

Web Design in-the-small

Prototyping issues

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What is inside pages?

CONTENT

+

LINKS

+

ORIENTATION INFO

Design in the small

- Defining the data structure for the main content in the pages
- Defining the way links are represented
 - Labels
 - Icons
 - Previews of linked objects
- Defining the data structure for orientation info

Details about:

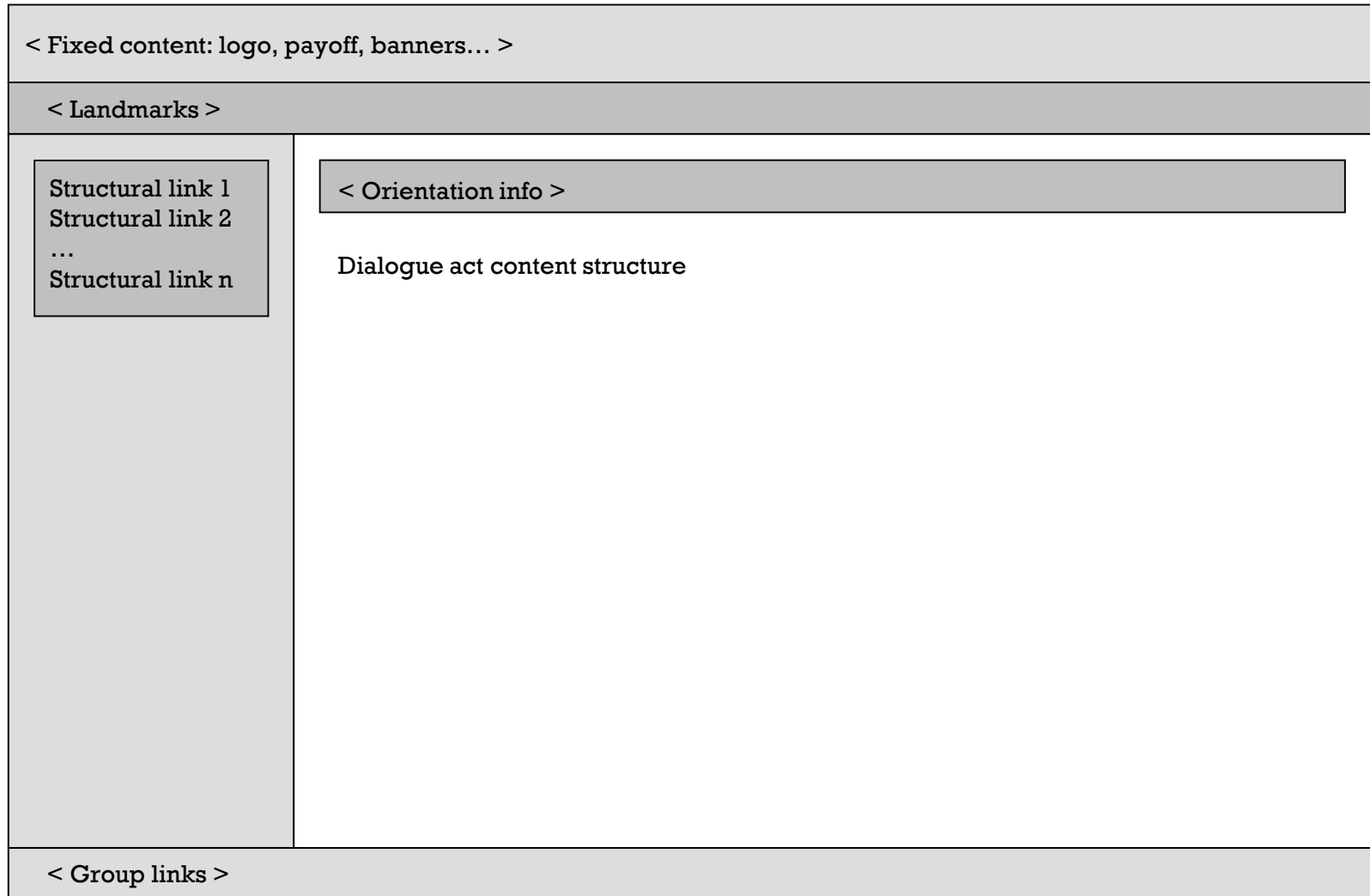
■ PAGE

- Topic Page
 - Entry Page
- Transition Page
- Introductory Page
- Home Page

■ LINK

- Structural link
- Transition Link
- Group Link
- Landmark

■ ORIENTATION INFO



SINGLE TOPIC: The Resort; Dialogue ACTS: Our area + how to get here

< Fixed content: logo, payoff, banners... >

< Landmarks HOME



Structural link

➤ Sourroundings

Title: The sorrroundings

Short textual description (100 words)

HOW TO GET HERE

Short textual description (100 words)

MAP: Image

Our events Our structures Special Offers Rooms Restaurants and Menus

Other Landmarks

< Kind of Topic name > - <Page title/ Dialogue act Name

< Fixed content: logo, payoff, banners... >

< Landmarks >

Structural link 1
Structural link 2
...
Structural link n

Transition link 1
Transition link 2
...
Transition link n

< Orientation info >

Dialogue act content structure

< Group links >

Page structure in the small for a Kind of Topic page



You are in one of the «Structures» of our Resort

➤ **Fotogallery**

4-5 Images

Title: max 30 characters

➤ **Events hosted here**

Description: Max 200 words

OUR SERVICES

➤ **Service Name
+ Thumbnail Image**

➤ **Service Name
+ Thumbnail Image**

UP to all Structures

Our events Our structures Special Offers Rooms Restaurants and Menus

Landmarks

Brera
Pinacoteca

Visit

Collection

Events

Education

Calendar

Support Us

Orientation Info

Large animated image

You are in «Paintings of the Period X

Structural links

➤ Provenance

➤ About the author

➤ Location: Room R (see map)

Title :

Author :

Date:

Object Type and material:

Dimension:

Inventory Num:

Description: Max 200 words

Group Links

NEXT / PREVIOUS Painting in Period X

Related Paintings in the same period

Related Paintings of the same author

Related Paintings of the same room

Transition links

(Multiple) group name

< Fixed content: logo, payoff, banners... >	
< Other Group links >	
	< Orientation info >
	< Group name>
	<Optional Introductory content >
	➤ Destination Page Preview + Group Link
	➤
	➤ Destination Page Preview + Group Link
< Landmarks >	

Page structure in the small for a the Introductory Page of a (Multiple) Group

Group “Periods for Painting”

See example in

<http://pinacotecabrera.org/en/collezioni/filter-collection/?filterby=periodi>

Landmarks



Visit	Collection	Events	Education	Calendar	Support Us
-------	------------	--------	-----------	----------	------------

Collection Title: The collection by Period
Image

*Collection Online: Filter collection by
Period/Era*

2-3 Images

Period 1

Link to Group «Paintings of Period 1>

.

.

.

2-3 Images

Period N

Link to Group «Paintings of Period N>

.

Orientation Info

Group Links

Group “Paintings in Period X”

See example in

<http://pinacotecabrera.org/en/collezioni/the-collection-online/?periodo=xv-secolo-d-c-en>

Landmarks



Visit	Collection	Events	Education	Calendar	Support Us
-------	------------	--------	-----------	----------	------------

Orientation Info

Collection Title: The collection by Period
Image

*Collection Online: Explore Paintings of
Period X*

Image
Title

Author

Link to Painting

.

.

.

Image

Title

Author

Link to Painting

Group Links

< Fixed content: logo, payoff, banners... >

< Landmarks >

Introductory content (optional)

< Orientation info >

- Destination Page Preview + Semantic link (to the target of the relationship, i.e., the pages for the related topics)>
- Destination Page Preview + Semantic link (to the target of the relationship, i.e., the pages for the related topics)>
- Destination Page Preview + Semantic link (to the target of the relationship, i.e., the pages for the related topics)>
- **Semantic link (to the source of the relationship)**

Landmarks



Visit	Collection	Events	Education	Calendar	Support Us
-------	------------	--------	-----------	----------	------------

You are in paintings of author «A»

Author «A»: works at Brera

Image

Title

Link to Painting

- .
- .
- .

Image

Title

Author

Link to Painting

Return to «A»

Orientation Info

Transition Links

Alternative representation of the in-the-small specifications

■ Using Tables

TOPIC/KIND OF TOPIC/ (MULTIPLE) GROUP NAME/ PAGE NAME						
LANDMARKS						
Landmark 1/label						Landmark N/Label
...						
Structural/Semantic/Group Links						
Structural/Semantic /Group Link 1/Label	Structural/Semantic /Group Link1/ Destination Preview (if needed)				Structural/Semantic /Group Link N/Label	Structural/Semantic /Group Link L/Destination Preview (if needed)
Main Content						
Attribute 1						Attribute M
Orientation Info						

TOPIC/KIND OF TOPIC/ (MULTIPLE) GROUP NAME/ PAGE NAME						
LANDMARKS						
Landmark 1/label						Landmark N/Label
...						
Structural/Semantic/Group Links						
Structural/Semantic/Group Link 1/Label	Structural/Semantic/Group Link 1/Destination Preview (if needed)				Structural/Semantic/Group Link N/Label	Structural/Semantic/Group Link L/Destination Preview (if needed)
Main Content						
Attribute 1						Attribute M
Orientation Info						

How to use the in-the-small specifications

- To create page layouts («wireframes»)
- Requirements for Front-End implementation
 - CSS definition – see future lessons
- Requirements for Back-end implementation
 - Design of the back-end Data Base – see future lessons

PROTOTYPING PROCESS



FINAL PRODUCT

Build using Prototyping Tools

Build using implementation tools/sw frameworks



Sketches

Low fidelity wireframes

High fidelity wireframes

Interactive mockup

Semi-functional Prototype/ Vertical

Semi-functional Prototype/ Horizontal

Functional Prototype



Used for requirements/design evaluation; promotion

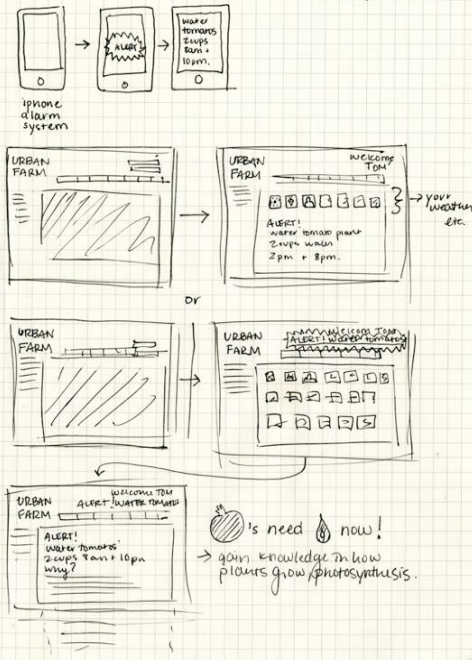
First step in the implementation process

Different professional profiles involved (designers....engineers)

Different technological tools

Sketches

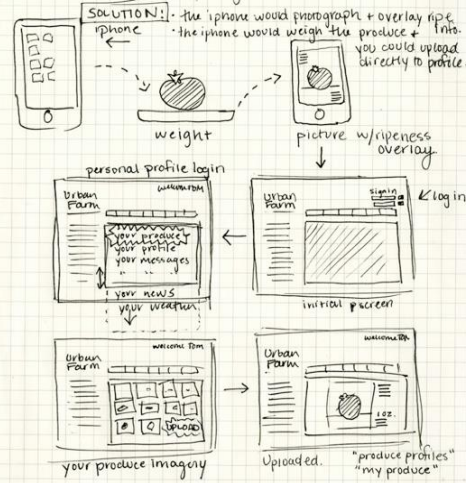

SOLUTION: An alert system for your iPhone, an daily updates on-line.



NEED: to know if a piece of produce is ripe / how much it weighs.

SOLUTION:

- the iPhone would photograph + overlay ripe info.
- the iPhone would weigh the produce + you could upload directly to profile



- Sometimes called “Paper based Prototyping”
- Hand drafted examples of the interface (and possibly the flow of interaction)
- You can use Sketches for your design in the small

Low fidelity / No interaction

Low/High Fidelity Wireframes

Fidelity: Distance from the final product

Low fidelity wireframes

- also known as **digital sketches** or **screen blueprints**
- focus on “**what** a screen **offers**, not what it looks like”
- shows the basic visual **organization** of contents, navigation and interaction elements on the “screen”

High fidelity wireframes

- define the advanced “look-and-feel” of the interface
- show the visual organization of contents, navigation and interaction elements on the “screen” and define **all their visual properties**

Low Fidelity Wireframe

<div>Site Logo</div>		<div>Listen And Contact Language</div>	
		<div><input type="text"/></div> <div>Search</div>	
<div>TouristsStudentsBusinessmenOfficials</div>			
<div>About the city</div> <div>Government</div> <div>Commerce & Industry</div> <div>Economy</div> <div>International Cooperation</div> <div>Education</div> <div>Culture</div> <div>Holidays</div> <div>Social Activities</div> <div>Immigration</div> <div>Accommodation</div> <div>Mark</div> <div>Media</div> <div>Emergency & Rescue Services</div>	<div>Image</div>	<div>News</div> <div>Events</div> <div>Facilities</div> <div>Map</div> <div>Pictures/Videos</div>	
	<div>Welcome Note</div>	<div>External Links</div>	

Low Fidelity Wireframe

(Multiple) group name

< Fixed content: logo, payoff, banners... >

< Other Group links >

< Orientation info >

< Group name>

<Optional Introductory content >

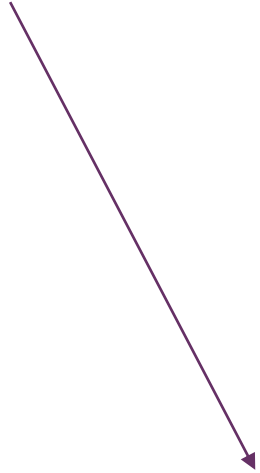
➤ Destination Page Preview + Group Link



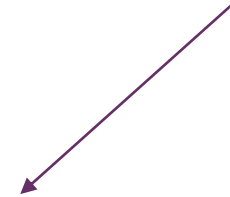
➤ Destination Page Preview + Group Link

< Landmarks >

High Fidelity Wireframe



Medium Fidelity Wireframe



Interactive mock-up

A set of interactive “screen shots” that:

- Convey the «look and feel» of the interface and its main dynamic features
- Enables to perform (examples of) **interaction** i.e. navigation

Prototype

A system that provides part of the functionality of the final system
Implemented using (at least in part) the **FINAL technology**

- **Vertical Prototype:** a SUBSET of FULLY implemented features & functions
- **Horizontal prototype** = a COMPLETE SET of PARZIALY IMPLEMENTED features & functions (e.g., omitting “background aspects such as ” DB connection”)
- **Functional prototype:** provides **all** the functionality of the final product; needs a further step of engineering before final deployment

The good and the bad

Paper-based prototyping	Low-Fidelity Wireframes	High-Fidelity Wireframes	Interactive Mock-up	Functional prototype
PROS Quick and dirty Easy to do Fast feedback Very inclusive CONS Might be confused Hard to share	PROS Good for defining content and navigation structures, and evaluating them among design experts CONS No interactivity Limited specification of visual layout properties Enabling preliminary user testing only on structural aspects	PROS Detailed visual specs Good for defining and explain/validating content structure & LAYOUT CONS No interactivity Enabling preliminary user testing on lay-out and content aspects	PROS Good to explain BEHAVIORS and lively demonstrate scenarios Good for preliminary testing of navigation features CONS Time-consuming Development for a throw-away object	PROS Good for UX evaluation and technical testing VERTICAL: good for in- depth testing of tech features HORIZONTAL: good for full-sized UX evaluation CONS Requires software know-how VERTICAL: does not provides the full picture for the UX HORIZONTAL: technical problems of full-sized vertical functionality may not be detected

Mockuping-Prototyping Tools

See also <https://www.cooper.com/prototyping-tools>

NAME	RUNS ON	PROTOTYPE FOR	OUTPUT	GESTURES	TRANSITIONS	DESIGN	TRIAL	PRICING
Antetype	OS X	Android, iOS, Web	HTML, iOS App Player	X	X	✓	30 days	\$189.99
App Cooker	iPad	iOS	PDF, App Player	✓	✓	✓	No	\$19.99
Avocado	OS X	Android, iOS	Desktop	✓	✓	X	Unlimited	Free
Axure	OS X, Windows	Any	HTML, PDF	X	✓	✓	30 days	From \$289
Briefs	OS X	iOS	App Player	X	✓	✓	Feature limited	\$199
Codiga Web	Web	Mobile	HTML	✓	X	✓	Feature limited	From \$16/mo.
Codiga Desktop	OS X, Windows	Mobile	HTML	✓	X	✓	7 days	From \$79
Concept.ly	Web	iPad, iPhone, Web	HTML	X	X	X	No	From \$0/mo.
Evolus Pencil	Linux, OS X, Windows	Any	HTML, PDF	X	X	✓	Unlimited	Free
Flinto	Web	Android, iOS	HTML	X	✓	X	30 days	\$20/mo.
Fluid UI	Web	Any	HTML, App Player	✓	✓	✓	Project limited	From \$12/mo.
Form	OS X	iOS	App Player	✓	✓	X	Unlimited	Free
Framer	OS X	Android, iOS	HTML	✓	✓	X	14 days	\$79.99
Framework7	Any (HTML)	iOS	HTML	✓	✓	✓	Unlimited	Free
Hotgloo	Web	Any	PDF	X	X	✓	15 days	From £15/mo.
Indigo Studio	OS X, Windows	Any	HTML	✓	✓	✓	30 days	From \$1,495
InVision	Web	Android, iOS, Web	HTML	✓	✓	X	No	From \$0/mo.
Justinmind	OS X, Windows	Android, iOS, Web	HTML, App Player	✓	✓	✓	30 days	From \$29/mo.
Marvel	Web	Any	HTML	✓	✓	X	Unlimited	Free
Marvel Apps	Android, iOS	Android, iOS	HTML, App Player	X	✓	X	Unlimited	Free
Mockups	Web	Any	HTML, PDF	X	X	✓	Project limited	From \$9/mo.
Origami	OS X	Android, iOS	Desktop	✓	✓	X	Unlimited	Free
Pidoco	Web	Any	HTML, PDF	✓	✓	✓	31 days	From \$12/mo.
Pixate	Web	Android, iOS	App Player	✓	X	X	No	From \$0/mo.
POP	Android, iOS, WP	Android, iOS, WP	HTML, App Player	✓	✓	X	Project limited	From \$10/mo.
Proto.io	Web	Any	HTML, PDF, App Player	✓	✓	✓	15 days	From \$29/mo.
Protoshare	Web	Any	HTML	X	X	✓	30 days	From \$29/mo.
Prott	OS X, Web, Windows	Any	HTML	✓	✓	X	Project limited	From \$12/mo.
Prott App	iOS	iOS	HTML, App Player	✓	✓	X	Unlimited	Free
Ratchet	Any (HTML)	Android, iOS	HTML	X	✓	✓	Unlimited	Free
Solidify	Web	Any	HTML	X	✓	X	30 days	From \$19/mo.
UXPin	Web	Any	HTML, PDF	X	✓	✓	30 days	From \$15/mo.
Weld	Web	Any	HTML	X	✓	✓	No	From \$0/mo.

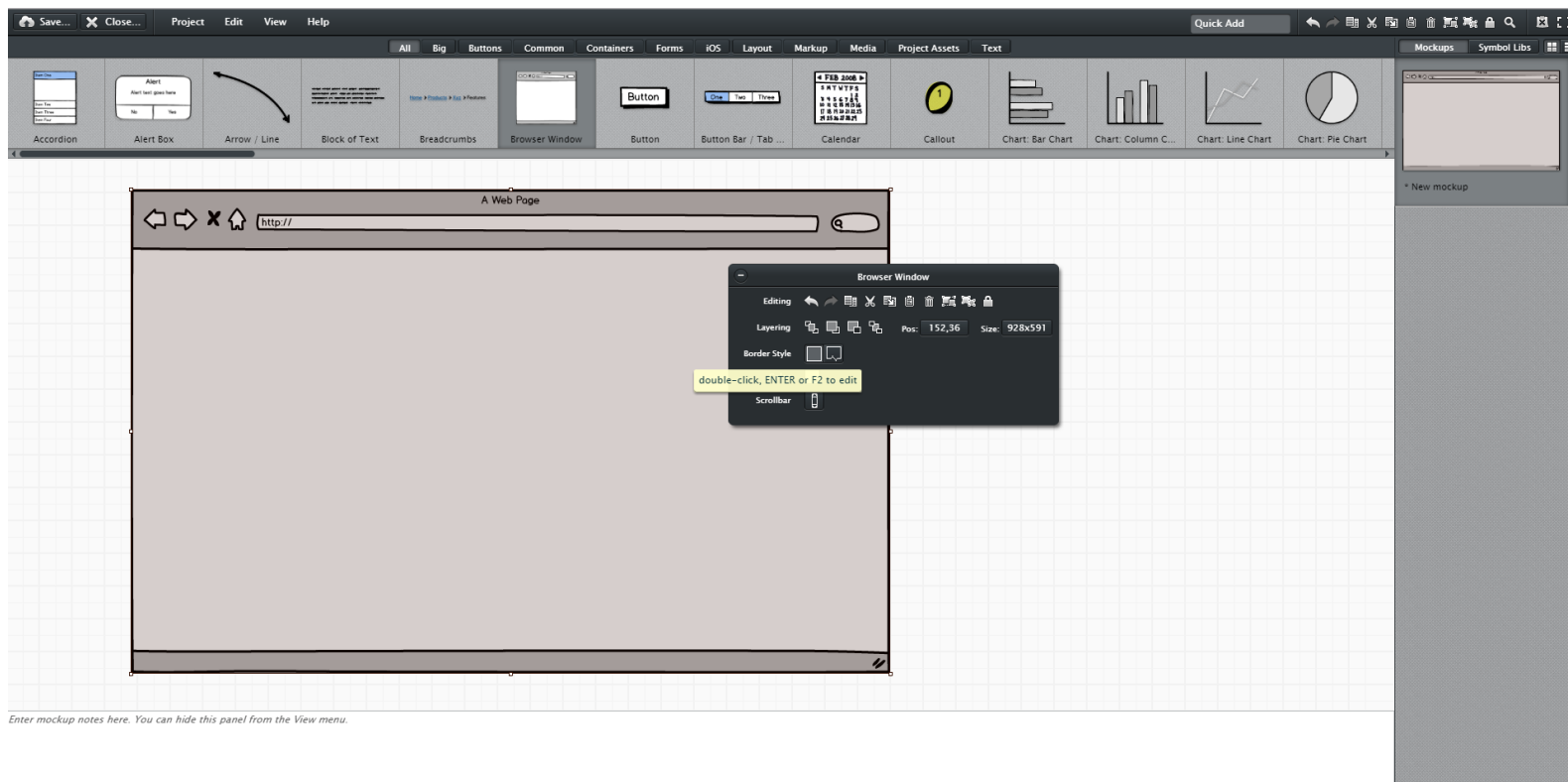
Mockupping/Prototyping Tools: what do they have in common

- Template specific for different devices and platforms
- Drag-and-drop elements to compose pages
- Export project in different formats (Pdf, Png,..)
- Navigate among the project's pages
- Share project with client
- Collect feedback and annotation
- Add tasks for project members

Examples of mock-upping tools

Balsamiq:

(<https://balsamiq.com/>)



Balsamiq:

(<https://balsamiq.com/>)

Pro

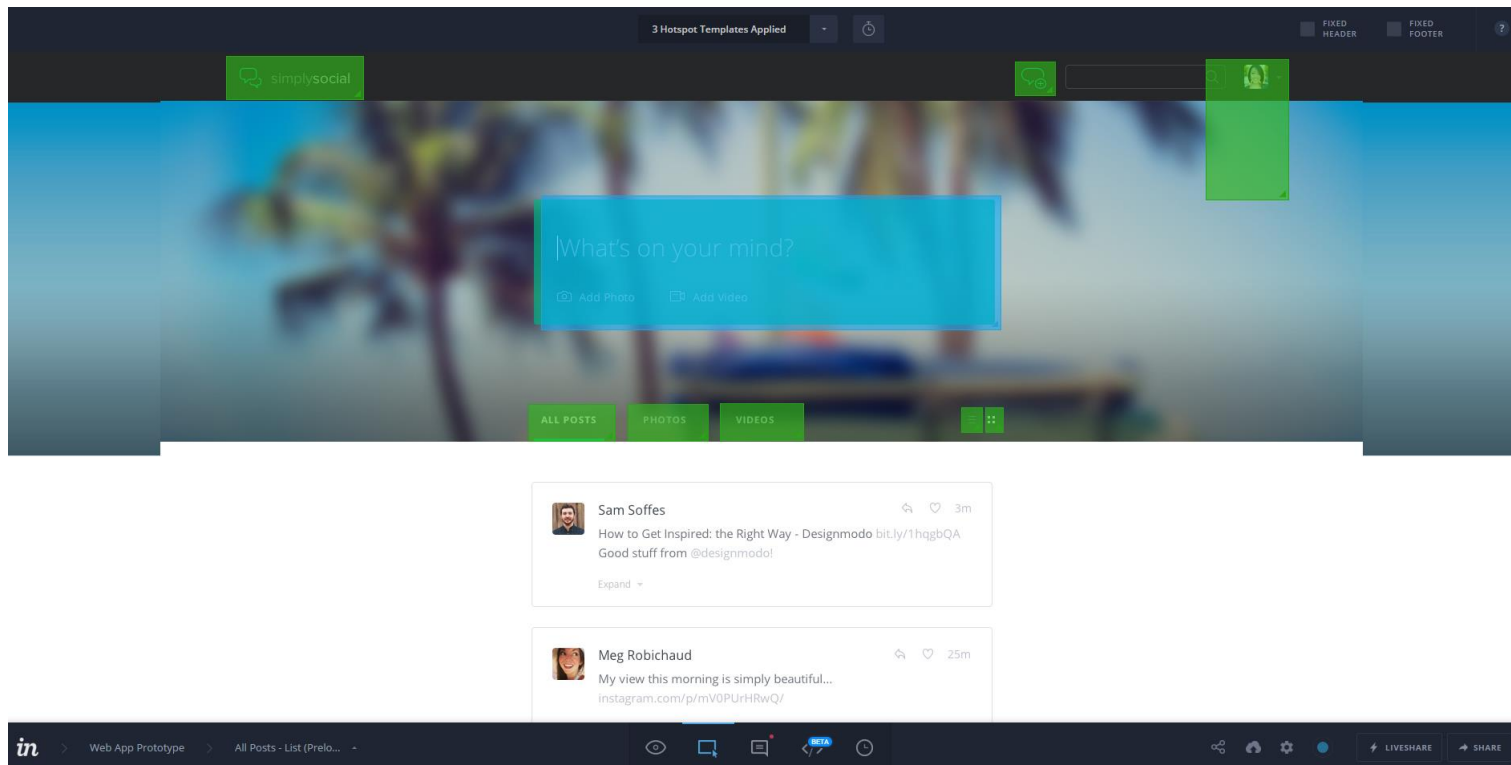
- Easy to use
- A big set of pre-defined elements
- Import/Export functions
- Interactive pdf downloadable
- Collaborative working
- Web editor + Desktop app

Con

- Free-trial: 30 days

InVision:

(<https://www.invisionapp.com/>)



InVision:

(<https://www.invisionapp.com/>)

Pro:

- Easy to use (drag and drop to add screens and create hotspot)
- Sharing and commenting system for collecting feedback
- Support for mobile/touch gestures
- Workflow + Map visualization
- Web editor

Con:

- Only good for working with **existing mocks**; No features for creating or modifying elements in the tool
- Interactivity limited to hotspots or timeouts for moving between screens

What do you have to do in your «Design and Front end» project

Taking into account the general requirements of the projects:

1. Create the **C-IDM** schema, **L-IDM** schema, and **P-IDM schema** (be consistent!)
2. Create **in-the-small design specifications** (as hand-drafted “**sketches**” or “**low-fidelity**” wireframes) CONSISTENT with IDM specifications
3. Create a vertical **prototype** that enables to perform the main navigation steps (be consistent with the IDM schema and in-the-small specifications!)
4. **Evaluate** you prototype with a sample of users

INCLUDE REALISTIC CONTENT IN YOU PROTOTYPE!

Project Topic

- The web site for a center devoted to offer assistance and therapeutic intervention to children and/or young adults with cognitive disability

Examples:

<http://labilita.org/>

<http://www.benedettadintino.it/>

Find others!