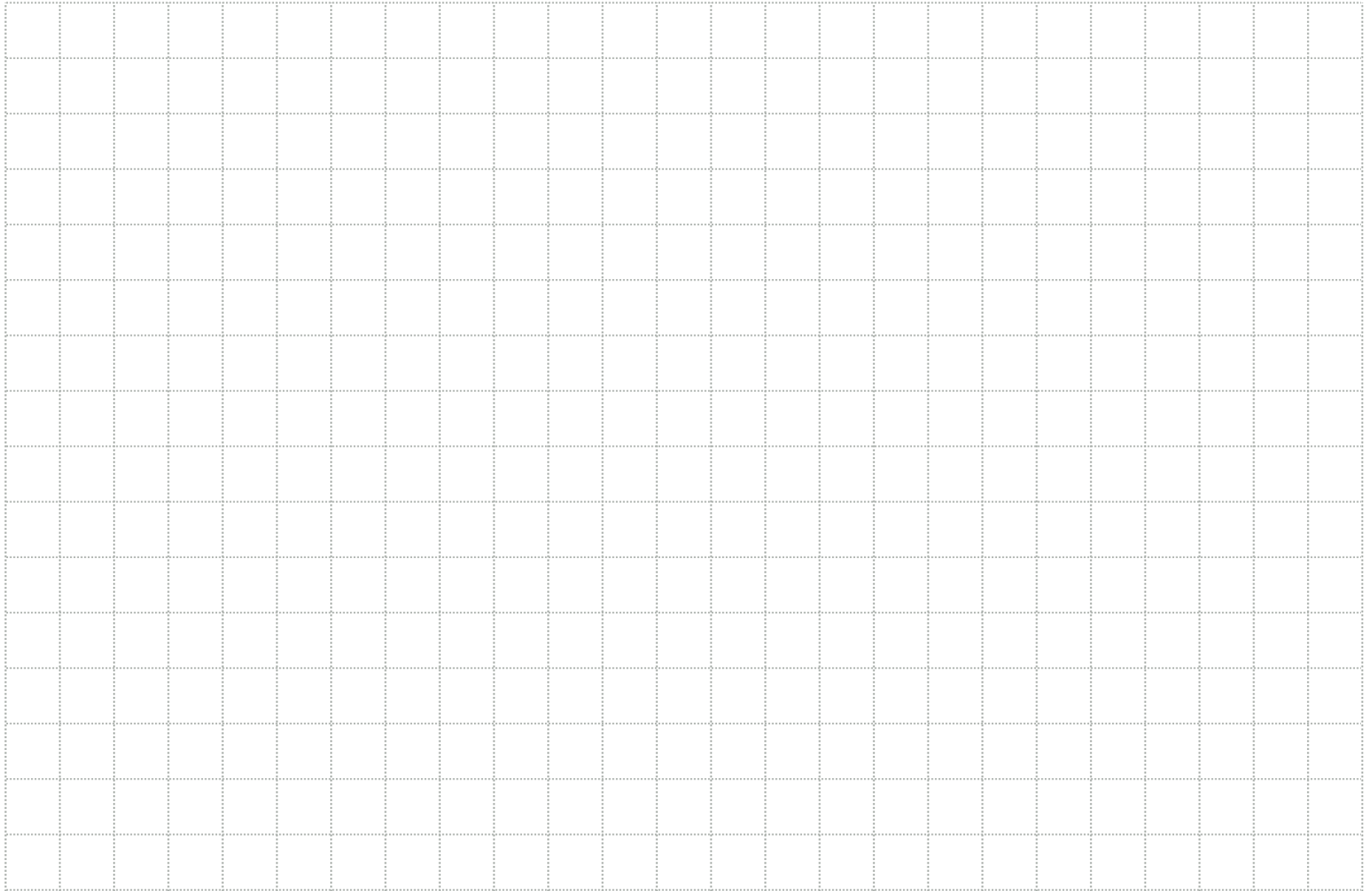# ALL GIRL CHALLENGE

DESIGN TEAM WORKBOOK

Our Design Challenge:

Team Members:

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

What is Design Thinking?

Design Thinking is about believing we can make a difference, and having an intentional process in order to get to new, relevant solutions that create positive impact.

Design Thinking gives you faith in your creative abilities and a process for transforming difficult challenges into opportunities for design.
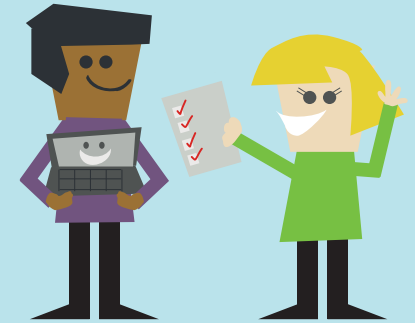
There are different ways to tackle the All-Girl Challenge. Here's two ways you can focus on for the challenge:

PRODUCT DESIGN

In order to help address the challenge, your team may want to think about potential products or a family of potential products that could be designed, developed, and sold. This products could be physical things that consumers buy, or they could be software like web apps or smartphone apps.
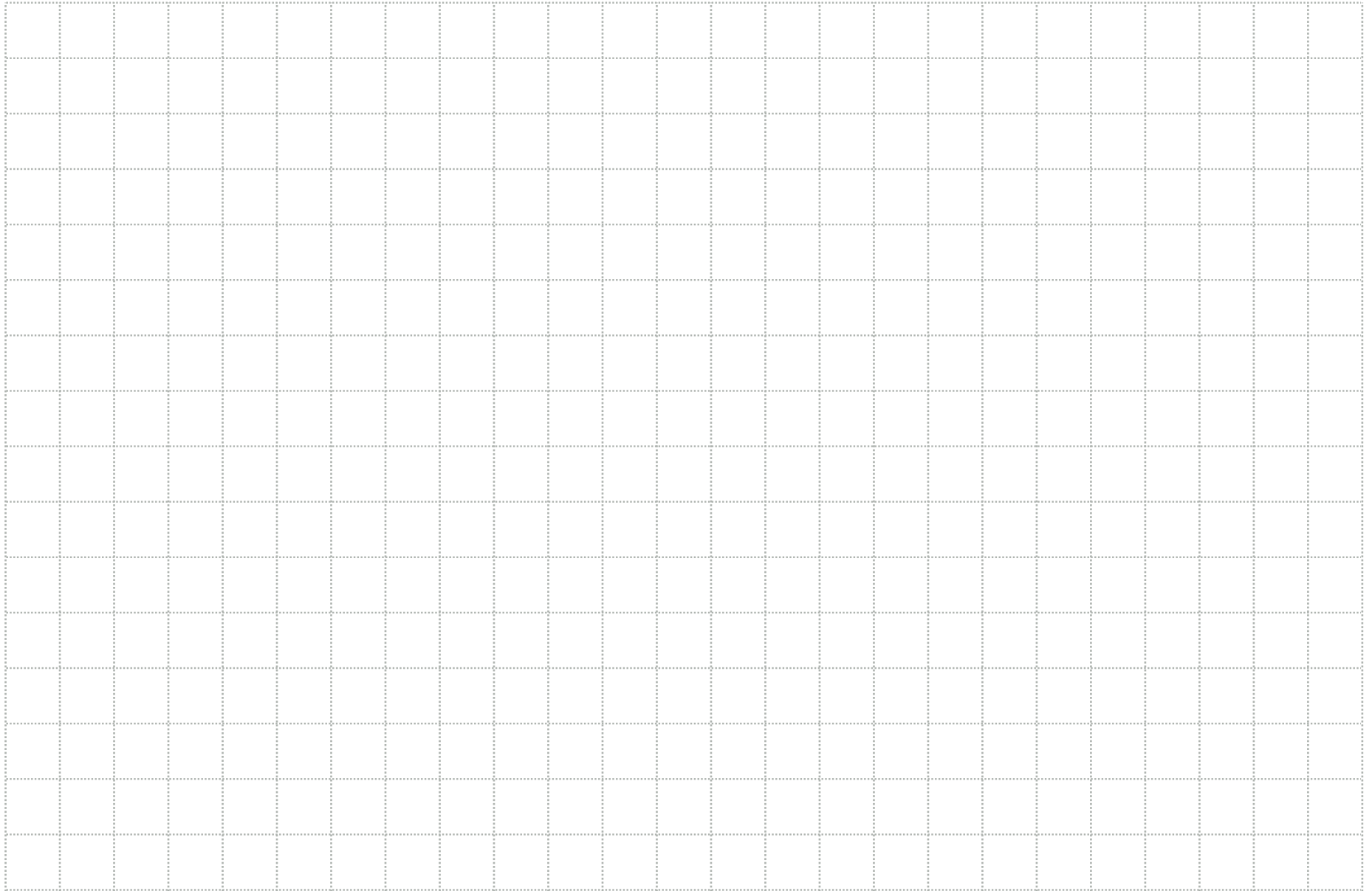
SERVICE
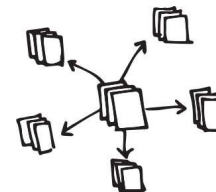
Your team could also consider designing a service to help address the challenge. Examples of services include transportation services (subway, commuter rail, taxi service,) meal preparation services (e.g., caterers,) and medical assistant services.

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Timeline and Checklist

It's going to be important to keep track of your team's time during the Challenge to make sure you make it to the end! Here's a rough timeline of the Challenge that you'll want to keep in mind to make sure you're on track!
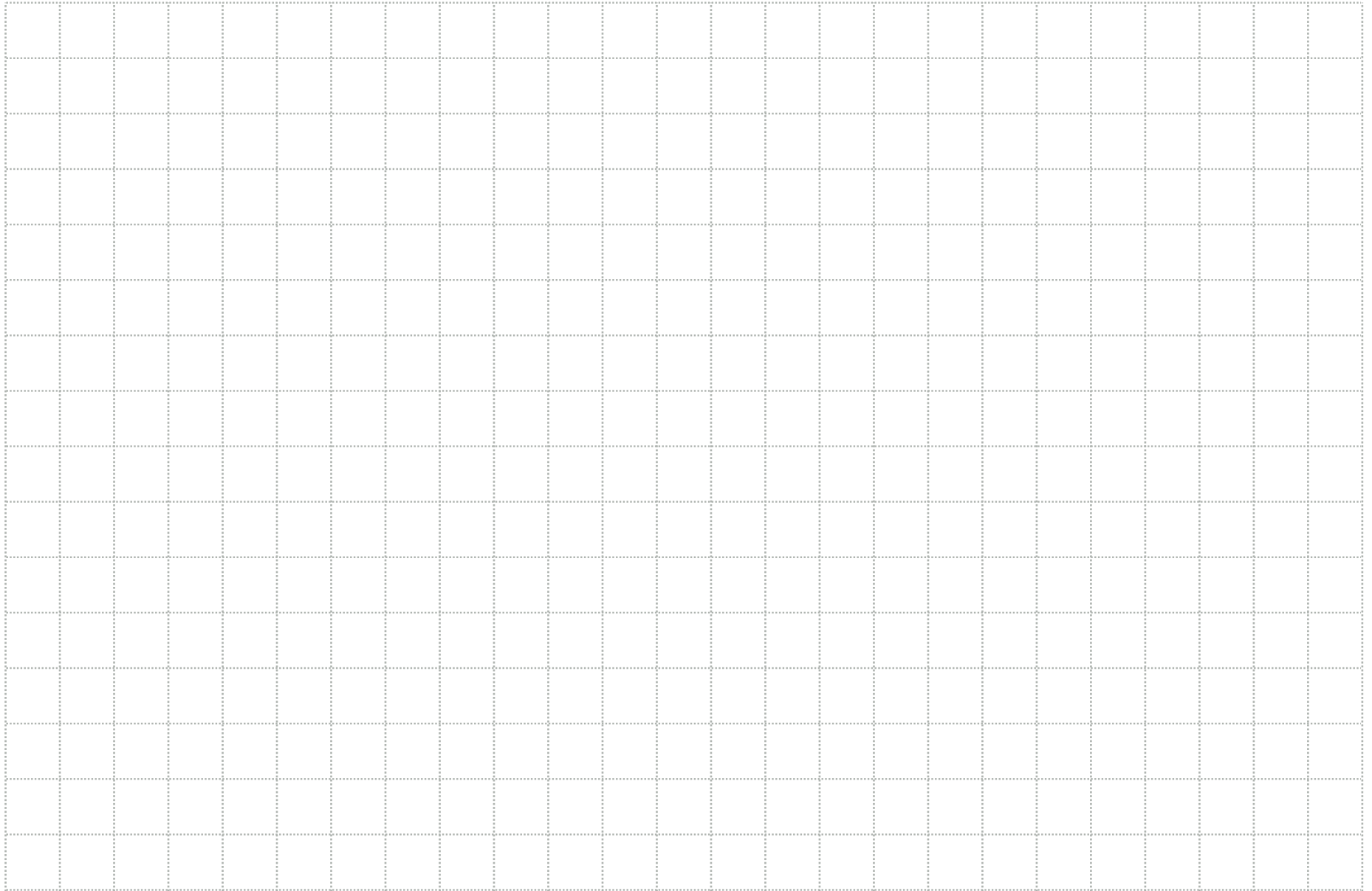
TIMELINE

BRAINSTORM SESSION (35 MIN)	FLESHING OUT IDEA (1 HR)	BUILDING PROTOTYPES (1 HR)	PREPARE TEAM PRESENTATION (55 MIN)	PRESENTATIONS + AWARD CEREMONY (45 MIN)
FRI 6:30-7:05 PM	**SAT 9:45-10:45 AM**	**SAT 1:40 PM-2:40 PM**	**SAT 2:40 PM-3:35 PM**	**SAT 3:35 PM-4:20 PM**

CHECKLIST

☐ **Using the brainstorming techniques you learned in the Design Thinking lesson, fill out page 4-7 of this workbook as best you can. You can put your sticky-notes into this workbook to save time.**
BRAINSTORM SESSION (35 MINUTES) / FLESHING OUT IDEAS (1 HOUR)

☐ **Document your solution idea on page 8 of this workbook.**
FLESHING OUT IDEA (1 HOUR)

☐ **Test your solution idea by interviewing the experts and documenting their feedback (use the form on page 9.)**
FLESHING OUT IDEA (1 HOUR)

☐ **Have a team discussion about the feedback and decide how to modify your solution idea based on the feedback (use page 10.)**
FLESHING OUT IDEA (1 HOUR) / BUILDING PROTOTYPES (1 HOUR)

☐ **Create prototypes of your solution using Inkscape (see page 11.)**
BUILDING PROTOTYPES (1 HOUR)

☐ **Create presentation to share your solution to the All Girl Challenge judges.**
PREPARE TEAM PRESENTATION (55 MINUTES)

☐ **Give your presentation! GOOD LUCK!**
PRESENTATIONS (45 MINUTES / 7 MINUTES PER TEAM)

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Brainstorm: Define Your Team's Specific Challenge

You are going to be lead through an exercise to better understand the challenges that people living with disabilities face, first-hand. What difficulties or problems-to-solve did each of you discover?

Next, flip these problem statements into possible design challenges. Begin your question with "How might we..." - this turns the problems you saw into opportunities for design!
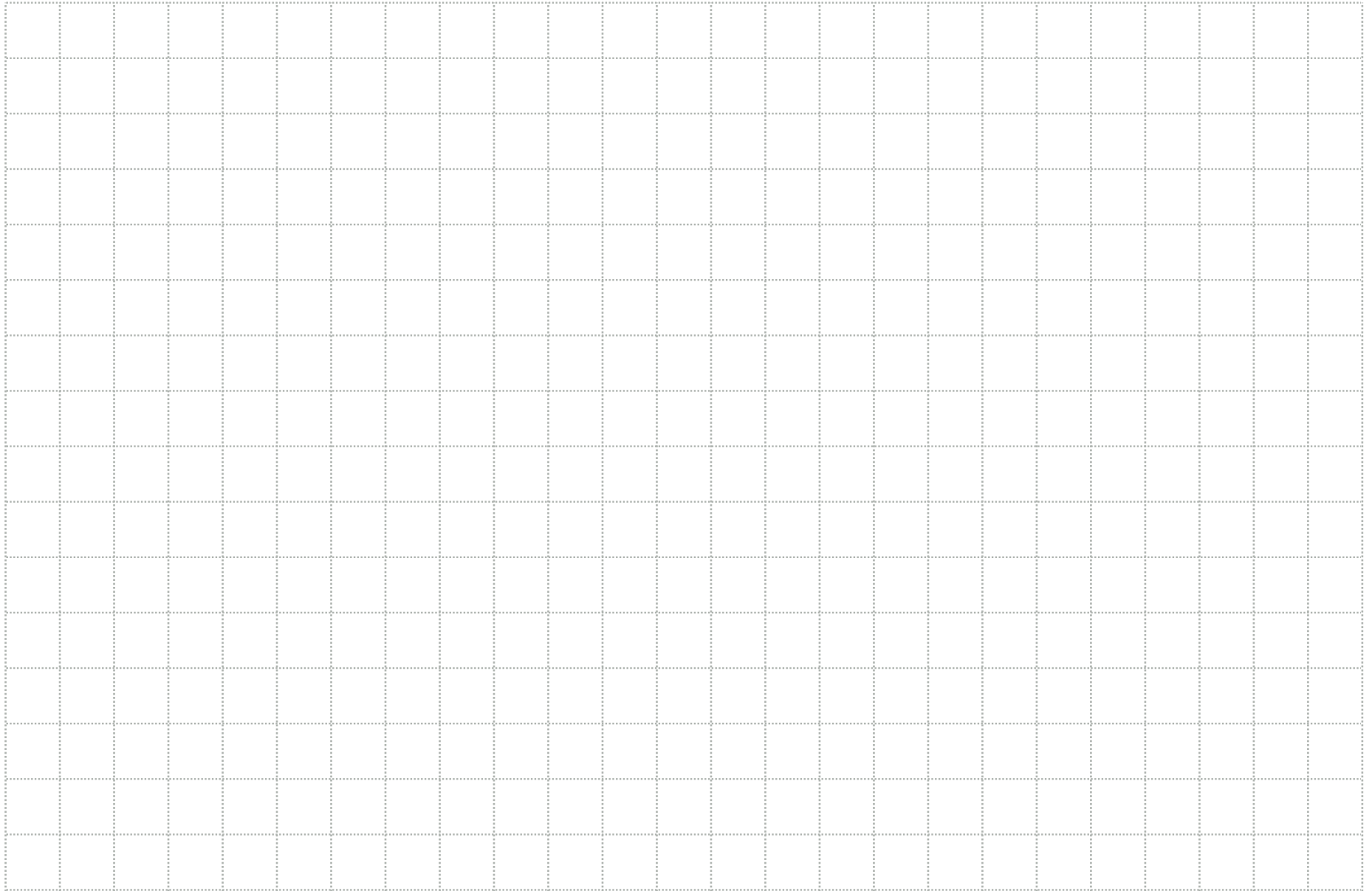
PROBLEMS TO SOLVE

HOW MIGHT WE ...

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Brainstorm: What Will Your Team Build?

Brainstorm Ideas

Take a look at your "How might we..." list on page 3. Read this list out loud - each team member should write out ideas to answer reach "How might we..." with one product or solution idea per sticky note. Fill out as many sticky notes as you can, and don't forget the brainstorm rules! Stick the notes up on a whiteboard or on the wall. Take 10 minutes to do this.

Choose an Idea

Look over the sticky notes that your team has posted up. Are there any related or duplicate ideas? Move them together to "cluster" them. Then, use different whiteboard marker colors or dot stickers to "vote" on your favorites. Each team member can get 15 votes, and they can vote multiple times for any one idea. When you are finished voting, count the votes and determine the team's favorite idea!
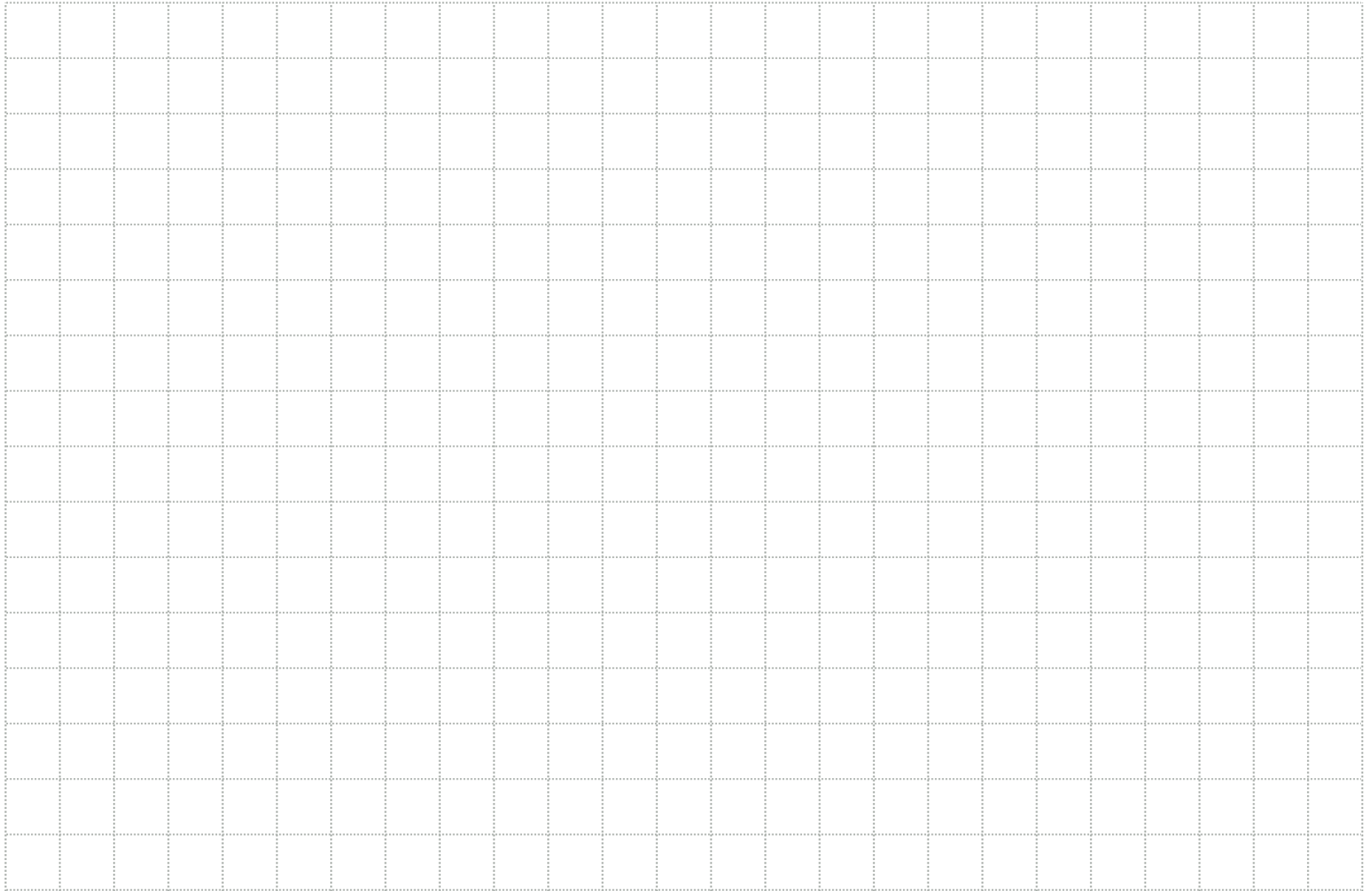
BRAINSTORM RULES

1. Defer judgment - save your critique for later.
2. Encourage wild ideas - crazy ideas are good brain food!
3. Build on the ideas of others.
4. Stay focused on the topic at hand.
5. One conversation at a time.
6. Be visual. Draw and describe.
7. Produce as many ideas a possible; don't worry about quality!

Our Team's Idea:

Fill out the details of your final selected idea below:

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Brainstorm: Refining Your Idea

Sketch out the End Goal(s)
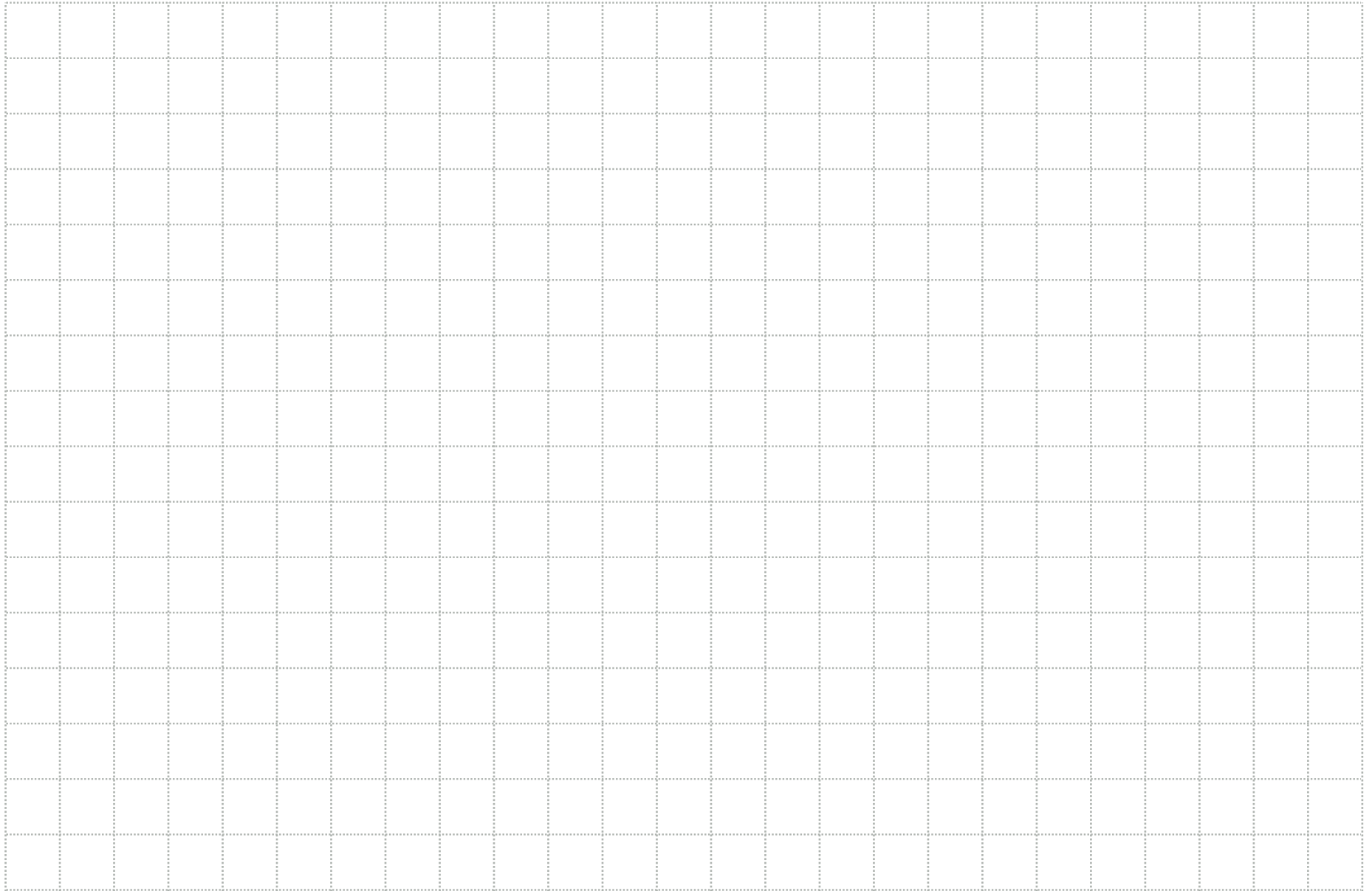What will our challenge solution do?

END GOALS

Doodle Your Idea
What will your idea look like? If it's a product, is it a physical product or is it software? What does it look like? If it's a service, who will need to be involved? How will it work? Can you draw inspiration from other existing products/services that relate to your idea?

DOODLE SPACE

Define Indicators of Success
How will we know that our solution works? How can we test it?

MEASURES

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Describe Your Idea

Create a concept description for your selected idea to prototype.
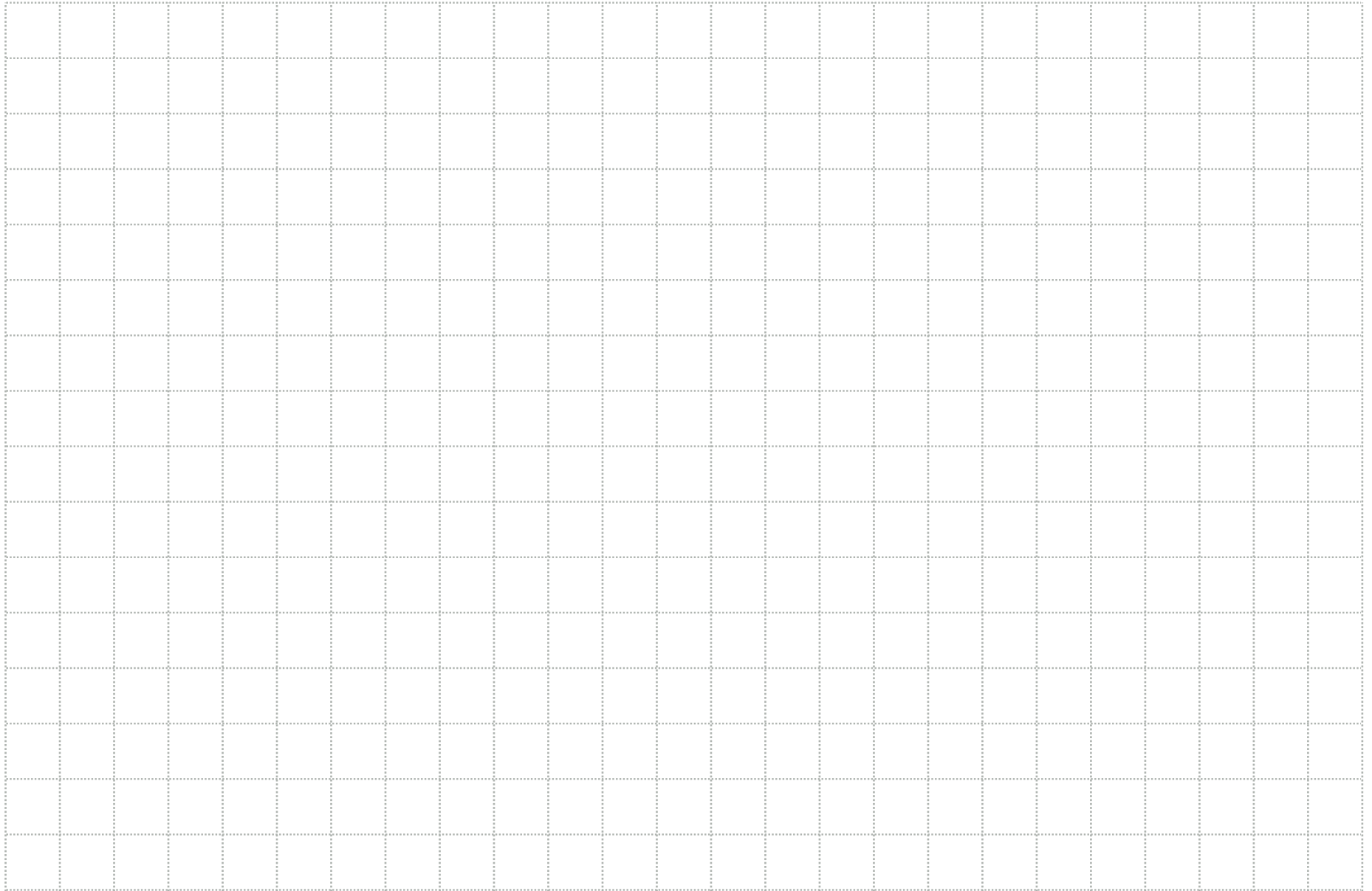
CONCEPT NAME

SKETCH

HOW DOES IT WORK?

WHAT NEEDS OR OPPORTUNITIES DOES IT ADDRESS?

ONE-SENTENCE CONCEPT DESCRIPTION

WHO WILL THIS CONCEPT HELP? WHOSE HELP WILL YOU NEED?

Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Test Your Idea

It's time to get feedback on the idea. Show your concept documentation on page 8 to the experts and ask them for feedback to make it better!

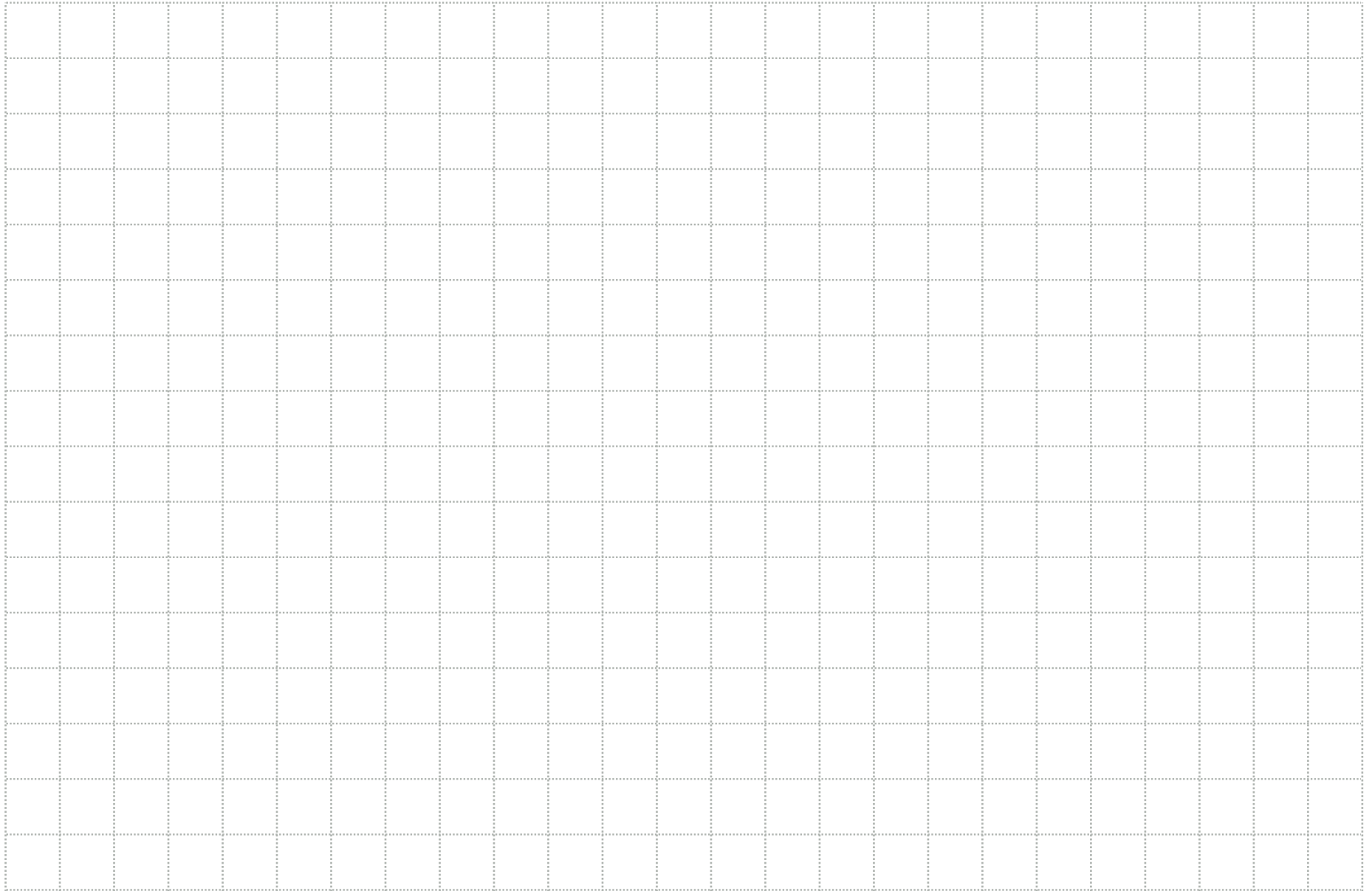**QUESTIONS TO ASK ABOUT YOUR CONCEPT:**

....

....

....

....

....

INTERVIEWEE

Grace Teo, Open Style Lab Co-Founder

FEEDBACK/NOTES

INTERVIEWEE

John Moon + Rainbow / NEADS

FEEDBACK/NOTES

INTERVIEWEE

Janelle Diaz, UMASS Counselor

FEEDBACK/NOTES

Sticky Note Storage / Doodle Space
Stick your sticky notes here or use the space to doodle.

Integrate Feedback

What were the original goals of your concept? Review the feedback from your testing. Based on the feedback, does the concept's goals need modification / refinement?

REFLECT

According to your feedback, what do you think is most important for your idea's success? How might you improve it? Can you emphasize what was well received about your concept?
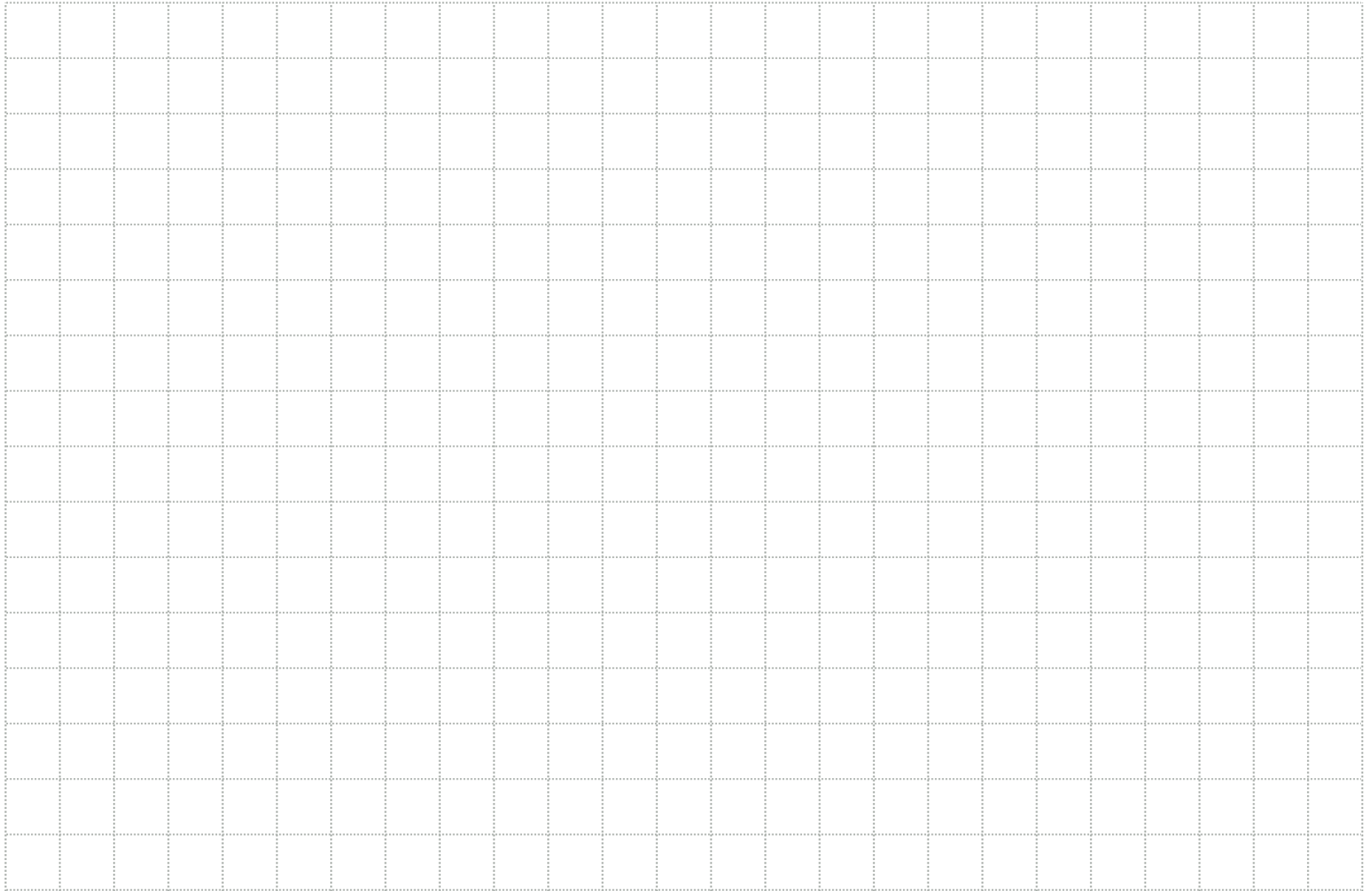
FEATURES TO ITERATE

Doodles/ Notes / Etc.

DOODLE SPACE

Sticky Note Storage / Doodle Space

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Prototype Your Solution

Prototypes enable you to share your idea with other people and discuss how to further refine it. You can prototype just about anything. Choose the forms that suit your idea best from the list below. Remember, you ultimately will need to present your prototype at the end of the challenge!

Create a Storyboard

Visualize the complete experience of your idea over time through a series of images,

A friend tells Cindy about a roof clearing program. She is interested in having someone clear her roof.

The friend goes onto the city website and puts in Cindy's address and phone number.

The city calls Cindy to schedule a roof clearing, and someone shows up to clear her roof.

sketches, cartoons or even just text blocks. Stick figures are great—you don't need to be an artist. Use Post-it Notes or individual sheets of paper to create the storyboard so you can rearrange their order, then finalize by redrawing in Inkscape.
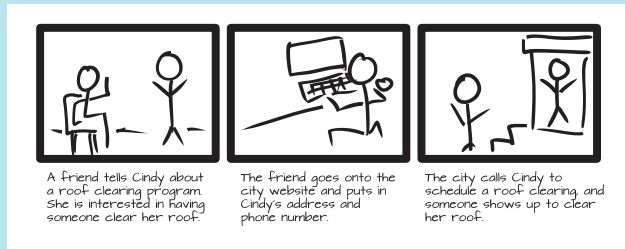
Create a Story

Tell the story of your idea from the future. Describe what the experience would be like. Write a newspaper article reporting about your idea. Write a job description. Create a letter to be sent to your users. Describe your idea as if it were published on a website.

Create an Ad

Create a fake advertisement that promotes the best parts of your idea. Have fun with it, and feel free to exaggerate shamelessly. (You created an ad as part of your design thinking homework!)
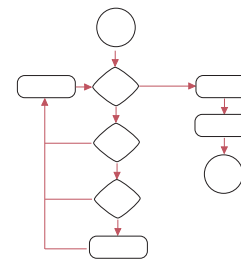
Create a Mockup

Build mock-ups of digital tools and websites with simple sketches of screens on paper. When your team is happy with the paper sketches, redraw your mockups in Inkscape (or create them in Inkscape to start!)
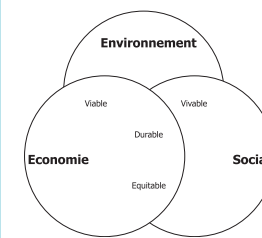
Create a Diagram

Map out the structure, network, journey or process of your idea. Try different versions. Here are some examples of diagrams you can try:

FLOWCHART

VENN DIAGRAM

MIND MAP

TIMELINE

Client places order

Order ticket created

Software finds local volunteer

Volunteer calls to set appointment

Volunteer clears client roof

Create a Model
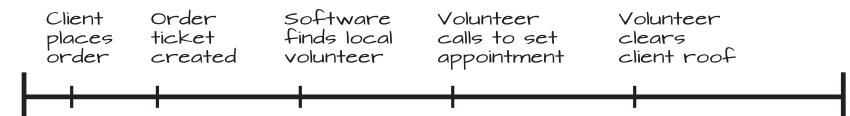
Put together simple three-dimensional representations of your idea. Use paper, cardboard, straws, napkins, tape - whatever else you can find. Keep it rough and at a low fidelity to start, and evolve the resolution over time.

Create a Role-play

Act out the experience of your idea. Try on the roles of the people that are part of the situation and uncover questions they might ask.

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Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Inkscape Cheatsheet

You'll use Inkscape to prototype your idea. Here's a quick cheatsheet of the things you learned during the Inkscape session in case you can't remember how to do something.
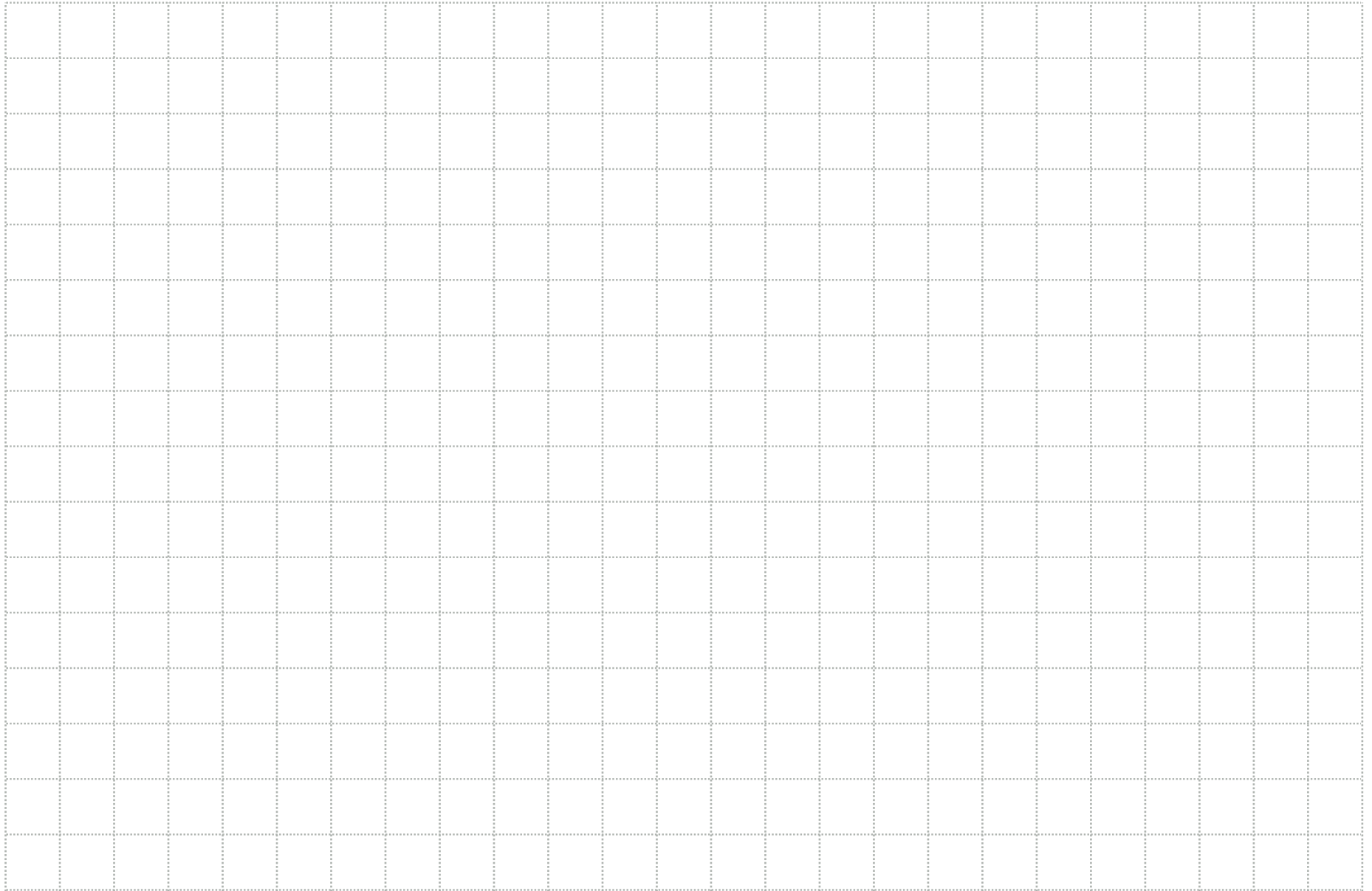
Import Clipart	File > Import Clipart (menu)
Ungroup Objects	Ctrl + Shift + G
Group Objects	Ctrl + G
Select Multiple Objects	Shift + Click or Lasso
Go inside a group	Double click the group
Exit a group	Double click the space outside of the group

Zoom at 100%	1	Center canvas	5
Zoom in	+	Zoom out	-

Scale object	Drag on straight arrows around selection box (click on object once if arrows are curved.)
Rotate object	Drag on curved arrows around selection box (click on object once if arrows are straight.)
Duplicate Object	Ctrl + D

Move item to top	Home	Move item to bottom	End
Move item up	PageUp	Move item down	PageDn

"Hole punch" Path	Place object that will punch out other object on top, then Path > Difference (menu)
Combine paths	Select all objects to be combined, then Path > Union (menu)
Fill & Stroke Dialog	Object > Fill & Stroke (menu)
Save File	File > Save As... (menu)
Export File	File > Export PNG Image... (menu) Make sure you have the tab you want selected in this dialog! Drawing / Page / Selection

Flip horizontally	H	Flip vertically	V

Tips:

#1 Ctrl and Shift are magical.

#2 Don't get lost, 5 will bring you back to your document.

#3 Things acting wacky? You may be in a group! Double-click outside of the object you're working on to exit the group.

#4 Things getting stretched? Lock the aspect ratio lock.

#5 Don't fear mistakes, you can undo with Ctrl + Z .
Redo with Ctrl + Y .

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Sticky Note Storage / Doodle Space

Stick your sticky notes here or use the space to doodle.

Create Your Presentation

Your team will need to "pitch" your idea to the All Girl Challenge judges via your presentation. A credible and inspiring story will help convince others to support your concept. Include your prototypes and your process (including the feedback you received and how you acted on it) in your presentation. Below is a list of ideas to consider when crafting your presentation:

Highlight the Potential

Create a provocative statement for your idea. Get your audience excited about the opportunities you see. Frame it as "What if...?"

Build a Narrative

Tell a brief and engaging story, focusing on the most important aspects of your concept. Describe what inspired your idea, and how it responds to the needs you learned about. Describe early feedback you've gotten and how you considered it in your prototypes.

Describe How it Works

Clearly explain how your idea works. Walk the audience through your prototypes and explain each step. How will your prototype solve the problem your team set out to solve? Make a clear connection.

Communicate the Value

Explain the value your idea provides for the various people involved. Be explicit and illustrative in your descriptions.

PRESENTATION CHECKLIST

- [ ] Review your notes from the class you attended on public speaking for inspiration.

- [ ] Put slides together (you can use reveal.js or any program you are comfortable with.)

- [ ] Figure out which team member is going to speak during which parts of the presentation, and who is going to advance the slides.

- [ ] Determine roughly how much time to give each part of your presentation. You will have a total of 7 minutes for your presentation.

- [ ] Figure out which laptop you are going to give the presentation on and make sure you have all the files you need on it. (You can use the All Girl Challenge USB keys to transfer files between laptops.)

- [ ] Give your presentation to the judges! GOOD LUCK!

PRESENTATION TIME MANAGEMENT PLAN

MINUTE 1	MINUTE 2	MINUTE 3	MINUTE 4	MINUTE 5	MINUTE 6	MINUTE 7

Sticky Note Storage / Doodle Space
Stick your sticky notes here or use the space to doodle.