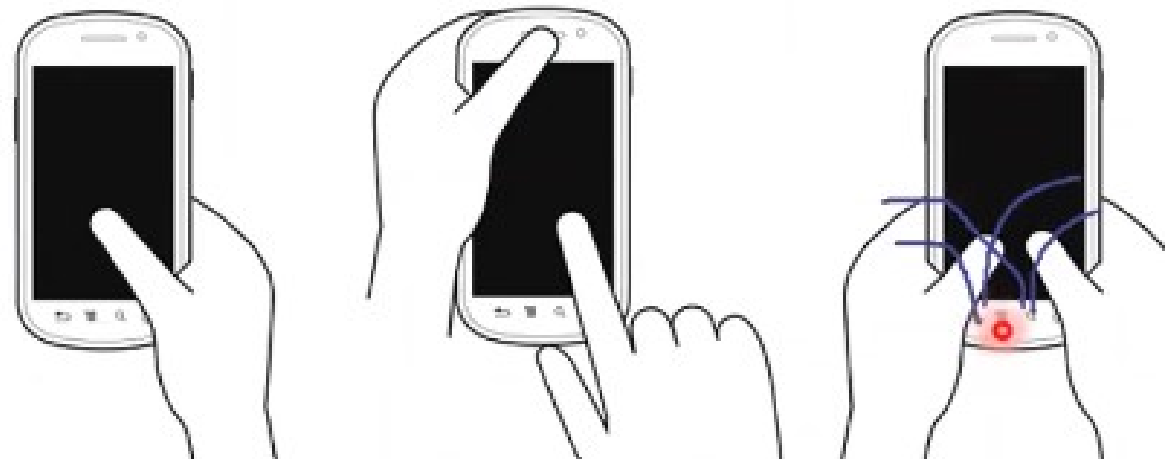
- ◆ Answer: Fitts «almost» changes
- ◆ In Fitts for mobile, the size of the object matters, but also the imprecision due to the finger, and also...

# The mobile grasp!!



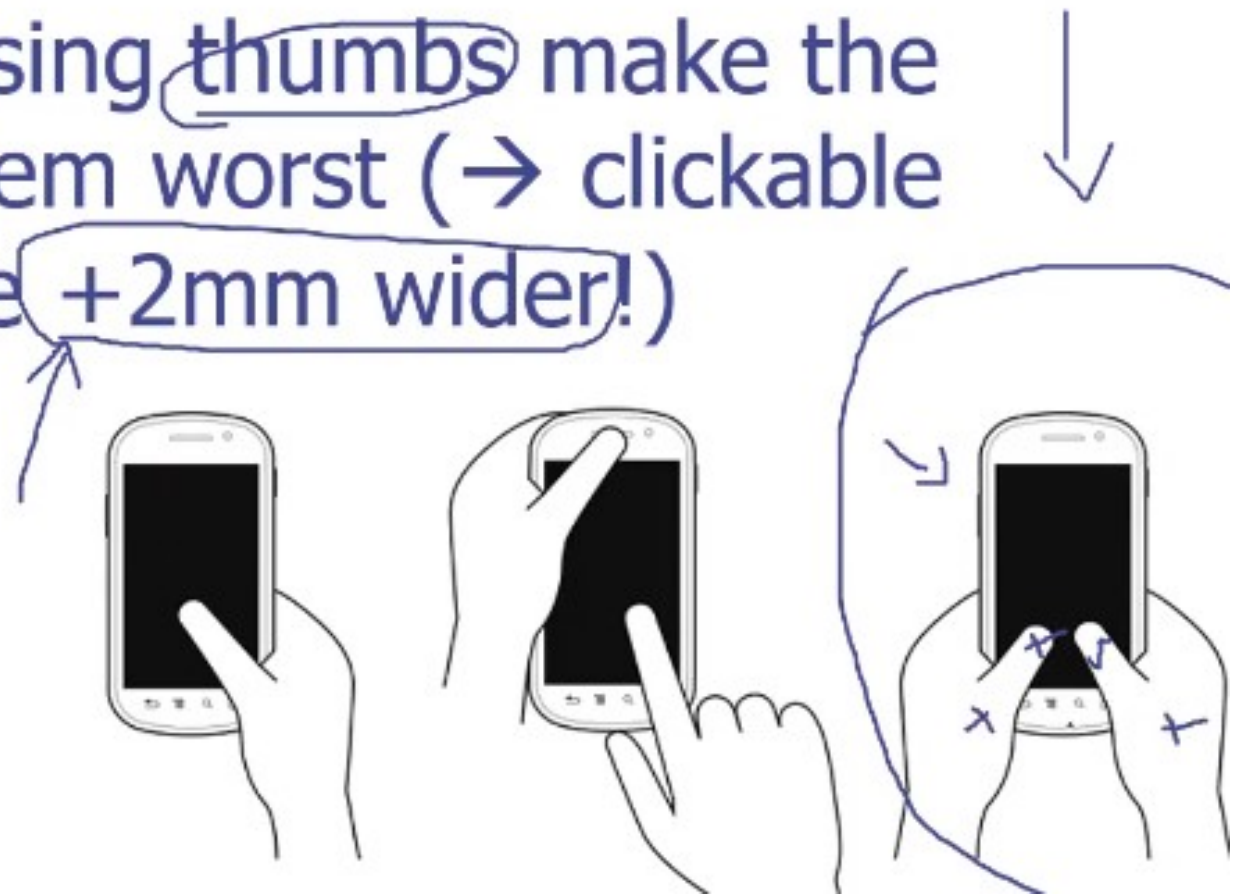
# The cases

- ◆ There are five classic cases
- ◆ The two-handed symmetrical case, two-handed with one active hand, one-handed



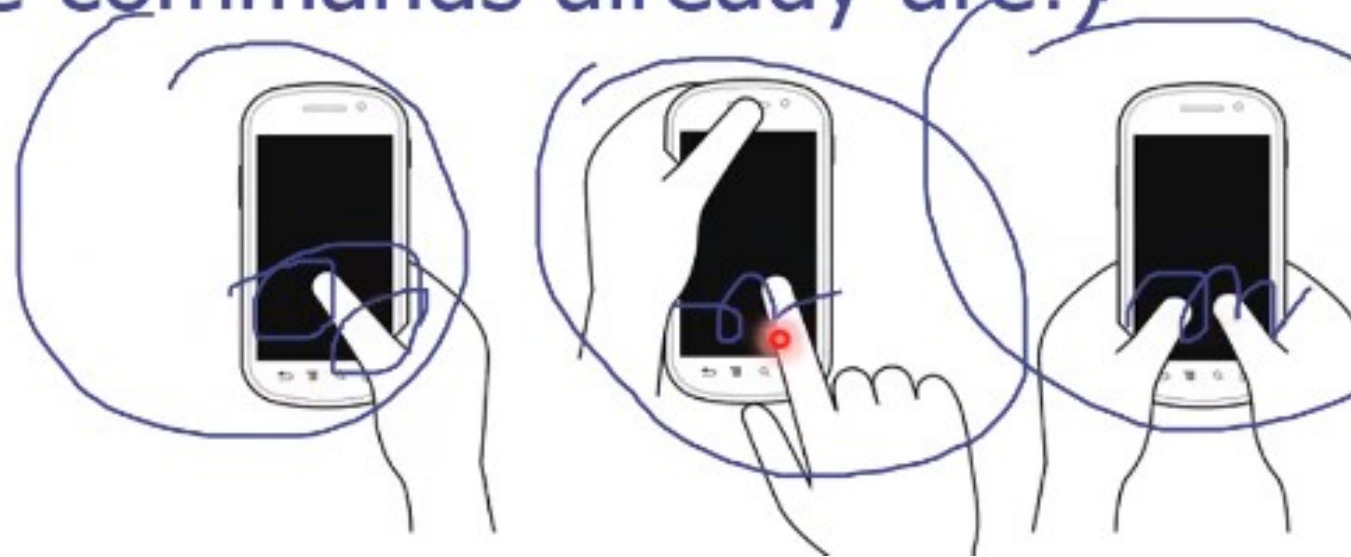
# So...

- ◆ Each of these five cases behave in a different way (!)
- ◆ For instance, using thumbs make the fat finger problem worst (→ clickable areas should be +2mm wider!)



# So...

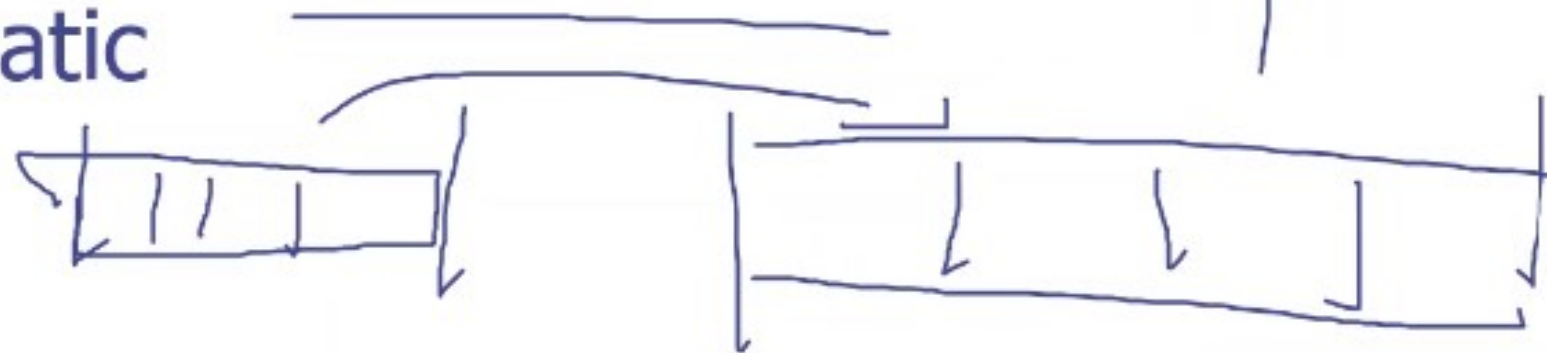
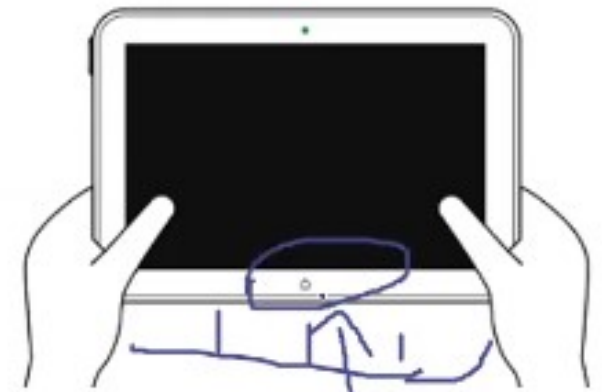
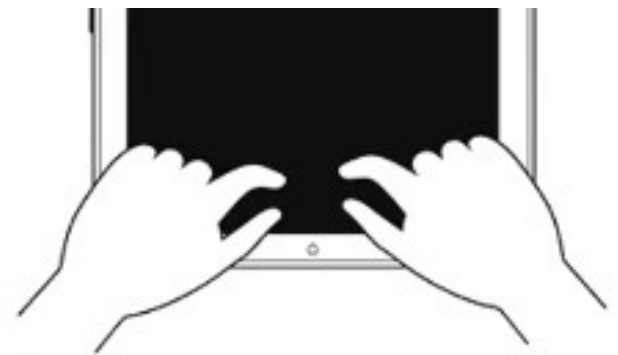
- ◆ The best interface takes into account all these constraints, and for instance keep all the controls in the lower part of the screen (duh, that's where the basic smartphone commands already are!)





# But...

- ◆ Both on smartphone and tablets, the screen shape (and reachable areas) change also when passing from normal to **landscape** position (!!)
- ◆ In these cases liquid layouts can be problematic



# We can use magic places!

- ◆ Remember Fitts: the borders
- ◆ The advantage over a desktop web site is that now the «window» is already maximized, and so we can always use borders, for instance via a ***fan menu***

# Example



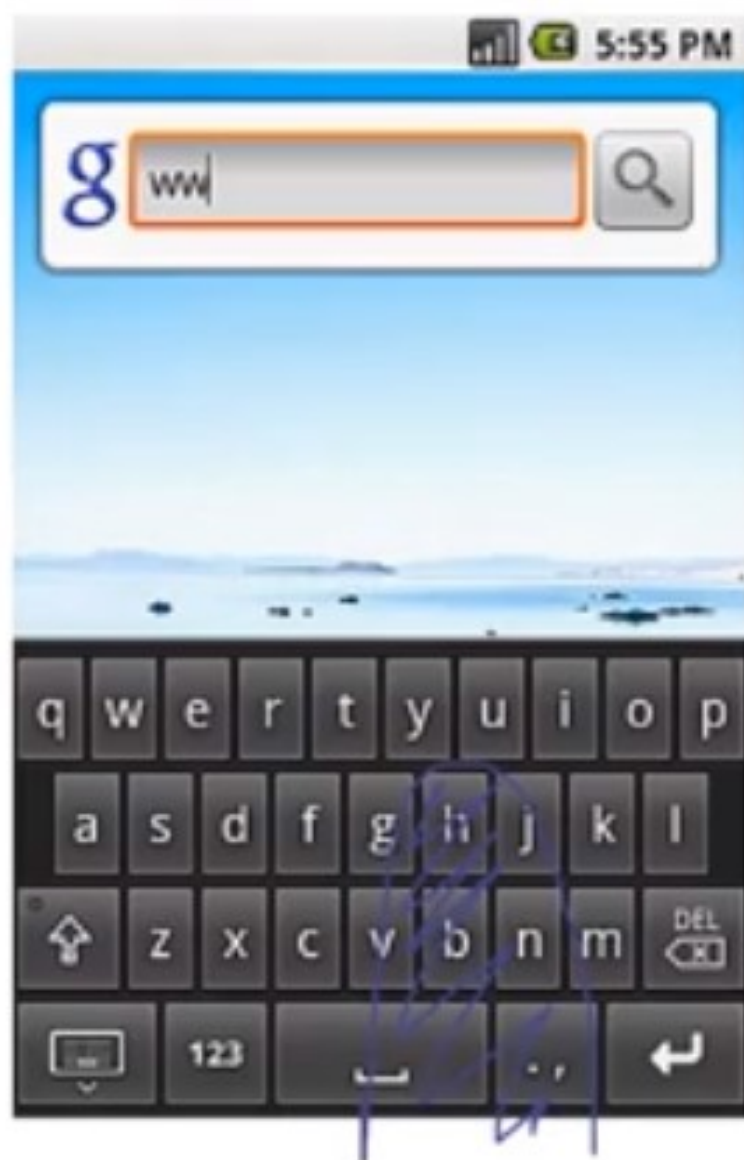


# Example





# Similar historical error...



# Repeated...





# Apps

- ◆ We all know the success of apps: thinking better about them, can you see what they really are?
- ◆ They are a consequence of computational effort minimization:
- ◆ An app ***minimizes access time*** to the functionality of interest

# For instance

- ◆ Many users, more than a fourth, use apps more than 60 times a day (!)



# And just for this...

- ◆ ... They win over mobile web:
- ◆ Smartphone users pass on average 86% of their times on apps and 14% on the web

# Mobile Web so low...??

- ◆ Just understand what users are doing in all this time with apps
- ◆ First place: **games (32%)** !
- ◆ Second place: **social sites (28%, trend growing)**!

# 26, 13, 9...

- ◆ This is the beginning of the *death sequence* for apps:
- ◆ 26% of apps are used just once, 13% twice, 9% only three times, etc... (!)

# Apps are like butterflies...



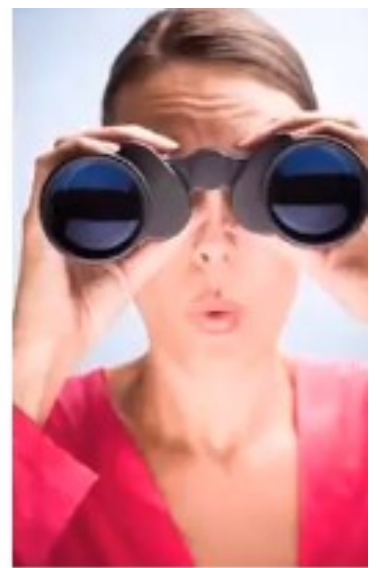
- ◆ ... they have a very short life time:
- ◆ From ***4 months*** to ***1 year***
- ◆ For instance, ***games*** (the most attractive) paradoxically have an average lifespan of 4 months
- ◆ Important signal on duration: if users growth last more than the critical period of ***3 months***, then the app will likely last much longer, otherwise it will die quickly

# Just for this reason...

- ◆ ... and so even more critically than for web sites...
- ◆ ... it's crucial to be found by users!



# How are apps found?



- ◆ Primarily, via the app store...
- ◆ ... and so with a search engine (!!)
- ◆ Just not Google or Bing, it's the proprietary engine of the app store...



# ASO



- ◆ The corresponding problem for mobile apps is called **ASO: App Search Optimization**
- ◆ Similar to SEO but with differences
- ◆ The similar parts: being a search engine it also works via ***keywords***, that we should carefully insert

# ASO at textual level



- ◆ Places are not that much: the app description, possibly dedicated keywords (Apple app store), and in the most relevant place of all:
- ◆ The ***name*** of the app itself, where it's useful to insert one or two crucial keywords



# Other sources of score for ASO



- ◆ Google and Apple also use a lot of information coming from the ***global social system***
- ◆ For instance: downloads (integrated over time), usage time, ratings and reviews, uninstalls (!), brand, and positive/negative parts coming also from other systems (***web and email***)!

## Menu

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## Home » Web Information Management

### Project

The usual project consists in a usability analysis of a web site, with the instructions explained here.

"Usual" means that sometimes I might give also other projects, anyway additionally to this default one. So in case there is another project available during a certain year, you will just have more choices.

**ATTENTION** to the **DEADLINES** mentioned at the end of the page and repeated here for convenience: : **June 1, 2022** to request a web site, and **July 1, 2022** to deliver the project.

#### The Choice

First of all, you have to choose a website to analyze. The beginning period for requests starts from the end of the course onwards, not before (so you will also have knowledge of mobile usability). When the course ends you are free at any time (before the first deadline) to send your request.

The chosen site of course should not be too easy (for instance sites of 1/2 pages...). Said that, the actual size of the site is a not such a relevant factor: what matters is the analysis, not the number of pages.

In case of complex sites / sites with a lot of pages, it is up to you to decide up to what level to perform the analysis. For instance, if a site has one hundred pages, do a selection and choose



3. For each page that you analyze, please include an *image copy* of the page, either inline in the document or as separate file (there are various ways to **take a screenshot of a site**, choose what you like best).

#### **Desktop or mobile?**

As said before, you can choose whatever version you like (desktop, notebook, mobile of various sizes). If you want you can include more than one version (for instance, show how the site behaves in the classic desktop case and in the mobile one): if you do more versions you can also, if you want, privilege one versus the other (for instance, make a more accurate analysis for the desktop case and then hint at the mobile case, or vice versa).

#### **The Evaluation**

At the end of the report, assign also an *evaluation* to the site that you analyzed, by using the classic range from 0 to 10: 0 is the minimum, 6 is sufficient, 10 is the maximum. You can also use half marks (for instance, give a 5.5 or a 6.5). The evaluation, as well as the whole report, is kept confidential, so if you are analyzing the site of a friend or of some company you don't have to worry of the impact of a negative judgement, just be straight.

#### **Sending the Report**

The Usability Report has to be sent to the email address of the course, using as subject "**WIM PROJECT**": please be sure to have in the email (email body or within the report) your personal data (name and student id number). You will again receive an automated reply to confirm reception (if not, as before, please retry and if the case contact me).

#### **The Result**

The project results are two: pass, or no-pass (the reasons are explained during the course).