

Principles of design psychology

27.02.2023

Made by Maksim Malko (4471849)

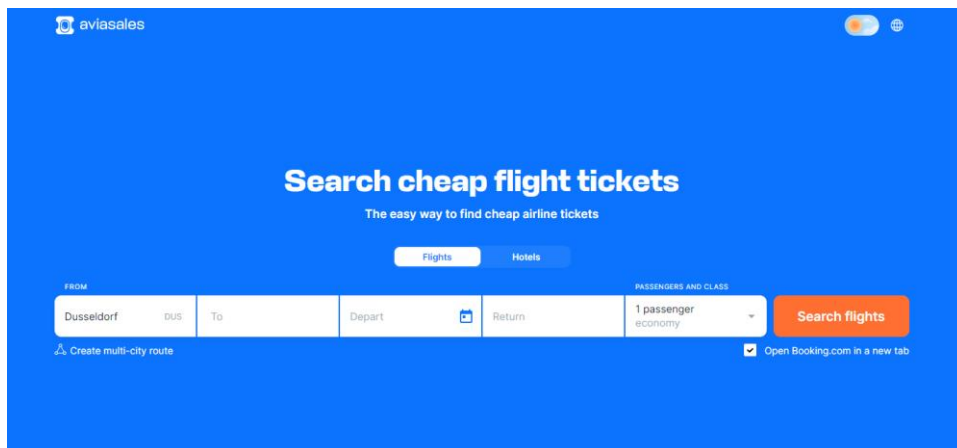
Principle of least effort	2
Website example	2
Non-Website example	3
Bad example of using this principle	4
Principle of perpetual habit	5
Website example	5
Non-website example	6
Bad example	6
Principle of socialization	7
Website example	7
Non-website example	8
The principle of emotional contagion	9
Website example	9
Non-website example	9
The principle of identity	10
The principle of beauty	14
Website example	14
The magical number 7+-2	16
Website example	16
Psychology of mistakes	16
Website example	17
Focus, Attention, and Concentration	17
Website example	17
Bad example	18

Principle of least effort

The “principle of least effort” essentially states that people will do the least amount of work to get something done. This can apply to the amount of thought, time, energy...

Website example

I found a great example of this principle on the “Aviasales” website. The main purpose of this service is to find the best flight offers.

The screenshot shows the Aviasales website's search interface. It has a blue header with the Aviasales logo and a search bar. Below the header, there's a section titled "Search cheap flight tickets" with the subtitle "The easy way to find cheap airline tickets". There are two tabs: "Flights" (selected) and "Hotels". The search form includes fields for "FROM" (Dusseldorf), "TO" (DUS), "Depart" (with a calendar icon), "Return" (with a calendar icon), and "PASSENGERS AND CLASS" (1 passenger economy). A "Search flights" button is on the right. At the bottom, there's a link to "Create multi-city route" and a checkbox for "Open Booking.com in a new tab".

When we enter the website, we see this nice and clean window which asks us basic info about our flight. We don't need to login/register or fill a lot of information.

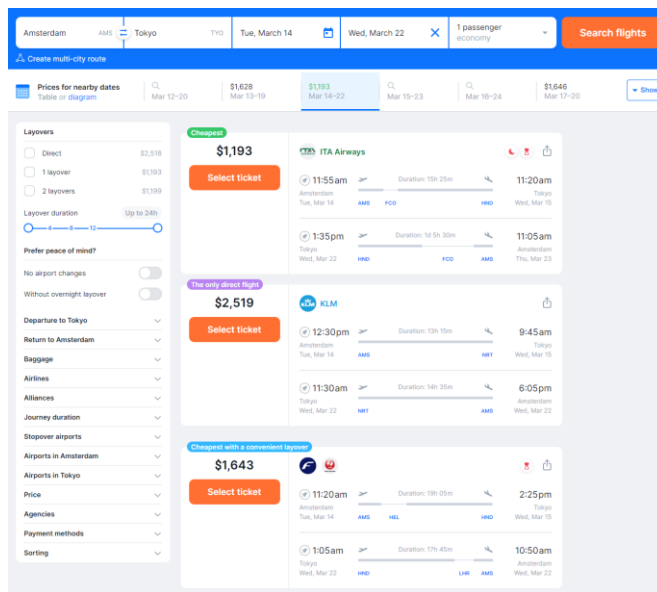
There is one nice thing here. When we select dates for departure and return, website shows us the best price options.

MARCH 2023 ↕

SUN	MON	TUE	WED	THU	FRI	SAT
			1 \$988	2 \$717	3 \$911	4 \$1,061
5 \$880	6 \$907	7 \$885	8 \$907	9 \$714	10 \$907	11 \$880
12 \$880	13 \$766	14 \$880	15 \$807	16 \$862	17 \$911	18 \$898
19 \$862	20 \$858	21 \$858	22 \$807	23 \$937	24 \$937	25 \$873
26 \$717	27 \$714	28 \$793	29 \$868	30 \$717	31 \$1,015	

As a result, if we didn't decide the flight dates yet, it will be easier for us to decide them by looking on prices.

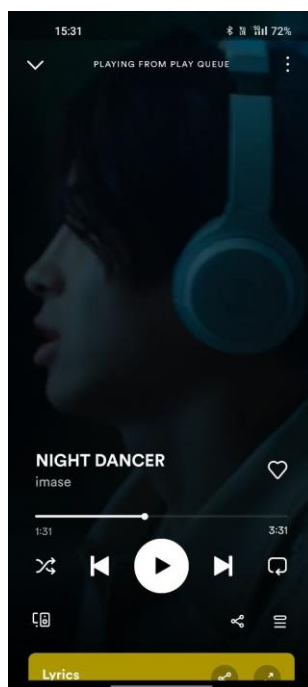
After filling in all the information about our flight we just click “Search flights” button and website shows us many different options we can choose.



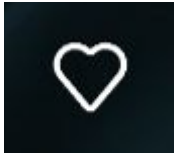
As you can see on a screenshot we got many different options, but the first 3 of them are from different categories: “Cheapest”, “Direct flight” and “Cheapest with a convenient layout”. It’s nice that website gives these 3 options, because they are suitable for most of the users. This website has many nice features but if I write about all of them it will look like an essay. That’s why I move to the next example.

Non-Website example

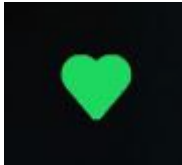
For the non-website example, I decided to use Spotify app. As far as this service is created to listen to music it must have functionality to save your favorite music to favorites playlist.



For Spotify it is as simple as clicking 1 button.



After clicking this button music will be added to your “Favorites” playlist and button will change a color to green.



I think it’s a nice example of how this app allow us to do one of its main features by just clicking one button. In my opinion this “Heart” button can be also a nice example of principle of perpetual habit.

Bad example of using this principle

I found a bad example in Media Markt while testing these headphones.



As you can see, they have 3 buttons and 2 of them look absolutely the same. Although it looks nice, it is very difficult for the user to understand even how to turn them on, let alone more atypical

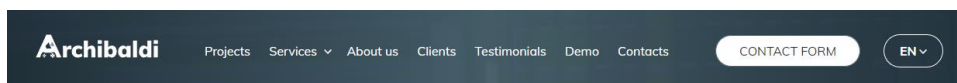
features such as noise reduction or volume control. I think these buttons are a bad example of using this principle because the user needs to learn the functionality of the device by clicking all the buttons or reading the instructions, which no one likes in our time.

Principle of perpetual habit

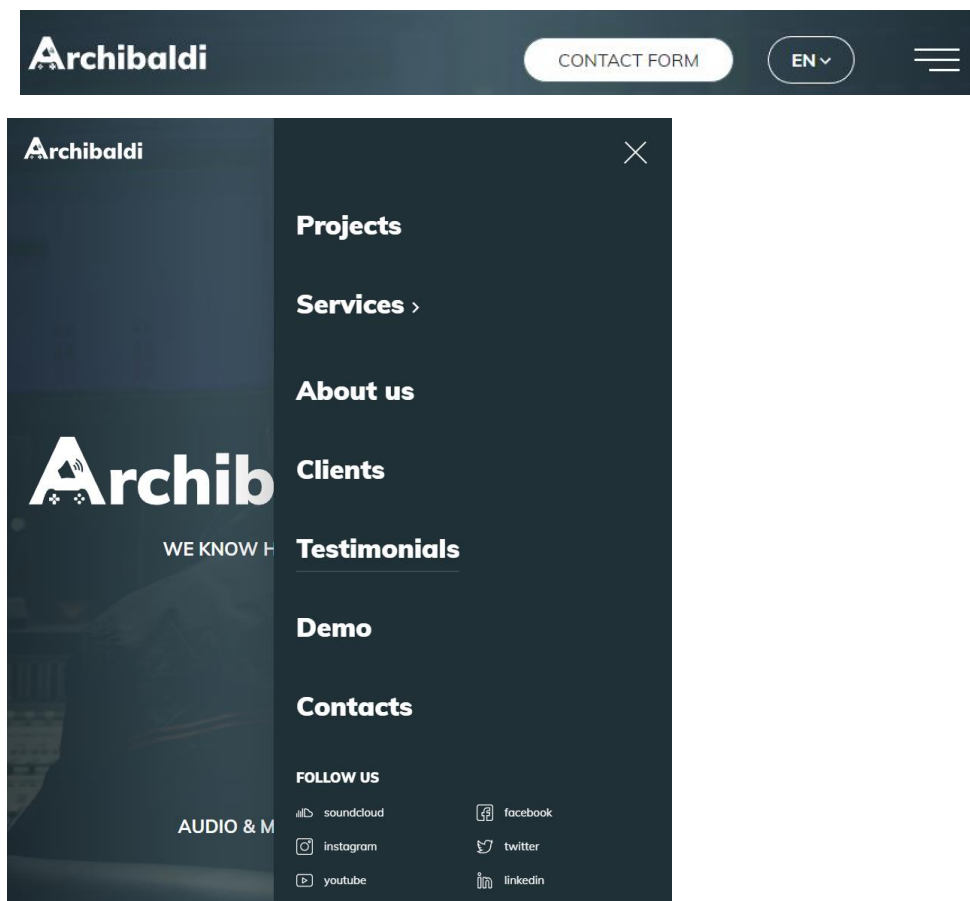
The principle of perpetual habit states that people greatly rely on their memory and habit when doing this or that task.

Website example

As a nice example of using this principle on a website I decided to take “Archibaldi” website navigation bar.



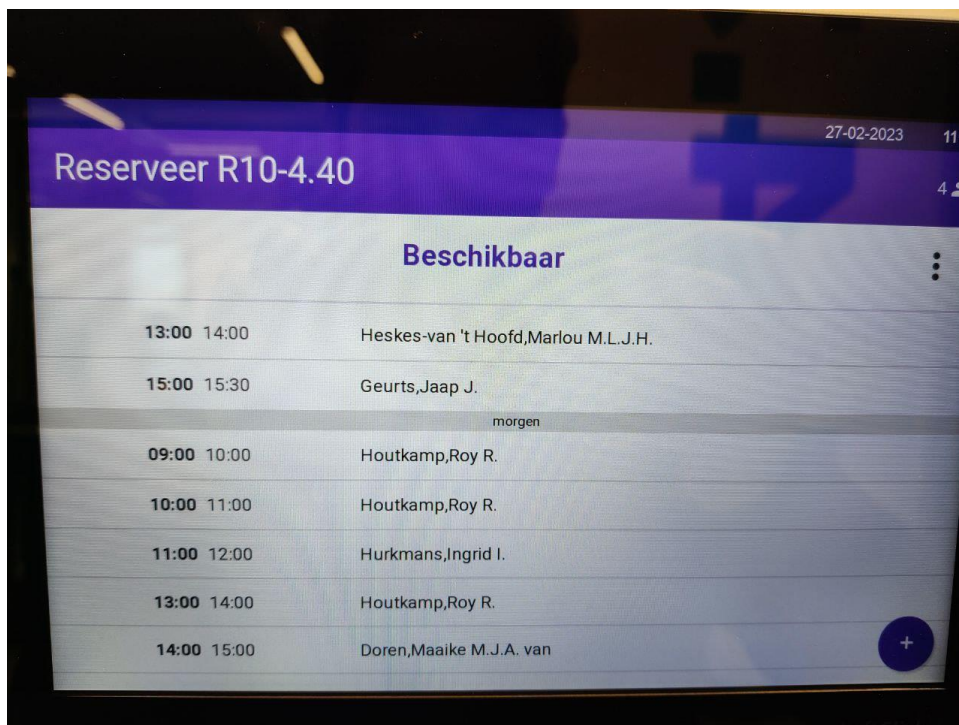
You can see that on the big screens this menu looks like typical navigation bar as all the websites do, but if we open this website on a small screen the “hamburger” will appear and make it easier for user to navigate.



In my opinion it is a good example because they only use this menu when it is needed. It would be strange to see “Hamburger” on a huge display.

Non-website example

I found nice non-website example in Fontys.



It is a display for room reservation and a nice example here is this small “+” button.



First of all, this button is always associated with adding something and just because this display created to add new reservations it is clear to user what actually function this button does.

Bad example

For the bad example I will return to the “Spotify” app. Spotify has function for creating playlists for your music. And the problem is not a playlist but adding music to them.



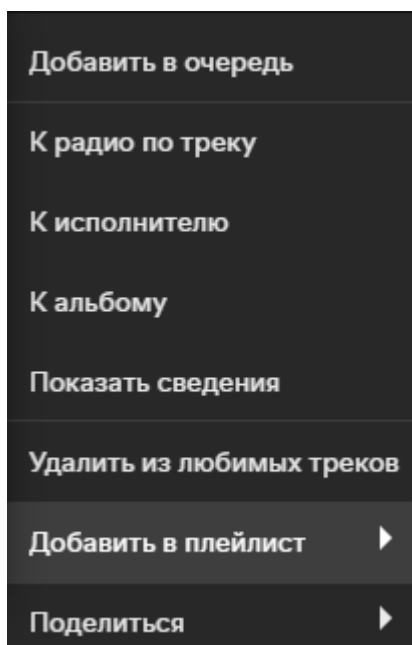
As you can see here this field doesn’t contain “+” button and we can’t add music to our playlist. We need to go to the actual song or playlist containing this song.

1	Doublet Eve	1 781 342	1:14
2	Leo Eve	8 025 847	4:07
3	Raison Detre Eve	26 806 657	3:42
4	Kara No Kioku Eve	3 004 693	3:49
	Inochi No Tabekata Eve	28 049 188	3:44 ...

After that we need to click this horizontal “Kebab” menu.



Select “Add to playlist” option



And only after that we will be able to add this music to a playlist we want. I find it very inconvenient because user needs to make 4 steps before adding music to a playlist. It would be much easier if Spotify had “Add to playlist” button in this field.

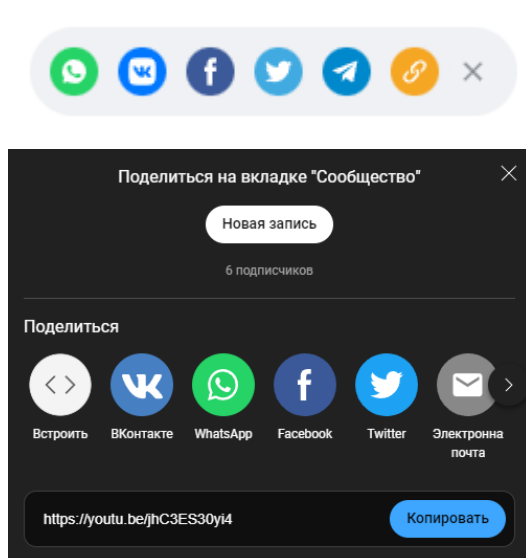


Principle of socialization

People want to be social, and they greatly rely on technology in order to achieve it. More than that, they use technology in order to feel accepted into society.

Website example

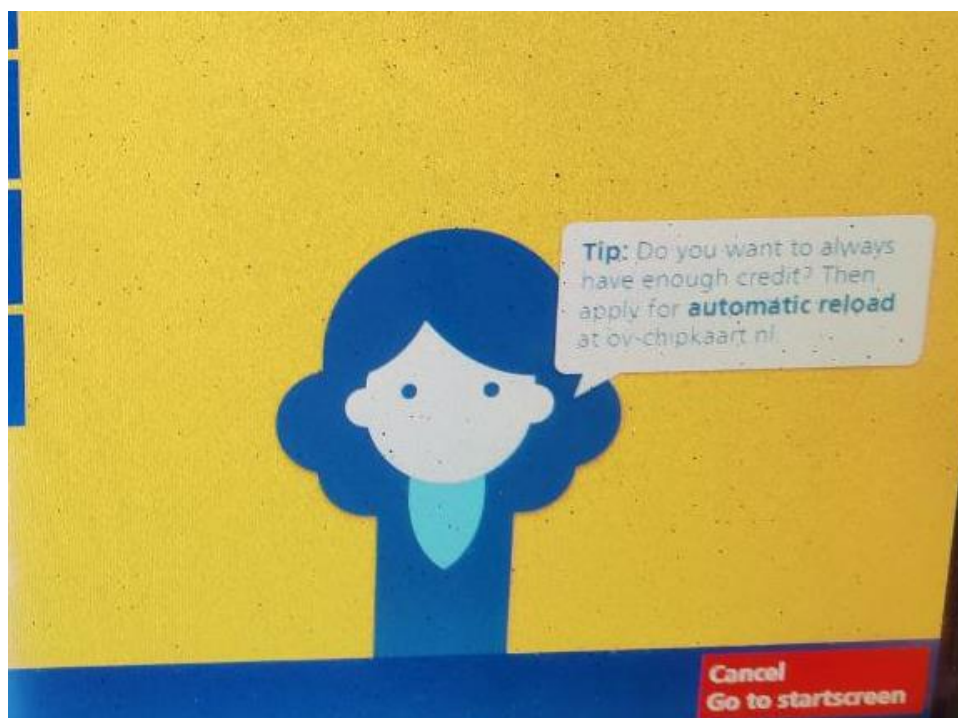
A good example of this principle can be this “Share” menu, which can be found in almost all the current websites.



This menu gives you possibility to share any kind of content with your friends and get a reaction for them. Communication with people is a synonym to socialization and that is why this is a nice example of this principle.

Non-website example

For the non-website example, I went to the railway station and found this cute lady who gives you tips, which are actually product advertisements.



I think it's really creative way of advertising of using cute "Mascot", but in the way it doesn't scream "BUY OUR PRODUCT". It also takes an empty area of the screen, so it doesn't look empty.

The principle of emotional contagion

Have you ever noticed that emotions are contagious? If a person you like is laughing out loud, you will be smiling. If somebody in a very well-made movie is crying, you will feel sad. This is the psychology of UX design and of human beings — we subconsciously take over the emotions and behaviors of other people, especially of those we like.

Website example

The most basic example of this principle is a review page for products. I would say that almost every person reads reviews before buying a product. Especially if this product costs a lot and will make big impact on your life.

Reviews
★★★★★ 9,5/10 (136 reviews)

Beoordeling

5 sterren	115 reviews
4 sterren	20 reviews
3 sterren	0 reviews
2 sterren	1 review
1 ster	0 reviews

Beoordeling per onderdeel

Aansluitmogelijkheden	★★★★★ 9,7
Ergonomie	★★★★★ 9,5
Nauwkeurigheid	★★★★★ 9,8
Formaat	★★★★★ 9,5
Design	★★★★★ 9,5

Afbeeldingen van klanten

Meest behulpzame reviews

★★★★★ 10/10
Van diesel naar een tesla! Deze Logitech G Pro is alles
Zit je dan tijdens de corona, slap en huilend achter je pc. handje kapot door je designer muisje. Toen zag ik deze Logitech G pro, hop naar de Coolblue winkel te Haarlem! Hele fijne overzichtelijke winkel, goed personeel en nooit stress. Weer snel naar huis, oude muis
[Toon meer](#)
John davies | 12 mei 2020

★★★★★ 10/10
State of the art
+ accuraat
+ maar 80 gram
+ erg snel
- geen
Een betere draadloze muis dan dit ga je niet vinden. Je kan het gerust een meesterwerk noemen.
De accuduur is echt fenomenaal net als de tracking.
P.a. brinksma | 1 december 2018

★★★★★ 9,0/10
Geweldige gaming muis
+ Heel licht
+ Past mooi in de hand
+ tracked heel goed
- side buttons voelen mushy aan
Deze muis beschikt over de nieuwe "hero" sensor van logitech, deze werkt ultmuntend, geen problemen met tracking, ook geen muismat calibratie nodig.
[Toon meer](#)
Giovanny huylenbroeck | 25 november 2018

[Toon alle 136 reviews](#)

Here is a pretty nice example I took from “Coolblue” website. Its review page contains Photos, Text reviews, Overall score, Pros & Cons of a product. The only thing is missed here is filtering by language. In this example it is understandable because this company only sells in the Netherlands. But if company sells all around the world it would be also nice to have these options.

☐ Only from your country ☒ Translate to English

Non-website example

For the non-website example, I found truck which looked similar to this a few days ago.



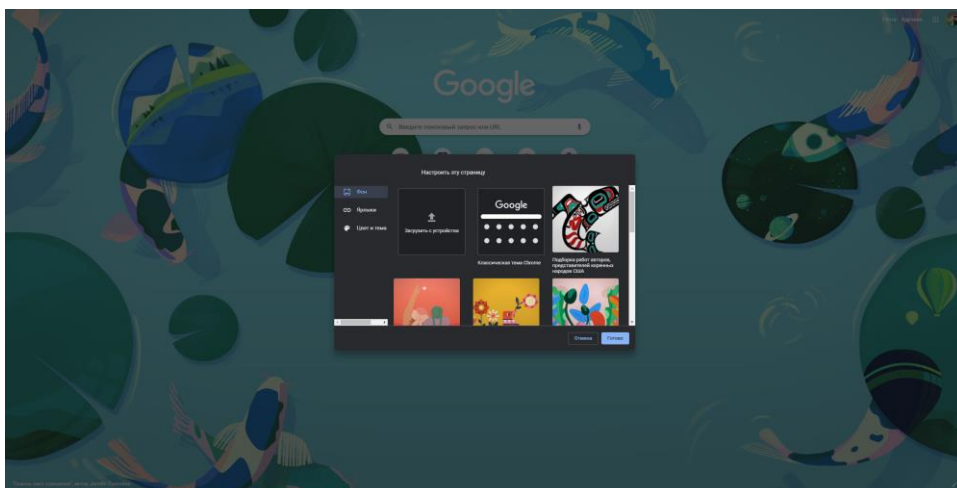
But the truck I found had a text that LIDL has the freshest vegetables and fruits in the Netherlands. I would call it pretty aggressive marketing, but it also works, because people think that these words were taken by testing and researching vegetables and comparing them to the other grocery stores in Netherlands. That's why people can believe these words and will think that LIDL has the best greens.

The principle of identity

All people need a sense of identity, a feeling of belonging, an understanding of who they are. This is why applications and websites with wallpapers are so popular — people customize their devices to feel unique. This is why people collect awards and medals — to feel appreciated and recognized.

There are so many examples of using this principle. I put here some of them.

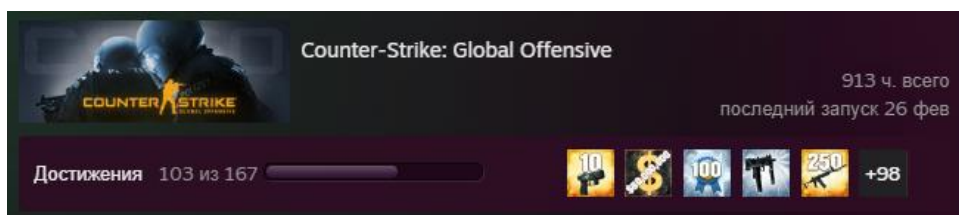
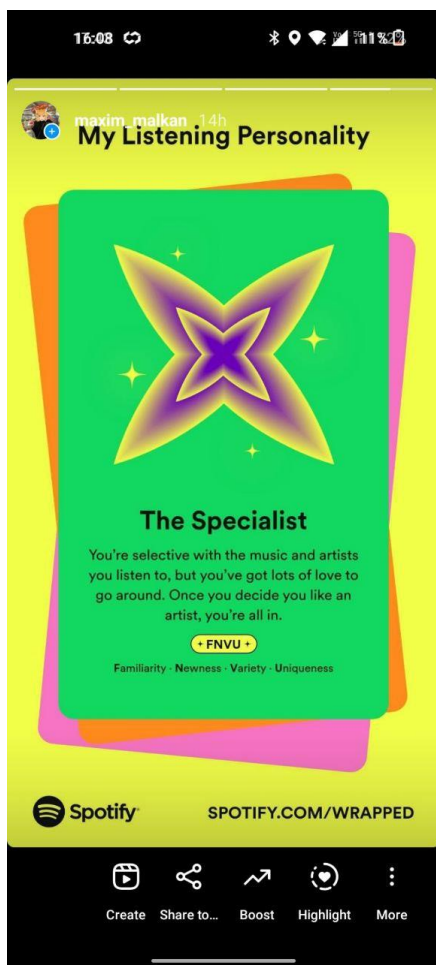
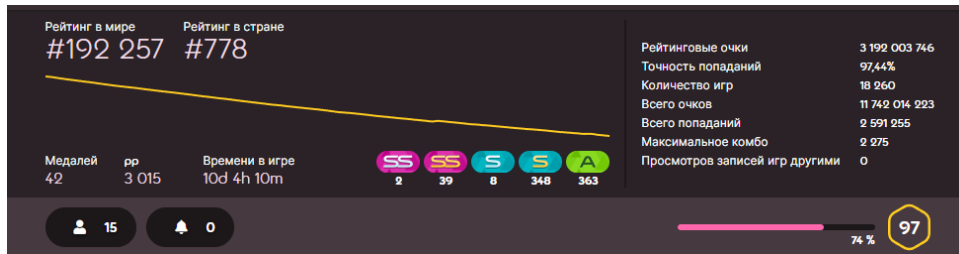
Changing wallpapers in the browser. There are even some browsers which are known only for having a lot of options for external customization and they are quite popular. For example: Opera GX.



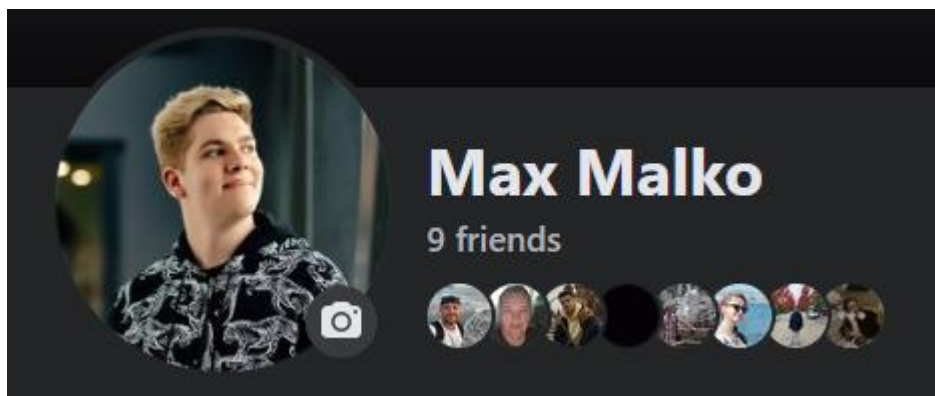
Small emojis after name in messengers which make you a bit more unique. I would say that some of social media like “Instagram” are mostly created by using this principle.

Максим Малько 

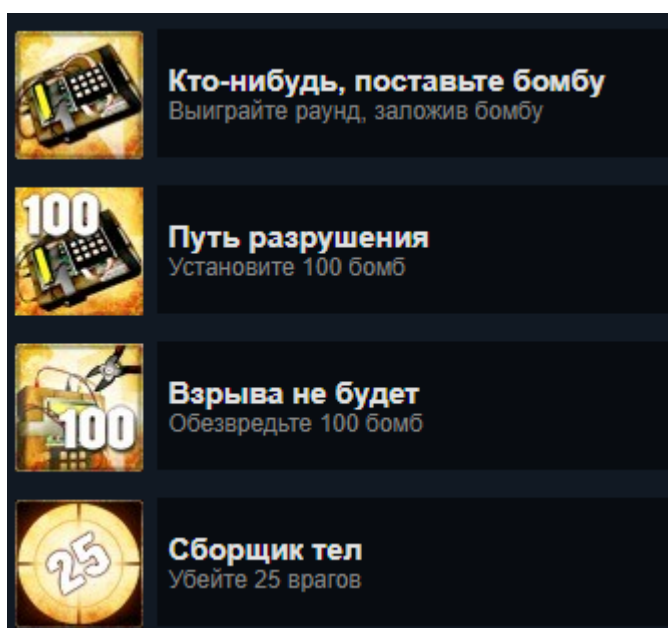
Different statistics which make you fill better than other people.



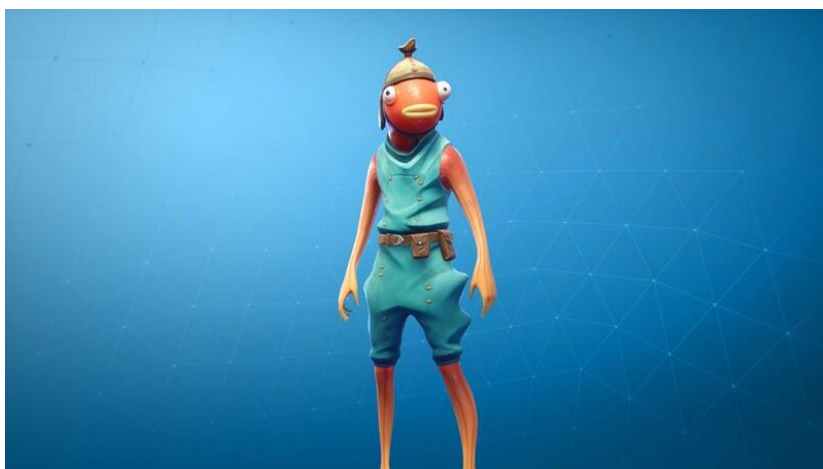
Profiles



Achievements

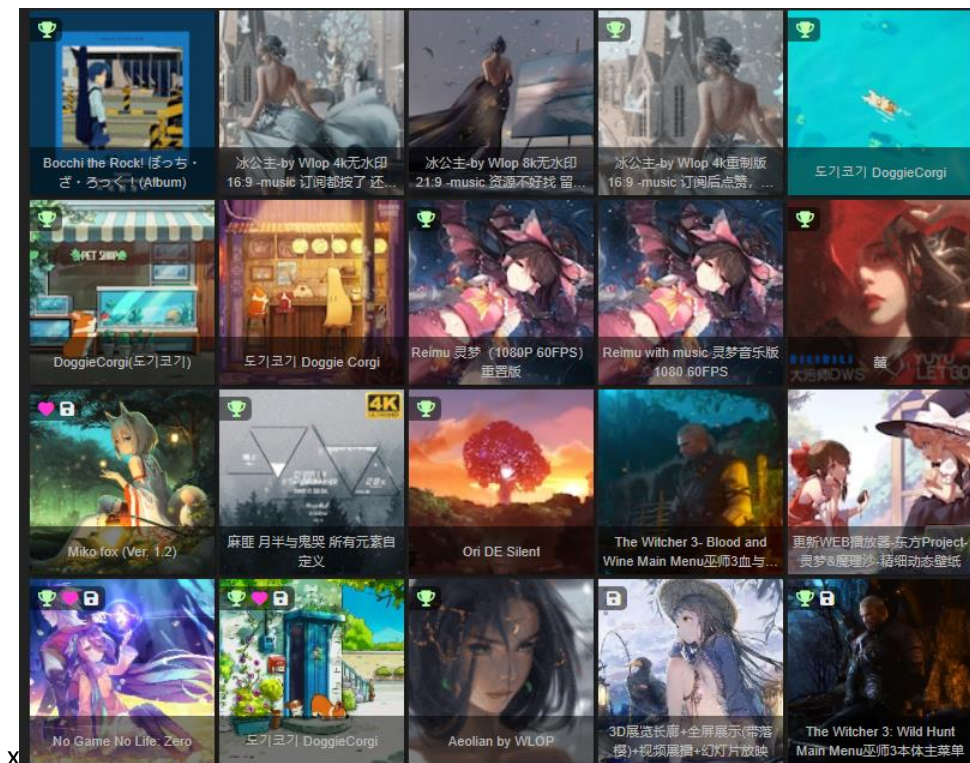


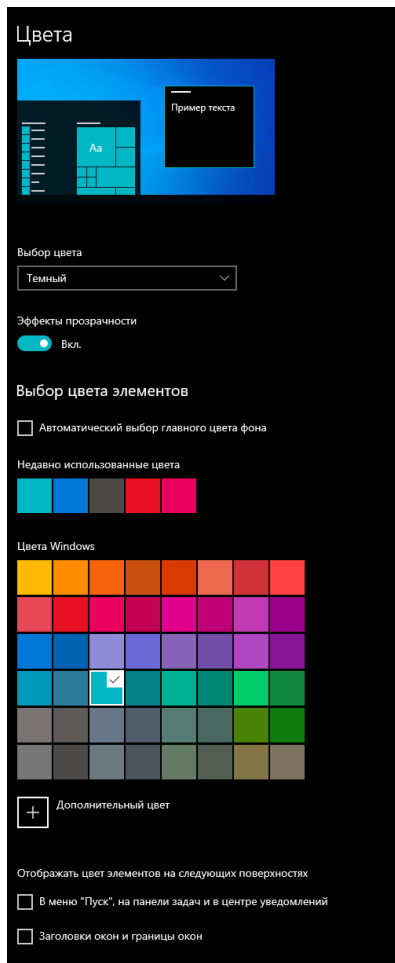
Skins





System customization





As you can see there are a lot of examples of using this principle and I would say that it became much more popular during last years. Everyone wants to be unique and big companies understand how to use this knowledge to make even more money)

The principle of beauty

Numerous psychological studies prove beautiful people and beautiful things are always more loved and popular than unattractive ones. People choose books by their cover.

Website example

The example here is pretty basic. Let's imagine that person named "Carl" wants to go to the Chinese restaurant. He opens google maps to find one and sees 2 different options with the same reviews and nice photos. For the final decision Carl checks websites to find a menu and he sees these 2 absolutely different websites.

No 1

CHINEES SPECIALITEITEN RESTAURANT

GOLDEN GARDEN

De Top 88

Beste traditionele Chinese Restaurants in Nederland van 2011.

18	Fong Sheng	Apeldoorn
19	Hong Sheng	Karlsruhe
20	Golden Garden	Eindhoven
21	Nieuw Sin Guang	Groningen
22	Gantau Village	Breda

HOME • RESTAURANT • LUNCH • SPECIALITEITEN • A LA CARTE • AFHAAL • BUFFET • CATERING • SPAARKAARTEN • KORTINGEN • KERSTMENU

beoordelen wat de 88 uitkomt. De bezoekers konden 88 uitdrukken in cijfers voor Eter uitdrukken in cijfers beoordeeld door

Onbeperkt genieten - NIEUWE LOPEND BUFFET KAART !

NIEUWE CATERING MOGELIJKHEDEN

Hartelijk Welkom bij Golden Garden

Geachte gast,

Vanaf januari 2023, zal Golden Garden elke woensdag gesloten zijn.

Mits de woensdag op een feestdag valt, dan zal Golden Garden wel gewoon open zijn.

Voor reserveringen kunt u bellen naar 040-2525550. Of loop gezellig binnen.

We hopen u snel te verwelkomen.

Onze openingstijden zijn.

Woensdag gesloten (vanaf januari 2023)

Van ma t/m do: 11:00-21:00. Van vr t/m zo: 11:00-21:30.

Uw gastheren,

W. Guo & J. Kwok

Heeft u bij ons genoten van het eten, service en de gastvrijheid ?
[Laat dan iets leuks achter op de google review.](#)

Chinees Fondue onbeperkt eten 2,5 uur



Golden Garden
Kastelenplein 88
5653 LR - Eindhoven
info@goldengardeneindhoven.nl
Tel: 040-2525550
Mob: 06-84910562

Woensdag gesloten (per 2023)
Geopend van: ma t/m do 11:00 tot 21:00 en vr t/m zo 11:00 tot 21:30

No2

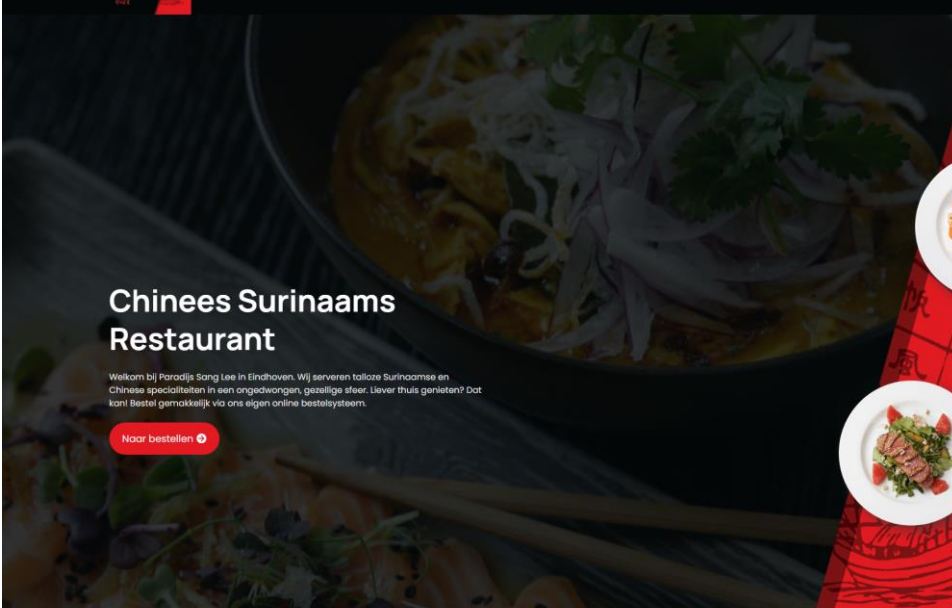
PARADISUS SENG LEE

Home Menu Contact Bestellen

Chinees Surinaams Restaurant

Welkom bij Paradisus Seng Lee in Eindhoven. Wij serveren talloze Surinaamse en Chinese specialiteiten in een ontspannen, gezellige sfeer. Liever thuis genieten? Dat kan! Bestel gemakkelijk via ons eigen online bestelsysteem.

[Naar bestellen](#)



Hopefully, it is clear that Carl will close the first website as soon as possible and run to the 2nd restaurant as fast as possible, despite the fact that the food, service and atmosphere in the first

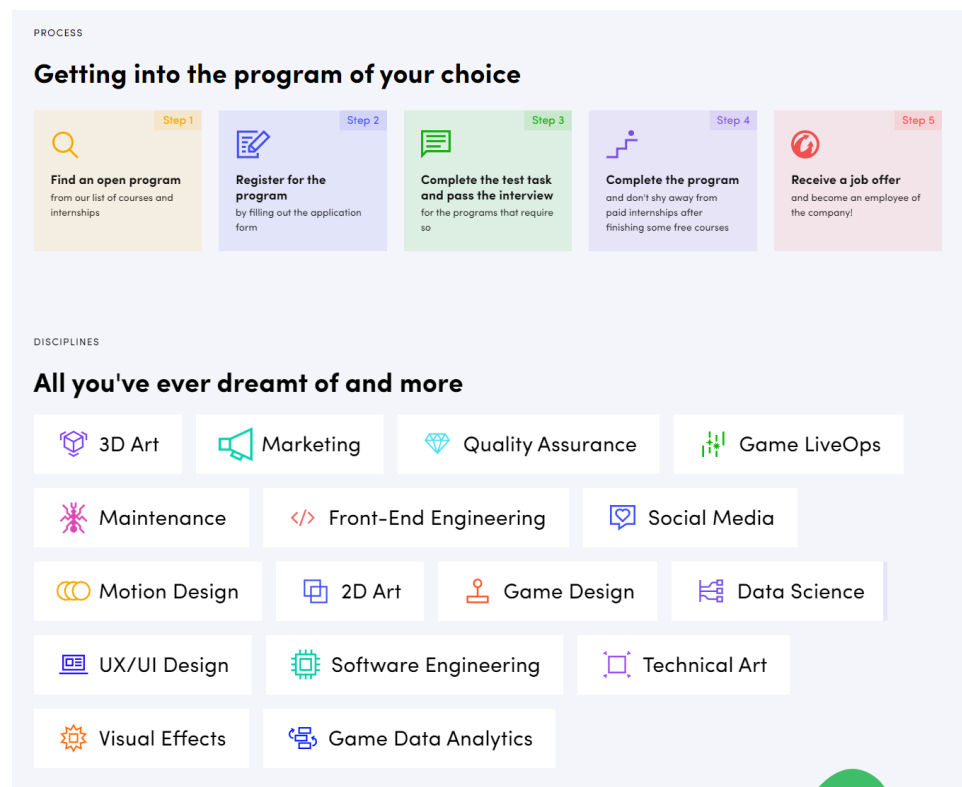
restaurant could be much better. That is how this principle works and just because the 2nd restaurant knew how to use it, they got one more customer. That is a good example of using this principle. Bad example is restaurant number 1 which decided that beauty is not important for their website.

The magical number 7+-2

“The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information” is a psychological article published by George A. Miller — the cognitive psychologist at Harvard University. According to this paper, a person can hold from five to nine things in their short-term memory.

Website example

Nice example for this principle is “WG Forge” website. It’s created to complete the internship in one of the biggest game companies. When you enter this website, you will see nice-looking process written step by step of what you need to do to complete this internship and also a list of options you can choose from. Only after choosing a sphere, you want to work on you will get additional information. I think that is nice because you don’t have to read all the information you are not interested in.



Psychology of mistakes

All people make mistakes. Mistakes spark a wide range of emotions in people’s minds, chiefly negative ones — from sadness and anxiety to procrastination and apathy. Regardless of its severity, a mistake is still a mistake, and it is annoying. What are the mistakes in terms of user experience design psychology? These are counter-intuitive, unclear, or misleading scenarios, which prevent people from achieving their goals with the software.

Website example

A nice example of this principle is entered info validation we used to do while studying Software engineering. As an example, I'll take my final project website.

If the user forgot to fill in some data during registration website will tell him to enter this actual data.

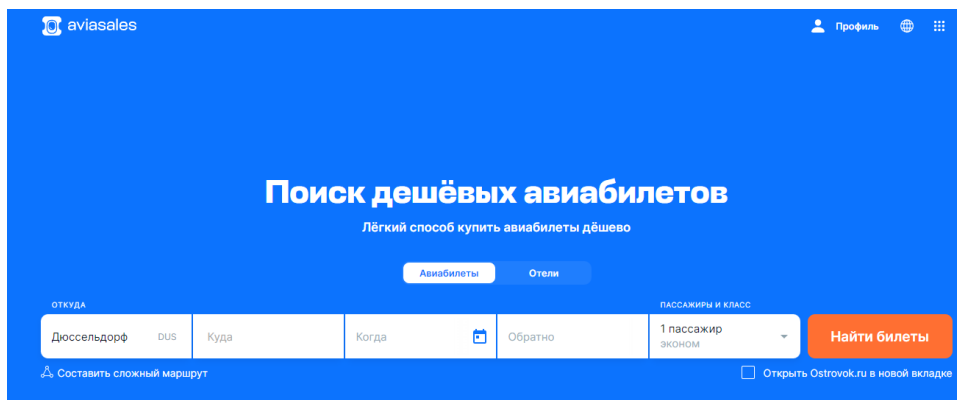
- Name is required

Focus, Attention, and Concentration

Normally, the attention span of an adult is from ten to twenty minutes. After this short time, people tend to lose focus and concentration and get distracted by their own thoughts or the things around them. The job of a UI/UX designer is to grab users' attention and to retain it for as long as needed. To do so, you have to reduce distractions and break the monotonous routine.

Website example

Let's return to the "Aviasales" website. On the main page they only show as info we need to fill in to get ticket options.

The image shows the top section of the Aviasales website. It has a blue header with the 'aviasales' logo on the left and a user profile icon with the text 'Профиль' on the right. Below the header, the main heading is 'Поиск дешёвых авиабилетов' (Search for cheap flights) in white, followed by the subtitle 'Лёгкий способ купить авиабилеты дешево' (Easy way to buy cheap flights). There are two tabs: 'Авиабилеты' (Flights) and 'Отели' (Hotels). The search form consists of several fields: 'откуда' (from) with 'Дюссельдорф' and 'DUS' as input, 'куда' (to) with 'Куда' as input, 'когда' (when) with a calendar icon, and 'пассажиры и класс' (passengers and class) with '1 пассажир' and 'эконом' as input. A 'Найти билеты' (Find flights) button is on the right. At the bottom left, there is a link 'Составить сложный маршрут' (Create complex route) and at the bottom right, a checkbox 'Открыть Ostrovok.ru в новой вкладке' (Open Ostrovok.ru in a new tab).

And only after filling in this info we get this filter options

Layovers

☐ 1 layover \$306
 ☐ 2 layovers \$539

Layover duration

Up to 24h

4812

Prefer peace of mind?

Without overnight layover
 ☐

Departure to Warsaw

Return to Dusseldorf

Baggage

Airlines

Alliances

Journey duration

Stopover airports

Airports in Dusseldorf

Airports in Warsaw

Price

Agencies

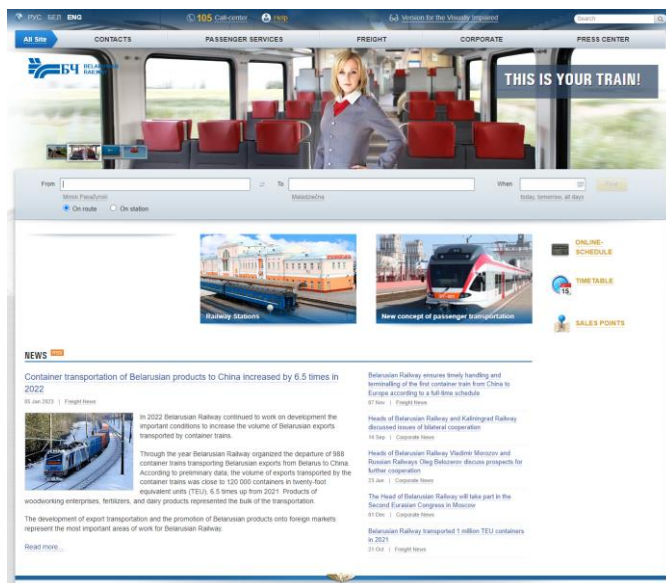
Payment methods

Sorting

So, the interaction with user is done step by step. This website doesn't have any unnecessary info on a page.

Bad example

And this is a bad example.



This website of the main railway station in Belarus contains too many unnecessary information and the design is also awful. Why does everyone need to see news if he just wants to buy tickets? This banner on top doesn't give us any useful information and looks awful. Main features like timetable or sales points located in the strange location. As a result, it's so hard to focus on one thing.