Check this out —
It’s the d.school bootcamp bootleg.

This compilation is intended as an active toolkit to support your design thinking practice. The guide is not just to read — go out in the world and try these tools yourself. In the following pages, we outline each mode of a human-centered design process, and then describe dozens of specific methods to do design work. These process modes and methods provide a tangible toolkit which support the seven mindsets — shown on the following page — that are vital attitudes for a design thinker to hold.

The bootleg is a working document, which captures some of the teaching we impart in “design thinking bootcamp,” our foundation course. An update from the 2009 edition, we reworked many of the methods based on what we learned from teaching and added a number of new methods to the mix. The methods presented in this guide are culled from a wide range of people and organizations who have helped us build the content we use to impart design thinking. Think of this guide as a curation of the work of many individuals, who hail both from the d.school and also from other far-reaching areas of the design world. We thank all the people who have contributed to the methods collected in this guide.

This resource is free for you to use and share – and we hope you do.
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We welcome your reactions to this guide. Please share the stories of how you use it in the field. Let us know what you find useful, and what methods you have created yourself — write to: bootleg@dschool.stanford.edu

Cheers,
The d.school
**Focus on Human Values**
Empathy for the people you are designing for and feedback from these users is fundamental to good design.

**Craft Clarity**
Produce a coherent vision out of messy problems. Frame it in a way to inspire others and to fuel ideation.

**Embrace Experimentation**
Prototyping is not simply a way to validate your idea; it is an integral part of your innovation process. We build to think and learn.

**Be Mindful Of Process**
Know where you are in the design process, what methods to use in that stage, and what your goals are.

**Bias Toward Action**
Design thinking is a misnomer; it is more about doing that thinking. Bias toward doing and making over thinking and meeting.

**Radical Collaboration**
Bring together innovators with varied backgrounds and viewpoints. Enable breakthrough insights and solutions to emerge from the diversity.

**Show Don’t Tell**
Communicate your vision in an impactful and meaningful way by creating experiences, using illustrative visuals, and telling good stories.

**Empathy**
Empathy for the people you are designing for and feedback from these users is fundamental to good design.

**WHY empathize**
As a human-centered designer you need to understand the people for whom you are designing. The problems you are trying to solve are rarely your own—they are those of particular users; in order to design for your users, you must build empathy for who they are and what is important to them.

**WHAT is the empathize mode**
Empathy is the foundation of a human-centered design process. To empathize you:
- Observe. View users and their behavior in the context of their lives.
- Engage. Interact with and interview users through both scheduled and short ‘intercept’ encounters.
- Immers. Experience what your user experiences.

Engaging with people directly reveals a tremendous amount about the way they think and the values they hold. Sometimes these thoughts and values are not obvious to the people who hold them. A deep engagement can surprise both the designer and the designee by the unanticipated insights that are revealed. The stories that people tell and the things that people say—today if they are different from what they actually do—are strong indicators of their deeply held beliefs about the way the world is. Good designs are built on a solid understanding of these kinds of beliefs and values. Engage to:
- Uncover needs that people have which they may or may not be aware of
- Guide innovation efforts
- Identify the right users to design for
- Discover the emotions that guide behaviors

In addition to speaking with and observing your users, you need to have personal experience in the design space yourself. Find (or create if necessary) experiences to immerse yourself to better understand the situation that your users are in, and for which you are designing.
WHAT is the define mode

The define mode is when you unpack and synthesize your empathy findings into compelling needs and insights, and scope a specific and meaningful challenge. It is a mode of “focus” rather than “flaring.” Two goals of the define mode are to develop a deep understanding of your users and the design space and, based on that understanding, to come up with an actionable problem statement: your point of view. Your point of view should be a guiding statement that focuses on specific users, and insights and needs that you uncovered during the empathize mode.

More than simply defining the problem to work on, your point of view is your unique design vision that you crafted based on your discoveries during your empathy work. Understanding the meaningful challenge to address and the insights that you can leverage in your design work is fundamental to creating a successful solution.

WHY define

The define mode is critical to the design process because it explicitly expresses the problem you are striving to address through your efforts. In order to be truly generative, you must first craft a specific and compelling problem statement to use as a solution-generation springboard.

As a test, a good point of view (POV) is one that:
• Provides focus and frames the problem
• Inspires your team
• Provides a reference for evaluating competing ideas
• Empowers your team to make decisions independently in parallel
• Fuels brainstorming by suggesting “how might we” statements
• Captures the hearts and minds of people you meet
• Saves you from the impossible task of developing concepts that are all things to all people
• Is something you revisit and reformulate as you learn by doing
• Guides your innovation efforts

WHAT is the ideate mode

Ideate is the mode during your design process in which you focus on idea generation. Mentally it represents a process of “going wide” in terms of concepts and outcomes—it is a mode of “flaring” rather than “focus.” The goal of ideation is to explore a wide solution space—both a large quantity of ideas and a diversity among those ideas. From this vast depository of ideas you can build prototypes to test with users.

WHY ideate

You ideate in order to transition from identifying problems into exploring solutions for your users. Various forms of ideation are leveraged to:
• Step beyond obvious solutions and thus increase the innovation potential of your solution set
• Harness the collective perspectives and strengths of your teams
• Uncover unexpected areas of exploration
• Create fluency (volume) and flexibility (variety) in your innovation options
• Get obvious solutions out of your heads, and drive your team beyond them

Regardless of what ideation method you use, the fundamental principle of ideation is to be cognizant of when you and your team are generating ideas and when you are evaluating ideas—and mix the two only intentionally.
Traditionally prototyping is thought of as a way to test functionality. But prototyping is used for many reasons, including these (non-mutually-exclusive) categories:

- **Empathy gaining:** Prototyping is a tool to deepen your understanding of the design space and your user, even at a pre-solution phase of your project. In early explorations keep your prototypes rough and rapid to allow yourself to learn quickly and investigate a lot of different possibilities.

- **Exploration:** Build to think. Develop multiple solution options.

- **Testing:** Create prototypes (and develop the context) to test and refine solutions with users. Sometimes testing reveals that not only did we not get the solution right, but also that we have failed to frame the problem correctly.

- **Inspiration:** Inspire others (teammates, clients, customers, investors) by showing your vision. Prototyping is a powerful tool that can eliminate ambiguity, assist in ideation, and reduce miscommunication.

Prototypes are most successful when people (the design team, the user, and others) can experience and interact with them. What you learn from those interactions can help drive deeper empathy, as well as shape successful solutions.

We prototype to:

- **Learn.** If a picture is worth a thousand words, a prototype is worth a thousand pictures.
- **Solve disagreements.** Prototyping is a powerful tool that can eliminate ambiguity, assist in ideation, and reduce miscommunication.
- **Start a conversation.** A prototype can be a great way to have a different kind of conversation with users.
- **Fail quickly and cheaply.** Creating quick and dirty prototypes allows you to test a number of ideas without investing a lot of time and money up front.
- **Manage the solution-building process.** Identifying a variable to explore encourages you to break a large problem down into smaller, testable chunks.

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**WHAT is the prototype mode**

Prototyping is getting ideas and explorations out of your head and into the physical world. A prototype can be anything that takes a physical form – be it a wall of post-it notes, a role-playing activity, a space, an object, an interface, or even a storyboard. The resolution of your prototype should be commensurate with your progress in your project. In early explorations keep your prototypes rough and rapid to allow yourself to learn quickly and investigate a lot of different possibilities.

Many of the goals of prototyping are shared across all four of the above categories. We prototype to:

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**WHAT is the test mode**

Testing is the chance to refine our solutions and make them better. The test mode is another iterative mode in which we place our low-resolution artifacts in the appropriate context of the user’s life. Prototype as if you know you’re right, but test as if you know you’re wrong.

**WHY test**

To refine our prototypes and solutions. Testing informs the next iterations of prototypes. Sometimes this means going back to the drawing board.

To learn more about our user. Testing is another opportunity to build empathy through observation and engagement—it often yields unexpected insights.

To test and refine our POV. Sometimes testing reveals that not only did we not get the solution right, but also that we have failed to frame the problem correctly.