

Introduction to User Experience Design

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22.05.2014

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Who am I?

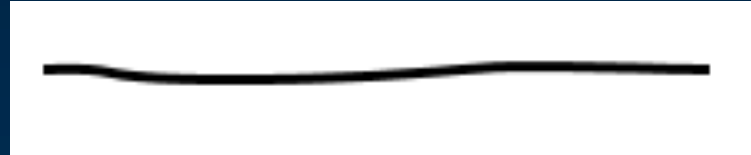
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 - Informatics at Sofia University
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Are You Good at Drawing?

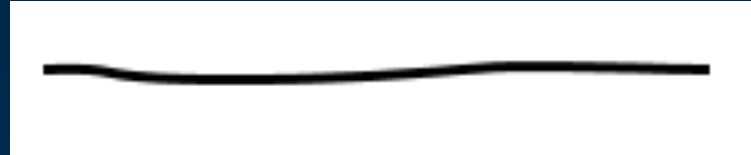
Are You Good at Drawing?

- Can you do this:

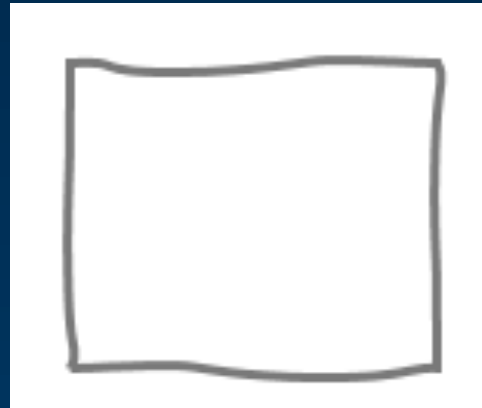


Are You Good at Drawing?

- Can you do this:

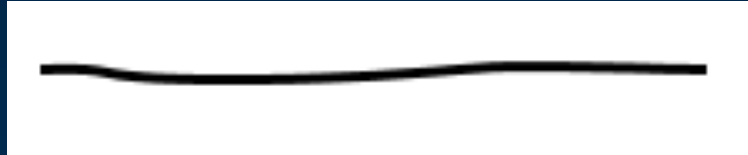


- And this:

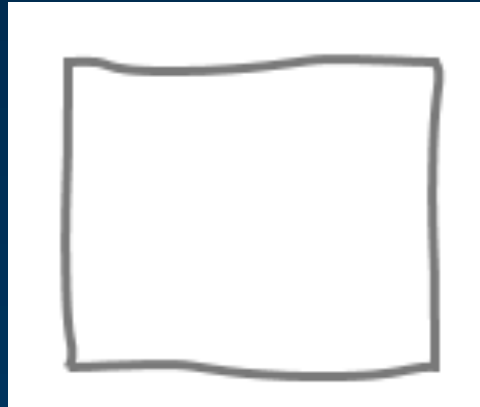


Are You Good at Drawing?

- Can you do this:



- And this:



- And how about that:



What Kind of OS Do You Use?

What Kind of OS Do You Use?

- Owning a MacBook does not make you a better designer



What Kind of OS Do You Use?

- Owning a MacBook does not make you a better designer



- Using Linux does not make you a worse one





A red cooking pot with a stainless steel lid is centered on a white surface. The lid has a stainless steel knob. The pot is casting a shadow to the left. A green rectangular border is overlaid on the pot, containing the text "You Had One Job!".

You Had One Job!



Fac Order#	99004234	New	99031927	Report Selection	OCB	SSF View	Dupe Load	View Invent	Routing Sheet	Print Bill	Call Log	Cancelled
Caller	JOE	Quote	0	Mode	From SC	To SC	Air	ADT	ADT	Find CAX#		
Phn		Unknown Shipper:		Tariff Service	CAXR9-00-01		2D	D	194	CAX#:	100670861	
Terms	<input checked="" type="radio"/> Prepaid	<input type="radio"/> Collect	<input type="radio"/> 3rd Party	From	YVR	AA				Shpr Ref:		
Cust:	Hi Fo Holdings, Ltd.	HIFO		To	YYZ	AE				B/L:		
Inv:	Hi Fo Holdings, Ltd.	HIFO		Deliver By	06-12-02	17:00				PO#:		
At:	Hi Fo Holdings, Ltd.	HIFO		Clock Stop						GBL Num:		
Addr:	1125		STREET SUITE 1200	Miles	0	P/U Miles	0	Del Miles	0	Cons Ref:		
CSPC	VANCOUVER	BC	V6Z2K8	Broker / Customs Agent						Billing Ref:		
Ph:				Broker:						Ref 5:		
Cont:				Value:	0.00	In:	USD			MasterID:	0	
Appointment: D:	06-10-02	F:		Notified:	<input type="checkbox"/>					MAWB:		
Cogs:	CANADIAN HARDWARE & H			Verbal Pod	<input type="checkbox"/>					Statement:	0	
Addr:			AVENUE SUITE 101	Notify on POD	<input type="checkbox"/>					Hold P/U:	<input type="checkbox"/>	
CSPC	SCARBOROUGH	ON	M1B5M4	Hazmat:	<input type="checkbox"/>					Non-Freight:	<input type="checkbox"/>	
Ph:										Manifest Hold:	<input checked="" type="checkbox"/>	
Cont:										Print Hold:	<input checked="" type="checkbox"/>	
Appointment: D:		F:								Rate		
Fee	\$0.00	Fee Collect	<input type="checkbox"/>									
Driver Collect	<input type="checkbox"/>											

Charges:	761.50
Discount:	0%
SubTotal:	761.50
Accessorial:	40.00
DV:	0
FSC: CAX 2.50%	38.08
Total:	839.58
Balance:	839.58

Addend
 Closed
 Post

Non-Freight
 Manifest Hold
 Print Hold

Rate

SAVED



SPEC DISP

CUSTOMER

INVT

 🔊

Google Search

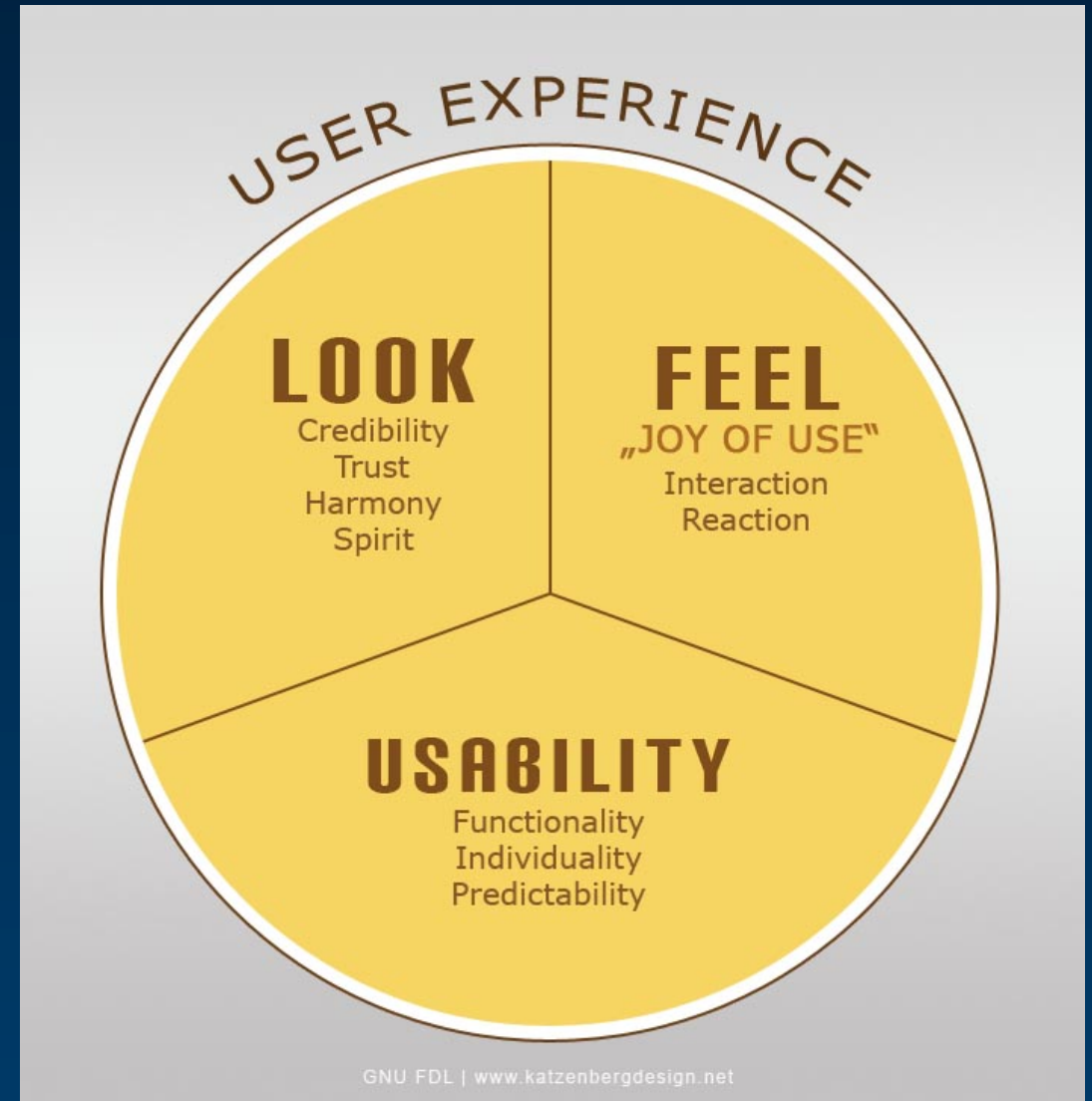
I'm Feeling Lucky

Google.bg offered in: [български](#)

User Experience Matters

What is User Experience

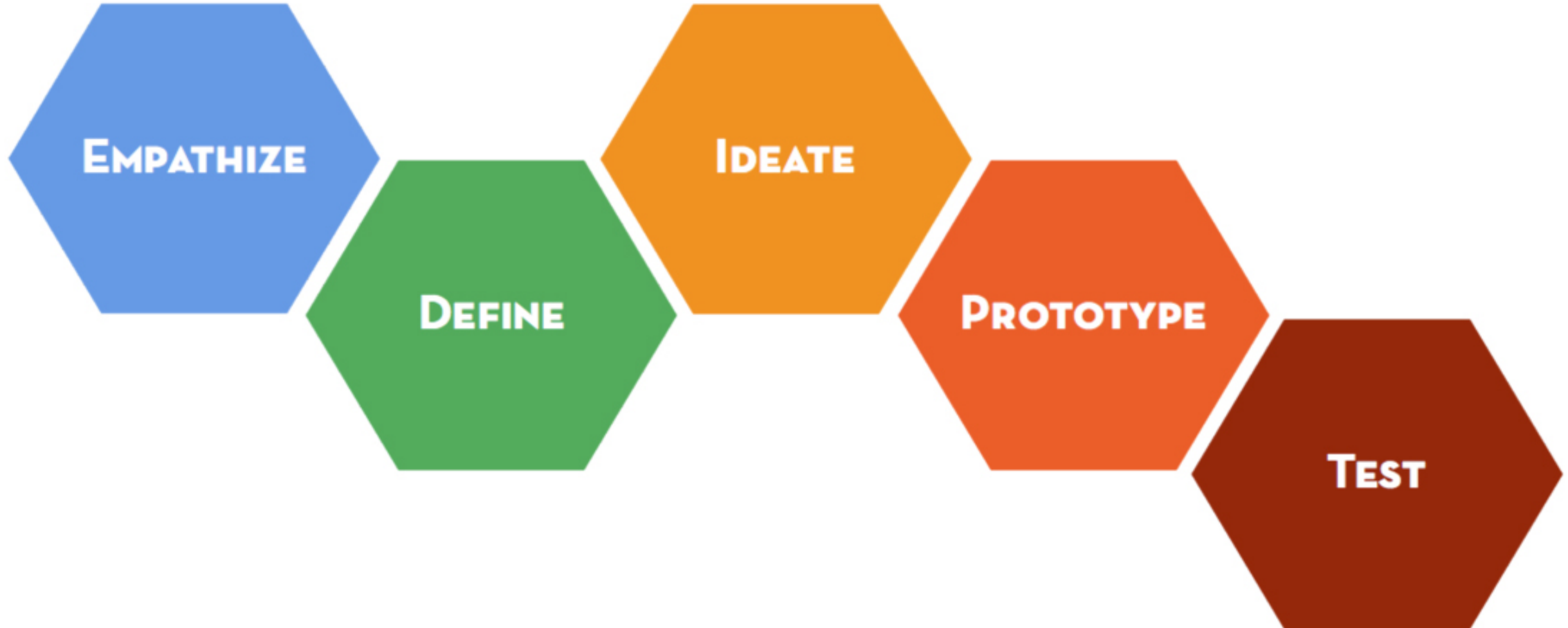
A person's perceptions and responses that result from the use or anticipated use of a product, system, or service



User Experience Disciplines

- User Researcher
- Interaction Designer
- Visual Designer

The Process



Research Phase

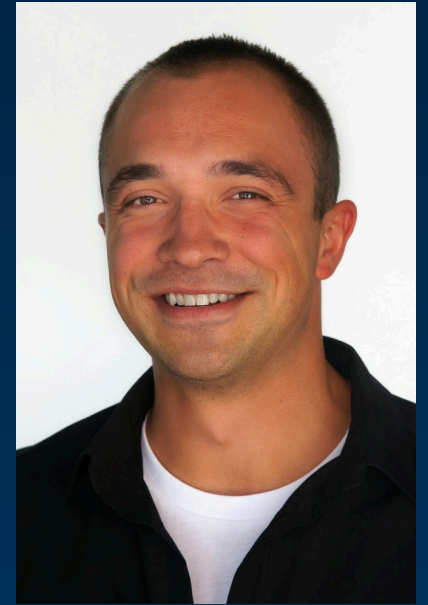
- Provide qualitative data about the users:
 - Goals
 - Motivations
 - Behaviors and attitudes
 - Use of existing products
 - Vocabulary
- Provide data about competition and market

Who to Research

- User interviews (Ethnographic interviews)
 - Interviewing
 - Observing
- Other people to interview:
 - Stakeholders
 - Subject matter experts
 - Customers

Research Phase Output - Persona

- Demographics
 - Deyan, 26 years old
 - Lives in Sofia
 - Not married
- Goals, motivations, preferences
 - Wants something for dinner
 - Can cook a few things
 - Doesn't mind doing the dishes.
- Stories
 - Turns on the stereo loud in the other room, so he can hear it in the kitchen



Research Phase Output - Models

- Models
 - Implementation
 - Designer
 - User



Research Phase Output - Models

- Models
 - Implementation
 - Designer
 - User



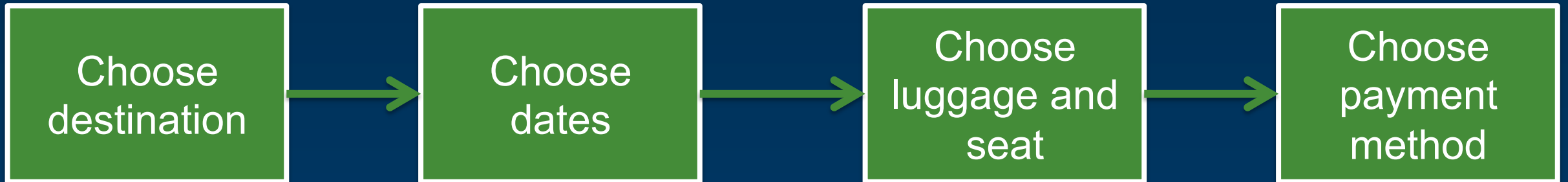
- Example – Thermostat
 - if you quickly want to heat up the oven to 200 degrees, how high will you put it in the beginning?

Prototyping

- Why prototype?
 - Immediately test a rough idea
 - Cheaper than development
 - Easier to tweak
- Types/Phases
 - Task flows
 - Paper prototype
 - High fidelity prototypes

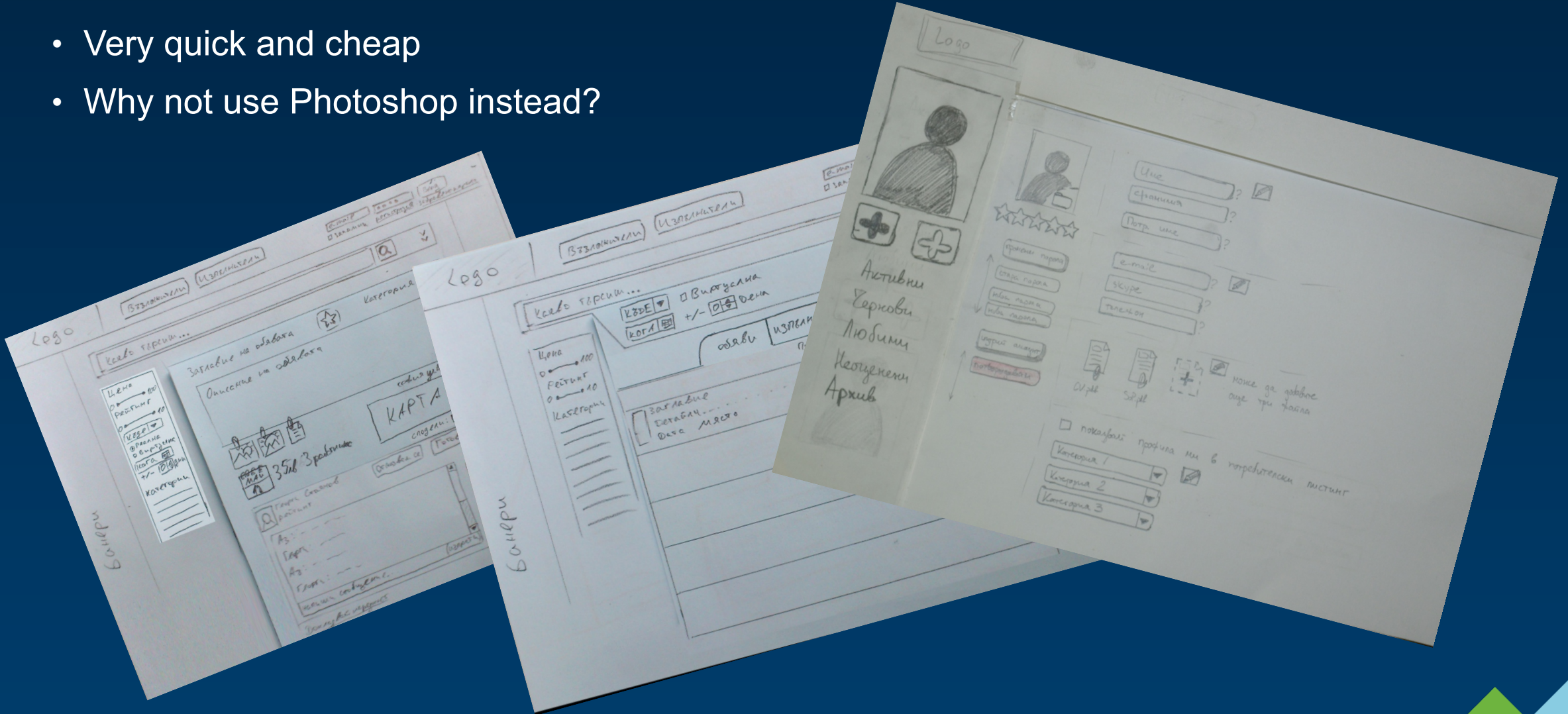
Task Flows

- Steps needed to achieve the goal
- Think about screens later



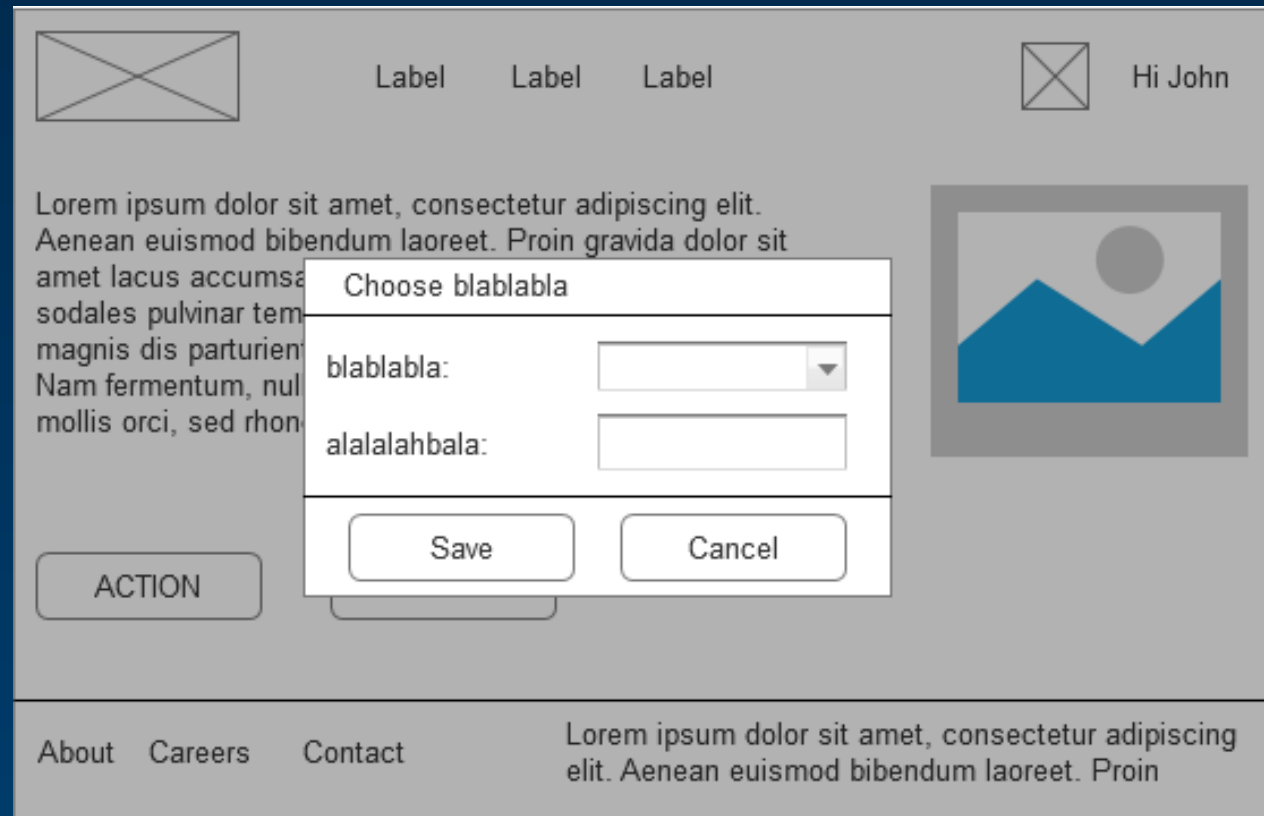
Paper Prototype

- Very quick and cheap
- Why not use Photoshop instead?



High Fidelity Prototypes

- Put the details to the test
- Clickable mockups (Axure RP, Omnigraffle)



Gestalt Laws of Perception

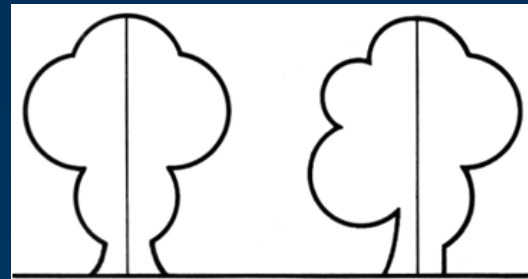
- Proximity



- Similarity



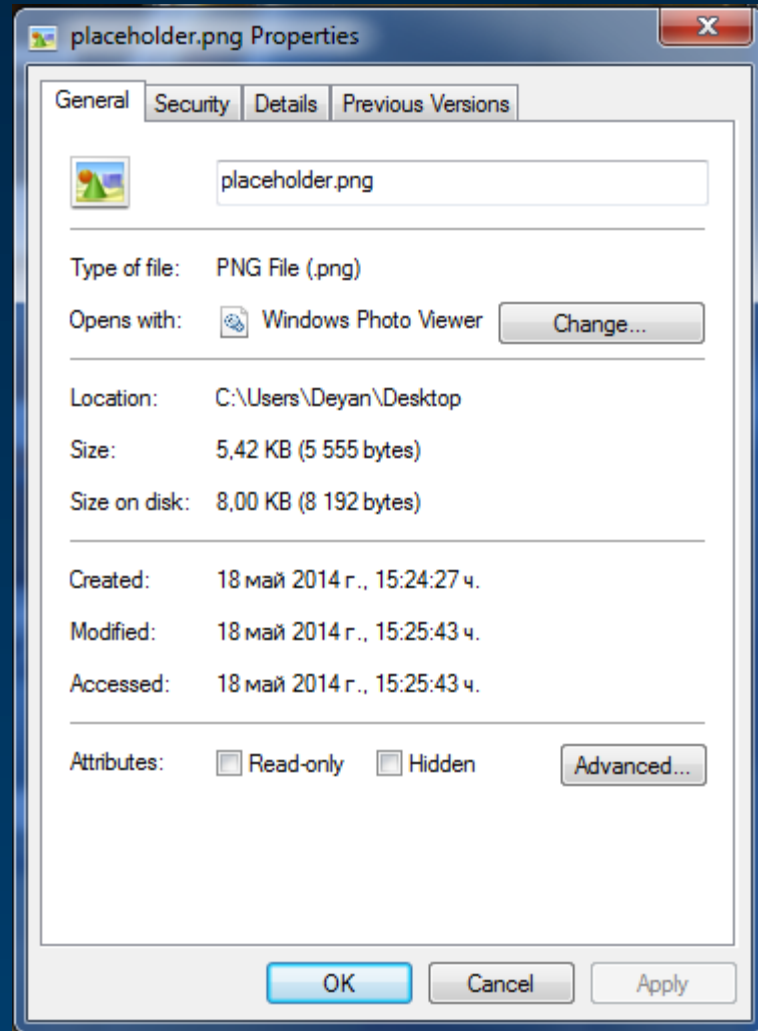
- Symmetry



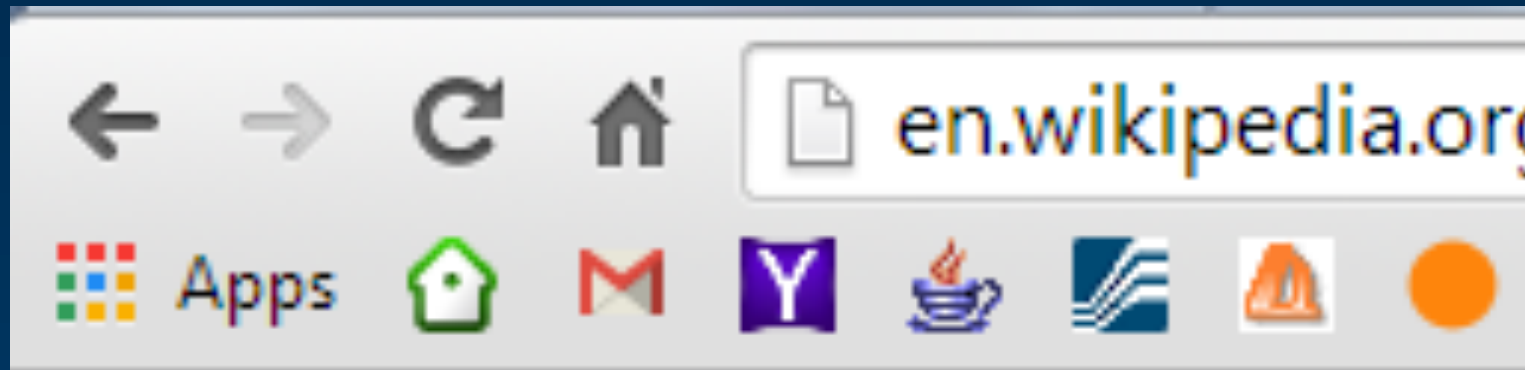
- Continuity



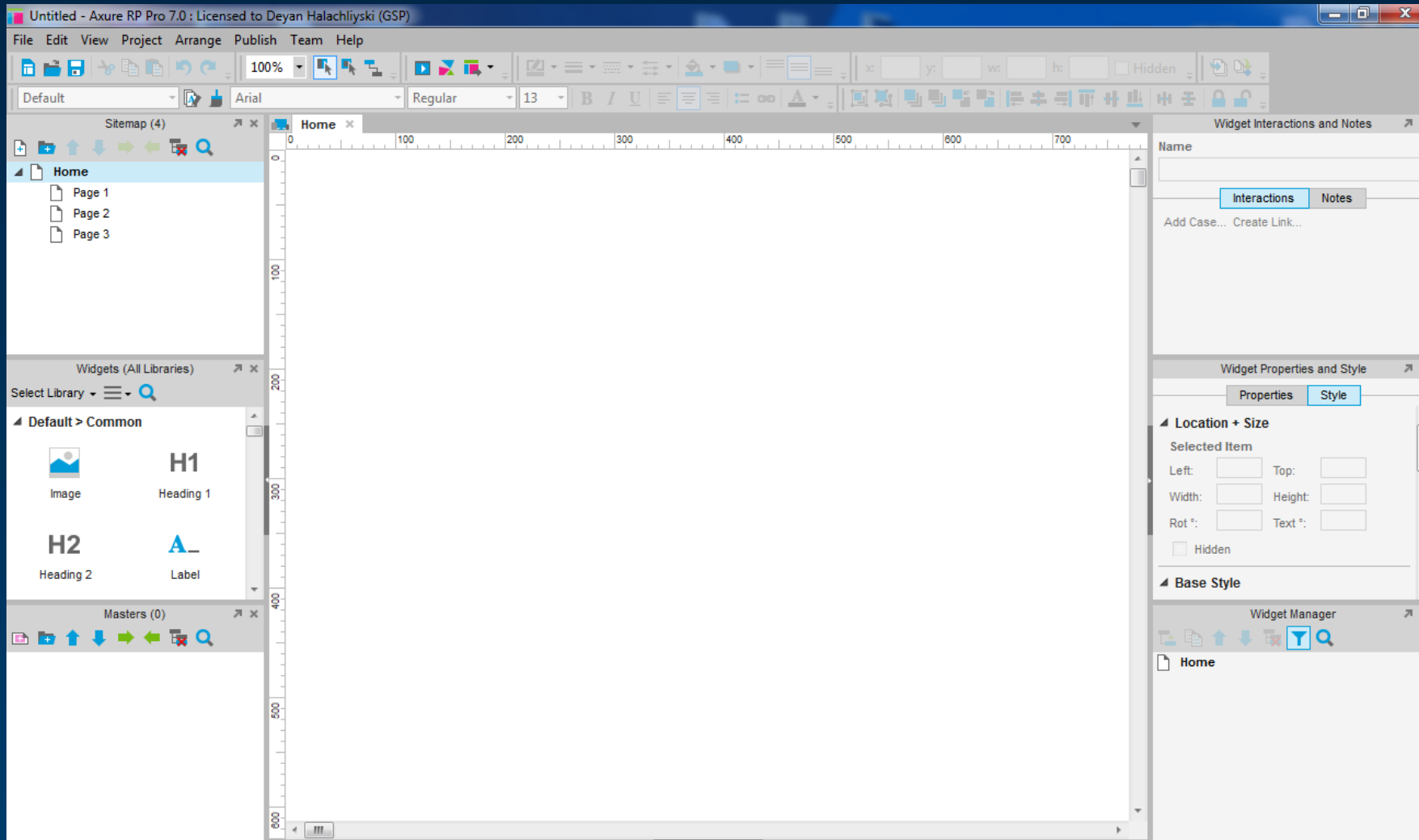
Gestalt Law of Proximity



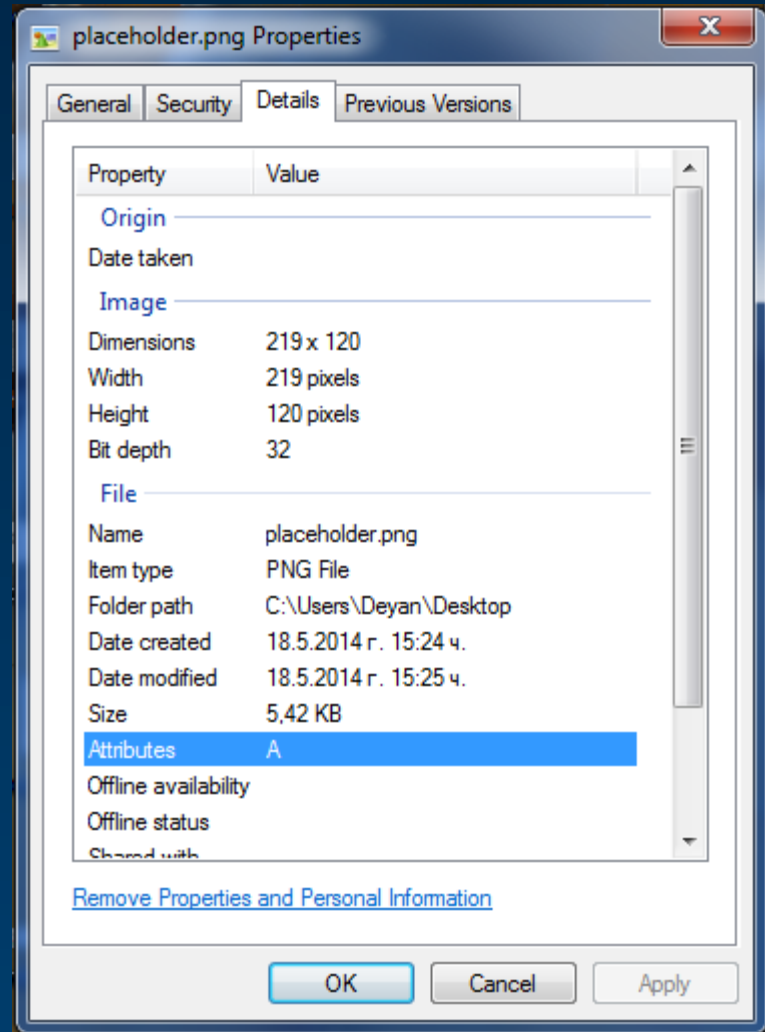
Gestalt Law of Similarity



Gestalt Law of Symmetry



Gestalt Law of Continuity



Usability Testing

- Does the system actually satisfy the user's needs
- Methods:
 - Silent observation
 - Think aloud
 - Heuristic evaluation

Heuristics

- Visibility of system status
- Match between the system and the real world
- User control and freedom
- Consistency and standards
- Error prevention
- Recognition rather than recall
- Flexibility and efficiency of use
- Aesthetics and minimalist design
- Help users recognize, diagnose, and recover from errors
- Help and documentation

Visibility of System Status

- The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.



The image shows a screenshot of a Facebook page for 'JIM CARREY MEME'. The page features a large cover photo with the text 'FACEBOOK PAGE!' overlaid. The profile picture is a small image of Jim Carrey. The page has 124,544 likes and 18,505 people talking about it. A red box highlights the interaction buttons: 'Liked', 'Following', 'Message', and a settings icon. Below the main content, there is a section for 'Community' with the text 'Go Like The Official Jim Carrey Meme'. A 'Photos' section shows a post titled 'AFTER SEEING #12' with 124k likes. The page is viewed by a user named 'Deyan'.

Match Between the System and the Real World

- The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

The screenshot displays the SoccerStand website interface. At the top, there is a navigation bar with buttons for 'REGISTRATION', 'LOGIN', and 'CONNECT WITH FACEBOOK'. Below this, a secondary navigation bar features sport categories: 'SOCCER', 'TENNIS', 'BASKETBALL', 'HOCKEY', 'HANDBALL', 'VOLLEYBALL', 'BASEBALL', 'AM. FOOTBALL', and 'OTHER'. The 'SOCCER' and 'AM. FOOTBALL' buttons are highlighted with red boxes. The main content area shows a match schedule for '18/05 Su'. It includes a table for 'GERMANY: Bundesliga - Relegation' and 'ITALY: Serie A'. The table lists match times, statuses (e.g., 'Half Time', 'Finished'), and scores (e.g., '0 - 1', '2 - 1').

Time	Status	Home Team	Score	Away Team	Actions
GERMANY: Bundesliga - Relegation					
18:00	Half Time	Greuther Furth	0 - 1	Hamburger	LIVE CENTRE, LIVE, +
ITALY: Serie A					
16:00	Finished	Catania	2 - 1	Atalanta	LIVE CENTRE, +
16:00	Finished	Genoa	1 - 0	AS Roma	LIVE CENTRE, +
16:00	Finished	Juventus	3 - 0	Cagliari	LIVE CENTRE, +
21:45		AC Milan	-	Sassuolo	LIVE CENTRE, LIVE, +
21:45		Chievo	-	Inter	LIVE CENTRE, LIVE, +
21:45		Fiorentina	-	Torino	LIVE CENTRE, LIVE, +
21:45		Lazio	-	Bologna	LIVE CENTRE, LIVE, +

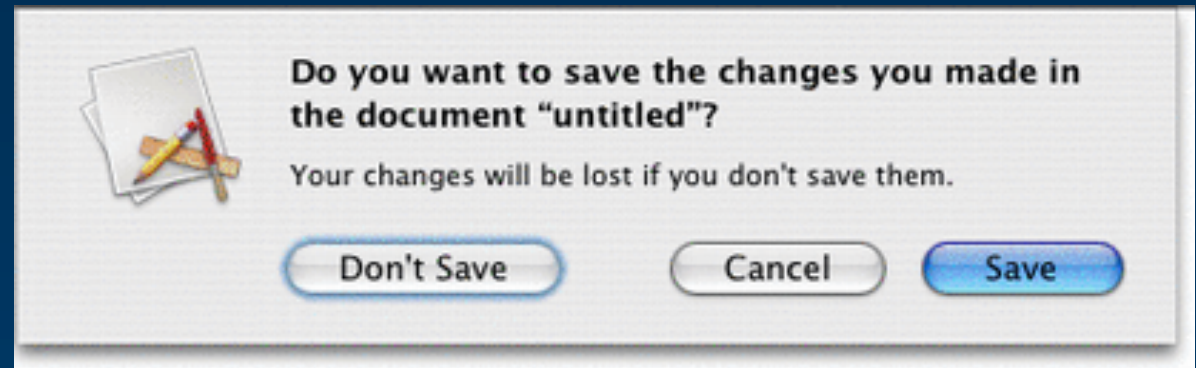
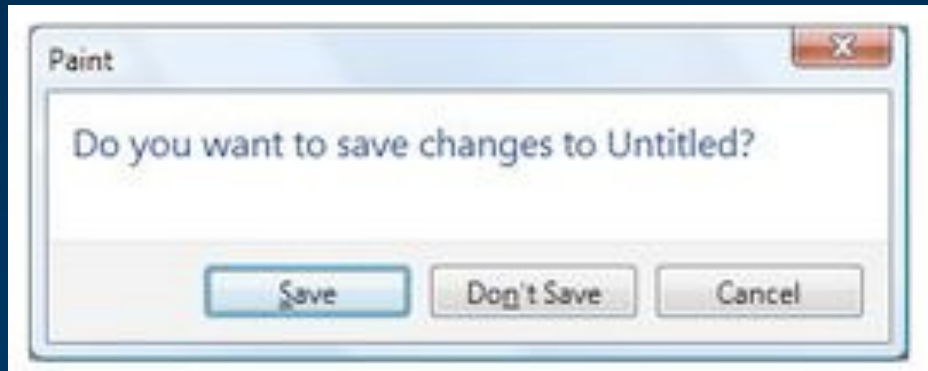
User Control and Freedom

- Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.



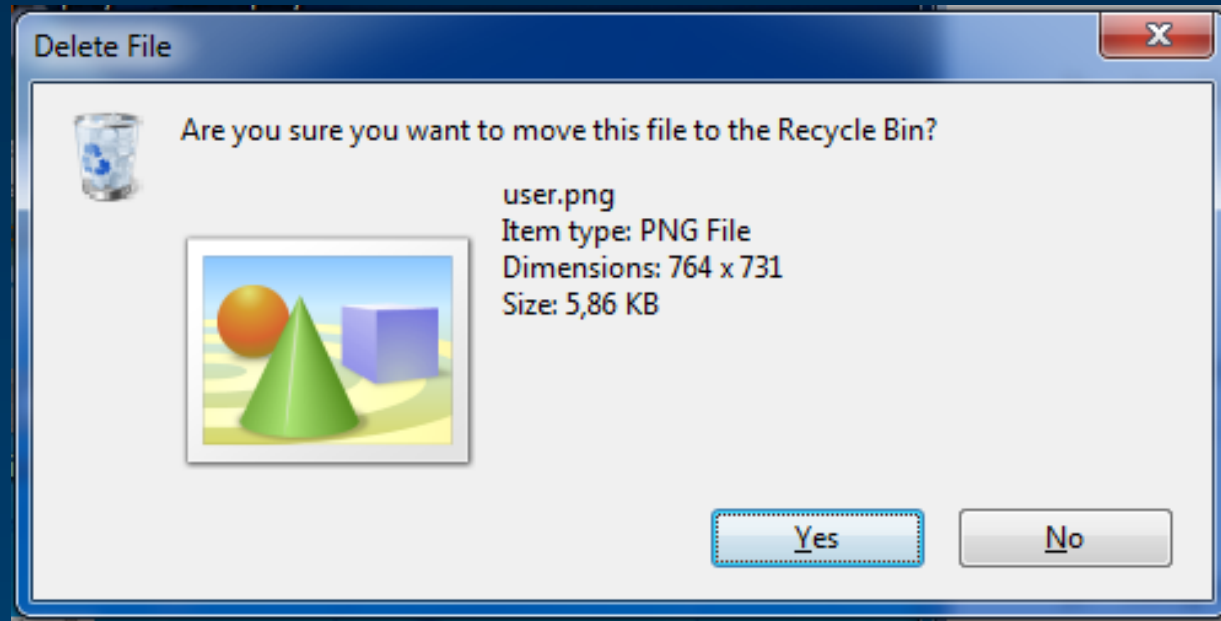
Consistency and Standards

- Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.




Error Prevention

- Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.



Recognition Rather Than Recall

- Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Test Business [SIGN IN](#) [SELECT PAYMENT METHOD](#) [CONFIRM PAYMENT](#)  **amazon payments™** SANDBOX

Pay using your Amazon account

Please review your payment summary below and then click **Confirm**. When you are finished you will be automatically returned to the WooCommerce website.

Your purchase is covered by the Amazon A-to-z Guarantee. Click [here](#) to learn more about the policy and restrictions.

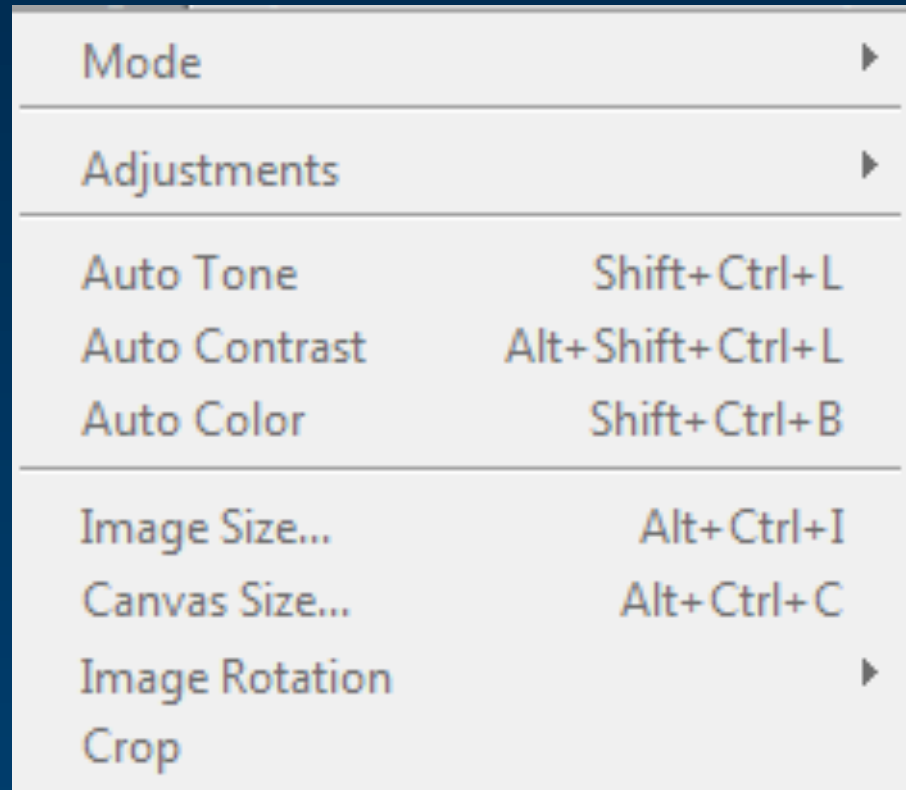
Payment Summary

Ship To: (What's this) Woo Ninja 123 Woo Rd Cupertino, CA 90140 United States 12345	Payment Method: Change Visa: ***- 1234	Billing Address: Change SkyVerge Seller 123 Main St, 649 mQkRgz Apt. 2B - 88 WtQB Dallas, TX 73158 United States
Details: WooCommerce - Order #1839 Pay: Test Business		Total Amount: \$159.99

[Confirm](#)

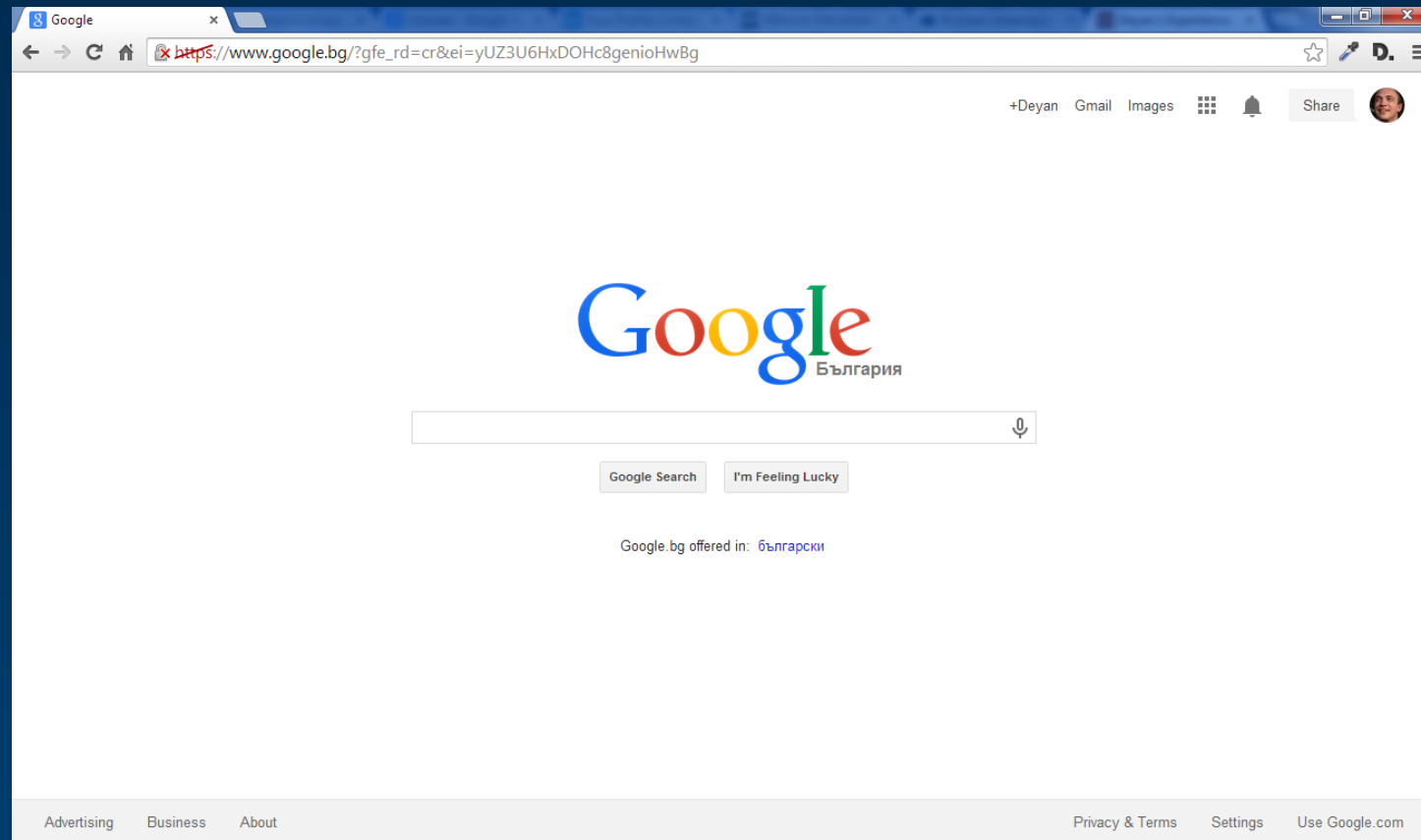
Flexibility and Efficiency of Use

- Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.



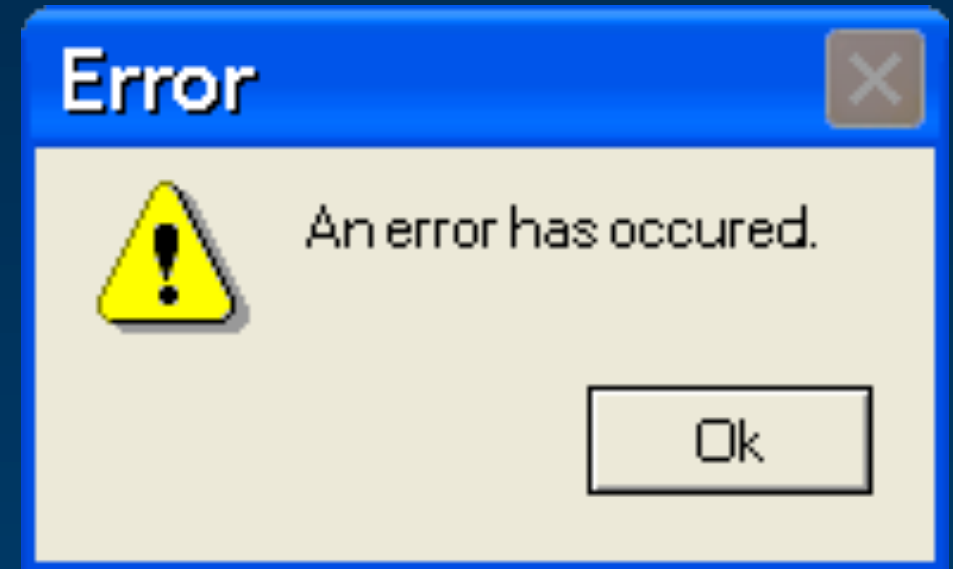
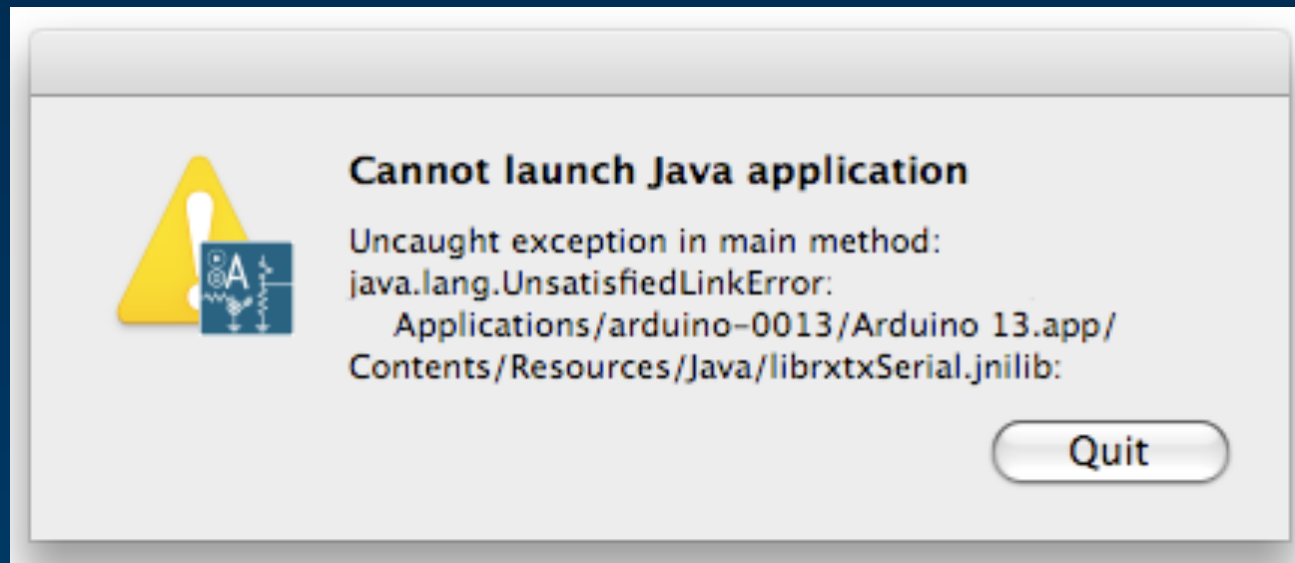
Aesthetics and Minimalist Design

- Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.



Help Users Recognize, Diagnose, and Recover from Errors

- Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.



Help and Documentation

- Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Summary

- What is User Experience
- User Research
- Prototyping
- Usability Testing

References and Further Reading

- About Face 3: The Essentials of Interaction Design – Alan Cooper
- <http://www.nngroup.com/articles/ten-usability-heuristics/> - Nielsen Norman group
- The Design of Everyday Things – Donald Norman
- Emotional Design: Why We Love (or Hate) Everyday Things – Donald Norman
- Don't Make Me Think – Steve Krug
- Sketching User Experiences – Bill Buxton

Design Task

McKFKing

- Fast food restaurant
- Kiosk
- Think about the complete workflow