

# *Fundamentals – Observations, Empathy, and Personas*

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Guest Lecture  
Jazlyn Hellman

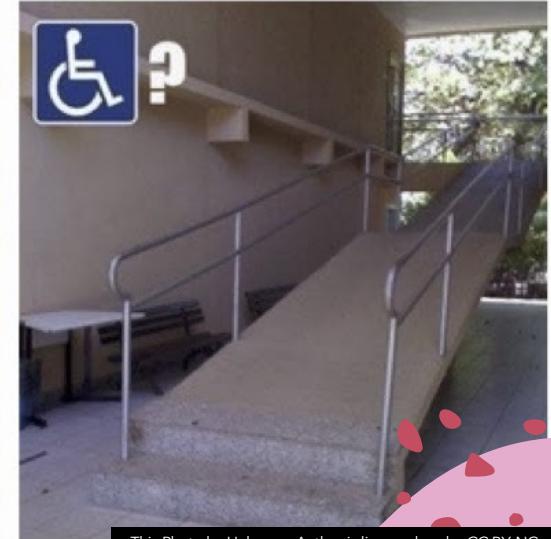
# *Schedule*

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1. 1:05 Review
2. 1:25 Activity - Observations
3. 1:45 Activity - Empathy mapping
4. (if time) Activity - Persona building
5. 2:10 Share
6. Q & A

*“To design for everyone  
is to design for no one at  
all ...”*

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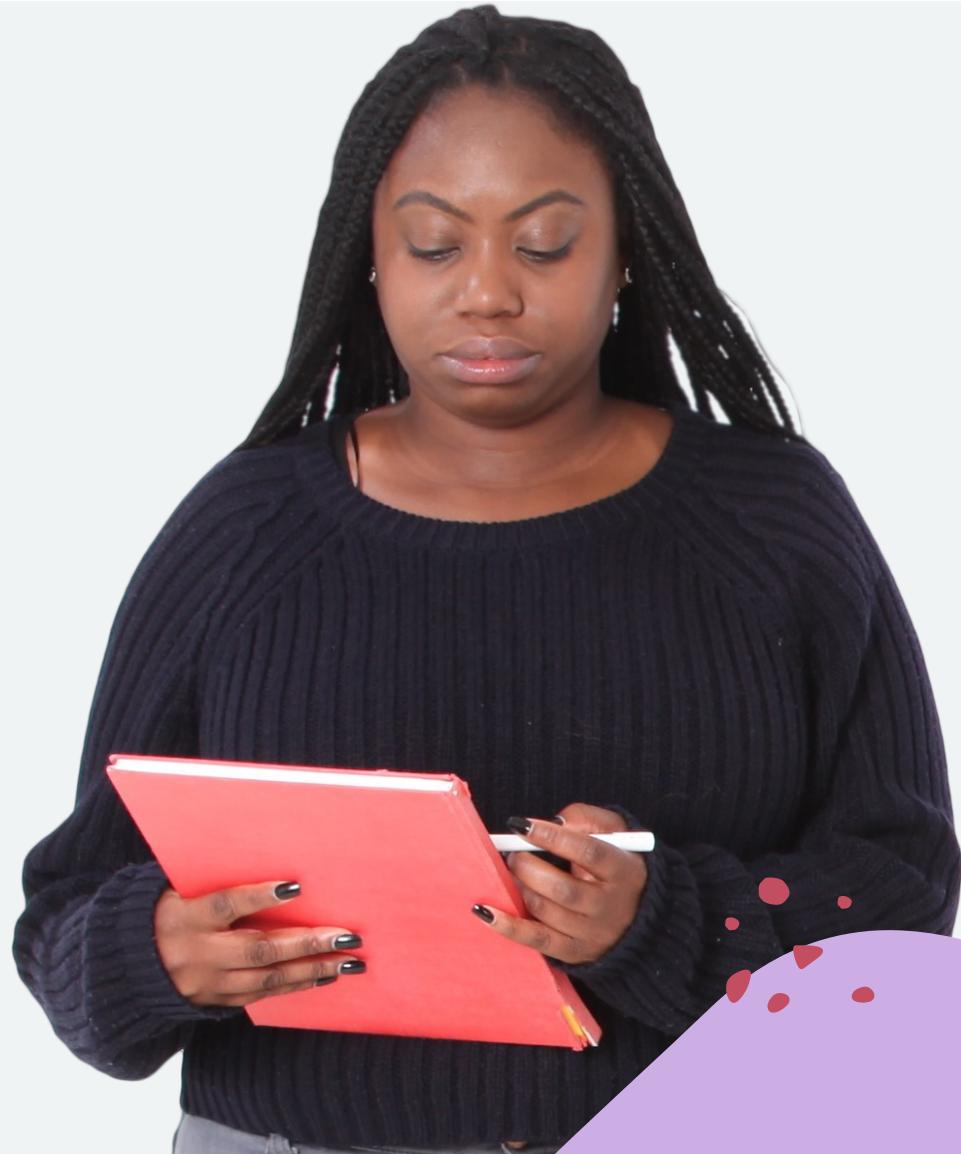
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# *Introduction- What's the problem?*

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- Identify it!
- Human-centered approach
- Iteration: Empathize - Define - Ideate - Prototype - Test
- Observations
- Why do we observe users?  
Even in an ML context

How do we properly do observations?



# *Observations - how to find people's needs*

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Cast aside your biases,  
listen and observe



Note the contradictions  
between what people  
say and what they do



Listen to people's  
personal stories



Watch for "work  
arounds"



Distinguish between  
needs and solutions



Look beyond the  
obvious

From "Six Things to Remember When Observing What People Do" Institute of Design at Stanford

# *Designing through Empathy*

- What is empathy and why is it important?
- Understand users
- Prioritize needs
- Guide actions (and designs)
- Empathy map (Nielsen Norman Group, 2018)
  - Collaborative visualization
  - Shared understanding
  - Help decision making

## Empathy Quotes

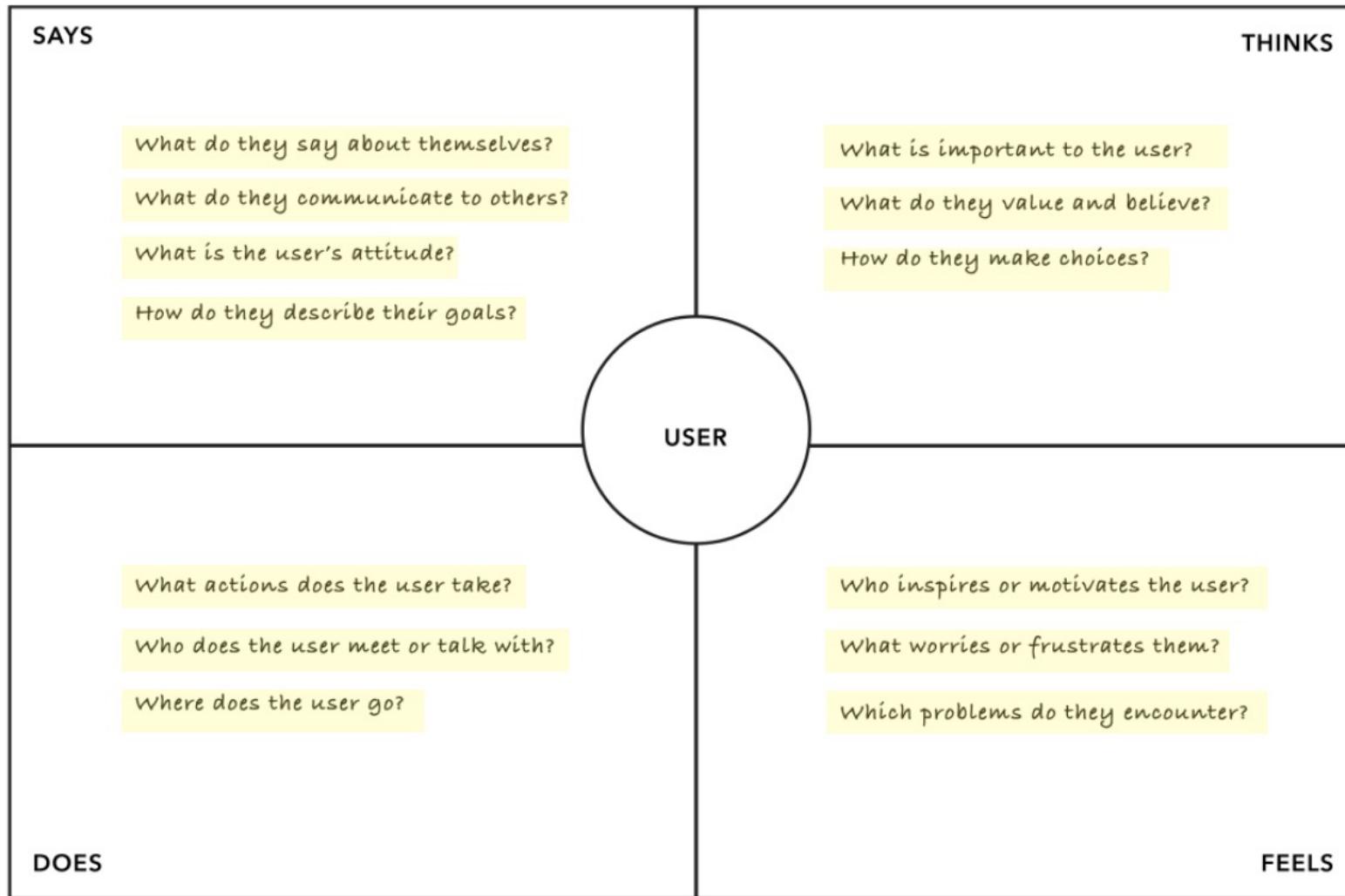
**Empathy is seeing with the eyes of another, listening with the ears of another, and feeling with the heart of another**

**Alfred Adler**



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## EMPATHY MAP



# *How to Empathy Map* (*Nielson Norman Group, 2018*)

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## **Define scope and Goals**

Task-based segmentation

The general goal or context users are working in



## **Materials**

Sticky notes!

Miro is a popular online tool:  
[Empathy Map Template | Miro](#)



## **Collect research**

Interviews, surveys, observations, etc.



## **Sticky note method**

Everyone participates, there are never too many sticky notes!

Remember - clear assumptions!

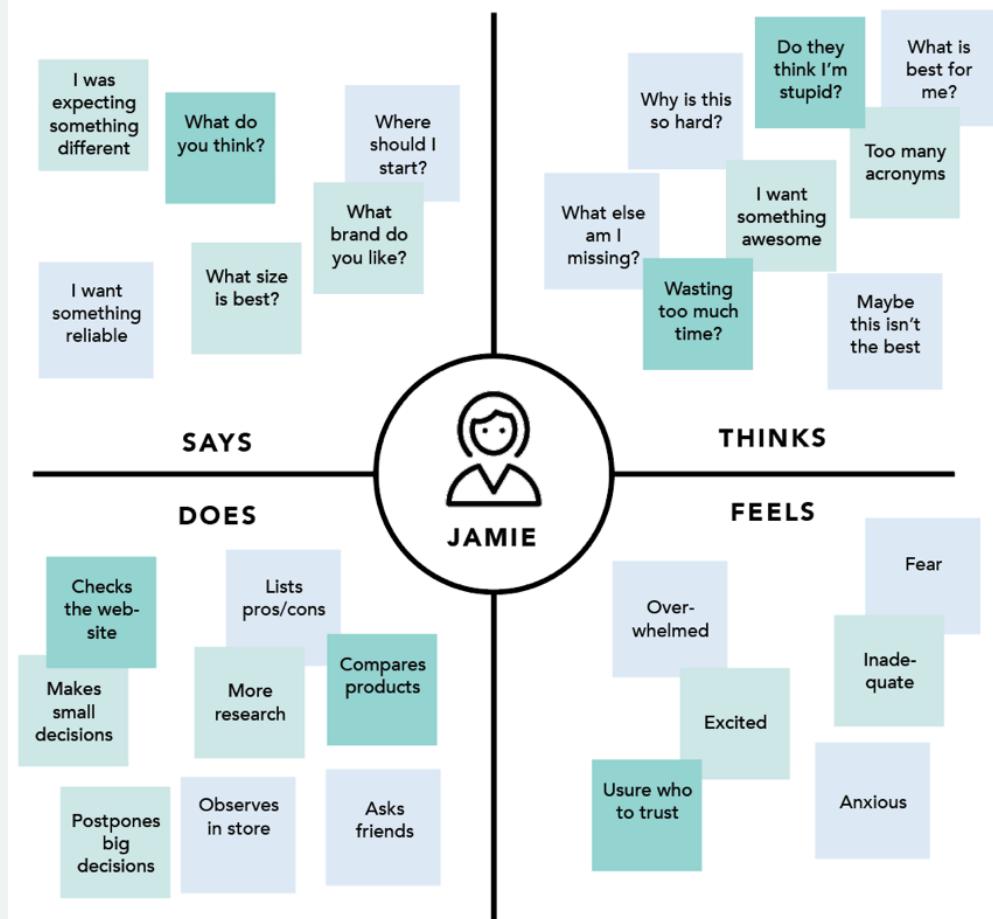


## **Cluster and repeat**

Find patterns, identify pain points, and user needs

# Example

## EMPATHY MAP Example (*Buying a TV*)



# *Personas*

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What are they?

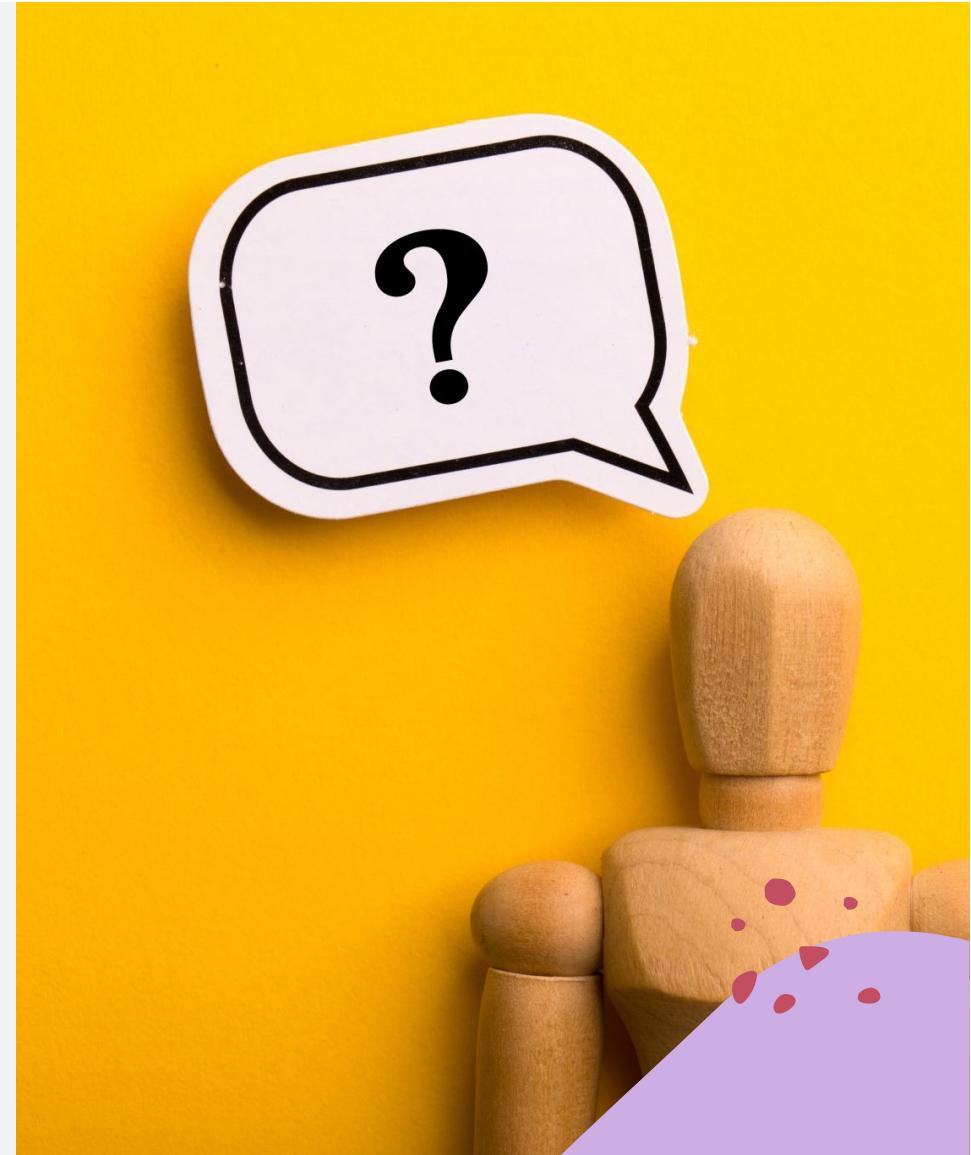
- A "pretend person"

Why do we use them?

- Inspire empathy
- Common vocabulary
- Actions, behaviors, interactions with the software ....

How do we make them?

- Use the empathy map as a jumping-off point
- Expand on your findings



# What to include ...

## *Background:*

Name, age, background, family, role/job,  
leisure activities/recreational interests, aspirations



**Jackie Sanders**  
Public Information Officer

## Profile

A former news reporter, Jackie traveled widely to cover stories in Iraq, Sudan, and Egypt. She knows how to stay cool and think on her feet in disaster scenarios. Jackie is an expert communicator and easily liked and trusted. As an emergency arises, her first task is to drop everything and get to the Emergency Operation Center (often on site) as fast as possible, where she will be responsible for dispatching critical information to the media and public.

## *Tasks:*

*What are they trying to achieve?  
Why are they trying to achieve this?*

## *Motivation & Project Engagement:*

*What is their relationship to the brand/service/product?  
What triggers the "interaction"?*

"When I got the call, my personal life faded away"

- Trustworthy
- Likeable
- Works well under stress
- Discerning

## Personal Information

**Profession:** Public Information Officer

**Location:** Long Island, NY

**Age:** 39

**Home life:** Single Mom

**Hobbies:** Soccer Coach, Book Club

**Personality:** Outgoing, Intelligent

## *Characteristics:*

*Personality factors*

*Technical factors (tools, ability, access points)*

persona credit: Jonah Model

## *Common Persona Pitfalls*

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Lack of understanding about *what* personas are

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Inaccurate expectations of personas

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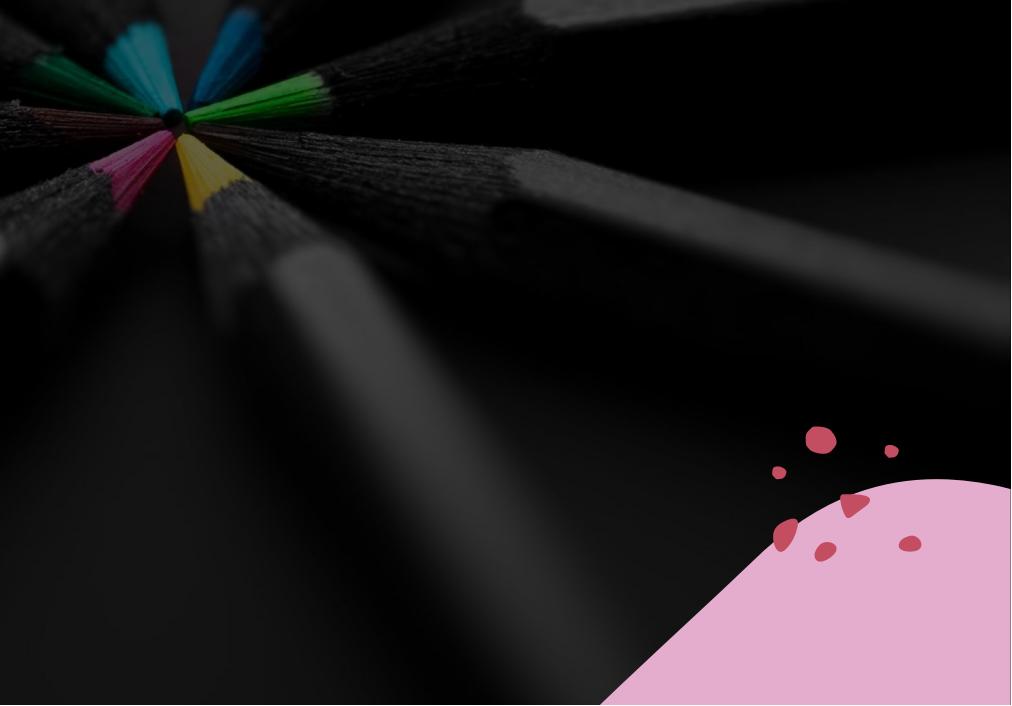
Don't know how to use personas

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Working alone

*More examples ...*

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# More example Personas



**Rebecca**  
Casual audiophile

Age	26
Occupation	Frontend developer
Education	Bachelor degree
Marital status	Single
Location	Mountain View
Online locations	Work and mobile
Computer(s)	iPhone and MacBook Pro
Internet usage	8-9 hours

TECHNOPOHBE  TECH WIZ

CDs  MUSIC STREAMING

CASUAL LISTENER  HARDCORE GEEK

**Music is essential to Rebecca's life. She is listening to tunes almost every second of her life, particularly while working.**

**Obstacles Rebecca faces:**

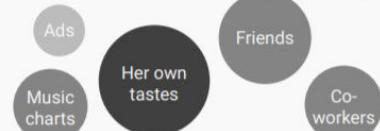
- Too busy to explore new music artists she might like
- Streaming music consumes a lot of data

**How will Rebecca interact with Spotify?**

**Questions Rebecca will ask:**

- How do I keep updated on new releases by artists I follow?
- How do I learn of new artists I haven't heard of?
- Can I listen to music in a data-efficient manner?
- How can I listen on both my MacBook and my iPhone?

**Who influences Rebecca?**



Example of a persona that shows the six main elements you should include. Name, age, gender, tag line, experience and skills are placed on the left-hand side. The middle column focuses on the context to indicate how they would interact with a product or service. Finally, on the right-hand side some goals and concerns are shared, as well as a short scenario to indicate the persona's attitude.

**Rebecca's situation**

**Goals, motivations:**

- Listen to great music to keep her productive at work
- Relax and unwind at the end of the day
- Superior music quality for full enjoyment of tracks
- Expand the circle of music artists she listens to

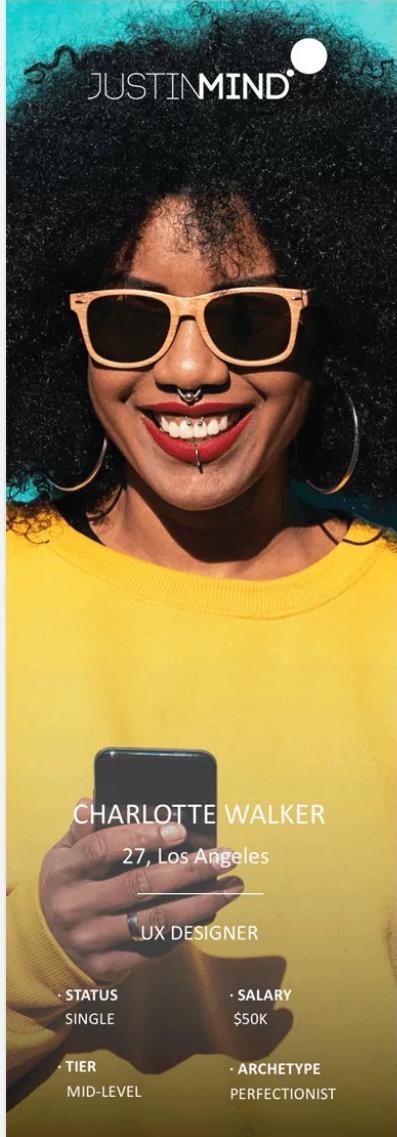
**Key words**  
music, jazz, r&b, pop, artists, new releases, top charts, background music

**Rebecca's story**

Music is a big part of my life; I like to think that I always have a "background music" running in each scene of my life. I love working while listening to music; somehow, it gives me a lot of focus on my task. I regularly talk to my co-workers about music and singers – that's what we like to talk about over lunch. We're constantly looking for new artists to inspire us and to expand our music library, but lately it seems a little tough to do that. Everything seems to have a "filter bubble" effect, and we keep listening to the same genres and artists. I really enjoy finding new artists that match my subjective taste, and most of the times I get those from my close friends. I wish there were a way to find more music and artists without having to rely on the serendipity of life!



## More example Personas



### PERSONALITY

- Prototyping
- Interviewing
- Design Thinking
- Empathy
- Coding



### BIO

Charlotte recently started a new job as a UX designer in a mid-size bank. She moved over from the start-up world and is still getting used to all the changes, particularly the paperwork. She's excited to bring a user-focused perspective to the design department but nervous because she's the bank's first UXer.

Outside of the office she's a sports-mad psychology grad. She enjoys reading UX blogs and will sometimes go to UX-related conferences if they're nearby. She's also tuned into design channels like Dribbble.



### Motivations



### Goals

- Introduce user focused mentality and methods into traditional company landscape
- Improve usability of bank's customer facing interfaces
- Grow the UX team



### Frustrations

- Getting buy-in for the new department's activities
- Dealing with more bureaucracy than in her old job
- Communicating necessity for change to development team



"I want to help my team deliver great user experiences"



### Behavior

Overseeing builds

Writing specs

Designing features

Meetings

User testing

### Influences

- |               |                |
|---------------|----------------|
| • CREDIBILITY | • BLOGS/FORUMS |
| • COLLEAGUES  | • PSYCHOLOGY   |
| • TECHNOLOGY  | • UI TRENDS    |

### Frequently used apps



Justimind



Google Calendar

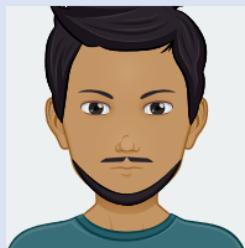


PocketGuard

## More example Personas

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### Enrique FLOSS End User



**Age:** 25

**Education:** Masters of Political Science

**Occupation:**  
Community Coordinator

**Location:** San Diego, CA

#### Experiences with OSS

- Works for local NGO serving people with special needs by
- Oversees volunteers (many with special needs)
- Prefers to use FLOSS for financial reasons
- Found a FLOSS for coordinating volunteers through web searching
- In past, has enjoyed using OSS and provides feedback when there are user forums
- Doesn't know much about software development

#### Challenges with Usability

##### Accessibility Issues



- FLOSS suits most needs except for a few challenges for the volunteers with special needs

##### Can't find where to get involved



- Doesn't want to have to switch applications
- Would like to share his experiences on accessibility
- Can't find a place on the website for non-developers, so can he use those means of communication?

##### Developers only



- Feels like only developer opinions are valued
- Feels like they didn't consider how other types of users would interact with the software

##### Communication



- Isn't sure how to explain his issues best or what terms will help him to communicate
- Also doesn't know what will fix things, only that a fix is needed.

#### Goals Related to Usability

##### • Talk to someone

Enrique wants to have a conversation with someone from the FLOSS

Doesn't care how or when, but wants his problems to be heard and taken seriously

##### • Fix the problems

Enrique doesn't want to have to change platforms.

This would waste a lot of time and money to transfer over all the information.

But he cannot keep using the FLOSS as is.

# More example Personas

## Dorte

Dorte is 53 years old and works as a secretary in her husband's plumbing business in the suburbs of Copenhagen. There are 5-6 assistants and apprentices in the company.

### Background

When Dorte was very young she trained as an office clerk in the accounts department in a department store in Copenhagen. She was married at the age of 21 to Jan who had just got his skilled worker's certificate. They have two grown-up sons who no longer live at home in the combined house and workshop/office. Their sons visit frequently as they still enjoy mum's cooking.

Dorte likes to keep up with fashion. She often goes to the hairdresser, loves vibrant colours and elegant shoes. When she reads women's magazines, she looks for small tips that she changes and makes her own. She is always smartly dressed and stays fit.

Dorte loves travelling to faraway countries; most recently, she and her family were on a trip to Vietnam this summer. Before they went, she spent time reading up on the country and also watched the film Indochine starring Catherine Deneuve. Dorte always discusses the vacations with Jan, who would prefer to go to Rhodes with old friends, but it is Dorte who has the final say about the destination.

In an average day, she tends to drink too many cups of coffee, and when the telephone rings all the time and she can't reach the assistants, she also tends to smoke a bit too much.

Dorte makes payments to the Danish early retirement benefit scheme and looks forward to the day where she no longer has to be the "mum" of others any more and can spend more time travelling.

### Computer use

Dorte does the accounts and the bookkeeping, VAT, taxes, vacation pay, the Danish Labour Market Supplementary Pension ATP, etc. She uses a mini financial management system that she has mastered after many years of use, but sometimes the system is not completely logical.

If she were to use other systems or use new, digital reporting, she would prefer it to be demonstrated to her by someone. She feels unable to learn something new when it is just explained to her, and she dislikes reading user guides. She says it takes her a long time to study anything new and familiarise herself with it, and she tends to see more limitations than possibilities in new IT. Dorte often underestimates her IT proficiency and overestimates the time that it will take to learn something new, so she stalls before she even gets started.

If she needs IT help, her oldest son and, less often, a woman friend provide the support. The friend works in a big company and is a super-user of the financial management software.



### Reporting

Dorte handles the tax cards for the business. She deals with and reports the wages, vacations, sickness benefits, and maternity leaves of the staff. She does the VAT returns and annual accounts of the company. In addition, she fills in the reports for Statistics Denmark and the Employer's Reimbursement System AER.

Dorte does not understand the logic of the IT system and does not trust everything to happen as it should. If she sends in a return form or report digitally, she likes a confirmation saying that the recipient has received the form.

### Her workday:

- She is not involved in the plumbing business as a trade, but she knows all the technical terms.
- She tidies things up. She does not want the others (her husband and the assistants) to make a mess in the basement where the office is as she is the one who has to look at it all day "Tidy up! Your mum does not work here!"
- She digs in and sometimes has to keep far too many balls in the air at the same time.
- She holds the fort, but does not get a lot of professional recognition in the company from the boss/her husband.
- She answers the telephone, handles mail, deliveries of goods (including invoices and delivery letters), and email.
- She handles the accounts, does some bookkeeping and writes invoices.
- She makes the coffee.
- She has occasional contact with the accountant.
- She does the invoicing of clients.
- She sends/delivers mail every day.
- She sends reminders.
- She handles customer contact (including damage control).
- She also walks the dog.

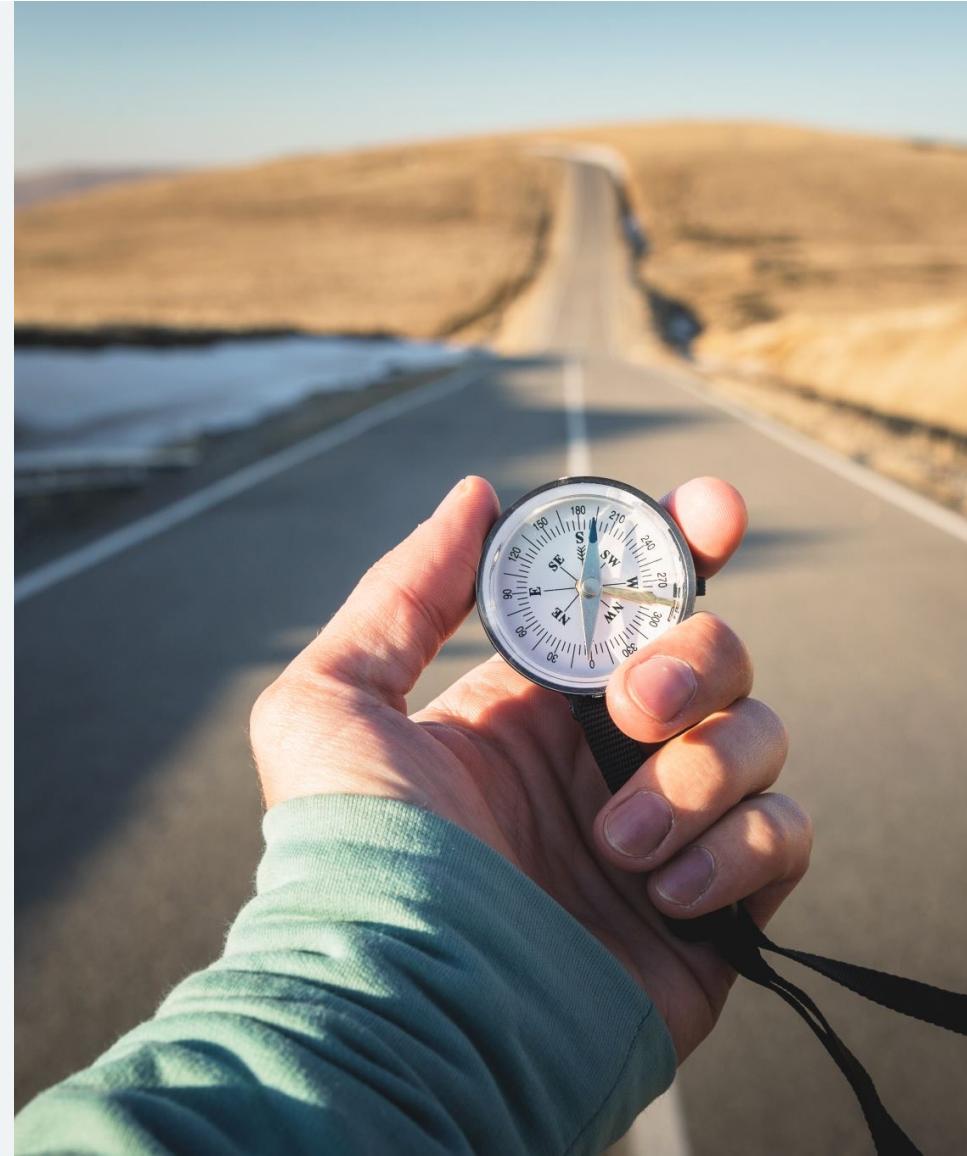
### Future goals

Dorte dreams about a future where she no longer has to work and where she can spend more time travelling. She is still debating with Jan whether they should travel or buy a summer cottage where they can live all year round when they retire.



# *Activity Time*

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# *Observations 1:25-1:40*



*Context 1:* Outlook Email Text Auto-Completion

*Context 2:* GitHub Pull Requests and Issue Threads

## *Instructions*

- Form teams of 6 and split in half into Team A and B
- For 5 minutes, Team A writes an email on outlook using text auto-completion.
- Team B takes notes through observing.  
If need be, ask them questions about using text completion in the past, their thoughts, feelings, experiences, actions, etc.
- Switch.  
In the interest of time, Team B does not need to make a PR or open an issue, so Team A will ask interview-style questions to Team B about their experiences in context 2.
- Team A takes notes.

**Don't ask leading questions (i.e., "Do you like to do this..." vs. "Why do you do this?" or "What do you think..") keep it open-ended**

# *Observations - how to find people's needs*

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Cast aside your biases,  
listen and observe



Note the contradictions  
between what people  
say and what they do



Listen to people's  
personal stories



Watch for "work  
arounds"



Distinguish between  
needs and solutions



Look beyond the  
obvious

Context 1: Outlook Email Text Auto-Completion (an existing AI)

Context 2: GitHub Pull Requests and Issue Threads (no AI)



# *Empathy Mapping*

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1. Stay in your Team A and B groups
2. Open Miro and follow the instructions:  
[https://miro.com/app/board/uXjVPK0cJBI=/?share\\_link\\_id=174379117702](https://miro.com/app/board/uXjVPK0cJBI=/?share_link_id=174379117702)
3. Use your **observations**
4. Identify the context and **specific** user group
5. Fill out the map (both individually and together)
  1. Each team member should use a dedicated color
6. Search for patterns & repeat

Remember to keep in mind your user group (segment) based on common behaviors and to get rid of your assumptions.

## *(if time) Persona Building Activity (work until 2:10)*

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1. There is no template, so either next to your empathy map in miro or freehand on paper/iPad/another preferred tool set up your group's Persona workspace.
2. Consider the following questions:
  1. Who is the Persona? (name, age, gender, image, personality, etc.)
  2. What do they do?
  3. What are their backgrounds? Their experiences?
  4. What are their goals?
5. **What are their concerns or pain points?**
3. Be creative!

# *Share*

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Questions:

What are the pains of the users?

Can you design an ML system to solve or improve the situation?

Provide evidence from your observations, empathy map, and persona.



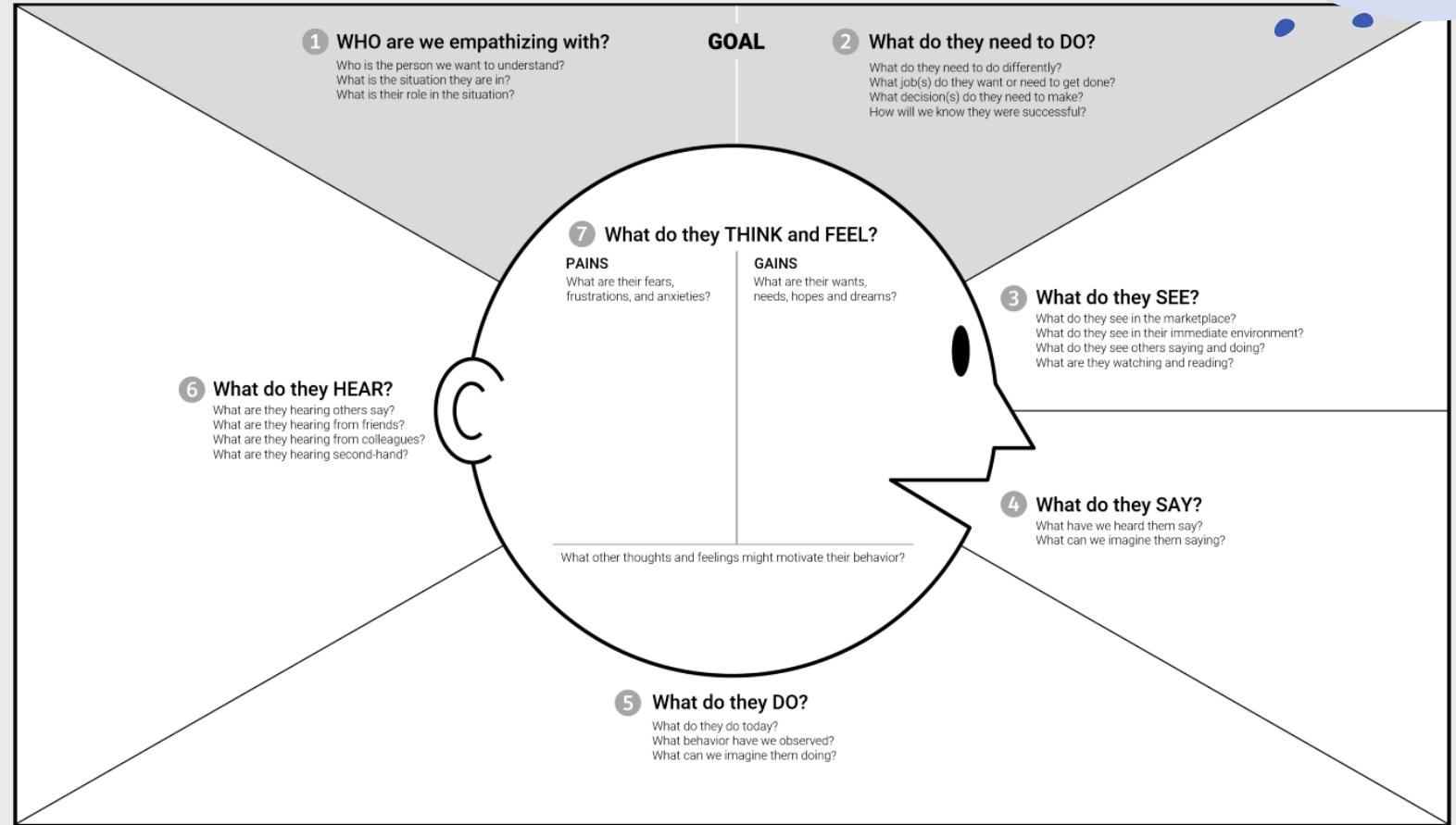
# Alternative Empathy Map

## Empathy Map Canvas

Designed for:

Designed by:

Date:



Last updated on 16 July 2017. Download a copy of this canvas at <http://gamestorming.com/empathy-map/>

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## ***More resources***

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Playlist: [Personas in User Experience Design \(UX\) - YouTube](#) (nngroup)

Empathy Mapping with examples: [Empathy Map Toolkit activity - Enterprise Design Thinking \(ibm.com\)](#)

Remember:

Its not enough to just get your model to work. You need to understand the human side of the machine. (that's why its called HAI)

Sometimes you'll find that there is no need for AI in the problem, and that is OK.



*Questions?*

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