Storyboard - Mock-Up, Wireframe, Flowchart

- Mock-up a lo-fi general design sketch in gray scale.
- Wireframe a more detailed design with shapes, images and text.
- Flowchart a guide of the application, a map.
- Interactive Simulation interactive prototype.



Mock-up

- Initial visualization
- Sketch
- Schematic representation
- Low fidelity
- Greyscale
- No colors /very minimal
- No GFX
- No details



Mock-up

- Mock-ups are used by designers mainly to acquire feedback from users about designs and design ideas early in the design process.
- Saves design and development time
- Avoids straying off track.



P3-Drinke - CS294-84: Interactive Device Design <u>http://husk.eecs.berkeley.edu/courses/</u> <u>cs294-84-fall12/index.php/P3-Drinke</u>



Wireframe

Wireframe is a more detailed design with shapes, images and text. It represents the skeletal framework of a mobile app. It is a visual guide that shows all connecting pathways between each screen and where they can lead.

- The next step up from a general mock-up.
- A guide to understand the functionality of an app.
- Gives the design and programming team a clear description of GUI.
- Professional presentation.



Wireframe

Wireframes focus on:

- The kinds of information displayed
- The range of functions available
- The relative priorities of the information and functions
- The rules for displaying certain kinds of information
- The effect of different scenarios on the display



Wireframe

- More detailed images, shapes, icons and text
- All main screens and functions of the app
- Labeled actions of buttons, text fields and icons
- Low fidelity
- Greyscale
- No colors /very minimal
- No GFX



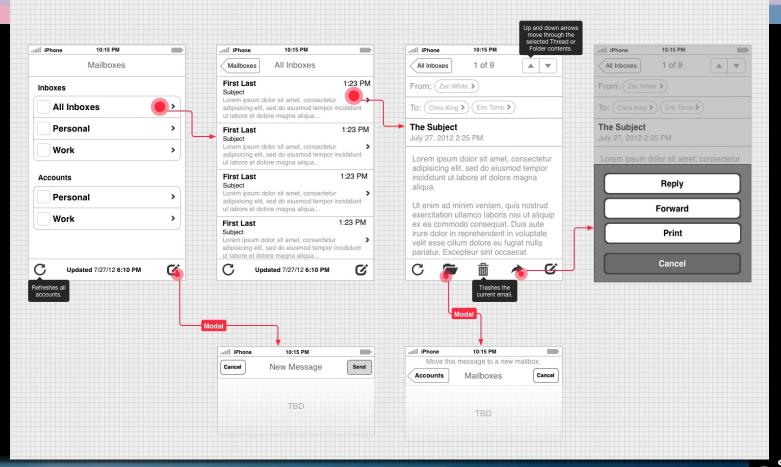
PaMI	Back Patients	Back Patients	Back Patients
	A-Z Doctor Salon	A-Z Doctor Salon	A-Z Doctor Salon
	Search	Dr. Doctor 1	Salon 1
Jsername	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
codrin.vasilache	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
Password	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
*****	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
Lasta	Patient Full Name Details	Dr. Doctor 2	Salon 2
Login	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
	Patient Full Name Details	Patient Full Name Details	Patient Full Name Details
	Patient Full Name Details		
	Add Edit Delete	Add Edit Delete	Add Edit Delete
Back Patient file Edit	Back Patient file	Cancel Patient Save	Logout Welcome
ersonal details Medical history	Personal details Medical history	First name	
	Disease name Date of introduction Details	Luther	
		Last name	Some summary here
irst name: Luther	Disease name Date of introduction Details	Sasha	some summary here
ast name: Sasha Birthdate: 15.10.1980	Disease name Details	Birthdate	
Personal no: 2801015227755	Date of introduction	15.10.1980	
ex: F	Date of introduction	Personal No. 2801015227755	
llood type: A+	Disease name Details	Sex F M	
Assured: Yes	Date of introduction Disease name Disease name	Blood type A+	Liew patients
elephone: 0723957223	Date of introduction	Assured Yes	
Allergies: -	Disease name Date of introduction Details	Telephone	
	Disease name	0723957223	
	Date of introduction	Allergies	
	Add Edit Delete		
Back Disease Edit	Cancel Disease Save		
ate : 27.10.2000	Date		
ymptoms: feeling very			
hirsty, extreme tiredness, weight loss westigations: level of glucose in	Symptoms		
lood and urine, oral glucose	Investigations		
plerance test, glycated hemoglobin,			
rine and blood tests	Diagnosis		
iagnosis: Diabetes			
ospital and physician: "Sfantul piridon" Hospital Iasi, Department of	Treatments		
pinuon nospitaliasi, pepartifient of	Complications		
iabetes and metabolic diseases. Dr.	compiliations		
iabetes and metabolic diseases, Dr. acila Bianca			
acila Bianca reatments: Insulin treatment for			
acila Bianca reatments: Insulin treatment for nore than 10 years.			
acila Bianca reatments: Insulin treatment for			

Patient Monitoring Interface http://patientmo.wordpress.com

School of Design

IC





Wireframe example by mobile velos http://velosmobile.com/2012/07/30/wireframing-with-omnigraffle-prove

School of Design

Why Wireframe is Necessary?

Keeps design and concept on track Informs the team Minimizes number of revisions Helps avoiding confusion

Allows to:

- Improve your design
- Optimize the user experience
- Reduce the need for changes during development



Mock-Up and Wireframe Software Links

Free/Small cost Mobile & Website UI

10Completely (or almost) Free Wireframe/Mockup Applications http://speckyboy.com/2010/01/11/10-completely-freewireframe-and-mockup-applications/

10 Free Wireframing and Mockup Tools http://speckyboy.com/2011/02/23/10-completely-freewireframing-and-mockup-tools/



Flowchart – a complete guide of the application, a map.

"Where can I go from this screen?"

- Used by design & programming teams
- Keeps various connections of each screen organized
- Visualizes user experience (UX)
- Displays all functions and examines further into the design.



Flowchart

- Arrows or some or lines signify pathways between all screens.
- Numbered steps and notes describing their functionality.
- The first screen is a splash or loading or an installation screen.
- The next screen is typically the main menu screen or home screen.
- More details are included (ex. numbered steps).





High-level application flowchart for a dictionary app from Excerpt from Designing the iPhone User Experience: A User-Centered Approach to Sketching and Prototyping iPhone Apps by Addison-Wesley

http://www.codeproject.com/ Articles/111949/Excerpt-from-Designing-the-iPhone-User-Experience

Common Resolution/Pixel Density List



Android OS Ranges

OS



Apple iOS iPhone/iPod Retina iPhone4/iPod iPhone5 iPad2/Mini iPad3

Resolution/Pixel Density 160 x 240 ldpi 320 x 480 mdpi 480 x 800 hdpi 960 x 720 xdpi 320 x 480 pixels 640 x 960 pixels 640 x 1136 pixels 768 x 1024 pixels 1536 x2028 pixels



Graphical User Interface (GUI)

GUI is defined as an acronym for graphical user interface, a type of computer screen display in which commands are entered and functions are selected by means of icons, menus, a mouse, etc.



Graphical User Interface (GUI)

Fields		
Buttons		
Bars		
Tabs		
Boxes		
Scrolls		
Navigational menus		
lcons		
etc.		



Graphical User Interface (GUI)

- Simple
- Easy to navigate
- Clear
- Concise
- Responsive
- Consistent
- Attractive
- Efficient



"Don't annoy. It is so easy to piss people off on mobile. What you think is really cool might only be cool the very first time."

"Make it an experience. Make news fast, right and make it sing."

Beware of "Click here", "mouseover this", "see video below."

Mobile app design tips by David Ho, engineer of the mobile apps for the Wall Street Journal.



Use images with links

- Allow users to read the full headline
- Provide big targets for touch screen users
- Detect the user's device and serve the relevant version of the site
- Provide enough space between navigation options

Mobile usability tips from Jakob Nielsen by Graham Charlton

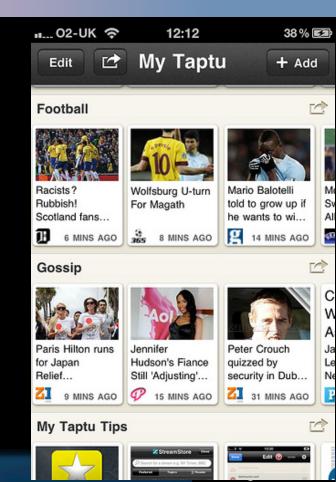


Use images with links

-Provides more visual impact

- -Helps users to quickly recognize an article
- that is interesting to them,

as they recognize their favorite actor, football player etc.



Allow users to read the full headline

- Provides a stronger 'information scent'.

People can get more of a clue of the subject of the article, and if the headline is well written, it should get more clicks.



Provide big targets for touch screen users

- Links need to be big enough so that users don't have to be too precise.

This is something that lets down the Guardian's iPhone app and mobile site. Some of the **links are too small and too close together**, making it easy to click the wrong link:

📶 02-UK 奈	13:17	54% 🚁
Back	football	
No comments		
Related subject	ts	
Sport		>
World news		>
Race issues		>
Football		>
Brazil		>
Scotland		>
Arsenal		>
UK news		>
Scotland		>

guardian.co.uk © Guardian News and Media Limited

Detect the user's device and serve the relevant version of the site

-Sending mobile users straight to the optimized version of the website make it easier for users.

-If the mobile and desktop versions have different URLs, then this makes it harder for users to fin the version they want.



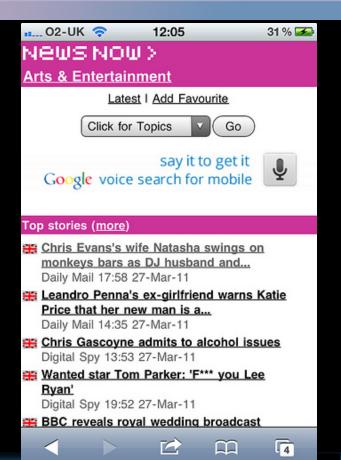
Provide enough space between navigation options

- Misplaced clicks can be a major source of frustration for mobile users, as they mean time wasted loading the wrong page and being forced to backtrack.

-If there is **clear space between links and menus**, then users are less likely to make these mistakes.



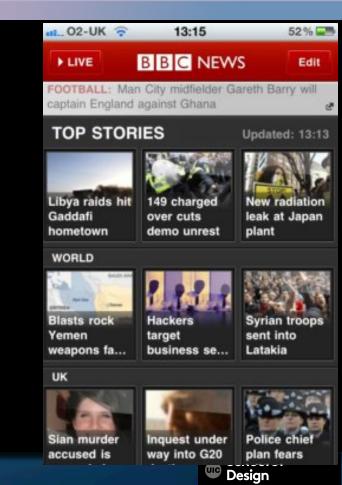
the close proximity of the links on the mobile site makes it harder to be accurate for touch screen users.



🙂 Design

Navigational links at the top of the page are far enough apart, while the target for users to click and select an article is larger.

- provide more of an 'information scent'
- add a brief summary of each story
- reduce the number of articles displayed on the first screen to allow more room for this information.



GUI Design Tips

Clear, simpler and appealing information presentation Uses shades and hues of two or three main colors

Organized layout

Sufficient space between elements for touch display navigation Moderate use of GUI elements (scrolls, tables, icons, etc.)



Examples (E. Tufte's Swiss Mountain Map video)

Swiss Mountain Map video from Edward Tufte's webpage <u>http://www.edwardtufte.com/bboard/q-and-a-fetch-msg?</u> <u>msg_id=0003vq</u>

