

Week 1 Design Challenge: Designing for a Client's Vulnerability

Client

María Lidia Torrez Martínez, from Managua, Nicaragua

Challenge

María lives in Managua, the capital city of Nicaragua, and struggles with a number of natural and social hazards. She is vulnerable to these hazards in a number of ways. There was a devastating earthquake in Managua in 1972. Your challenge is to identify one of Maria's specific needs as related to how she might reduce her vulnerability, and to propose, create and present a solution to respond to that need.

Outcome

By the end of class on Friday, you will have completed this packet (which involves doing research to understand María's situation, identifying a need she has, and proposing and developing a concept) and presented your concept for your colleagues. Excellent solutions will respond to a specific need that is grounded in your research.

Wednesday (90 minutes total)

- Step 1: Empathy and Research (approximately 30 minutes)
- Step 2: Identifying a design problem (approximately 20 minutes)
- Step 3: Finding a solution to the problem (approximately 30 minutes)

Thursday (60 minutes total)

- Step 4: Prototyping (building the concept) + feedback (60 minutes)

Friday (120 minutes total)

- Step 4 cont: Prototyping (building the concept) + feedback (30 minutes)
- Step 5: Presenting the solution (60 minutes)

Step 1: Empathy and Research (approximately 30 minutes)

Professional designers do research to understand their client's needs and to better understand their client's situation. This research can involve interviews, background information, photos, ethnographic fieldwork, and more. We'll begin by watching a video about María at <http://bit.ly/designingforMaria>.

Based on María's interview:

What hazards does she face?

These can be both natural hazards and social hazards that she has no control over.

In what different ways is María vulnerable to these hazards?

What experience or education does she have?

What does she value?

In addition to watching this video, do additional research on Managua to understand the community she lives in. Learning more about the history, environment and economy of this city will help you to better understand where she lives. Take notes on that research on this page.

Step 2: Identifying a design problem (approximately 20 minutes)

Professional designers use their research from Step 1 to identify a specific problem or need that their client faces.

Based on your research:

What does María struggle with?

What do people in María's community struggle with?

Client Need Mad Libs! Do 3 different ones:

María needs a way to (describe her problem here) because (evidence from your research)

María needs a way to **understand when a storm might be dangerous** because **storms scare her.**

1. María needs a way to _____

because _____

2. María needs a way to _____

because _____

3. María needs a way to _____

because _____

Step 3: Finding a solution to the problem (approximately 30 minutes)

Professional designers take their user needs statement and begin to brainstorm solutions to that problem.

What need/problem will you address in your work? Choose one of the 3 Mad Libs from before and rewrite below:

María needs a way to _____

because _____

Considering what María *enjoys, values or owns* (like a cellphone), think about what possible solutions can you imagine to the problem above.

Ideas ----->

FEELING STUCK?

What if your solution was a game? Or an app? Draw it below:

What if your solution was an article of clothing? Or a toy? Draw it below:

Step 4: Prototyping (building the concept) + feedback (90 minutes)

Now that you have a concept, build it! Use classroom materials (or materials you find elsewhere) to develop a prototype of your concept. The purpose of a prototype is to show other people how your solution looks, feels or works. It doesn't have to be functional, but it needs to be 3D.

First, ask yourself: **How would María feel if she saw this work?**

Document your own response here ----->

Then, ask at least two colleagues for specific feedback on your work by describing the need you identified and your proposed solution. Do they feel that the solution successfully responds to the need? What might improve the solution? Document your feedback here: ----->

Step 5: Presenting the solution (approximately 60 minutes)

Now that you've completed your work, you need to present it! Your presentation must include your user need statement (your problem), and describe how your solution responds to that need. Each presentation will last for approximately 1 minute, and you should expect to receive questions from Jenkins and/or your colleagues.