human computer interaction

Lecture 4:
Designing Personas

Dmitrijs Dmitrenko

Good design vs
Bad design

What
@Dentoh_

Follow

@DoubleDmi Annoying design in Brighton & Hove buses: The QR code scanner for mobile tickets is above the contactless payment reader, so If you use Google pay, you have to turn off NFC to avoid accidental 'tap-on's every time you use a mobile ticket. (At least on Samsung phones)
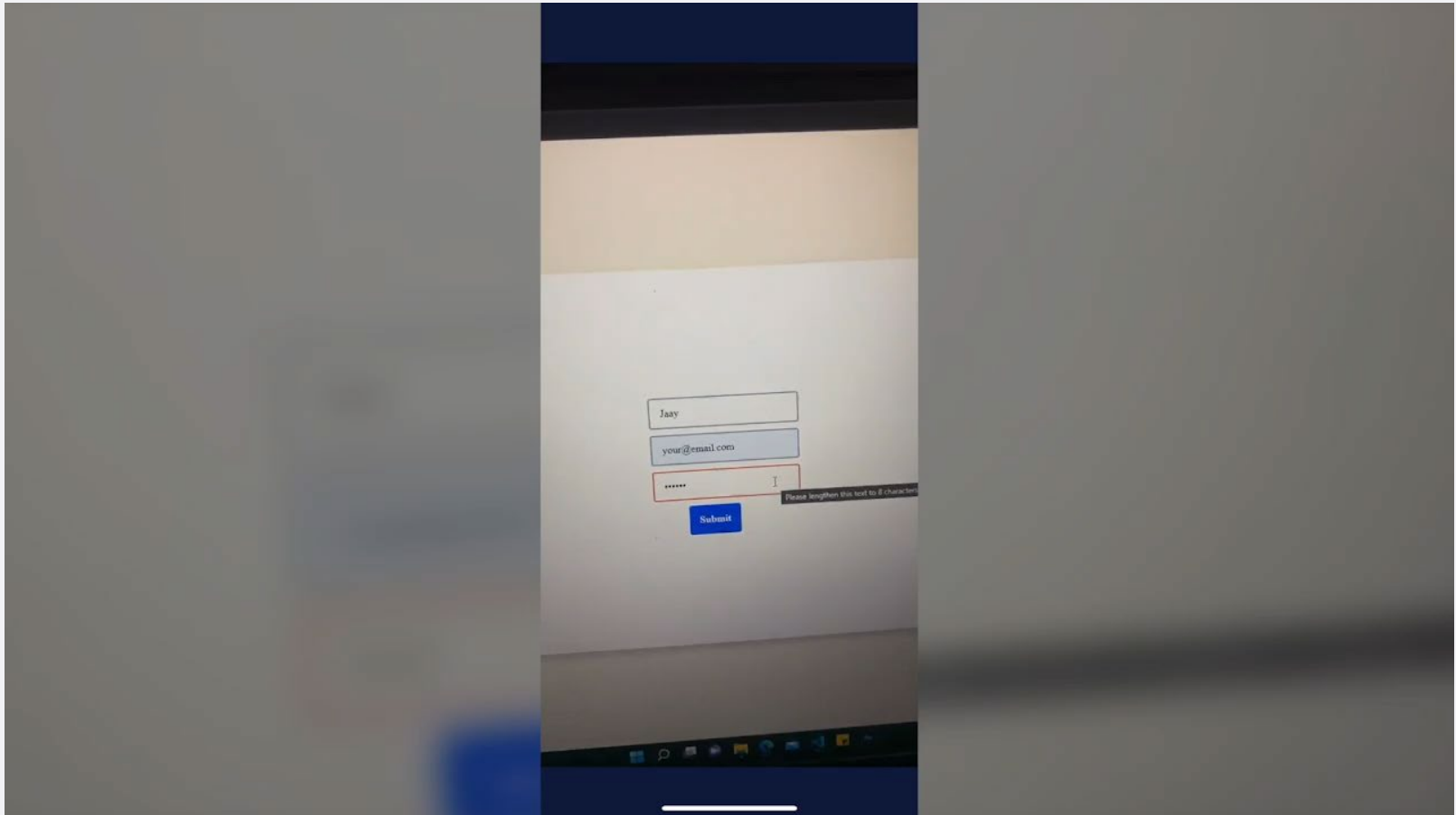
11:31 · 27 Nov 23 · **34** Views

Post your reply

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bad
design

After paying, the kiosk displays "transaction complete" and an "OK" button,
as the only option you can choose from.
(shared with me by Fin)

good vs bad
design

share your observations...

...on X or per email!

Use hashtags **#HCISussex #GoodDesign #BadDesign**

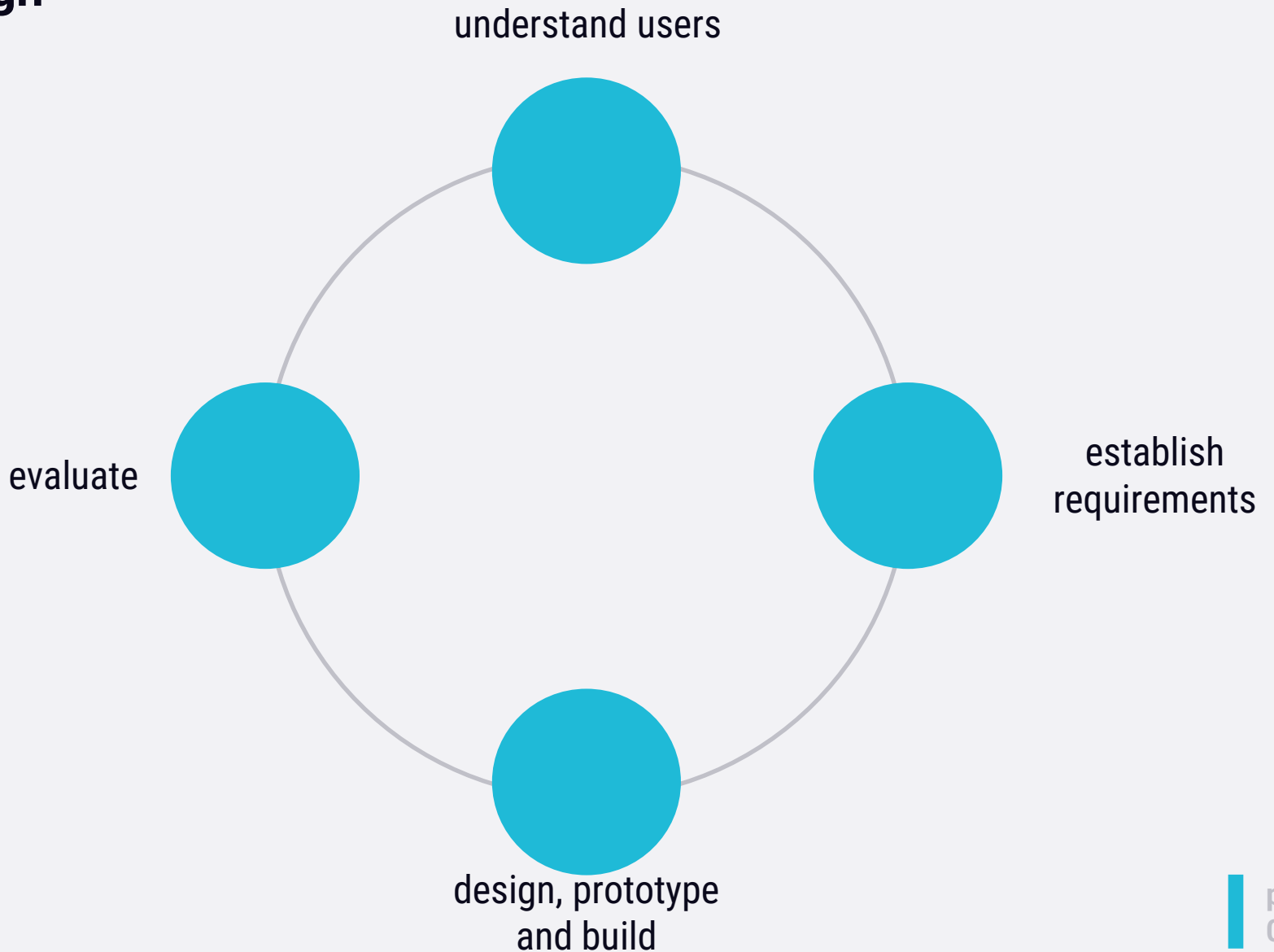**Tag me @DoubleDmi**

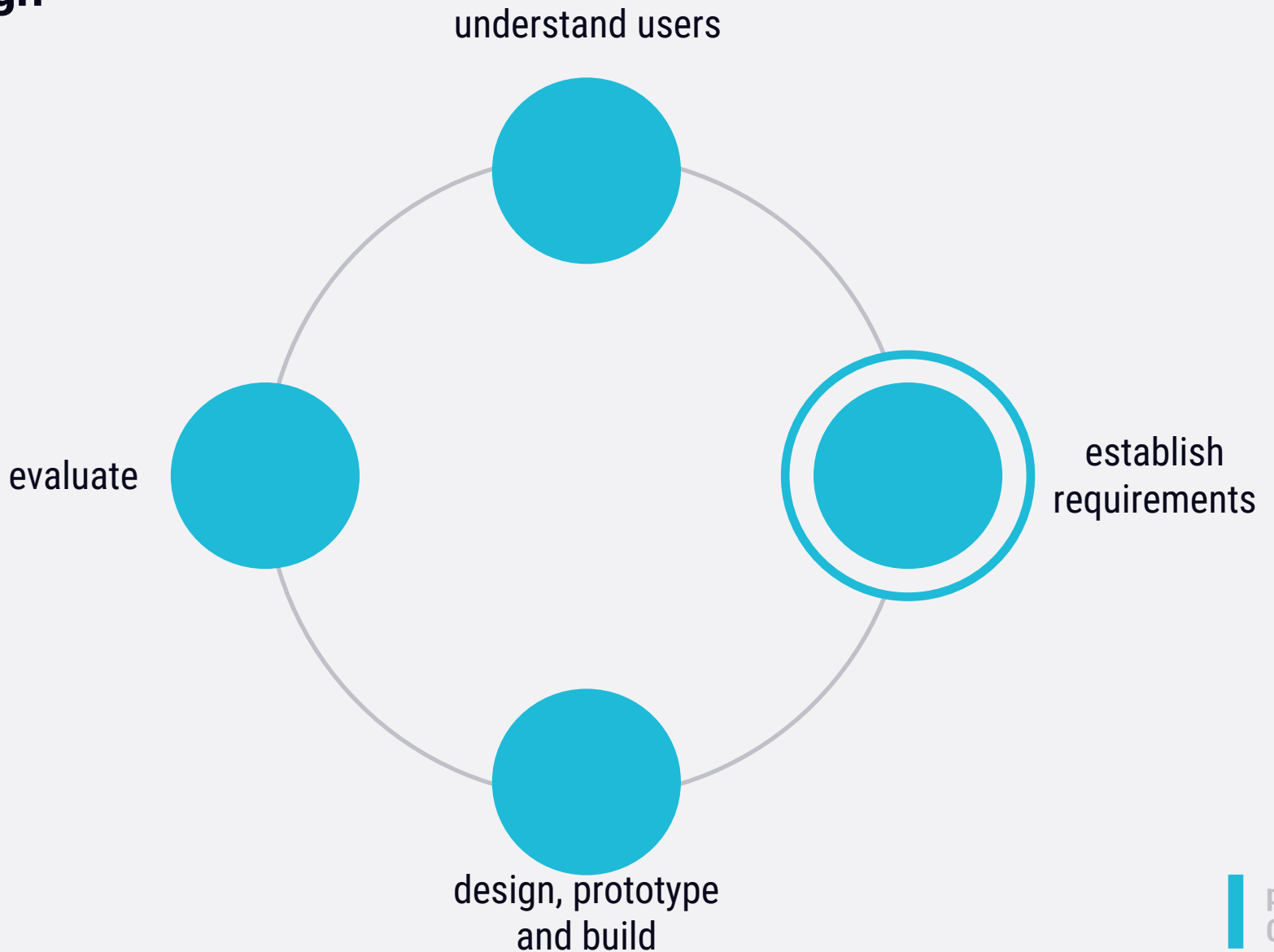Your examples will be featured in lectures!

Now back to today's lecture...

last week:

user research methods

user-centred
design

understand users

establish
requirements

design, prototype
and build

evaluate

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user-centred
design

understand users

establish requirements

design, prototype and build

evaluate

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overview

- **what** is a persona?

- **why** we create it?

- **how** do we create it?

- **when** could it fail?

interpreting
data

- **start soon** after data gathering sessions

- **initial interpretation** before **deeper analysis**

- **involving stakeholders** (e.g. primary/secondary users) in interpretation can be very powerful – **user workshops**

interpreting
data you have collected

- try to **make sense of** your **interview notes**

- use these insights to create a persona **relevant to your design brief**

personas
overview

- user profiles which capture **user characteristics**

- **not real people**, but synthesised from real user characteristics – should not be idealised

- make them **feel real** with a name, characteristics, goals, personal background

- **do not use stereotypes** in your persona design

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personas
overview

Name
Sarah Xavier

Age
23 years old

Job Title
Journalist

Location
Los Angeles, CA

Persona 1

Bio

Sarah is a graduate student from Yale University who's currently looking for a job as a journalist for a newspaper. She likes to order local and national newspapers, and reads articles online for fun.

She considers herself very outgoing, and makes it her goal in life to get to the truth of stories unraveling in the world around her.

Goals •

To work at a newspaper company, either in her state or for a national newspaper. To be notified when there are new job openings.

Frustrations •

Not knowing when new jobs are available at state or national newspaper companies. Doesn't know how she's doing compared to her competitors.

Current Feelings •

Nervous, not knowing when or if she'll get the job she wants. Unsure, not knowing how her application compares to others.

Tech Knowledge •

Uses her laptop and phone daily. Spends at least 2 hours on electornics every day. Feels comfortable using technology.

personas
why are they designed?

- to **help** the designer **make design decisions**

- to **remind** that **real people** will be **using** the product

- to **answer questions** like:

    - "What would bill do in such a situation with the product?"
    - "How would Clara respond if the product behaved this way?"

why do we need a persona?
and what is important about it?

personas
vs user profiles

- **user profile** = "brief biographical sketch"
  - often a **name and a picture**

- user profiles may contain information **unrelated** to the design task (e.g. car they drive, number of kids, city, etc)

- likely based on a **stereotype**

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personas
vs market segments

- **market segments** play role in persona development
  - can help determine the **demographic range**
  - can help **understand the relationship** between **users and markets**

- based on demographics, distribution channels, and purchasing behaviour
  - **no** insights on **user behaviour**!
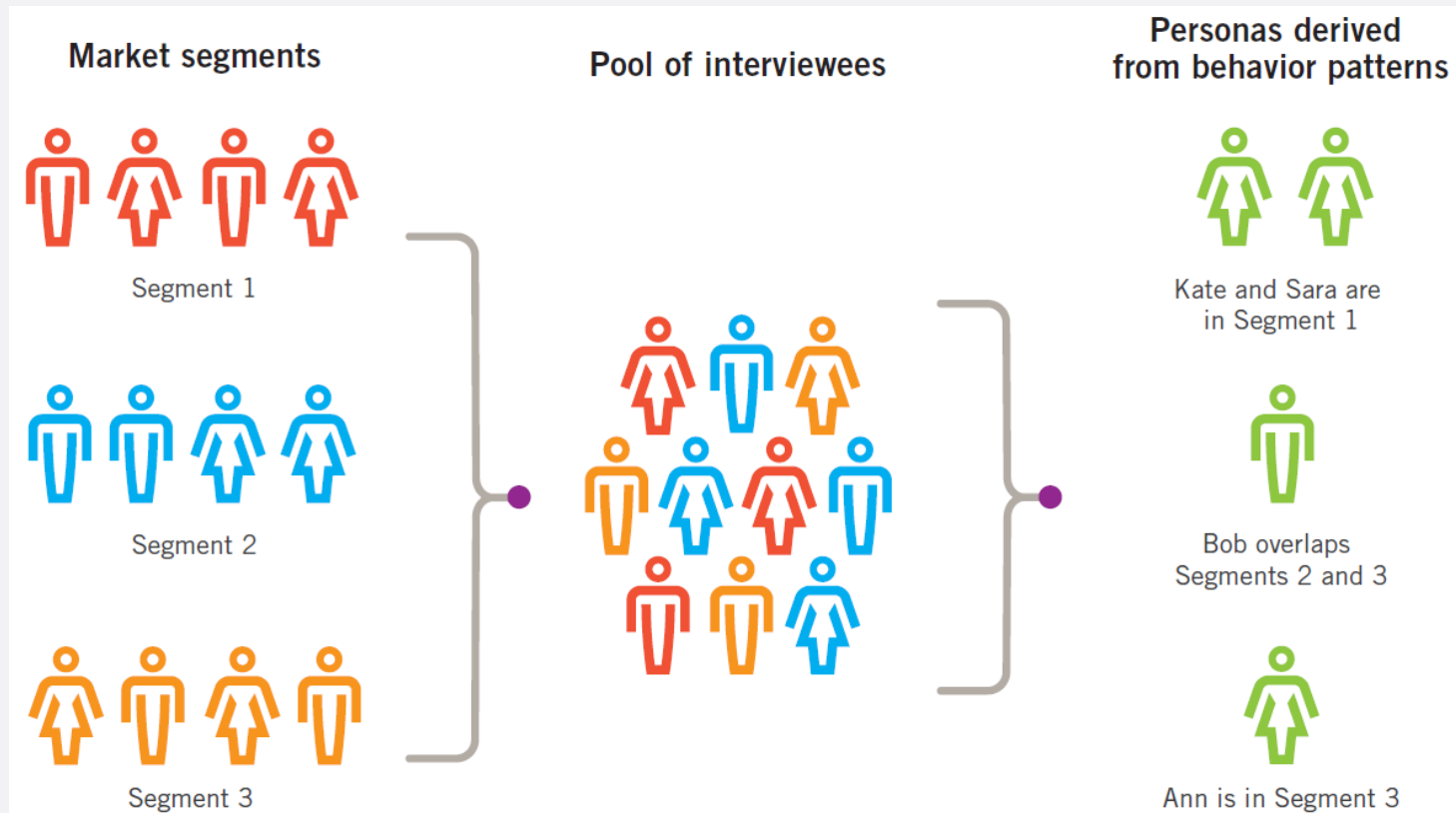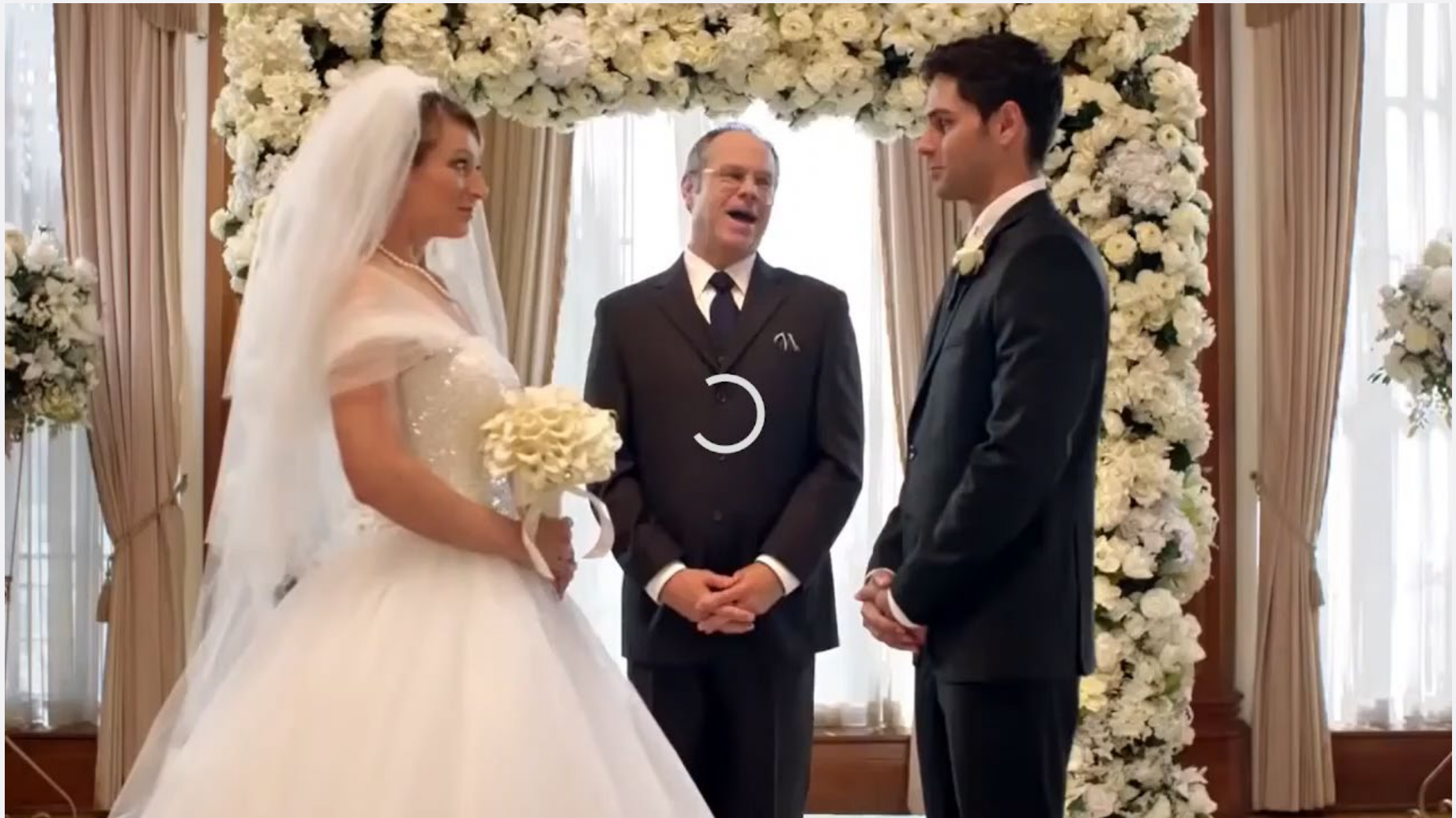
personas
vs market segments

Figure 3-3: Personas versus market segments. Market segments can be used in the Research phase to limit the range of personas to target markets. However, there is seldom a one-to-one mapping between market segments and personas.

Cooper, Alan, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

personas
how are they designed?

- represent the **model of the user**

- look at the user from a **higher abstraction level**

- **not a** model of **general user**

- design for **specific user types** and their **needs**

- analyse the **behaviour patterns** of target users

- account for the **social background of the target user**

- account for the ranges of their **characteristics (e.g. age)** but **do not calculate the average**

- in **big projects**, you would normally develop **multiple personas** representing key user types

  - primary, secondary, etc.
  - 3-5 recommended

  (for your coursework, you only need one persona; you may present more personas to demonstrate a more thorough design process)

multiple personas
an e-commerce example

personas
how about a different context?

⊕ What personas could you develop for a **nutrition app**?

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personas
why are they useful?

- determine **what and how** the prototype should do

- **help** the different stakeholders **communicate** better (e.g. designers and developers)

- make it easier to **relate** the prototype **to the target user**, compared to a list of features or flowcharts

- create **empathy** and motivate the design of **good UX**

- it's a **powerful reality-check tool** (does not replace a user test though)

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personas
design pitfalls

- designing an **"elastic persona"** (a persona cannot accommodate all the possible target users)

- **self-reflection design** (a persona is not you)

- **cool** design ≠ **good** design

- getting stuck on **edge** (rare) **cases** (you should test such cases but do not focus on them)
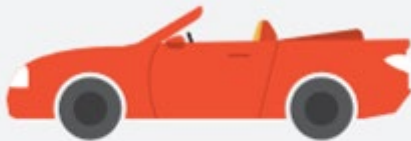
Source: YouTube/NNgroup

what car type would suit each of these personas?

Alesandro's goals
- Go fast
- Have fun

Marge's goals
- Be safe
- Be comfortable

Dale's goals
- Haul big loads
- Be reliable

Cooper, Alan, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

imagine designing a car that pleases everyone

Cooper, Alan, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

imagine designing a car that pleases everyone:
a real (failure) story!

instead, you could design a product for just ONE group of target users:

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personas
motivations & goals

- people are bad at naming their goals

- hence, we should **extract goals from behaviours**

- observe the target users and **specify** their **tasks as short sentences** (as few as possible)

- account for **differences in motivations and goals**

There are **three types:**

Life Goals (Reflective)	**Who** the user wants to be
End Goals (Behavioral)	**What** the user wants to do
Experience Goals (Visceral)	**How** the user wants to feel

Alan Cooper, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

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personas
user goals

⊕ **experience goals** express **how someone wants to feel** while using a product

⊕ example goals could be:

  ⊕ feel smart and in control

  ⊕ feel reassured about security and sensitivity

  ⊕ remain focused and alert

personas
user goals

- **life goals** represent the **user's personal aspirations**

- may explain the **end goal** – why is the user aiming for it?

- explain **long-term desires, motivations, and self-image attributes**

- example goals could be:

  - live the good life

  - succeed in my ambition to…

  - be respected by my peers

personas
user goals

- **end goals** describe the **end states** the users want to reach

- should refer to real-world end states — they are **not confined to** within the scope of the **website/app**

- example goals could be:

  - get into university
  - learning how to bake cookies
  - become a licensed driver

- **Focus on these in your coursework!**

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personas
user goals

- **each persona** is characterised by a **unique set of goals**
  - **not** a **job description or demographic**/bio
  - goals **may differ** within a job or demographic

⊕ understanding the **large context** is the key

⊕ a website that makes all its content findable and all its interactions intuitive may be *usable*, but it won't be *useful* unless it is **relevant to an actual goal a user has**

personas
user goals
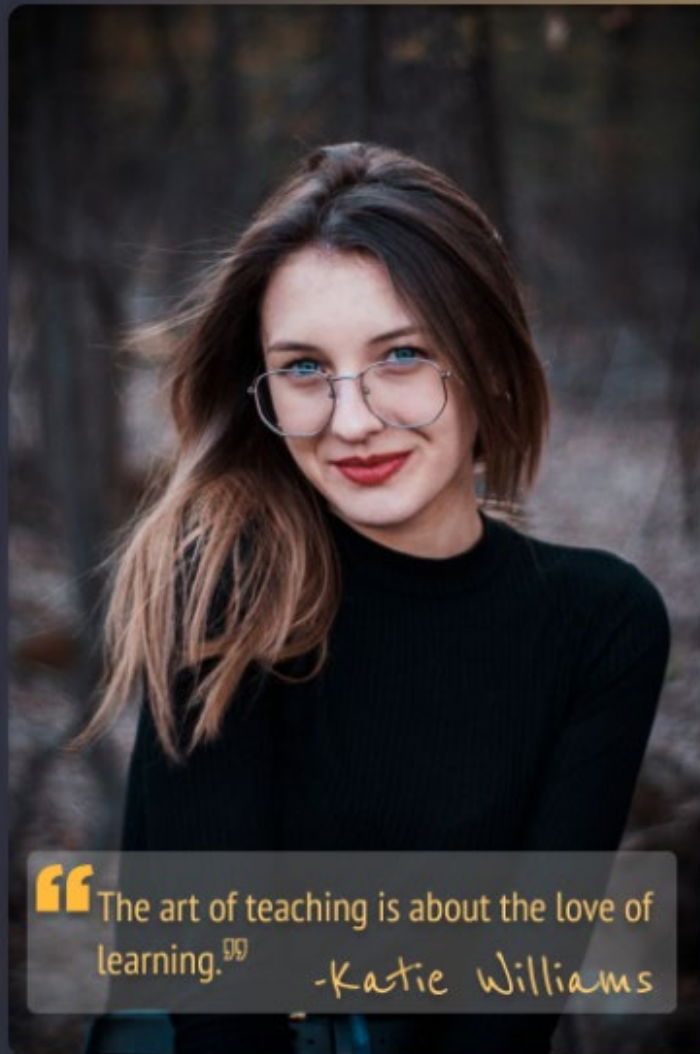
Position: Librarian
Age: 32 years
Experience: 12 years
Family: Married

NATIONAL BOARD CERTIFIED TEACHER

Pain Points
Not Having Consistent Backup From Principal
Lack Of Empathy Among Students
Having More Accountability Then Authority
Would Like More Planning Time

Goals
Moving Into An Administration Role
Learn One New Piece Of Technology Ever Year
Get Maker-Space Funding
Leave Work At Work

Philosophy
'I Believe That All Children Are Unique And Have Something
Special That They Can Bring To Their Own Education. I Will
Assist My Students To Express And Accept Themselves For
Who They Are, As Well Embrace The Differences Of Others.'

"The art of teaching is about the love of learning." -Katie Williams

Life Goals (Reflective)	**Who** the user wants to be
End Goals (Behavioral)	**What** the user wants to do
Experience Goals (Visceral)	**How** the user wants to feel

constructing personas: **8 steps**
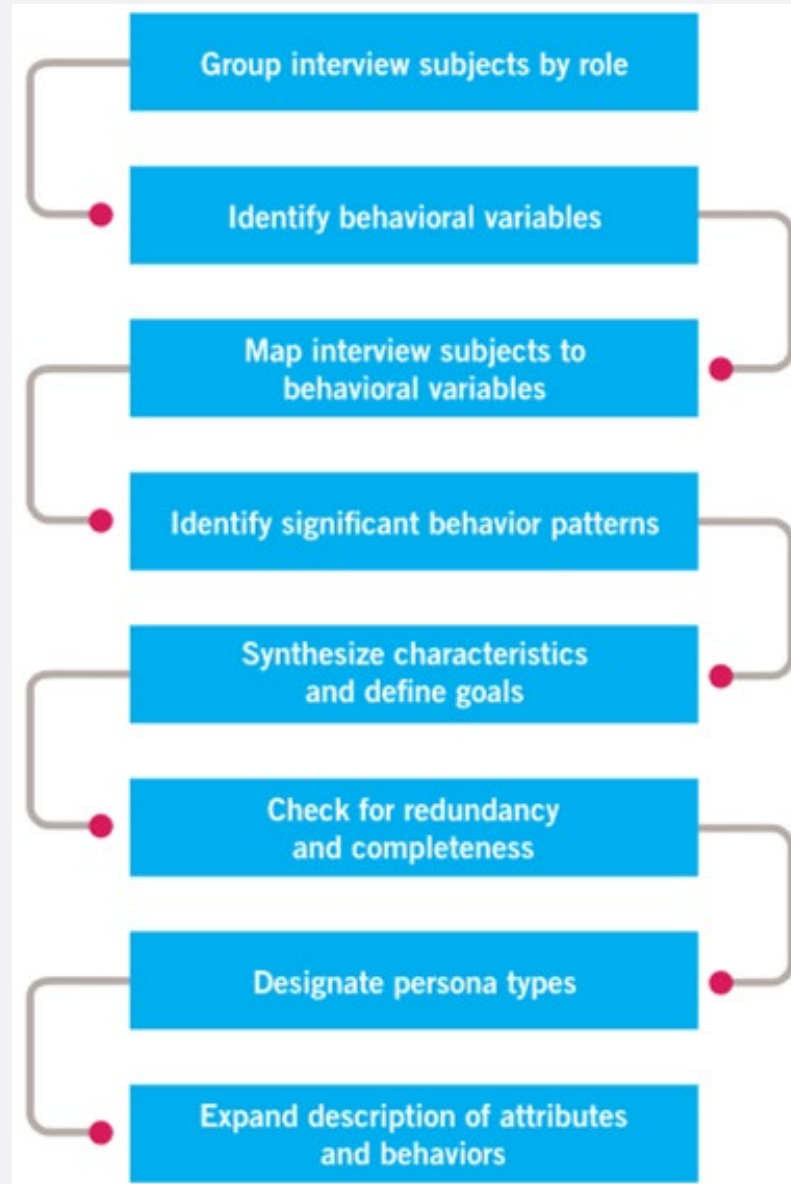
Group interview subjects by role

Identify behavioral variables

Map interview subjects to behavioral variables

Identify significant behavior patterns

Synthesize characteristics and define goals

Check for redundancy and completeness

Designate persona types

Expand description of attributes and behaviors

Alan Cooper, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

constructing personas
1. group interviewees by role
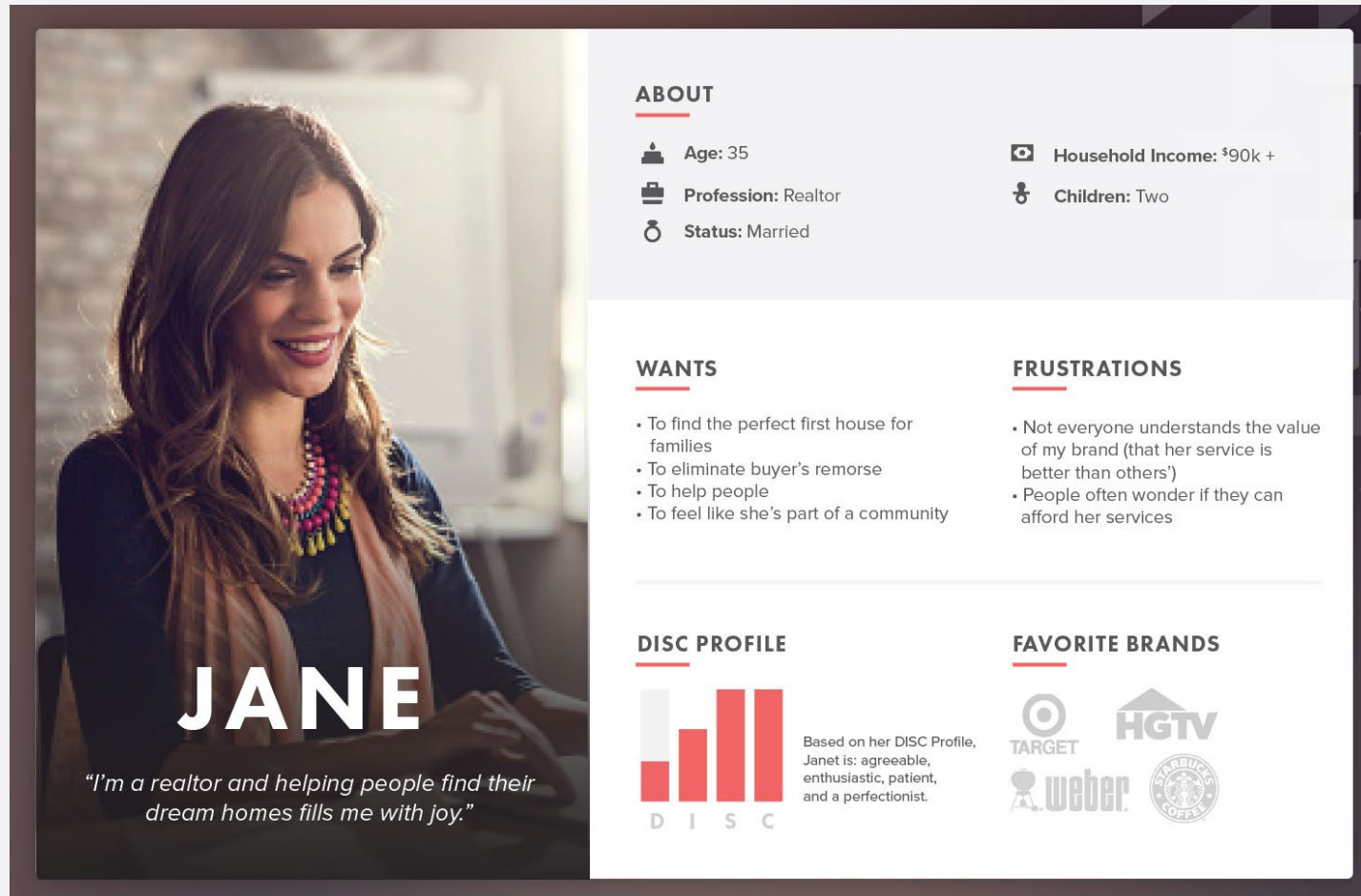
these could include:

- job roles

- descriptions

- family roles

- attitudes to relevant activities

- aptitudes regarding lifestyle choices

constructing personas
1. group interviewees by role

job role example:

ABOUT

Age: 35
Profession: Realtor
Status: Married

Household Income: $90k +
Children: Two

WANTS

- To find the perfect first house for families
- To eliminate buyer's remorse
- To help people
- To feel like she's part of a community

FRUSTRATIONS

- Not everyone understands the value of my brand (that her service is better than others')
- People often wonder if they can afford her services

JANE

"I'm a realtor and helping people find their dream homes fills me with joy."

DISC PROFILE

Based on her DISC Profile, Janet is: agreeable, enthusiastic, patient, and a perfectionist.

D I S C

FAVORITE BRANDS

TARGET   HGTV   weber   STARBUCKS COFFEE

Source: Dribbble/Nicole Love

constructing personas
2. identify behavioural variables

⊕ focus on the following variables:

⊕ **activities** – what the user does; frequency and volume

⊕ **attitudes** – how the user thinks about the technology

⊕ **aptitudes** – what education and training the user has

⊕ **motivations** – why the user is engaged in the technology

⊕ **skills** – user abilities related to the technology

constructing personas
2. identify behavioural variables

example of attitudes and aptitudes:

USER PERSONA
Jane Doe

"I design with all my heart, thinking about the users"

AGE 21
JOB TITLE UX Designer
STATUS Single
LOCATION Atlanta, GA

PASSIONATE EMPATHETIC
CURIOUS ADVENTUROUS

FAVORITE BRANDS

ABOUT

Jane is a UX Designer that works for a Fortune 500 company in Atlanta, GA. Ever since she was a child, she loved to make stuff on her own and show them to her parents, friends and classmates. Over the course of her childhood and throughout her school, she won numerous design prizes at various well known competitions across the United States and Canada. Due to her passion for design, she decided to pursue a Master's degree in Human Computer Interaction and learn more about User Experience (UX) and how she can become a better designer.

GOALS

- Become a designer who communicates well of her ideas at any place
- Easily explain her design ideas to other designers, researchers and engineers

NEEDS

- Looking for a design tool that helps to cut down unnecessary time and effort
- Receive feedback on her progress whenever needed before presentation

PAIN POINTS

- There are too many tools that forces her to spend time learning them
- Cannot rely on other people's opinion because they are highly subjective
- Certain situations require different tools to communicate her thoughts

PERSONALITY

Introvert — Extrovert
Analytical — Creative
Busy — Time rich
Messy — Organized
Independent — Team player

Source: Dribbble/Geunbae Lee
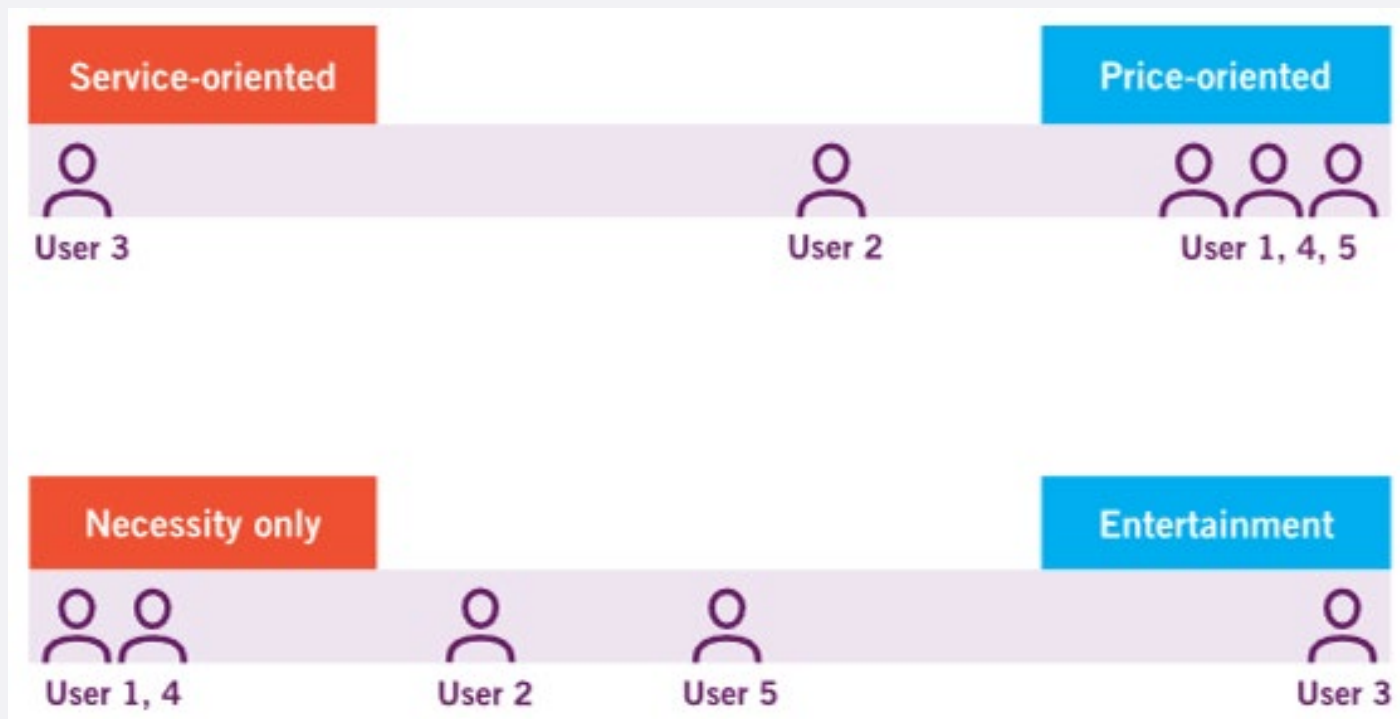
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constructing personas
3. map interviewees to behavioural variables

- some variables will represent a **continuous scale**

- **precise mapping** onto the scale is **not important**

- rely on your **gut feeling**

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3. map interviewees to behavioural variables

Online store example:

Alan Cooper, Robert Reimann, and David Cronin.
About face: the essentials of interaction design 4th Edition.
John Wiley & Sons, 2014.

4. identify significant behaviour patterns

- ⊕ look for **clusters of interviewees**

- ⊕ **behaviour patterns** will form the basis of a persona

- ⊕ look for **meaningful patterns**

Source: me.me

constructing personas
dealing with "grey areas"

constructing personas
5. synthesise characteristics and define goals

- for each behaviour pattern, define the following:

  - the **behaviours** themselves

  - the **use environment(s)**

  - **frustrations** and pain points related to the behaviour

  - **demographics** <u>associated with the behaviour</u>

  - **skills, experience, or abilities** relating to the behaviour

  - **attitudes and emotions** associated with the behaviour

  - **relevant interactions** with other people

  - **alternate** or competing **ways** of doing the same thing

constructing personas
5. synthesise characteristics and define goals

example of different use environments:

constructing personas
6. check for completeness and redundancy

- check for **gaps in** your persona **template**

- is any **behaviour missing**?

- eliminate **redundant personas** (if you have multiple)

- the **persona** should be as **compact** as possible

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constructing personas
7. designate persona types

⊕ there are six persona types:

    ⊕ **primary** (the main target of interface design)

    ⊕ **secondary** (may have specific additional needs)

    ⊕ **supplemental** (could be added due to political reasons)

    ⊕ **customer** (customer in the segment but not an end user)

    ⊕ **served** (do not use the protype but are affected by it)

    ⊕ **negative** (someone you are not designing for)

⊕ In your coursework portfolio, you need the primary persona. You may also describe one secondary persona to demonstrate a more thorough design process.

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constructing personas
8. expand the description of attributes and behaviours

⊛ the persona **narrative**:

    ⊛ **summarising** descriptions of **significant behaviours**

    ⊛ focus, **do not include** excessive **fictional descriptions**

    ⊛ **do not add what you did not observe**

    ⊛ **do not include solutions,** highlight frustrations instead

⊛ **precise and credible details** are vital to making a persona **look like a real potential user**

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constructing personas
8. expand the description of attributes and behaviours

⊕ the persona **narrative**:

Persona 1

Name
Sarah Xavier

Age
23 years old

Job Title
Journalist

Location
Los Angeles, CA

Bio

Sarah is a graduate student from Yale University who's currently looking for a job as a journalist for a newspaper. She likes to order local and national newspapers, and reads articles online for fun.

She considers herself very outgoing, and makes it her goal in life to get to the truth of stories unraveling in the world around her.

Goals •

To work at a newspaper company, either in her state or for a national newspaper. To be notified when there are new job openings.

Frustrations •

Not knowing when new jobs are available at state or national newspaper companies. Doesn't know how she's doing compared to her competitors.

Current Feelings •

Nervous, not knowing when or if she'll get the job she wants. Unsure, not knowing how her application compares to others.
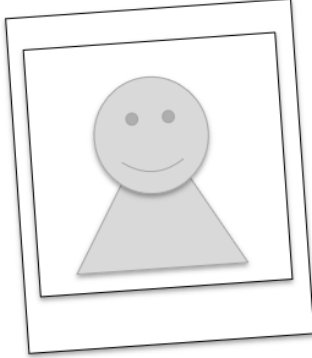
Tech Knowledge •

Uses her laptop and phone daily. Spends at least 2 hours on electornics every day. Feels comfortable using technology.

personas
what to focus on?

Design Brief:

Name:

Age:

Location:

Level of
technical comfort:

Back story and goals

Tell us a bit about them, their aptitudes (education, ability to learn) and goals.

Existing practices

How do they currently carry out the tasks your design aims to support?
What activities do they perform?

Frustrations

What frustrates them about the way things currently work?

8. expand the description of attributes and behaviours

⊛ the persona **photo**:

   ⊛ in general, it could be helpful to use multiple pictures in the design process

   ⊛ in the **persona template**, you only need **one photo**

Alan Cooper,
Robert Reimann,
and David Cronin.
About face: the essentials
of interaction design
 4th Edition.
John Wiley & Sons, 2014.

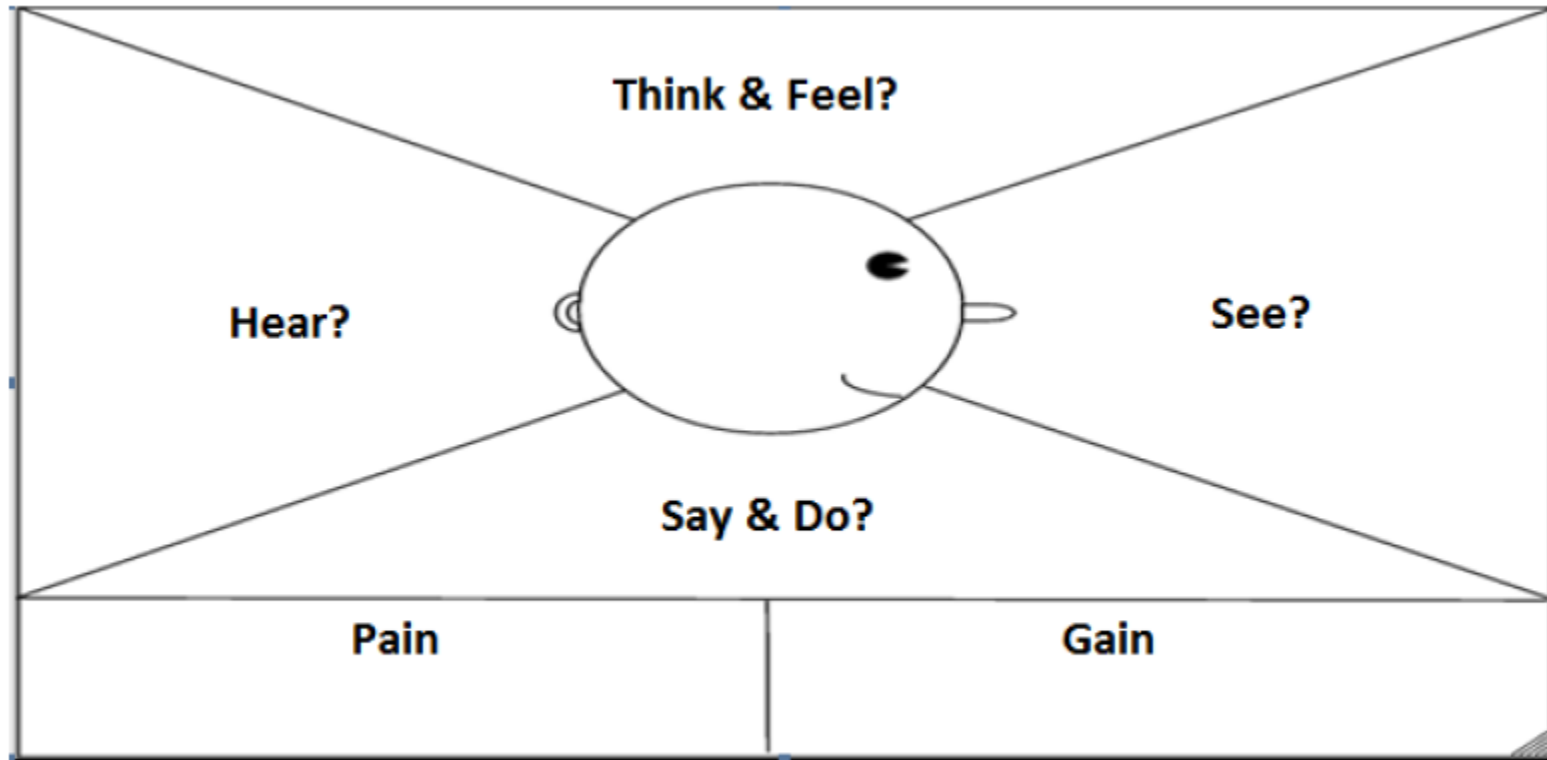# constructing personas (an alternative way):
using empathy maps

Figure 1.   The Template of the Empathy Map [7].

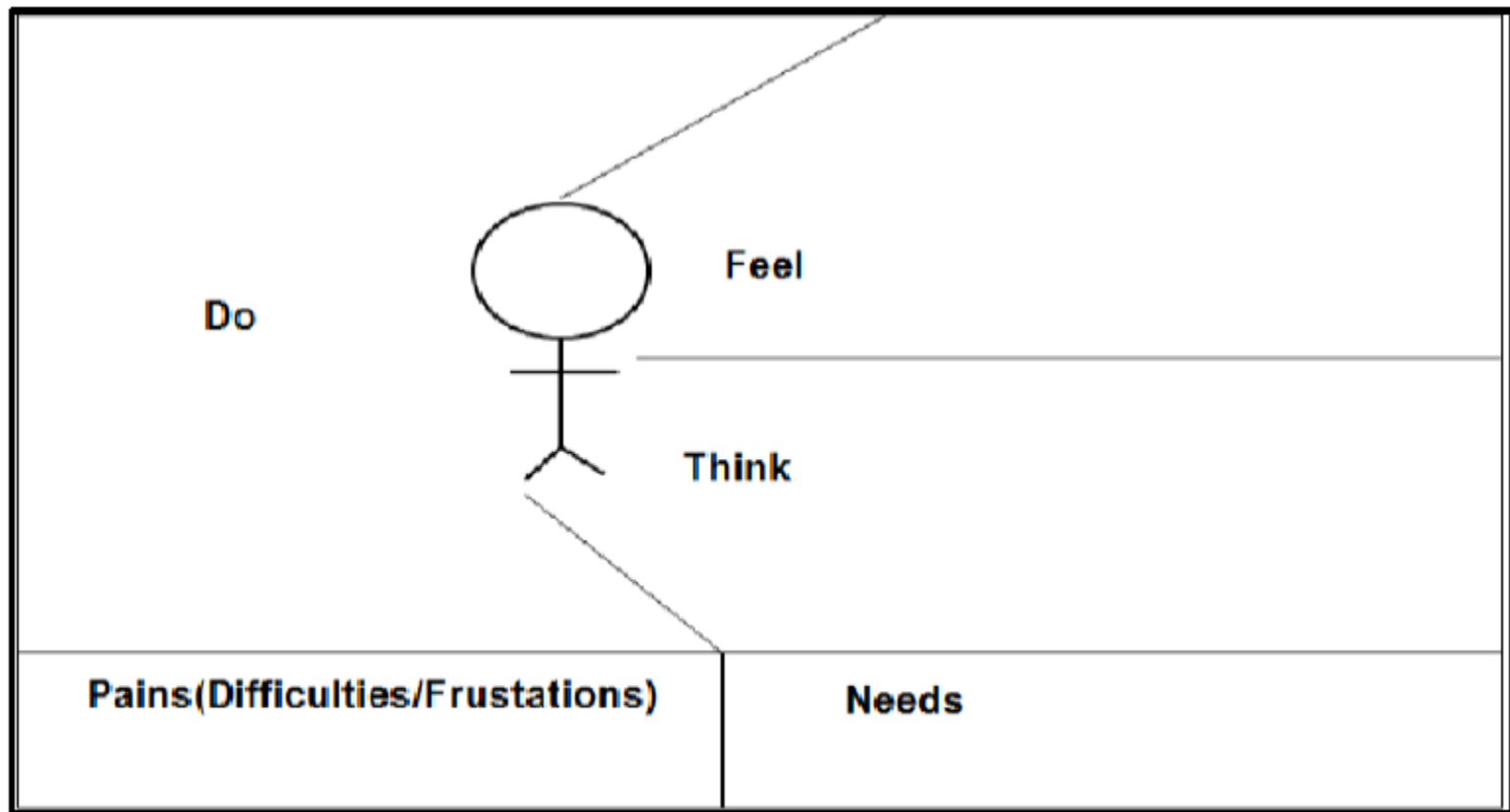# constructing personas (an alternative way):
using empathy maps

Figure 2.   Empathy Map Template used in the study.

(Ferreira et al., 2015)

constructing personas (an alternative way): using empathy maps

TABLE I. QUESTIONS FOR FILLING THE EMPATHY MAP [7]

Field	Guiding Questions
Do	What is common for him / her to say?
	How does s/he normally act?
	What are his / her hobbies?
	What does he like to say?
	How is the world in which s/he lives?
	What do people around him / her do?
	Who are his / her friends?
	What is popular in his daily life?
	What people and ideas influence him / her?
	What do the important people in his / her life say?
	What are his / her favorite brands?
	Who are his / her idols?
Think	What are some important ideas that s/he thinks and does not say?
Feel	How does s/he feel about life?
	What bothers him / her lately? Why?
Pains (Difficulties / Frustrations)	What is s/he afraid of?
	What are his / her frustrations?
	What has disturbed him?
	What would s/he like to change in his / her life?
Needs	What does s/he need to feel better?
	What is success? What does s/he want to achieve?
	What has s/he done to be happy?
	What would end his / her pain?
	What are some of his / her dreams?

(Ferreira et al., 2015)

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constructing personas (an alternative way):
using empathy maps

- One of the results of the qualitative analysis showed that through the EM it is **easy to describe personas.**

- One of the reasons is that the EM provides **more flexibility than the textual description.**

- It also **guides inexperienced practitioners** through the creation process.

(Ferreira et al., 2015)

personas

personas also bring requirements to life:

'A rich picture of an **imaginary person** who **represents** your **core user group**' …'Based on actual studies of users, observation, etc.' (HCI, Dix et al, p. 228).

Jill Anderson
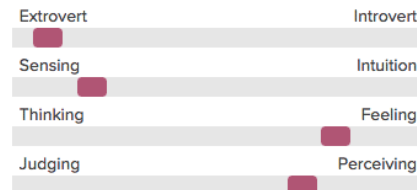
Bio

Jill is a Regional Director who travels 4-8 times each month for work. She has a specific region in which she travels, and she often visits the same cities and stays in the same hotel. She is frustrated by the fact that no matter how frequently she takes similar trips, she spends hours of her day booking travel. She expects her travel solutions to be as organized as she is.
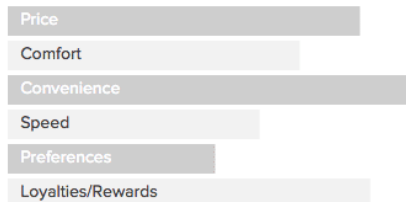
Goals

- To spend less time booking travel
- To maximize her loyalty points and rewards
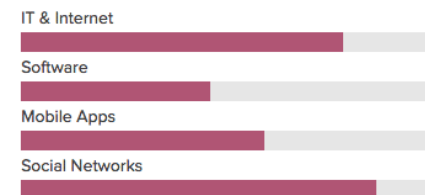- To narrow her options when it comes to shop

Frustrations

- Too much time spent booking - she's busy!
- Too many websites visited per trip
- Not terribly tech saavy - doesn;t like the process

"I'm looking for a site that will simplify the planning of my business trips."

AGE	29
OCCUPATION	Regional Director
STATUS	Single
LOCATION	Portsmouth, NH
TIER	Frequent Traveler
ARCHETYPE	The Planner

Organized | Practical
Protective | Hardworking

Personality

Extrovert — Introvert
Sensing — Intuition
Thinking — Feeling
Judging — Perceiving

Motivations

Price
Comfort
Convenience
Speed
Preferences
Loyalties/Rewards

Brands

KAYAK
Basecamp
Outlook
enterprise
IHG InterContinental Hotels Group

Technology

IT & Internet
Software
Mobile Apps
Social Networks

Can you extract any requirements from Jill's persona?

Let's discuss these in more detail next time!

Read the "Discovering Requirements" chapter of the Interaction Design book

INTERACTION DESIGN

PREECE • ROGERS • SHARP •

beyond human-computer interaction
4th Edition
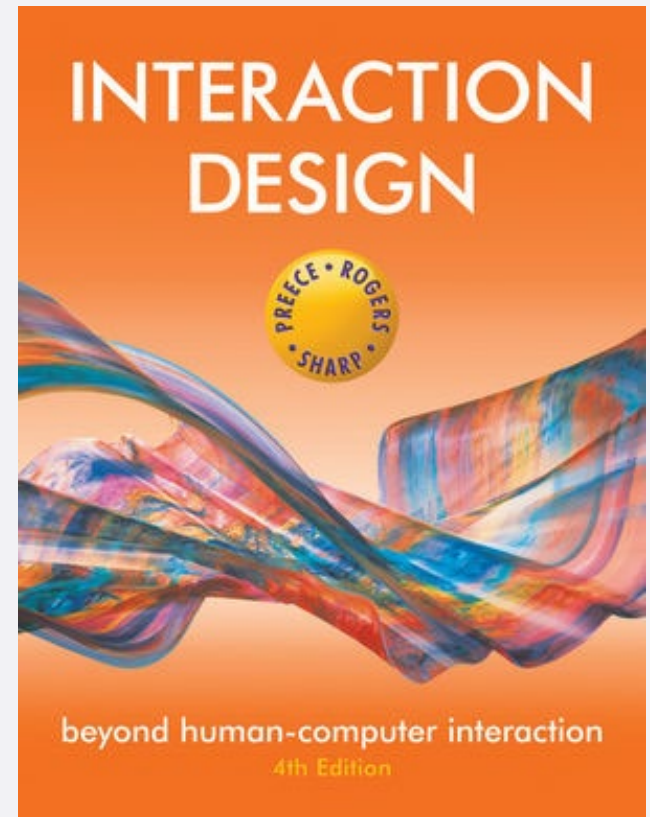
Read Chapter 3 of
Alan Cooper, Robert Reimann, and David Cronin.
About face: the essentials of interaction design
4th Edition.
John Wiley & Sons, 2014.