



IIT ROORKEE



NPTEL ONLINE  
CERTIFICATION COURSE

# INTRODUCTION TO INTERACTION DESIGN

Lecture 09

Designing for Emotional Interaction

SONAL ATREYA

DEPARTMENT OF DESIGN



# Designing for Emotional Interaction



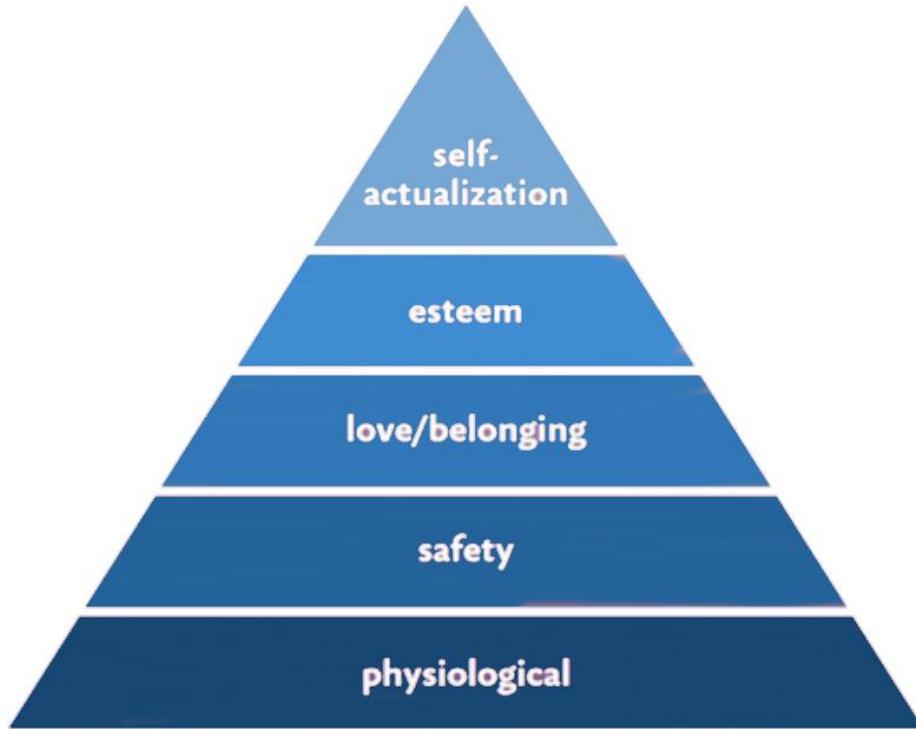
## Emotional interaction

In interaction design, emotional interaction is considered for creating user experiences that go beyond simple usability and functionality and consider the user's emotional state and how they are likely to respond to various design elements.

*emotional design* is a growing area relating to the design of technology that can engender desired emotional states, for example, apps that enable people to reflect on their emotions, moods, and feelings.



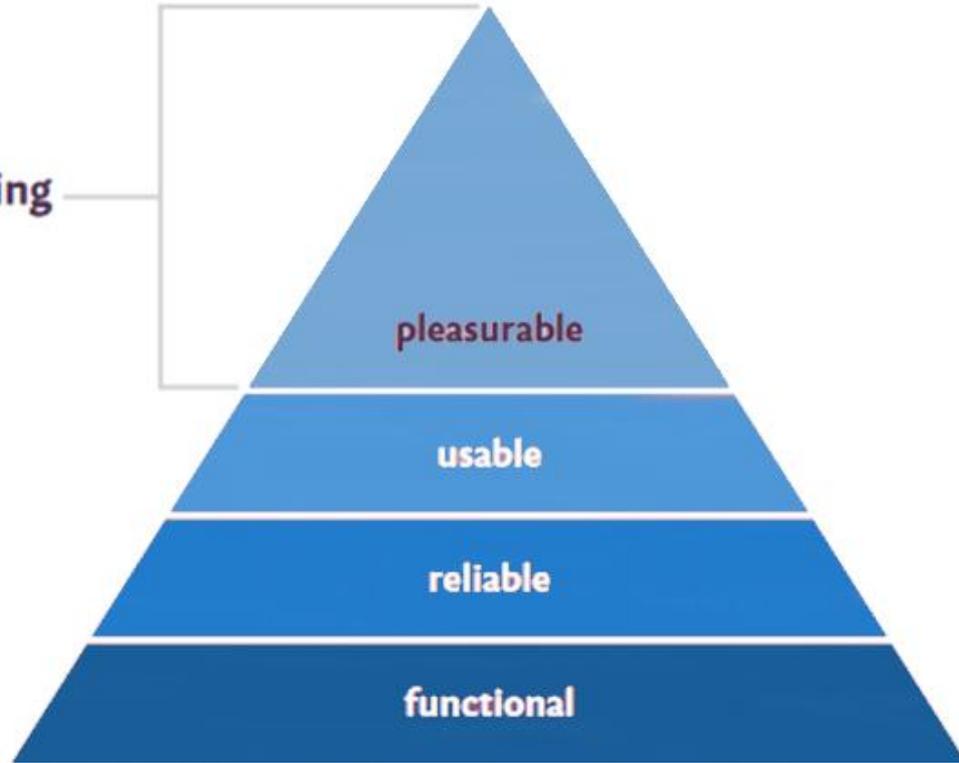
# The Expression of the Emotions in Man and Animal, Charles Darwin



The same state of mind is expressed throughout the world with remarkable uniformity; and this fact is interesting as evidence of the close similarity in bodily structure and mental disposition of all the races of mankind.

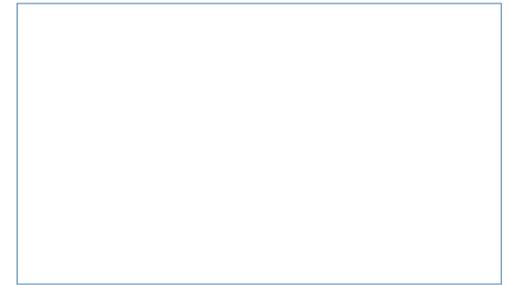


missing



## Online shopping experience

- Realization of need
- **Excitement** of purchase
- Positive/Negative experience of making a choice- **upset and dismay**
- Revising the choice- **irritability**
- Final decision- **comfort/happiness**
- **Doubt**



# Behaviour and Emotions





Source: <https://www.zonkafeedback.com/blog/how-to-set-up-effective-patient-feedback-system>



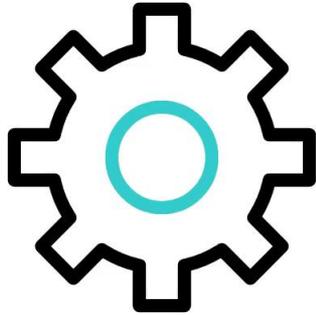
**Happy**  
**Sad**  
**Annoyed**  
**Anxious**  
**Frustrated**  
**Motivated**  
**Delirious**

Source: <https://www.surveystance.com/smiley-face-survey-kiosk-app/>

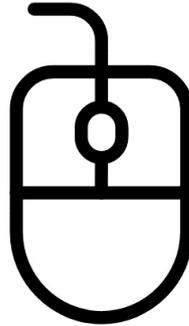


# Expressive Interfaces

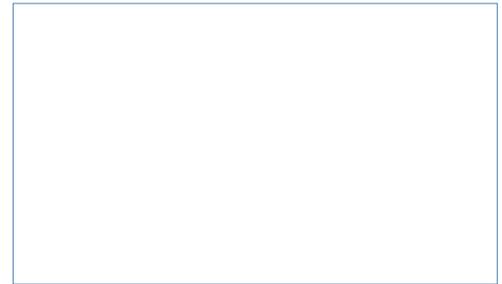
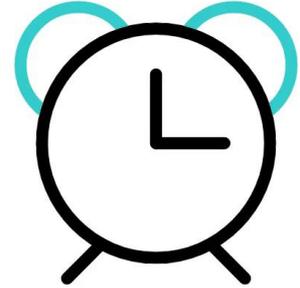
Animated icons



Sonification



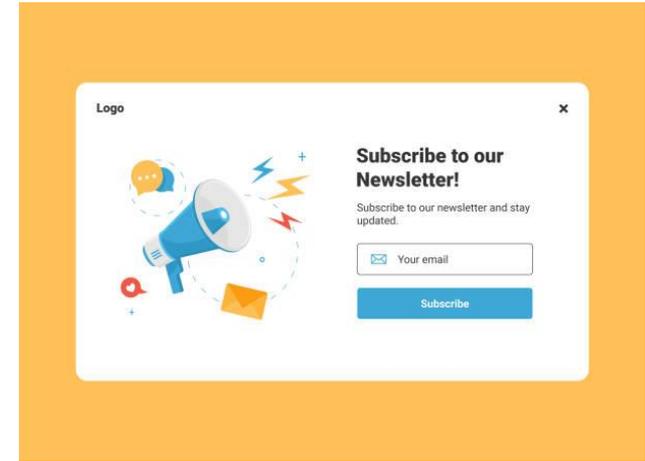
Vibrotactile feedback



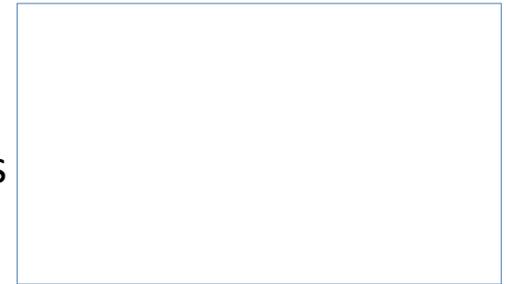
Source: <https://cdn-icons-gif.flaticon.com/8121/8121259.gif>

# Annoying Interfaces

- When an application/system
  - doesn't work properly or crashes
  - doesn't do what the user wants it to do
  - doesn't let the user know what to do
- Flashing animations
- When a user's expectations are not met
- When error messages pop up that are unclear
- When a system requires too many steps to perform a task
- Websites that are overloaded with text and graphics
- The overuse or automatic playing of sound effects and music
- Input devices that cause users to press the wrong keys or buttons persistently



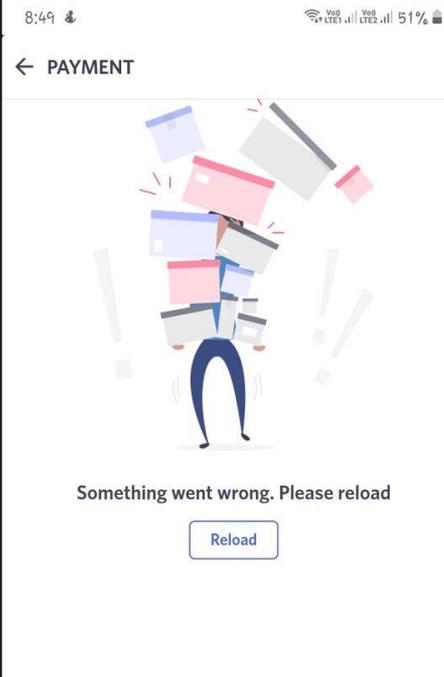
Source: <https://www.istockphoto.com/illustrations/popup-window>



# 404

## Not Found

The resource requested could not be found on this server!



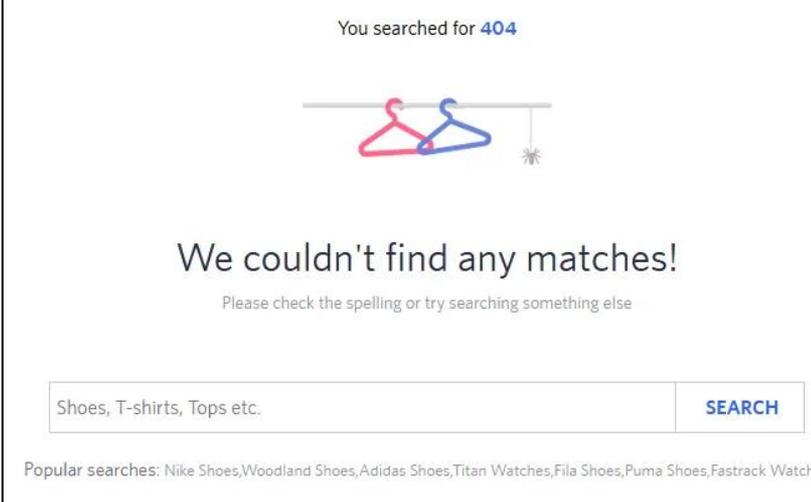
8:49 51%

← PAYMENT

Something went wrong. Please reload

Reload

The image shows a mobile app error screen. At the top, the status bar shows the time 8:49 and 51% battery. Below that is a back arrow and the word 'PAYMENT'. The main content area features an illustration of a person in a blue suit carrying a large stack of colorful boxes (red, blue, grey) on their back, with several boxes falling off. Below the illustration, the text reads 'Something went wrong. Please reload' and there is a 'Reload' button.



You searched for 404

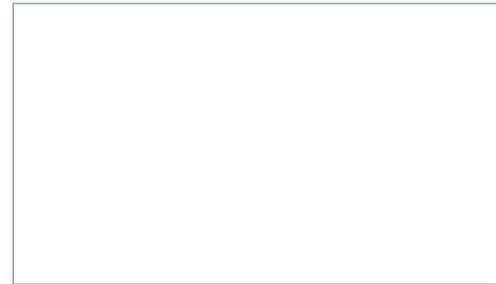
We couldn't find any matches!

Please check the spelling or try searching something else

Shoes, T-shirts, Tops etc. SEARCH

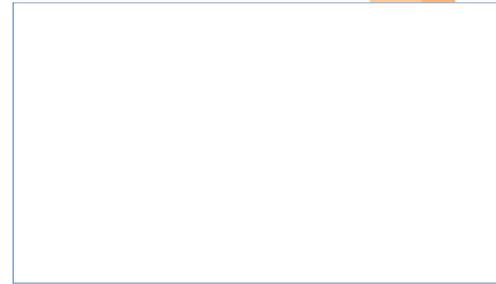
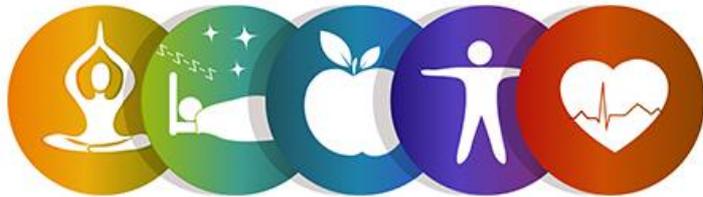
Popular searches: Nike Shoes,Woodland Shoes,Adidas Shoes,Titan Watches,Fila Shoes,Puma Shoes,Fastrack Watches

The image shows a search results page for a 404 error. At the top, it says 'You searched for 404'. Below that is an illustration of two hangers (one red, one blue) on a rack, with a small starburst icon. The main text reads 'We couldn't find any matches!' followed by 'Please check the spelling or try searching something else'. There is a search bar containing the text 'Shoes, T-shirts, Tops etc.' and a 'SEARCH' button. At the bottom, there is a list of 'Popular searches: Nike Shoes,Woodland Shoes,Adidas Shoes,Titan Watches,Fila Shoes,Puma Shoes,Fastrack Watches'.



# Emotional AI or affective computing

Designing technology to detect and recognize someone's emotions automatically from sensing aspects of their facial expressions, body movements and gestures.

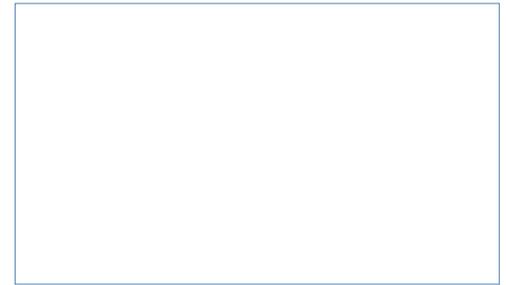


# Emotions and the User Experience

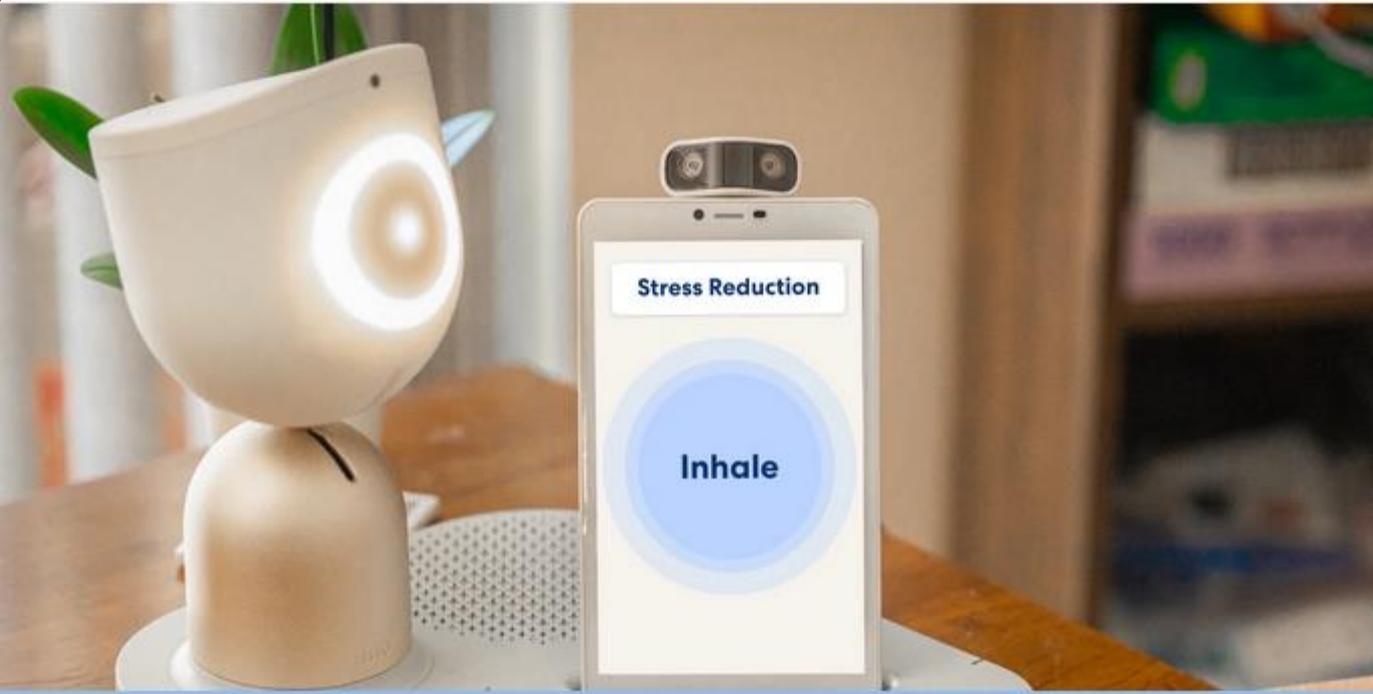
Emotional interaction is concerned with what makes people feel happy, sad, annoyed, anxious, frustrated, motivated, delirious, and so on, and then using this knowledge to inform the design of different aspects of the user experience.



Image by Freepik



# ELLI.Q



Introducing ElliQ

The sidekick for  
healthier,  
happier aging



# Miko

Artificial Intelligence. Genuine friendship.

Salut! 🇫🇷

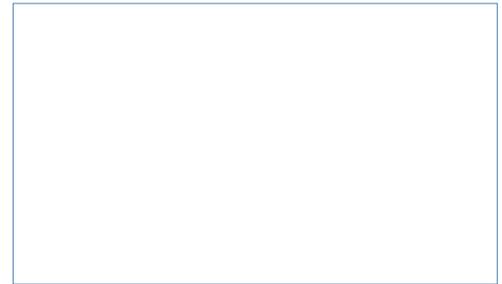
Hi! 🇺🇸

Hola! 🇪🇸

Hallo! 🇩🇪



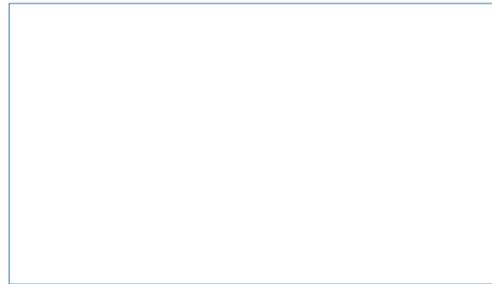
- + EMOTION
- + BEHAVIOR
- + ADAPTIVE



Miko's one to talk.



Source: <http://www.mikiyakobayashi.com/projects>

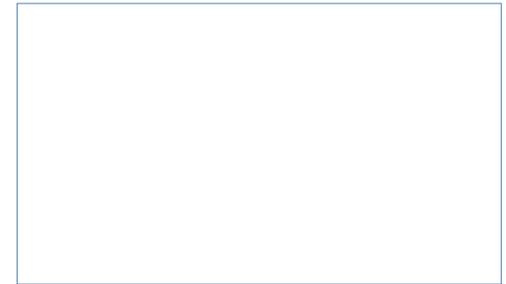


mubasic



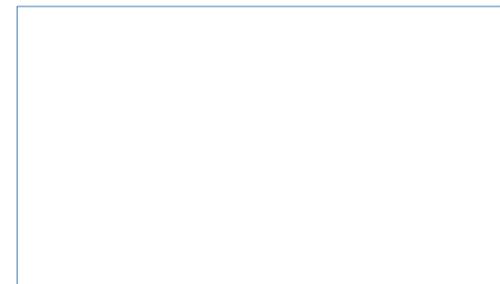
# The #1 source for children's music.

An ever-growing catalogue of high-quality children's music, sourced by talented music creators from all over the world.



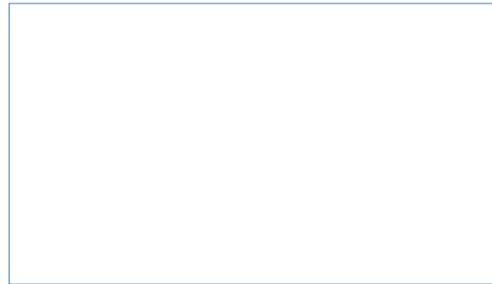
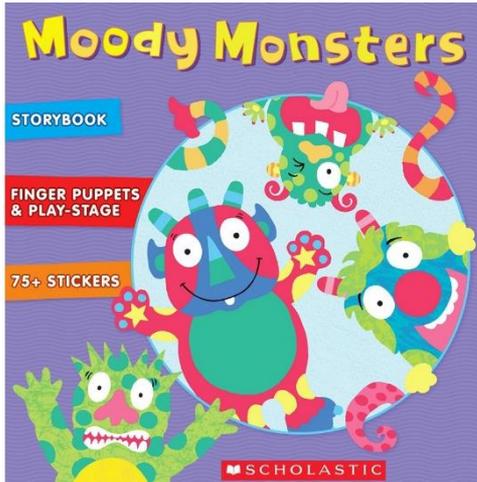
The image shows a screenshot of the Protest website homepage. At the top, there is a navigation bar with a hamburger menu icon on the left, followed by the text 'MEN', 'WOMEN', and 'KIDS'. The 'PROTEST' logo is centered in the top right, and a 'Search' button is on the far right. The main visual is a large hero image of two people in winter gear standing on a snowy mountain slope. Overlaid on this image is the text 'Our mission is to let you ride more' in a large, white, sans-serif font. Below the hero image, there are three white rectangular boxes, each containing a small image and text. The first box is for 'SHOP MEN' with the text 'Check out our winter 16-17 collection'. The second box is for 'SHOP WOMEN' with the text 'You can never go wrong with our most popular pieces'. The third box is for 'SHOP KIDS' with the text 'Comfortable, warm, and super cool!'. The background of the entire page is a light blue gradient.

Source: <https://www.protest.eu/nl/nl>





Track your mood wherever you are

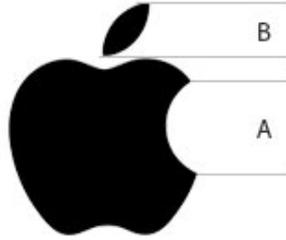
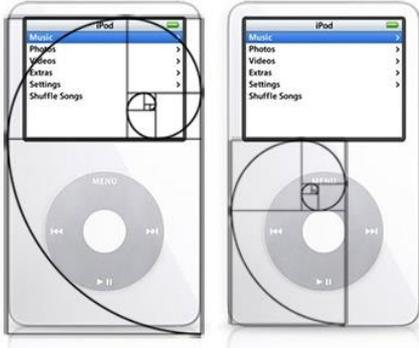


# Human nature

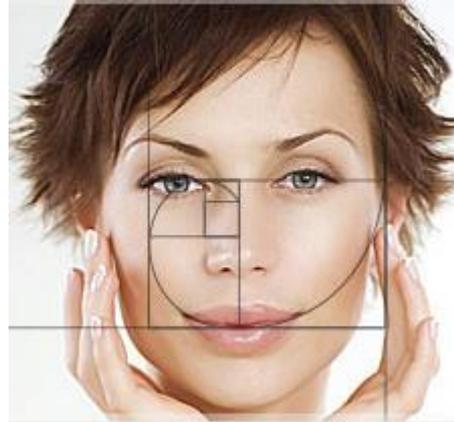
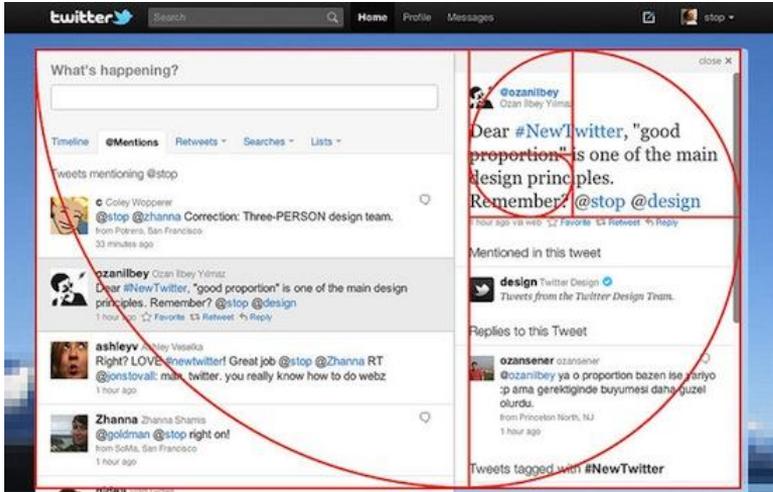
**evolutionary psychology:**  
naturally select the most  
advantageous instincts and  
behaviors to keep our species  
alive

*A Biological Homage to Mickey  
Mouse, Stephen Jay Gould*





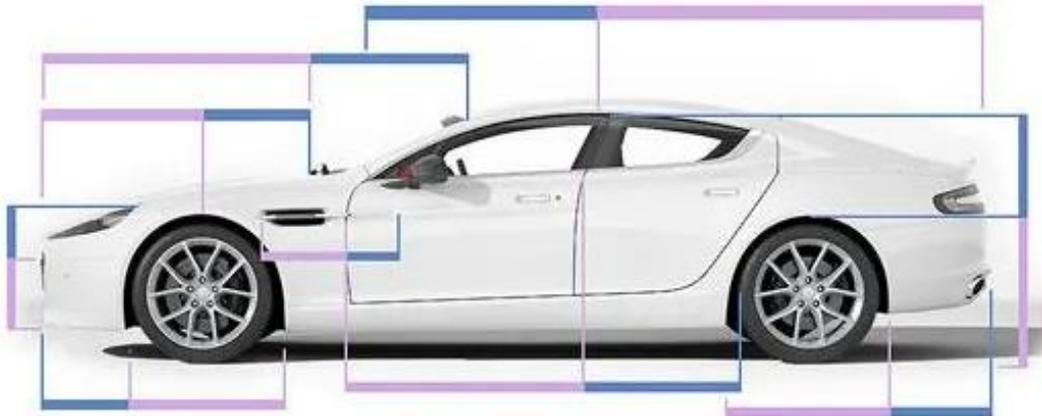
$$\frac{A}{B} \approx 1.618$$



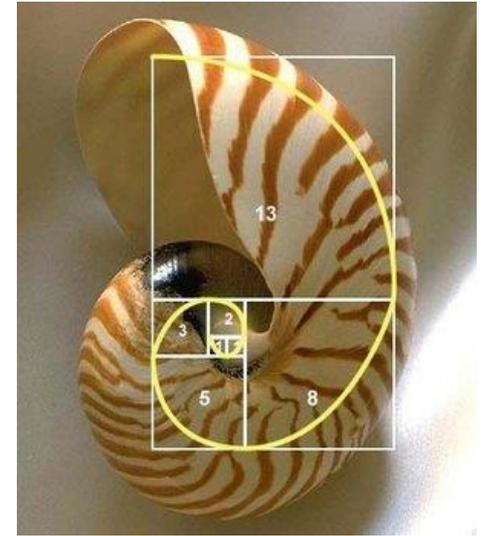
Source:  
<https://www.companyfolders.com/blog/gold-en-ratio-design-examples>



Source: <https://www.eclipsemediasolutions.com/blog/golden-ratio-web-design-creating-divine-website>



Source: <https://www.forbes.com/sites/anthonykosner/2013/02/22/the-sports-car-the-laptop-and-the-science-behind-the-golden-proportion/?sh=1facc7b5424a>



Source: <https://www.goldenratioproducts.com/>



Can you hear me?

Every year 3 million children die of hunger.

HELP KEEP THEIR VOICES ALIVE

wfp.org  United Nations World Food Programme

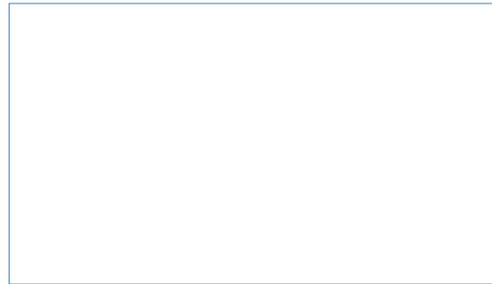
Coming to a cinema near you

**BE THE ONE**

**TO FEED HUNGRY CHILDREN**

GivingPartnerChallenge.org

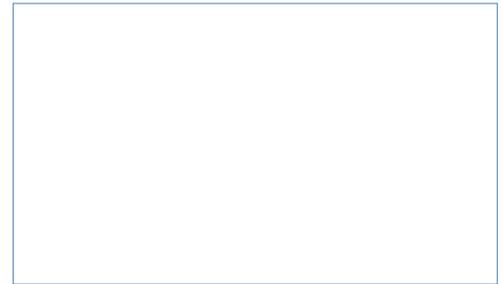
WHAT ON EARTH ARE WE DOING TO OUR PLANET?

*Reading material:*

*A Biological Homage to Mickey Mouse*, Stephen Jay Gould

<https://faculty.uca.edu/benw/biol4415/papers/Mickey.pdf>



**Thank You**

