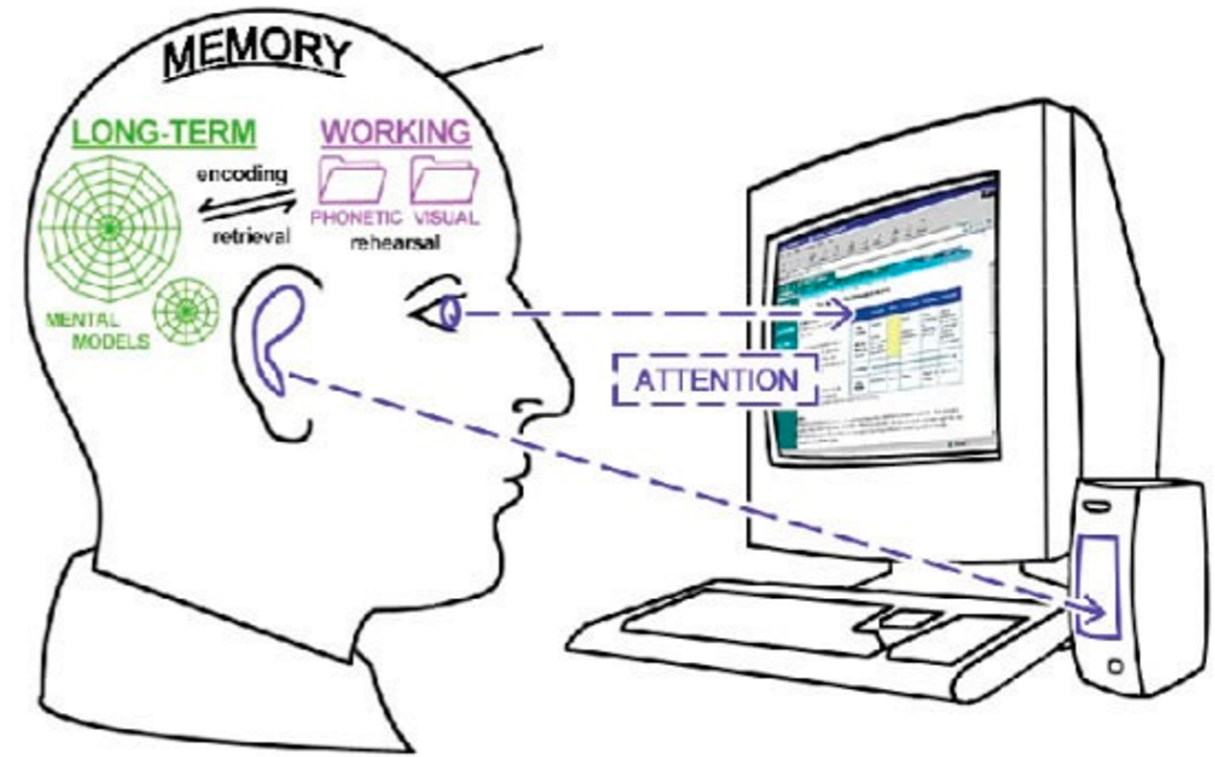
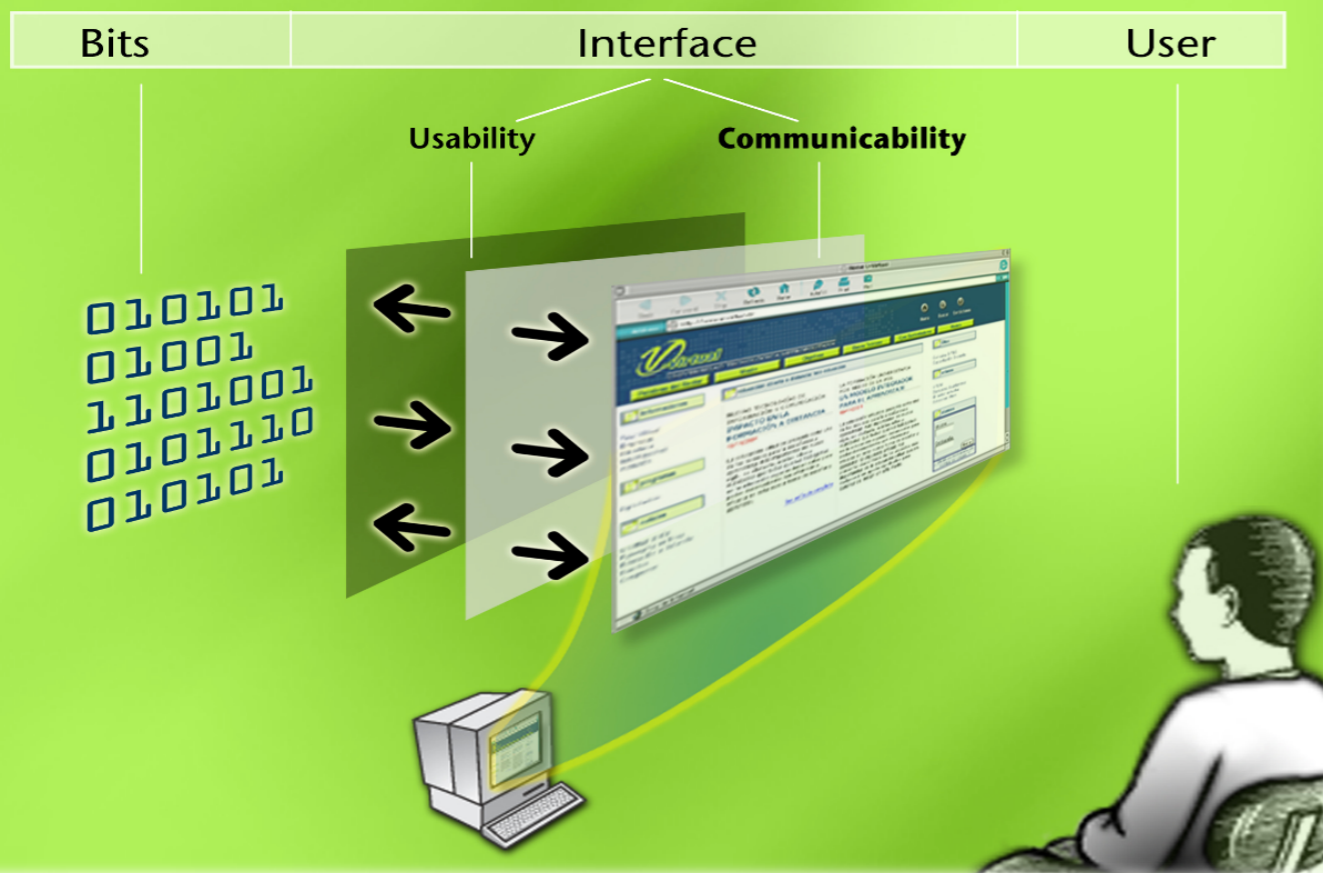


Yousif Korkis

# Drawing the Blueprints - UX/UX



## Interface Interactions

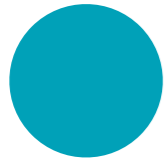
Hello, I'm Yousif. I am studying human computer interaction and how to improve it with the use of psychology. My research question is what changes can be made to an interface that will reduce cognitive load.

That sounds like a lot so let's break the question down. An interface would be any form of communication between you and the device. Language is an example but in regards of computers, phones, and most technology it's the screen.

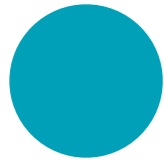
Cognitive load is the maximum amount your brain can handle at a given moment. For example, trying to learn math or statistics and listen to the radio is much harder than doing only one of those tasks.

# Eliminating Linear Scan

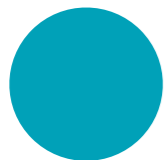
Using photos to reduce mental capacity



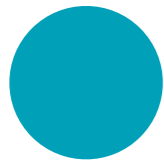
But how can we reduce it? This is how messaging app looked like before apple made an update.



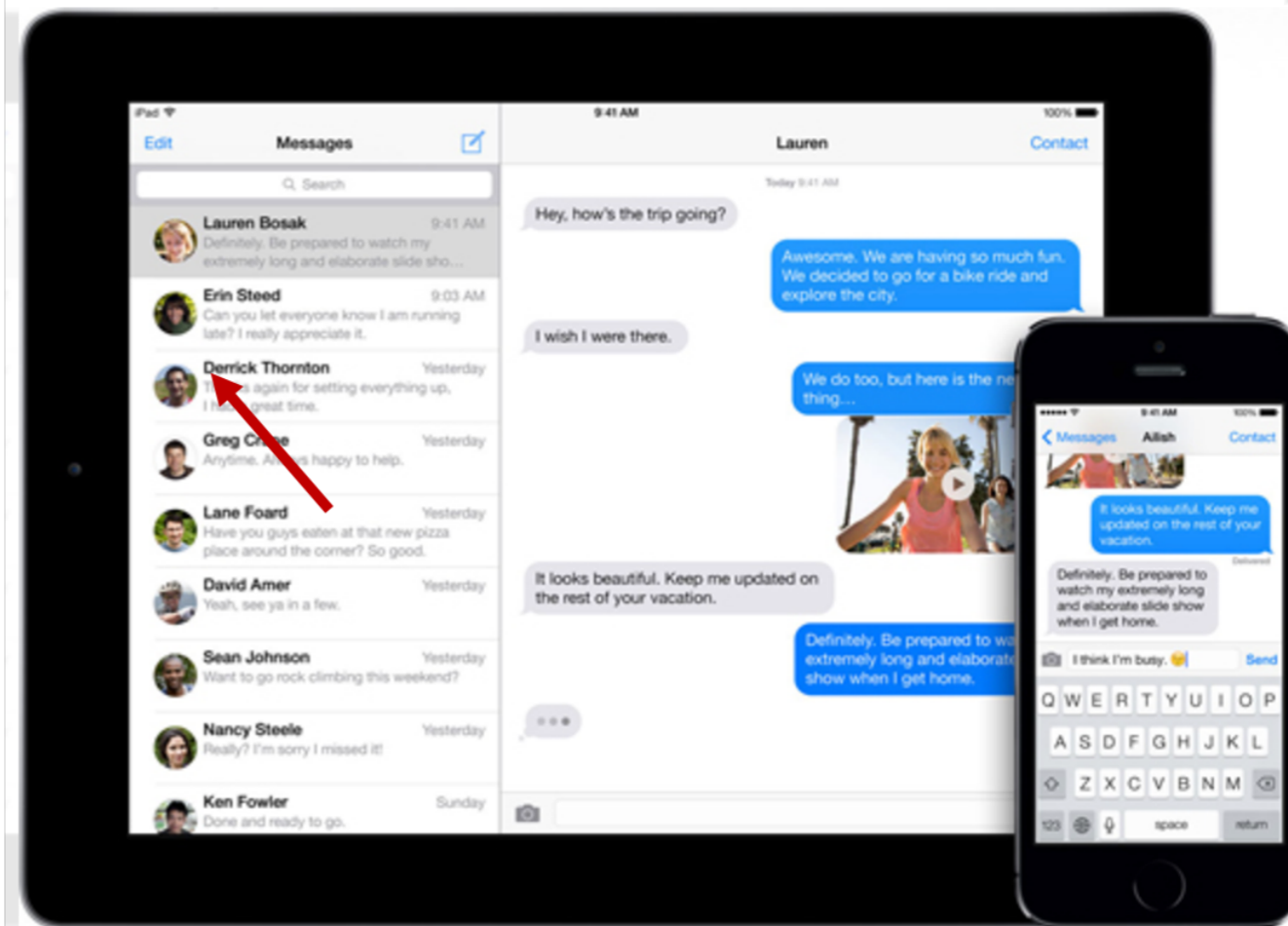
Notice when searching for a message you had to do a linear scan and read each name to locate the person you want.



After an update, apple engineers decided to add these icon images to find the person you're looking for much easier.



This uses less mental capacity for many reasons, of course, reasons related to how your mind works

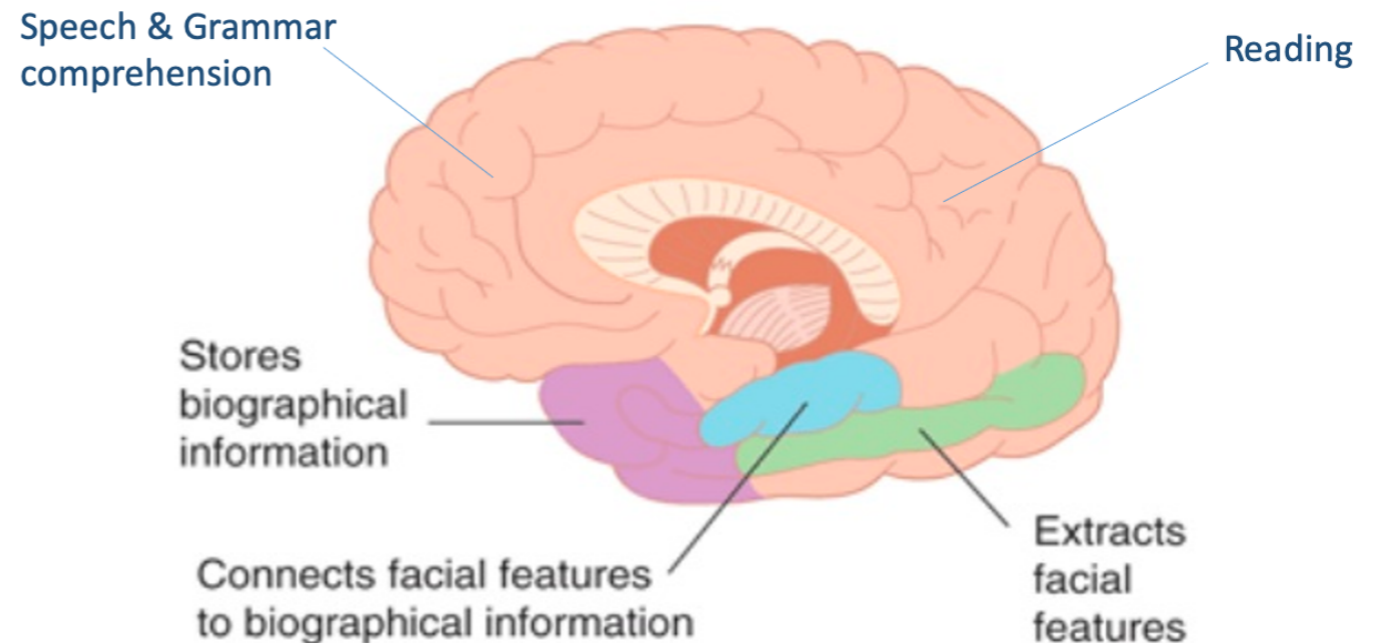


Think of a group project. When you give all of the work to one person they can only do so much until they can't handle it. But when everyone is involved and the workload is distributed, it gets done.



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## Face Recognition



## Numeral vs. Color

For this task I want you to count how many of the number 3 do you see.



Now count how many blue objects there are.

There was more of them but you still did better. This happens because color and facial recognition are a type of selective visual. That means they are low load tasks while reading or locating shapes need more work.



Google life insurance

About 247,000,000 results (0.51 seconds)

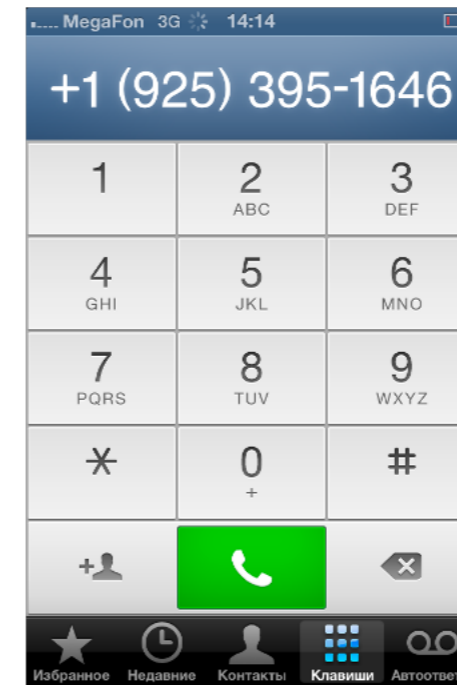
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 Ad www.selectquote.com/ ▾  
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 We Find the Best Rate on Life Insurance for You. Free Quotes!

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 Local agents · Affordable policies · Multiple coverage options · Free online quotes  
 Types: Select Term, Whole Life, Universal Life, Return of Premium, Family Life, Mortg...  
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 https://www.statefarm.com/insurance/life ▾ State Farm Insurance ▾  
 Provide for the ones you love with life insurance from State Farm®. Policies range from term, whole, and universal life as well as planning tools.  
 Term Life Insurance - Whole Life Insurance - Life Insurance Calculator



The principle of proximity is simple: we read things near each other as belonging together. For example, in a crowded room, if you see two or three people standing near each other, you might assume they are together, even if they are not engaged in conversation. Typographically speaking, proximity works the same way. Words strung together form a sentence. Lines of text close together form a paragraph. In a list, items grouped together form a visual “chunk” of information. Readers who are scanning with a purpose don’t just scan down the text. They jump from section to section, looking for a specific piece of information (for example, from job to job in a resume).

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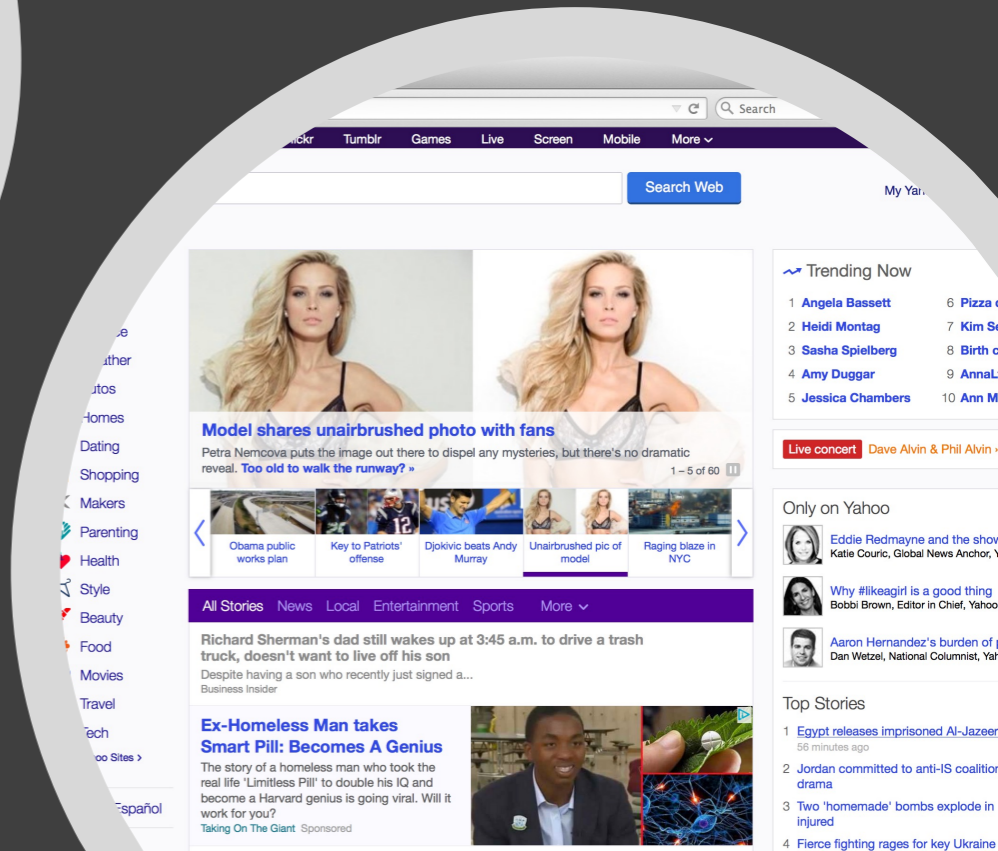
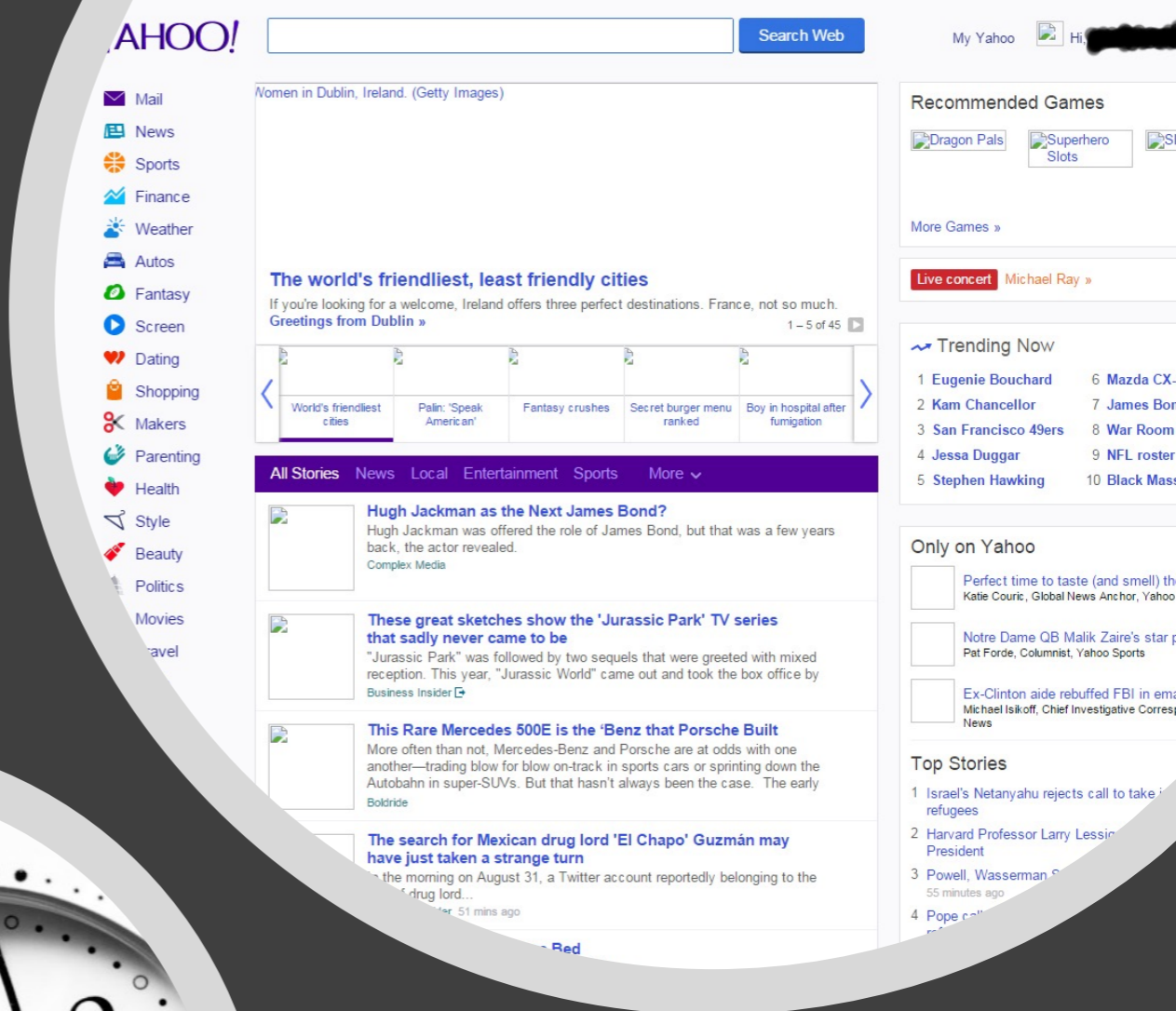
But what if you are faced with only one type of medium? The paragraph on the left is harder to read than the one on the right. By separating the information using spaces we can categorize it and remember it better.

This method is used in everyday life like phone numbers, social security cards, credit cards or even search engines. Notice how every website is linked with their own description and details. Also the ads are separate in the beginning and labeled.

- Our minds can do many things but we tend to really suck at perceiving time. An example of this would be how when we have fun time tends to go by faster. But when were at work its always slow.

- How can we use that for software design? Well back in the day yahoo would load their website by bits and pieces. Most of the site would show up and then the animations begin to load. Hypothetically let's say it took 3 seconds to load.

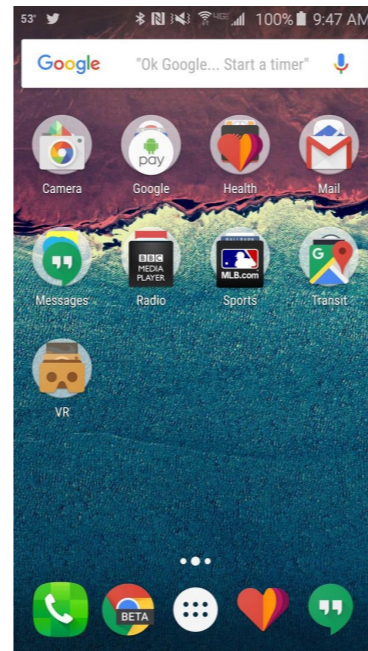
- While this Yahoo page shows a blank white screen for a while and then the entire home page is displayed. We'll say this took 5 seconds to load. Surprisingly this update saved Yahoo a lot of criticism.



- When using an interface, the main goal is to help people understand how to use it.

Transforming the instructions from working memory to long term memory. A way to do this is by making the interface similar to already existing ones.

- But there's a better option. We must teach the people by repetition. On the android when looking for the apps we can add a small title that says "all your apps". After a week this can be ingrained and removed.





This is why psychology is needed in software engineering. With it we can make interfaces comfortable, interactive and user friendly.

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