

# DESIGN THINKING STEPS



# APPLYING DESIGN THINKING

Understand

Discover

Define

Ideate

Prototype

Evaluate

Understand the problem

Empathize with users

Re-define the problem

Come up with solution ideas

Prototype and evaluate with users



# UNDERSTAND THE PROBLEM

Think like a beginner (Stanford d.school)

- If you approach the problem thinking you know the solution, you may miss out on alternatives

Don't criticise the ideas of others

All ideas are welcome

Question everything, even what we think we understand

Be curious

Look for patterns and similarities with other situations

Listen!

# EMPATHIZE WITH USERS

The problems are not ours; they are those of the users

To understand:

**Observe** users in their natural environment

**Engage** users, e.g., through interviews

**Immerse** in the users' environment to experience first-hand their challenges

# DEFINE THE PROBLEM

Define the problem from the users' perspective

What are the real needs?

Define the **point-of-view** statement of the problem, which includes

- User insight
- The designer's understanding of the problem (point-of-view)

This is the problem that you will try to solve

# IDEATE IN A GROUP

Produce alternative solutions, brainstorm

Create a broad solution space

As many solutions as possible, as diverse as possible

Conventional, innovative, attractive solutions

From this repository, you will synthesize a solution

# HOW TO CHOOSE A SOLUTION

Organize solutions in piles

- The logical
- The attractive
- The extreme

Select a solution that can lead to a prototype

- Physical or digital
- But always interactive



# PROTOTYPE

A prototype will be discarded

It is a quick implementation, not necessary digital, could be with paper

Integrates some of your solution ideas

It is more successful if users can interact with it

It starts a discussion on potential solutions and helps understand user needs



# TEST

This is your opportunity to get user feedback

Immerse prototypes into users' lives

Observe users while they interact with the prototype

Ask questions

- What are you thinking?
- How do you feel?

Be prepared to be wrong; be prepared to discard the prototype and start again



# RESOURCES

Stanford D.school

[file:///C:/OLD%20SONY%20VAIO%20LAPTOP/Current%20SVN%20%20main%20folder/Courses%20Μαθηματα/Τεχνολογια%20στην%20Εκπαιδευση%202018/dschool bootleg deck 2018 final sm+\(2\).pdf](file:///C:/OLD%20SONY%20VAIO%20LAPTOP/Current%20SVN%20%20main%20folder/Courses%20Μαθηματα/Τεχνολογια%20στην%20Εκπαιδευση%202018/dschool%20bootleg%20deck%202018%20final%20sm+(2).pdf)

<https://dschool.stanford.edu/resources/design-thinking-bootleg>

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