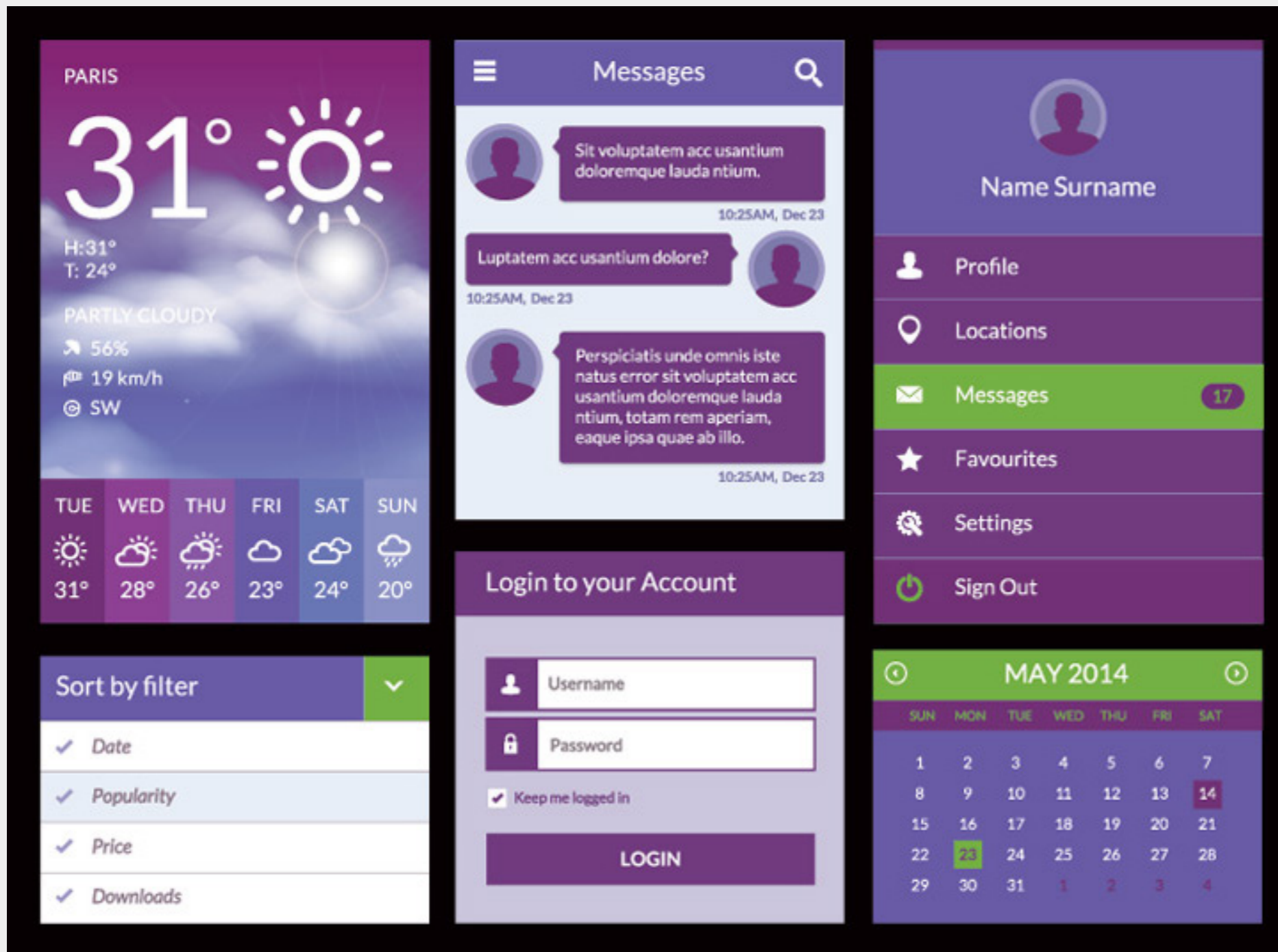


# **HUMAN COMPUTER INTERACTION**

**PART 4**  
**HIGH-FIDELITY**  
**PROTOTYPING**

# **HIGH-FIDELITY PROTOTYPE**



**shows a lot more detail**

**shows more functionality**

**shows how real UI elements might look like**

# **PRINCIPLES OF USER INTERFACES**

**DISCOVERABILITY**

**user is able determine what he can and cannot do**

**user should not get lost**

**AFFORDANCE**



**possible interactions between user x interface**  
**affordance might differ between different cultures**  
**x antiaffordance (disabled btns, hiding input fields)**

**FEEDBACK**

**full (after an action) x continuous (state of interface)**  
**eg. label 'Successful' after completing order, completing input field after selecting a date in datepicker**

**SIGNIFIERS**

**indicators on interface elements which shows their  
behaviour/actions**

**very often comparable to real life (bookmark, files  
and folders)**

# CONSTRAINTS

**limitations for users to be able to take an action**

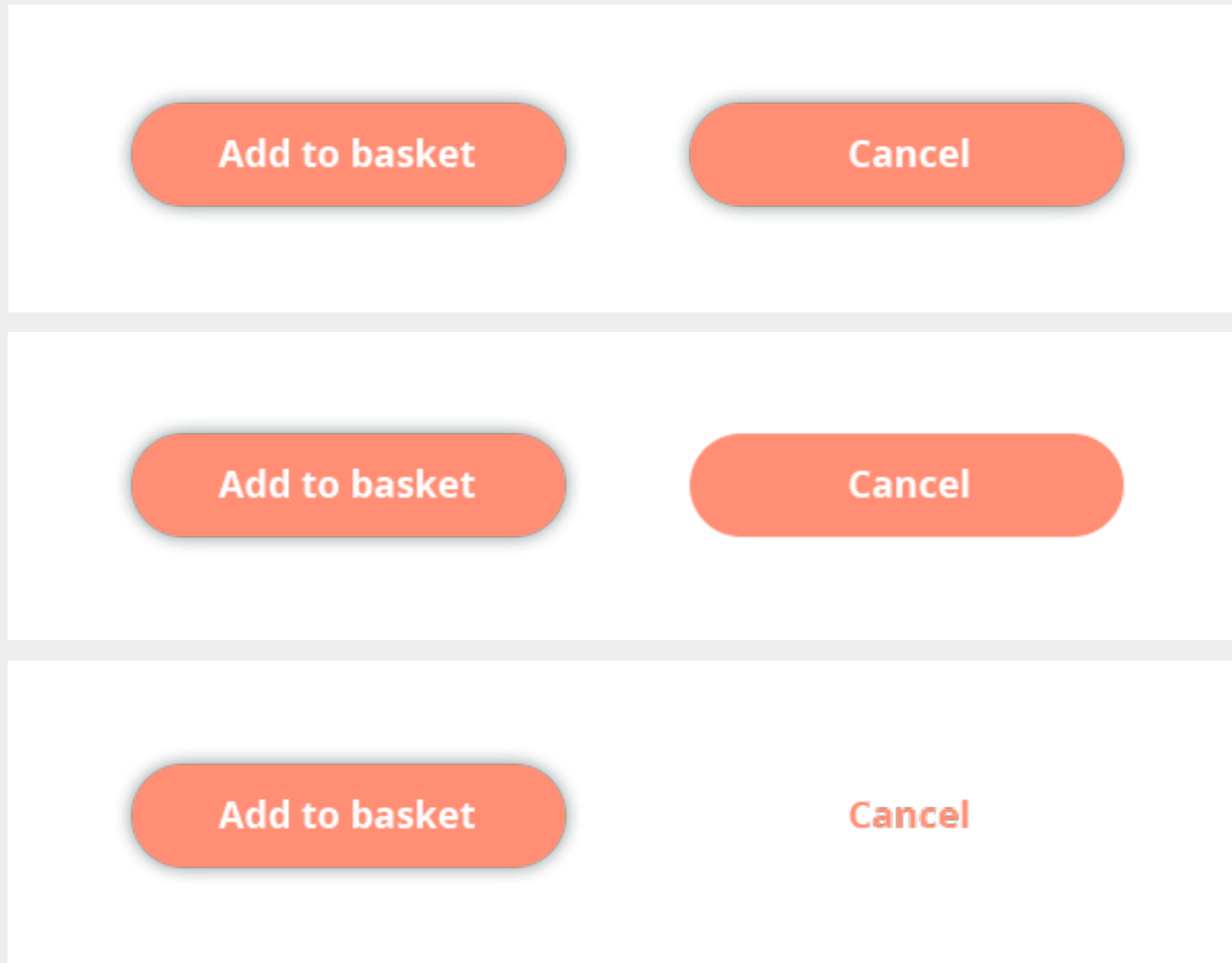
**Interlocks x Lock-Ins x Lock-Outs**

**CRAP!**

**Contrast Repetition Alignment Proximity**



**CONTRAST**



**elements which have different meaning/purpose should not look the same**

**contrasts are attractive, help people get oriented**

**it's not just color contrasts**

Volksabstimmung und Großdeutscher Reichstag

Stimmzettel

Bist Du mit der am 13. März 1938 vollzogenen

**Wiedervereinigung Österreichs mit dem Deutschen Reich**

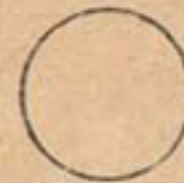
einverstanden und stimmst Du für die Liste unseres Führers

**Adolf Hitler?**

Ja



Nein



**REPETITION**

**repeat visual elements through whole app**

**people should recognize your app thanks to uniform design**

**colors, shapes, fonts, structure...**

# **ALIGNMENT**

First Name	<input type="text" value="sara"/>	Last Name	<input type="text" value="vus"/>	Personal Number	<input type="text" value="7687"/>
Gender	<input checked="" type="radio"/> Male <input type="radio"/> Female	Date Of Birth	<input type="text" value="3/15/2013"/>		
Responsible Person	<input type="text" value="Thomas Prakash"/>				
Address	<input type="text" value="qwrsfsdf sdfsjdf"/>	City	<input type="text" value="hkjh"/>	Postal Number	<input type="text" value="87878"/>
State	<input type="text"/>	Country	<input type="text" value="jhghjg"/>		
List of Comments	<input type="text" value="etert"/>	Comment	<input type="text" value="tert"/>		
Home Phone	<input type="text" value="etertre"/>	Mobile Phone	<input type="text" value="+97 234"/>		
Password / Id	<input type="text"/>	<input checked="" type="checkbox"/> SMS	<input checked="" type="checkbox"/> ThemeNightSMS		
Email	<input type="text" value="sdfiusdfi@jjdsjd.in"/>	Alternate Email	<input type="text" value="erterte"/>		
Relative	<input type="text" value="ertert"/>	<input checked="" type="checkbox"/> OP Short Notice			
Warning Message	<input type="text" value="jtyhytyhth"/>	CAVE	<input type="text" value="fhrh"/>		
					<input type="button" value="Save"/>

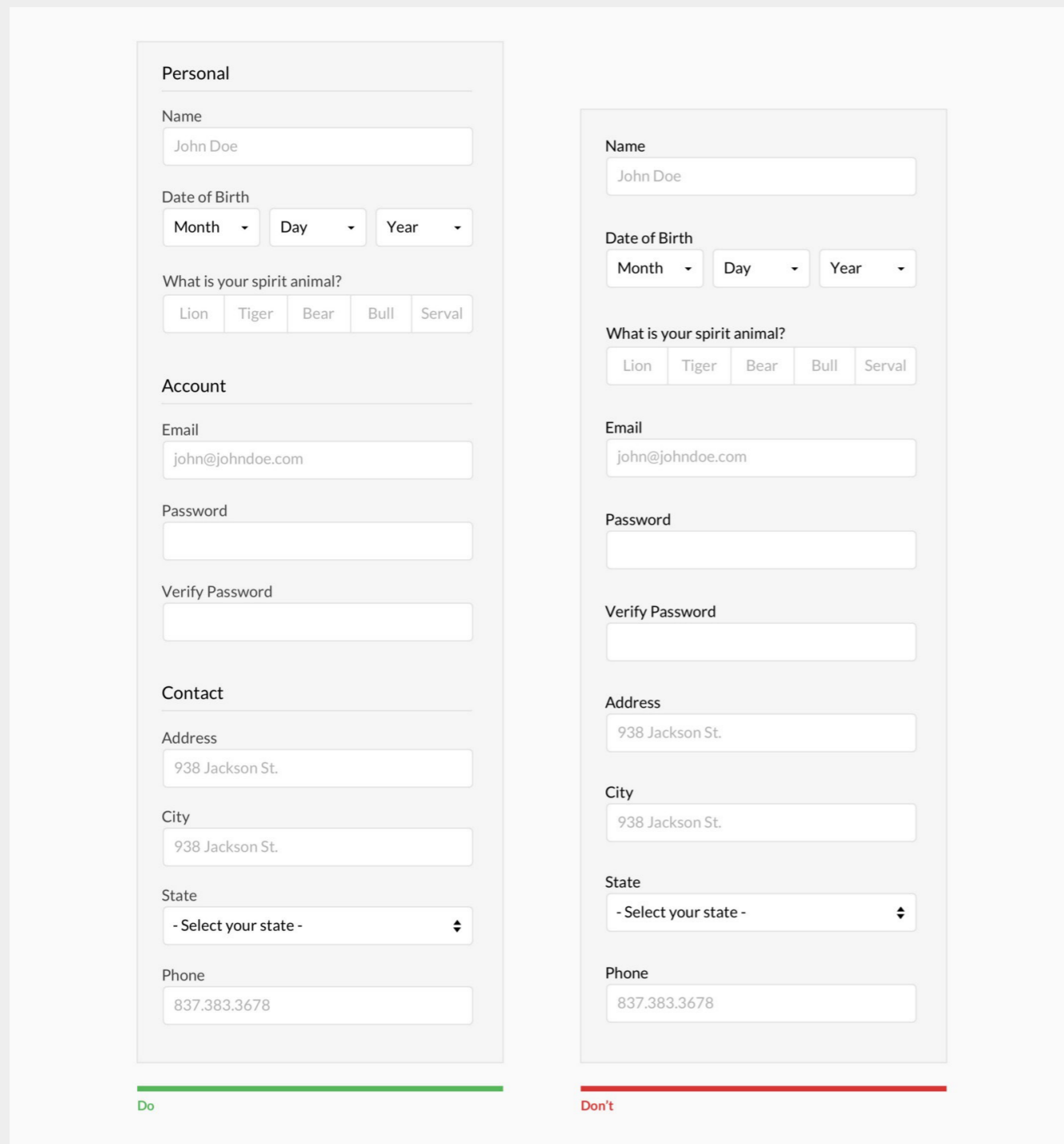
**each element should have visual connection to another one**

**elements should not be placed randomly**

**leave whitespace white**

**PROXIMITY**





**elements which are related should form a visible group**

**elements which are not related should be separated**



[www.adobe.com/products/xd.html](http://www.adobe.com/products/xd.html)

[www.figma.com](http://www.figma.com)

[www.sketchapp.com](http://www.sketchapp.com)

[www.invisionapp.com](http://www.invisionapp.com)

[www.proto.io](http://www.proto.io)

**NOW!**

- 1. find 4 websites containing some of the principles we have mentioned in today's lecture and describe the principles into a text document**
- 2. test your prototypes with classmates**
- 3. check software for your homework**

**we will check all required parts of your homework  
you'll get the points**

**HOMEWORK!**

**using Adobe XD (or your favorite software) prepare high-fidelity prototype of your semestral project**

**upload your prototype or a link to Homework Vaults until the next seminar**