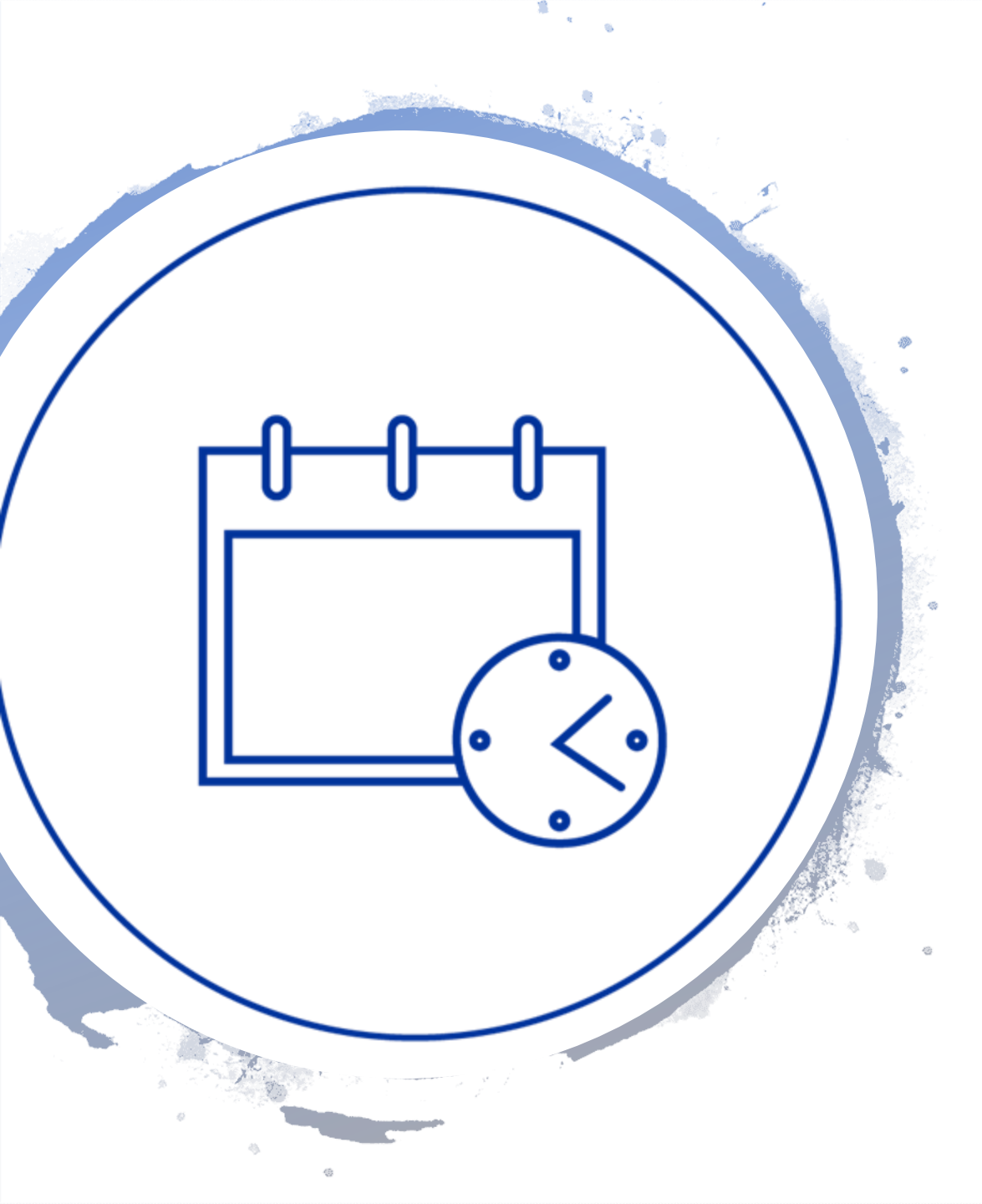


An intro into Design Thinking

CMGT engineer, designer & artist / Mark Boerrigter



Agenda

- INTRO into the Module
- WHAT is Design Thinking
- WHY use Design Thinking
- HOW to apply Design Thinking
- PREPARING for the lab
- REFERENCES

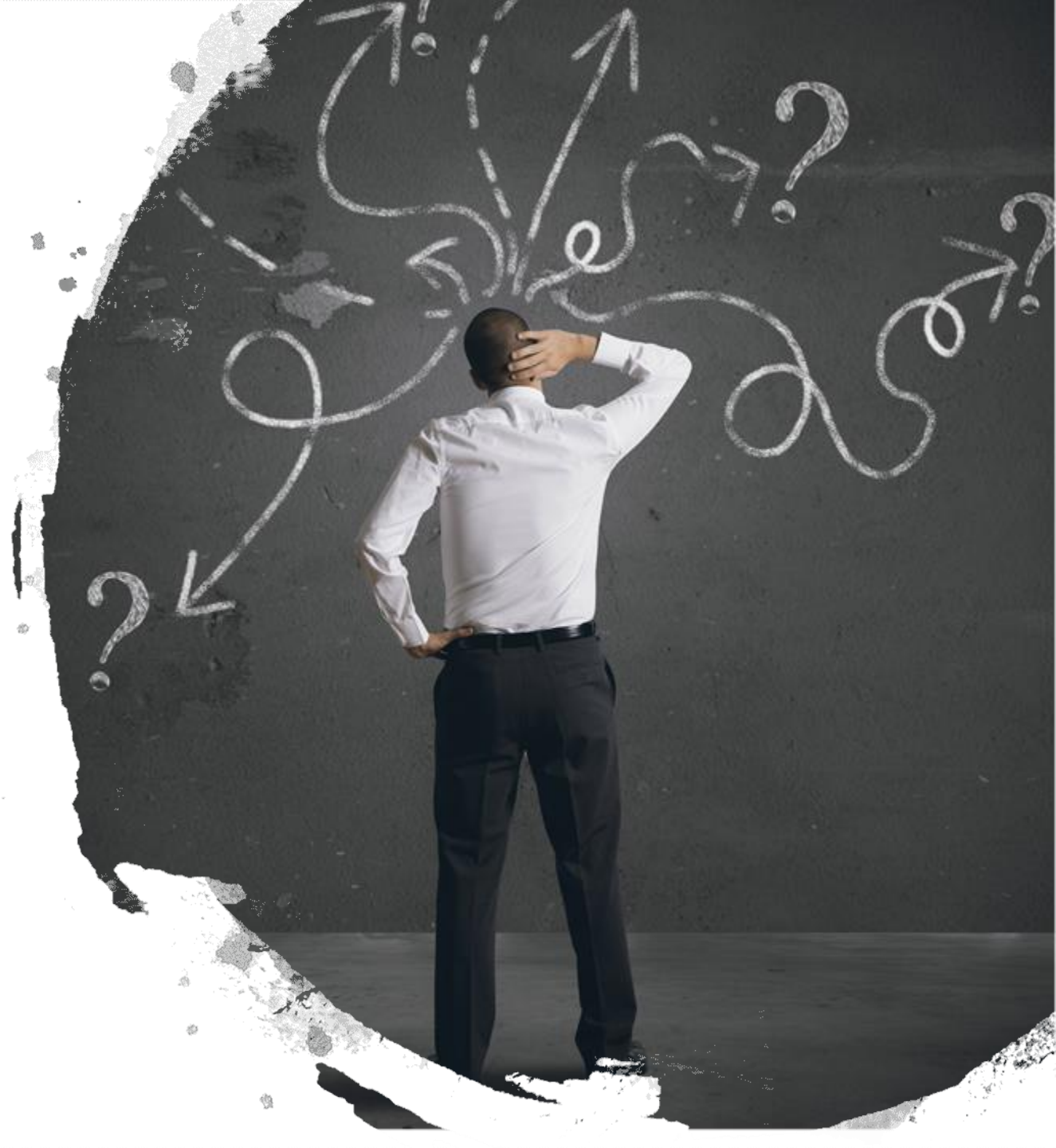
Intro

The module

- WEEKLY LECTURES
- WEEKLY LABS

The assignment

- TEAM
 - Interactive prototype (tested)
 - Weekly deliverables in the lab hours
 - Presentation: investors pitch with design thinking results, team and process overview, interactive prototype and future iterations.



The assignment

Create an interactive prototype of one or more media for a Transmedia storytelling experience that is based on an existing Intellectual Property

> exact criteria: check the assessment form <

Transmedia storytelling



Transmedia storytelling



<https://www.youtube.com/watch?v=CP-zOC15md0>

The process

Wk3: Intro	Lecture: intro Design Thinking and Scrum Lab: experience Design Thinking, forming teams + selecting an IP for your assignment
Wk4: Empathy	Lecture: intro Empathy and Transmedia storytelling Lab: creating an Empathy map for your assignment
Wk5: Define & Ideate	Lecture: intro Define & Ideate Lab: defining your users actions, design space and problem statement + brainstorming on possible stories and solutions
Wk6: Prototype	Lecture: different ways / tools for prototyping Lab: creating an interactive prototype
Wk7: Testing	Lecture: different ways / tools for user testing Lab: testing your prototype + improvements
Wk8: Pitching	Lecture: 'how to pitch' + exam preparation Lab: pitching your solution > price for best team!

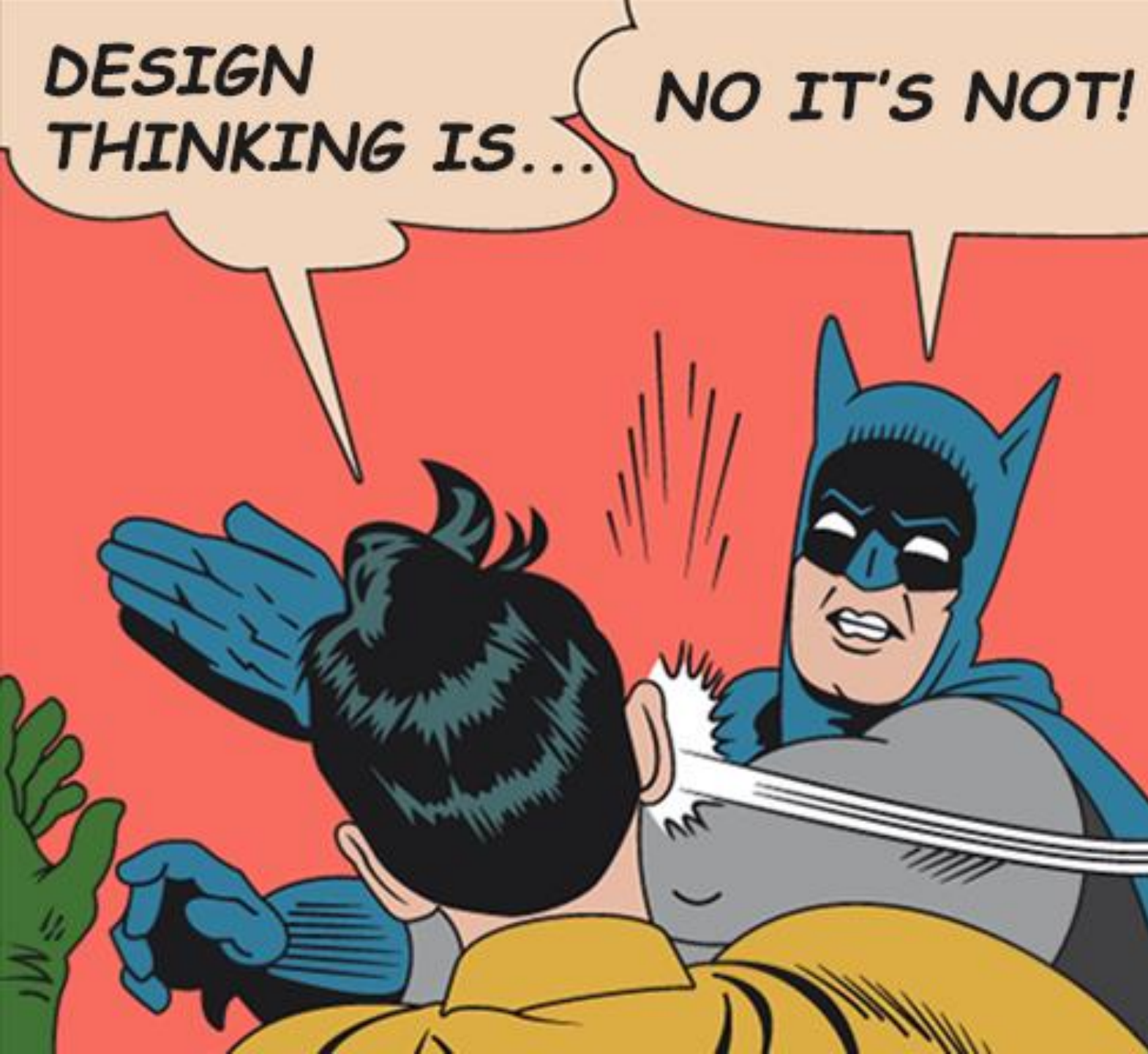
The logo is a circular emblem with a white background and a blue border. Inside the circle, the words "design", "thinking", and "bootleg" are stacked vertically in a bold, black, sans-serif font. The text is slightly tilted to the right. The background of the circle is decorated with a pattern of small, colorful dots (blue, green, yellow, red) and thin, black, wavy lines that resemble a hand-drawn or splattered effect. The entire logo is set against a white background with some faint blue and grey splatters around its edges.

design
thinking
bootleg

Additional info

Stanford Design School:

[https://dschool.stanford.edu/resources
/design-thinking-bootleg](https://dschool.stanford.edu/resources/design-thinking-bootleg)



What is
design
thinking?

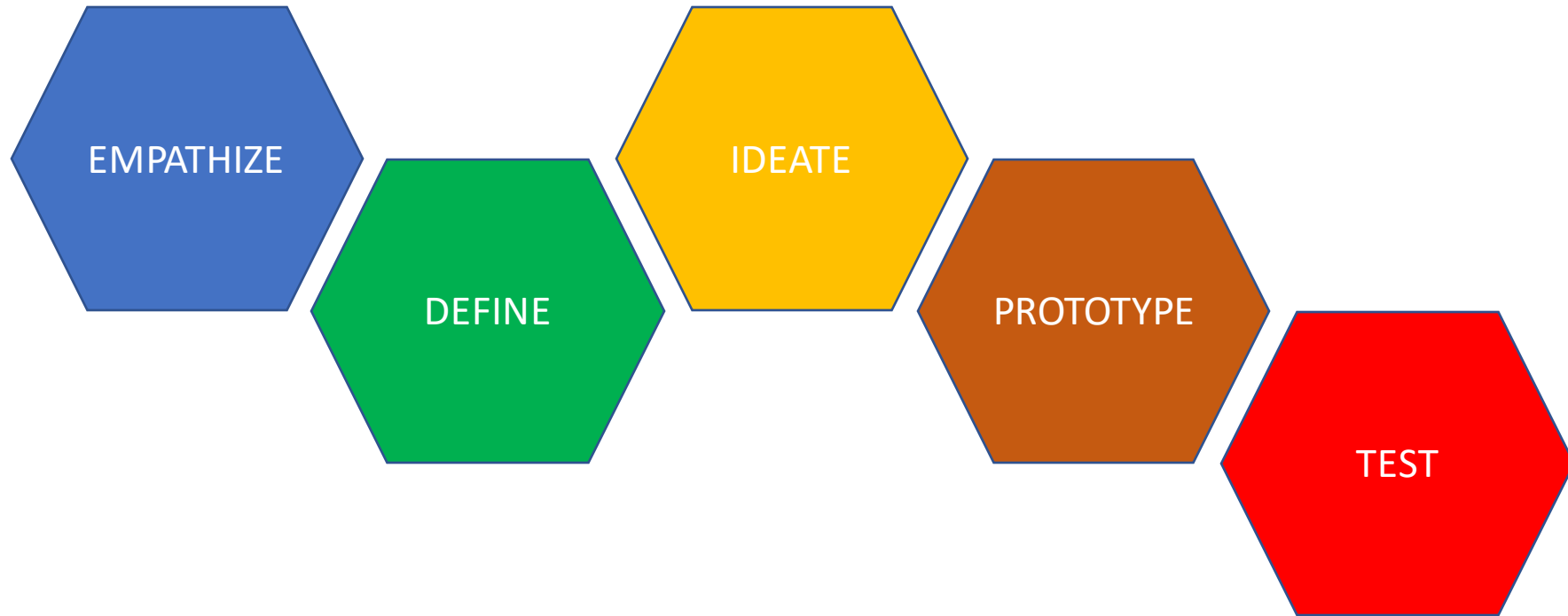


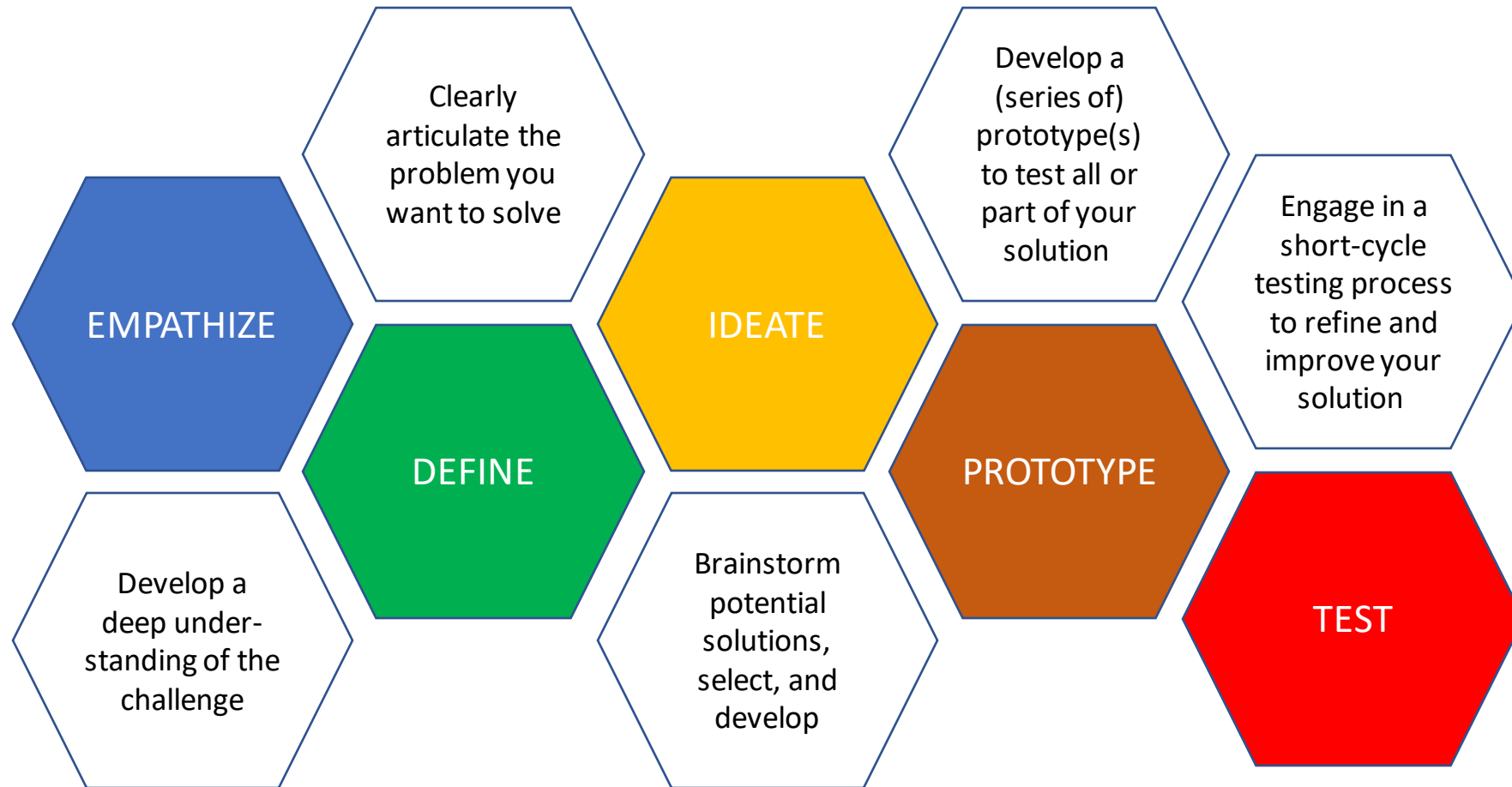
What is Design Thinking

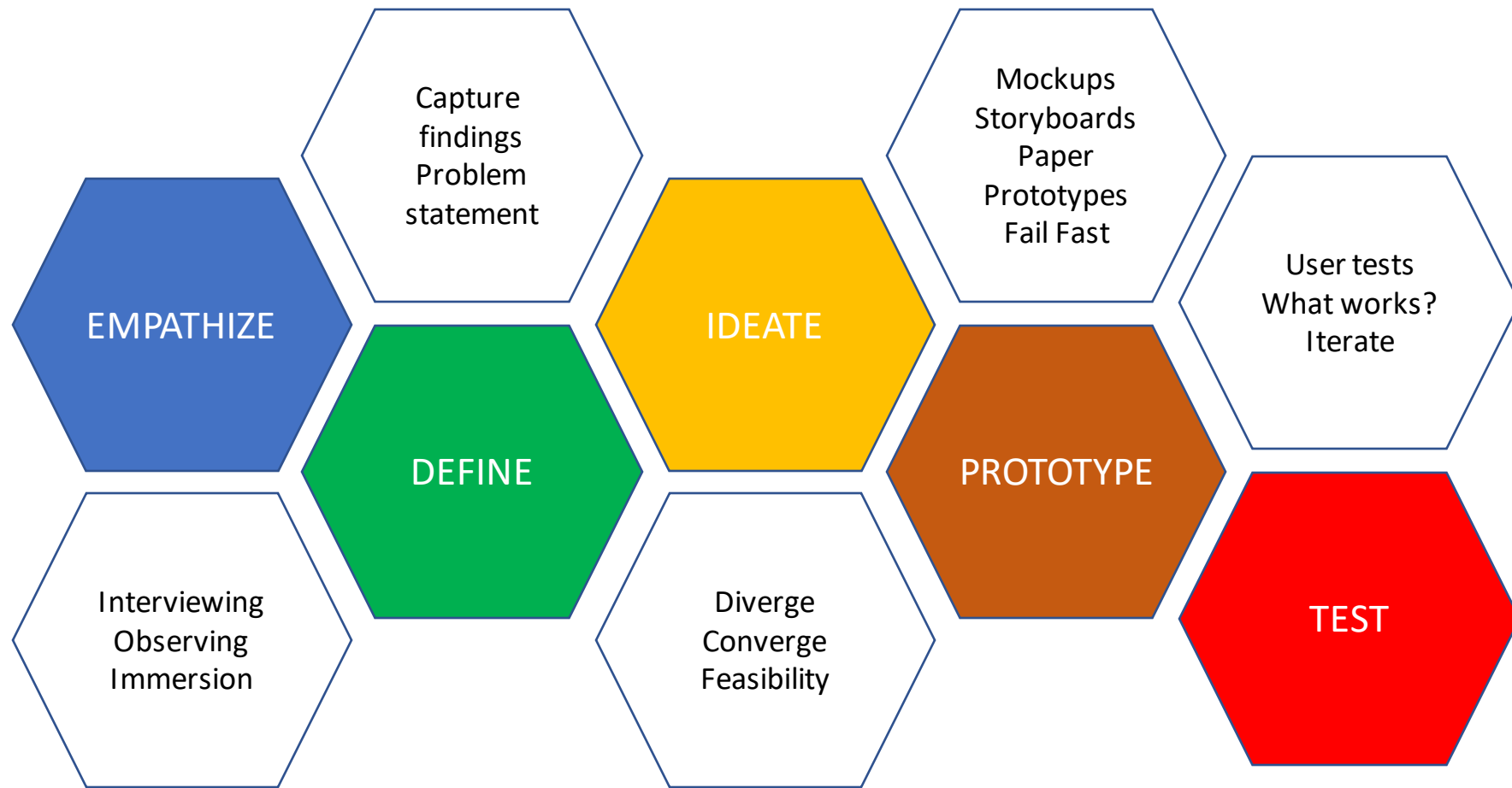
Design thinking is a method for the practical, creative resolution of problems using the strategies designers use during the process of designing.

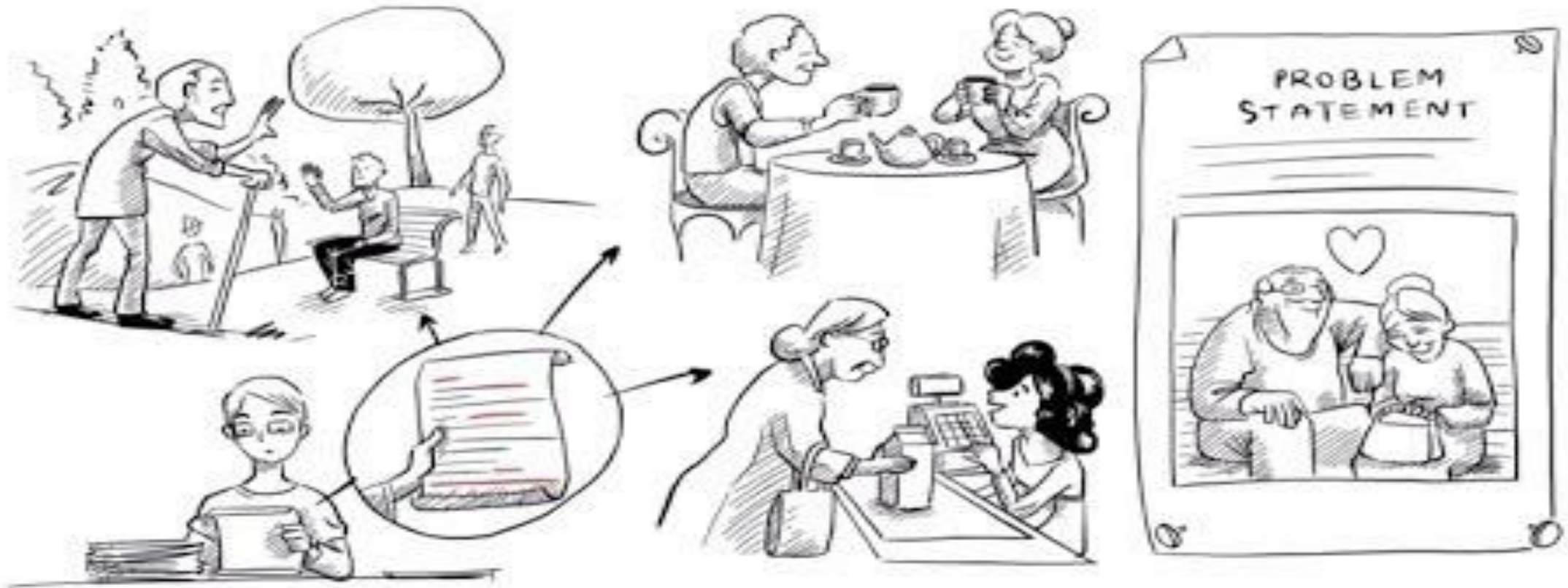
Design thinking has also been developed as an approach to resolve issues outside of professional design practice, such as in business and social contexts.

Source: wikipedia









- <https://www.people-doc.com/blog/design-thinking-case-studies>
- <https://blog.prototypr.io/how-i-use-zombie-apocalypse-speculative-games-to-teach-design-driven-innovation-fdf5742c5716>
- https://www.gamasutra.com/blogs/MarsAshton/20181003/327768/At_Meaningful_Play_Design_Thinking_X_Game_Design.php

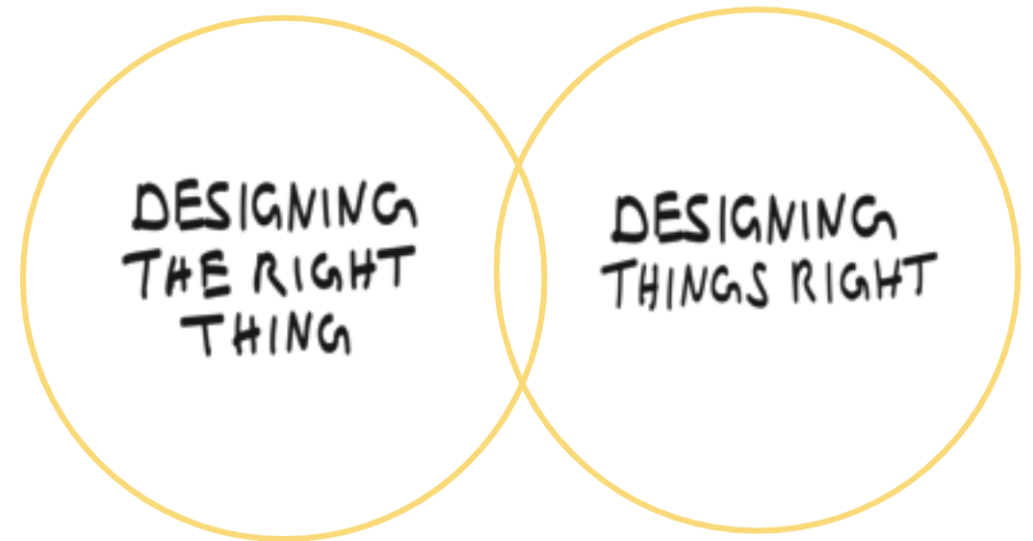
Why should you use design thinking?



Why should you use design thinking?



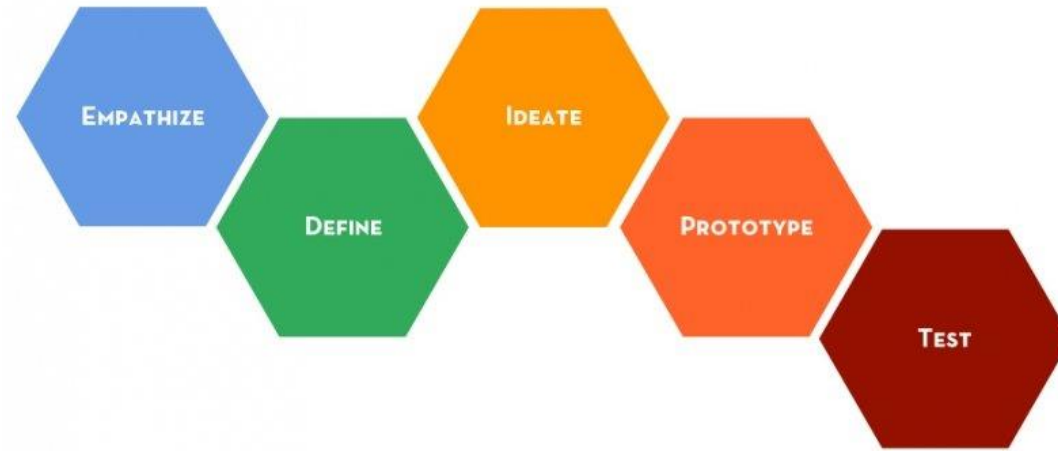
Why should you use design thinking?




Now look
back at
project
Boarding
call...

DESIGNING
THE RIGHT
THING

DESIGNING
THINGS RIGHT



How to use Design thinking



Assume a beginner's mindset

- You carry your own experiences, understanding, and expertise.
- Your unique perspective is an incredibly valuable asset to bring to any design challenge.
- At the same time, your viewpoint carries assumptions and personal beliefs. Your preconceived notions may, in fact, be misconceptions or stereotypes, and can limit the amount of real empathy you can build.
- Assume a beginner's mindset in order to put aside biases and approach a design challenge with fresh eyes.

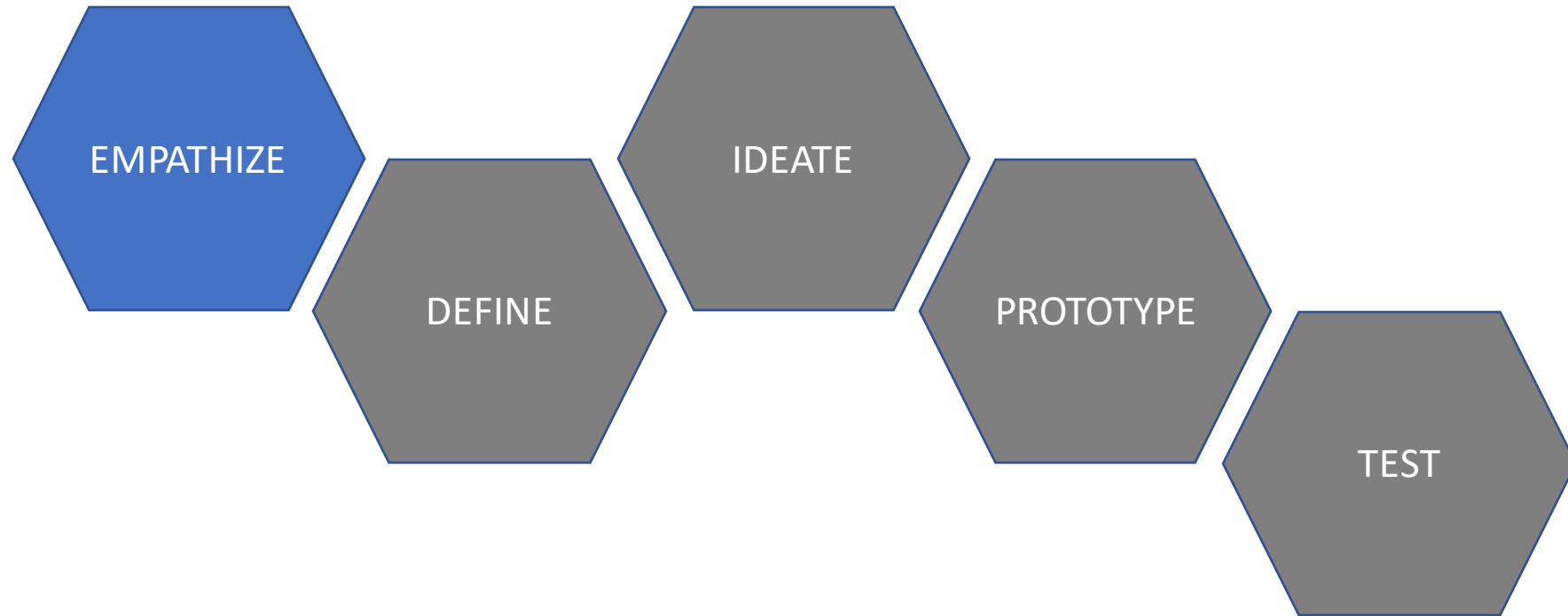
How to assume a beginner's mindset

- Don't judge
- Question everything
- Be truly curious
- Find patterns.
- Listen. Really.

Be optimistic – Yes, and...



[http://www.designkit.org/
mindsets](http://www.designkit.org/mindsets)





Empathize

- Empathy is the foundation of human-centered design. The problems you're trying to solve are rarely your own, they're those of particular users.
- Build empathy for your users by learning their values. The best solutions come from the best insights into human behavior. Discover the emotions that drive user behavior.
- Uncover user needs (which they may or may not be aware of).
- Identify the right users to design for.
- Use your insights to design innovative solutions



Why Empathize?

How to Empathize

Observe

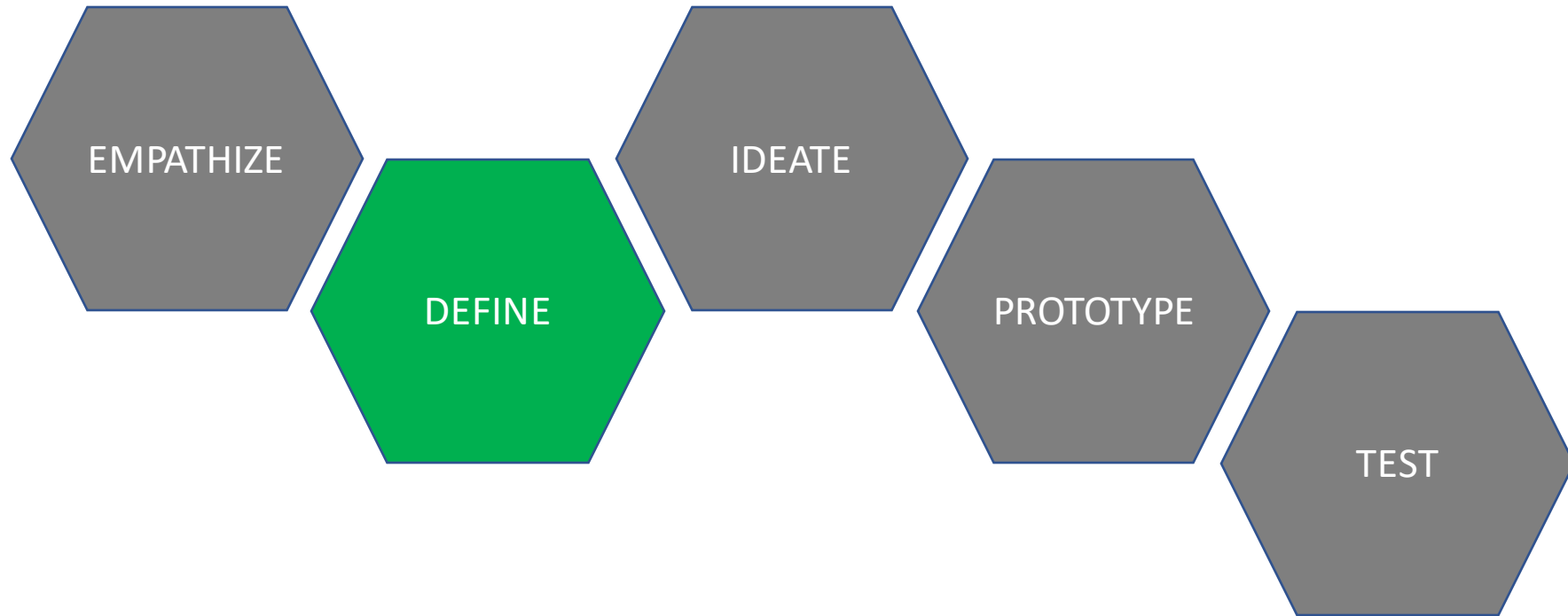
- how users interact with their environment. Capture quotes, behaviors and other notes that reflect their experience. Watching users gives you clues as to what they think and feel—what they need.

Engage

- users directly—interact with and interview them. Engaging users reveals deeper insights into their beliefs and values.

Immerse

- yourself in your users' experience. Find (or create if necessary) ways to immerse yourself in specific environments to understand first hand who you're designing for.





Define

- The define mode is when you unpack your empathy findings into needs and insights and scope a meaningful challenge.
- Based on your understanding of users and their environments, come up with an actionable problem statement (or Point of View).
- Understanding the meaningful challenge at hand, and the user insights you can leverage, is fundamental to creating a successful solution.



Your
problem
statement

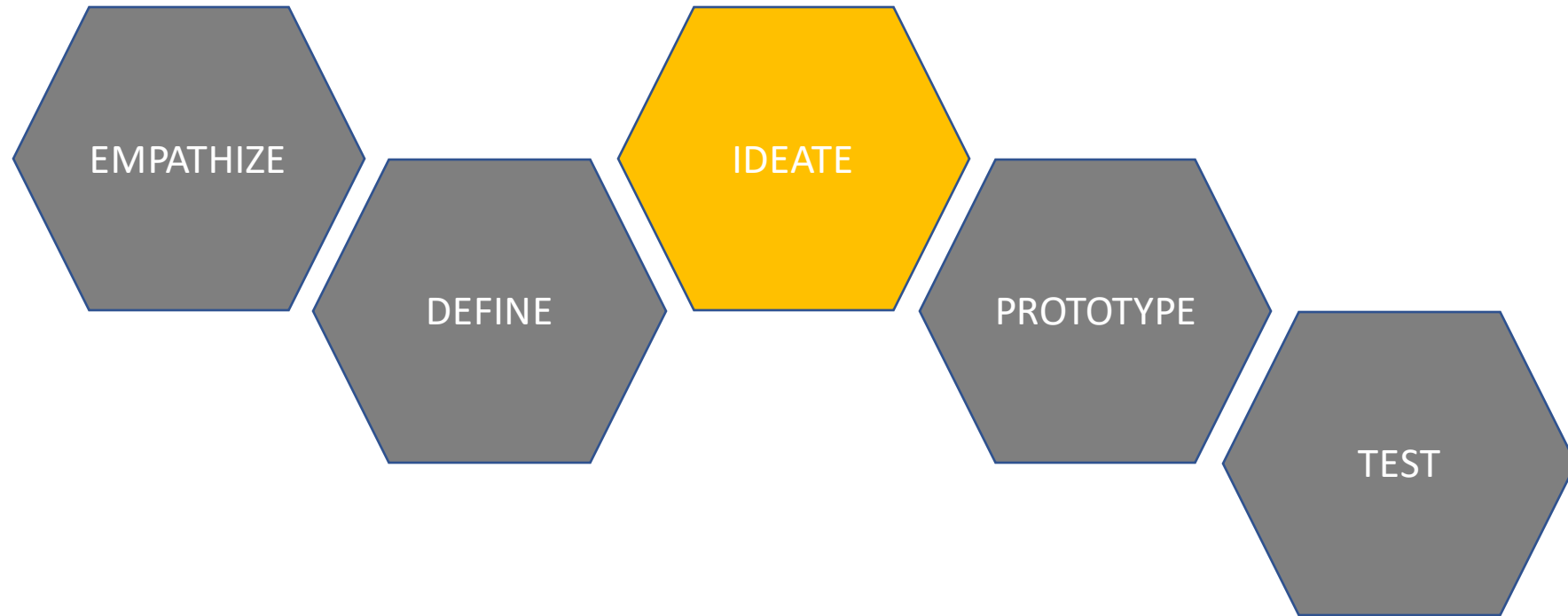
Why Define?

How to Define

The define mode explicitly expresses the problem you strive to address. In order to be truly generative, you must **reframe** your challenge based on new insights gained through your empathy work.

This reframed problem statement, can then be used as a solution-generating springboard.

A spectacular problem statement preserves emotion and the individual you're designing for. Includes strong language. Uses sensical wording. Includes a strong insight. Generates lots of possibilities.





Ideate

- Ideate is the mode in which you generate radical design alternatives. Ideation is a process of “going wide” in terms of concepts and outcomes—a mode of “flaring” instead of “focus”.
- The goal of ideation is to explore a wide solution space—both a large quantity and broad diversity of ideas.
- From this vast repository of ideas, you can build prototypes to test with users.



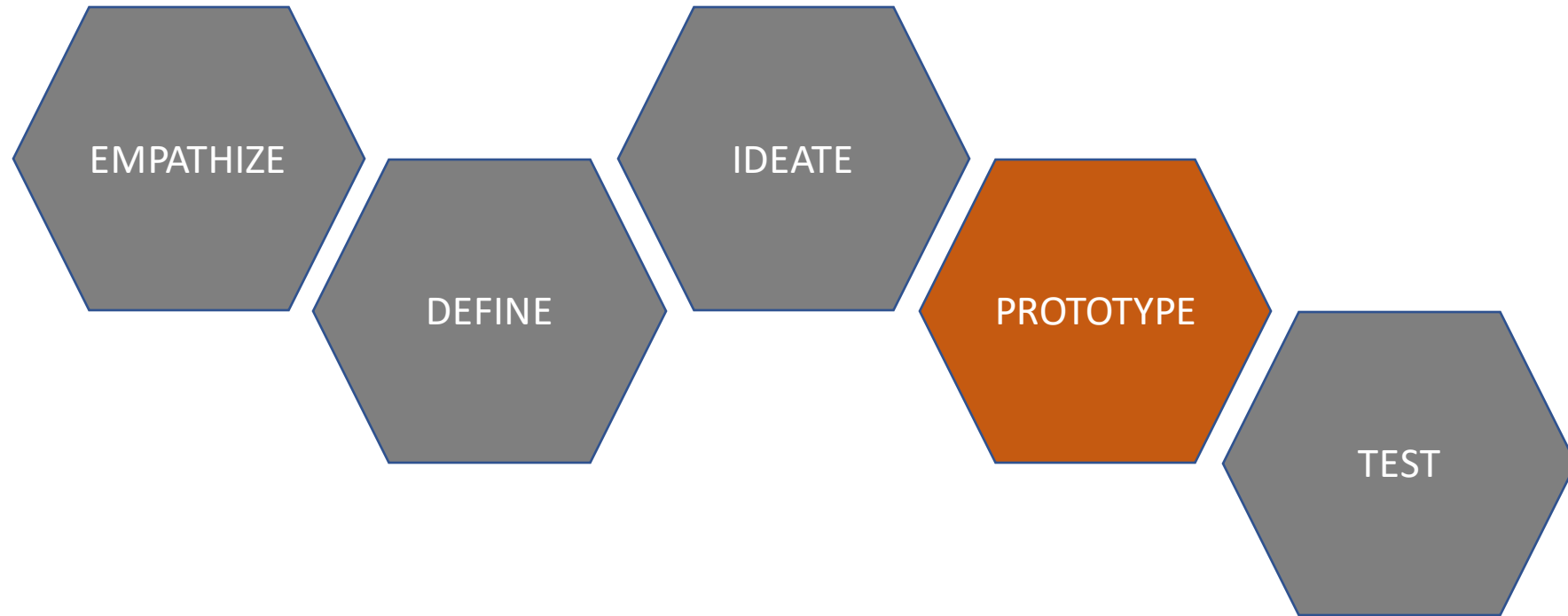
Why Ideate?

How to Ideate



How to Ideate

- Harness the collective perspectives and strengths of your team.
- Step beyond obvious solutions and drive innovation.
- Uncover unexpected areas of exploration.
- Create fluency (volume) and flexibility (variety) in your innovation options.
- Curtailing “bad” behaviors, such as evaluating during idea generation, is very important.





Prototype

- Prototyping gets ideas out of your head and into the world.
- A prototype can be anything that takes a physical form—a wall of post-its, a role-playing activity, an object.
- In early stages, keep prototypes inexpensive and low resolution to learn quickly and explore possibilities.
- Prototypes are most successful when people (the design team, users, and others) can experience and interact with them. They're a great way to start a conversation.
- What you learn from interactions with prototypes drives deeper empathy and shapes successful solutions.



How the customer explained it



How the project leader understood it



How the engineer designed it



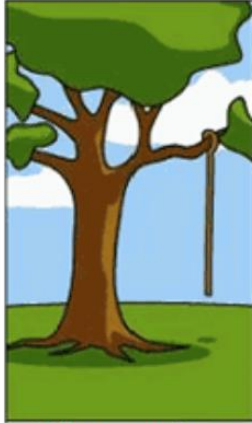
How the programmer wrote it



How the sales executive described it



How the project was documented



What operations installed



How the customer was billed



How the helpdesk supported it



What the customer really needed

Why Prototype?

How to Prototype

01

Just start building

02

Don't spend too much time

03

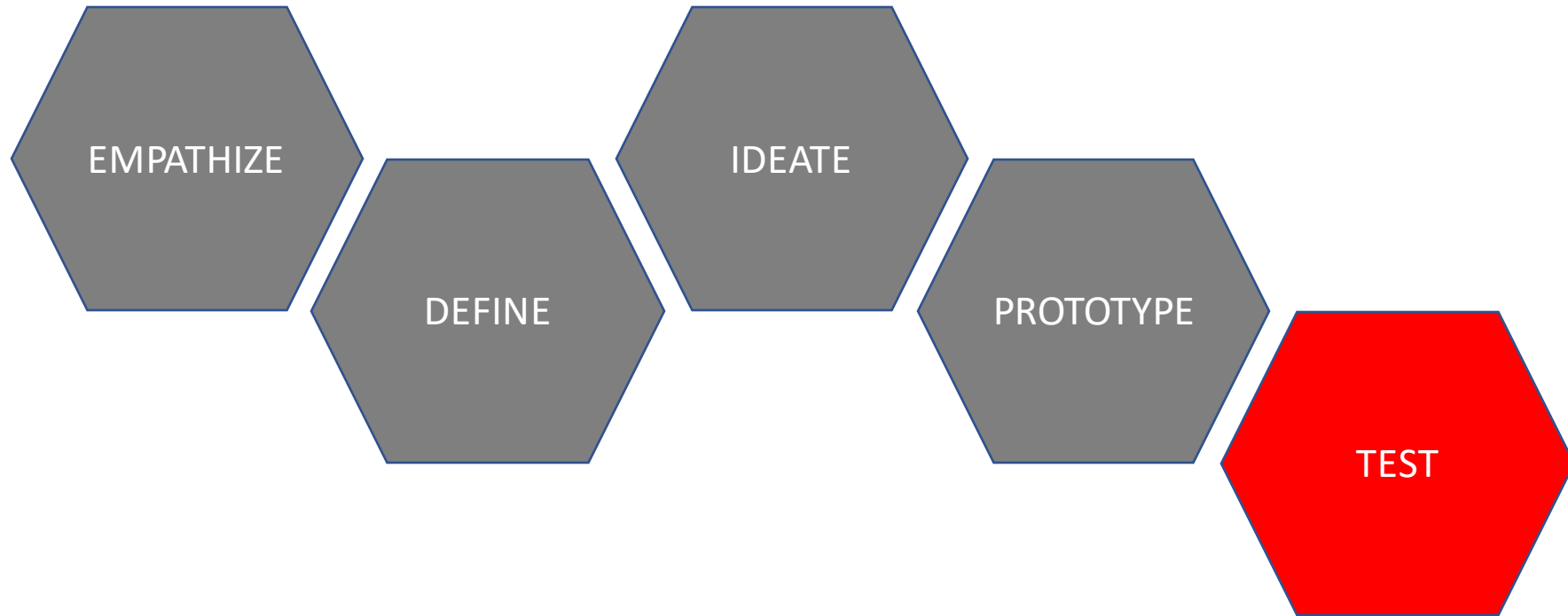
Remember what you're testing for

04

Build with the user in mind

05

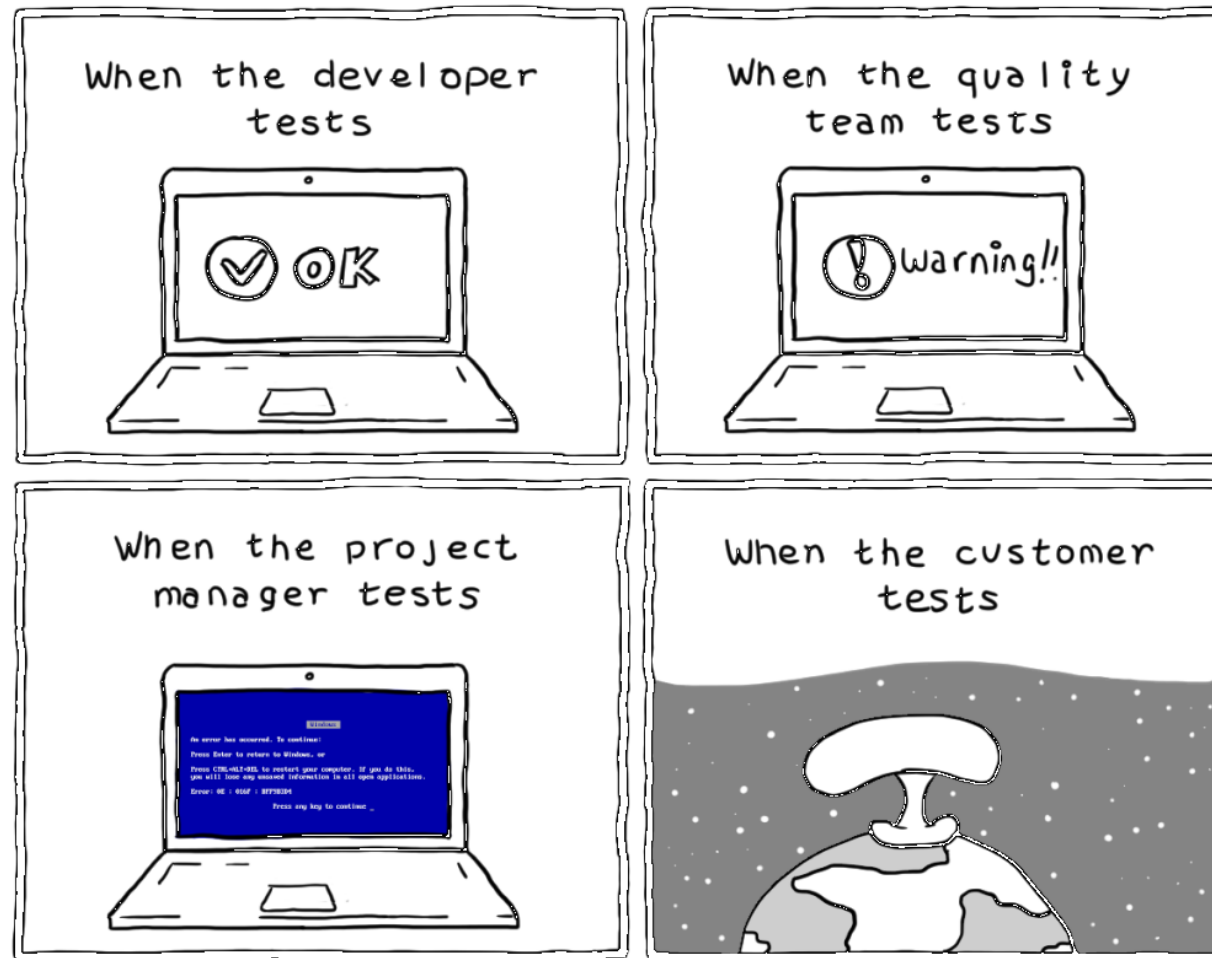
Test the prototype against your expected user behaviours and [user needs](#).





Testing

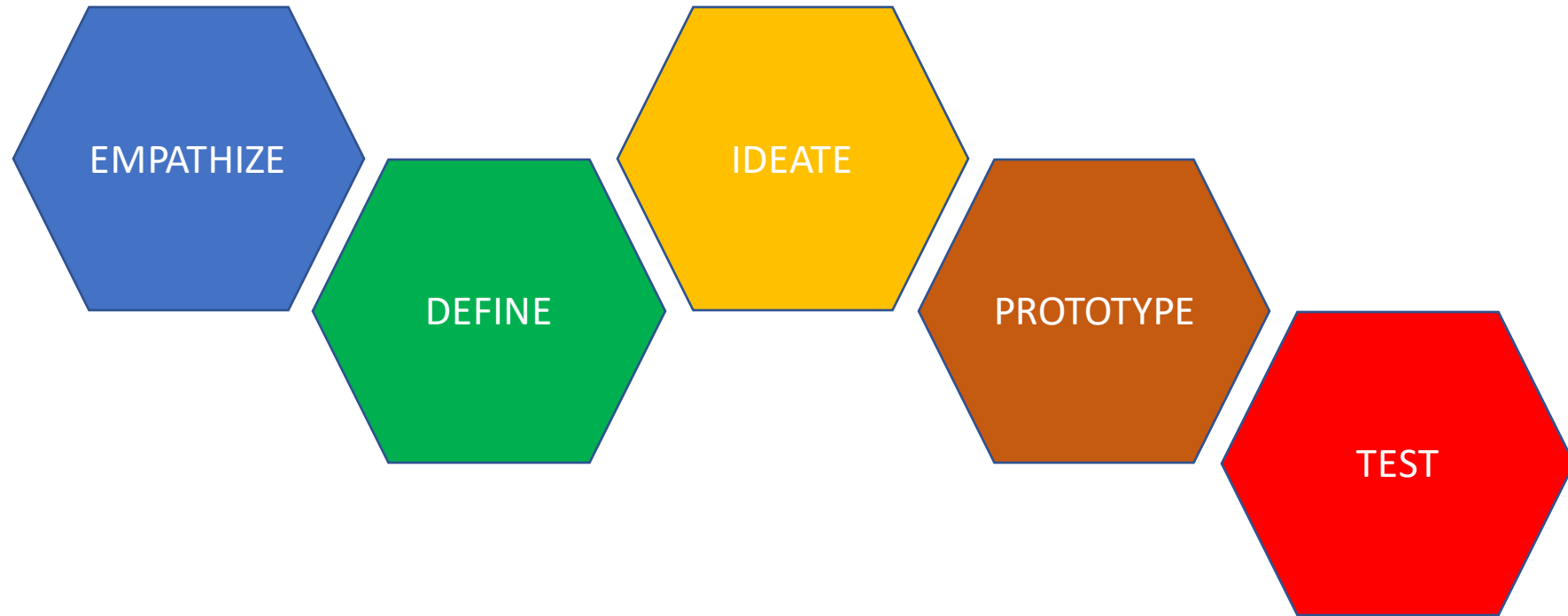
- Testing is your chance to gather feedback, refine solutions, and continue to learn about your users.
- The test mode is an iterative mode in which you place low-resolution prototypes in the appropriate context of your user's life.
- Prototype as if you know you're right, but test as if you know you're wrong.




Why Test?

How to Test

- Create authentic experiences for users to test your prototypes.
- Learn more about your user. Testing is another opportunity to build empathy through observation and engagement—often yielding unexpected insights.
- Refine your prototypes and solutions. Testing informs the next iterations of prototypes. Sometimes this means going back to the drawing board.
- Test and refine your Point of View. Testing may reveal that, not only did you get the solution wrong, but you also framed the problem incorrectly.





And then
what?

Back to the drawing board

Iterate

Cash!



Surviving the Zombie Apocalypse

Case

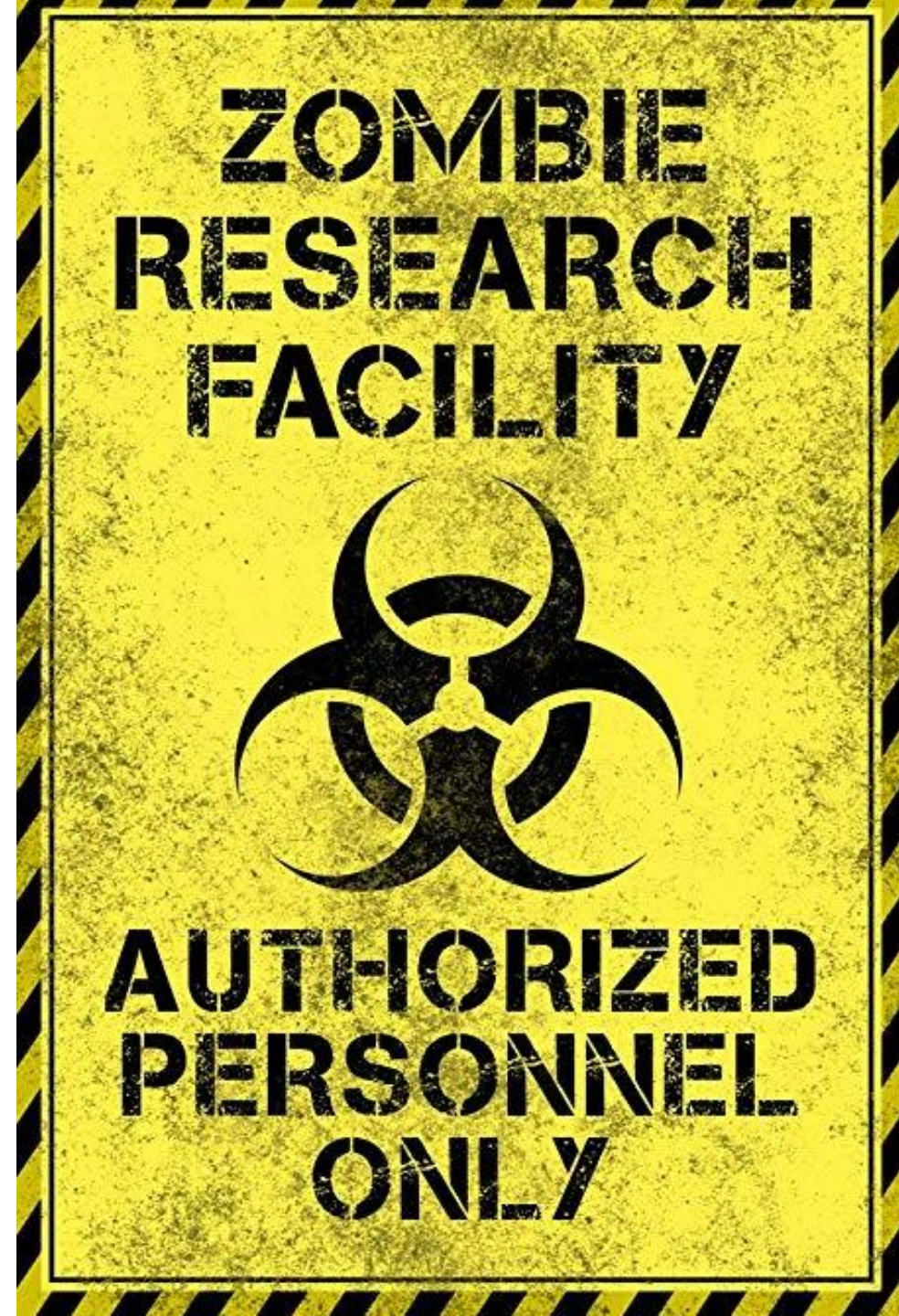
...BRRRAIINNNSSS....

- There is a Zombie outbreak on the streets. We need to get to the glass building for transport to safety.
- You have access to all the resources of this building, and your challenge is to explore how might we create a way for the entire group (10% loss is accepted) to cross the street alive.



1. EMPHATHIZE

- What do you know about our group?
- What do you know about zombies?
- What do you know about this building?
- What do you know about the streets?
- What do you know about....



2. DEFINE

- What are the most important insights?
- What are the most important needs?
- What is our problem statement?
 - How can we (users).... create a way to
(needs)... because ... (insights)...



3. IDEATE

- Sketch at least 3 ways to meet our needs



4. PROTOTYPE

- How could we prototype these solutions as fast as possible?



5. TEST

- How could we test these solutions?

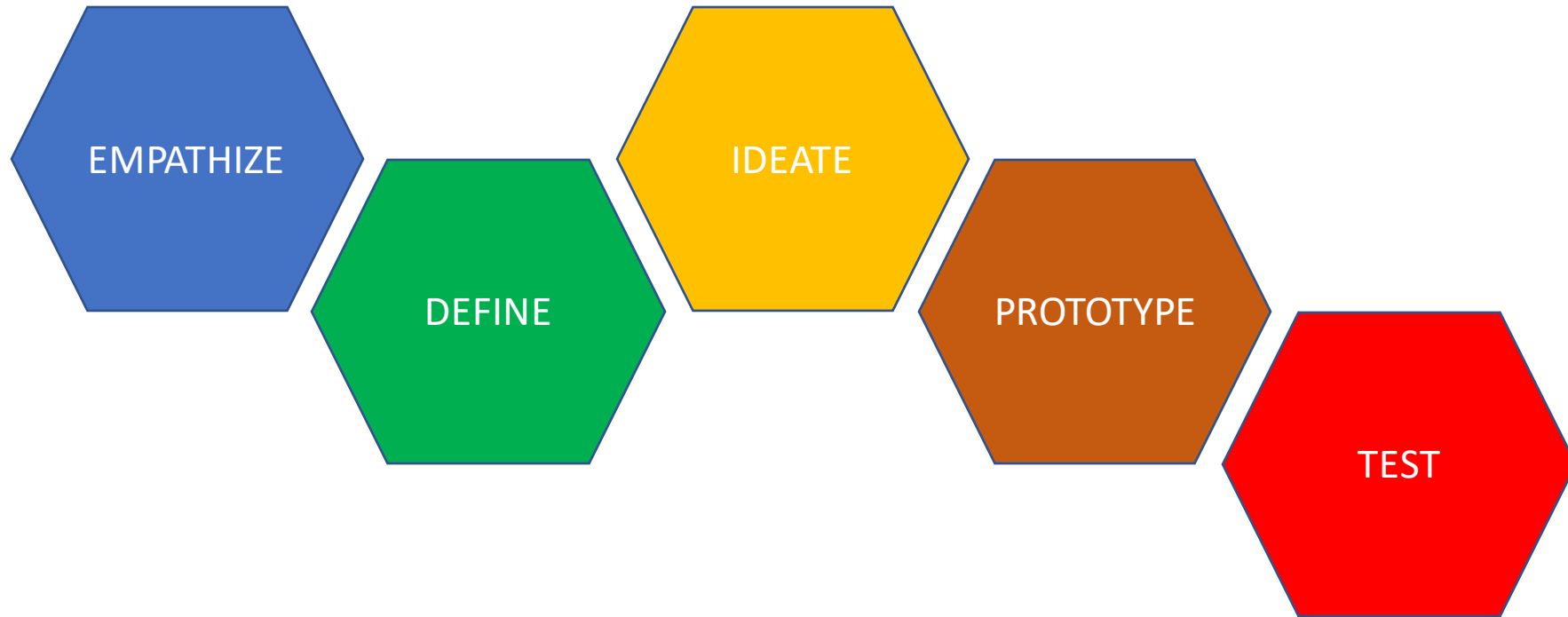


Transfer

From lecture to knowledge



What is design thinking?



Assignment LAB hours

As a <student> I want to <experience the design thinking process>, so that <I can understand and apply it for this project>.

As a <product owner>, I want to <select a known IP>, so that I <can start researching the IP for the empathy phase> .

References

Design Thinking Bootcamp Bootleg.
(2018). *Stanford d.school*. Retrieved 15 August 2018, from
<https://dschool.stanford.edu/resources/the-bootcamp-bootleg>

Design Thinking Bootleg . (2018). *Stanford d.school*. Retrieved 15 August 2018, from
<https://dschool.stanford.edu/resources/design-thinking-bootleg>