

# Week 5-2

# **Personas and Scenarios**

SFWRENG 4HC3/6HC3 Human Computer Interfaces

*\* Slides adapted from previous instructors of COMPSCI/SFWRENG 4HC3/6HC3*

# Qualitative Analysis Walkthrough

# Inductive Coding: Process

1. Open coding all your data
  - Stay close to the actual meaning of the actual data
  - Covert non-textual format data into texts
2. Cluster to form axial codes
  - Use affinity diagraming
3. Reapply axial codes
4. Cluster to form themes
5. Make sense of the themes

# Inductive Coding: Process

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# Inductive Coding: P6

1. What are the TOP 3 things you APPRECIATE when you're using multiple devices

I love it when I can pick up about any of the devices and they'll be in sync with the others - seamlessly.

I enjoy when I can access my information from nearly any device. That way I can choose the best or nearest platform for the job - such as a bigger screen when viewing photos, or my best keyboard and desk when writing a lot.

It's great that many (although not all) apps are very similar across devices, so I don't need to fiddle around when moving from one device to the next

# Inductive Coding: P47

1. What are the TOP 3 things you APPRECIATE when you're using multiple devices
  - the ability to move from one device to another. start reading news on my phone, then move to move to desktop and continue or finish.
  - software that knows I've been on another device, stitcher for example. I start to listen to a podcast, then move to another device and it picks up where I left off.
  - use the device where I want, desktop, breakfast table, toilet, car, etc.

# Inductive Coding: P72

1. What are the TOP 3 things you APPRECIATE when you're using multiple devices
  - Being signed in and syncing of favourites in the new Edge between my Surface Book, Macbook, iPad, iPhone. It means I can pick up a device and access things quickly.
  - Cloud services I use for collating content I want to absorb at a later date. Be that my Watch Later list on YouTube, Pocket app, Tweetbot Twitter client on iOS. Basically common apps that sync data/progress on a task giving flexibility of it being likely a device is nearby, and a sort of grab-and-go way of things working.
  - Having the flexibility of different forms of devices. iPhone for quick at hand tasks, iPad for something more casual taking in content that warrants a bigger screen, Surface Book for when I need the power or access to certain tools/apps. Or a more single-purpose device like a Nintendo Switch or Amazon Kindle for when I want to focus on one thing instead of risking being distracted by notifications, social media etc.

# Inductive Coding: Process

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# Quick Review Questions

# Making Sense of the Data



How do we **make sense of the collected data** about user requirements to guide our design process?

# Learn: Character Profiles

## Character Profiles

**HOW:** Based on observations of real people, develop character profiles to represent archetypes and the details of their behavior or lifestyles.

**WHY:** This is a useful way to bring a typical customer to life and to communicate the value of different concepts to various target groups.

In order to understand different types of customers and how to target them, IDEO developed four characters for a pharmacy wanting to reach the male beauty-product market.

[Chris]



*"I wouldn't be caught dead using moisturiser"*

*"I never buy after shave...I get it for Christmas"*

*"I read men's magazines sometimes, but I'd never buy one"*

*"I only really take vitamin C when I've got a cold"*

*"keeping fit isn't that important to me"*

# Week 5 Goals Overview

- ~~Monday~~
  - ~~Understanding Users: Learn and Try~~
  - ~~Data Analysis~~
- **Wednesday**
  - **Personas and Scenarios**
- Friday
  - Scenarios and HTA

# Personas

- Personas give **a rich picture of an imaginary person who represents your stakeholder group (often primary)**
- Personas allow you to **imagine what the person would do** – this is much better than asking yourself what you would do!
- Used in product design, software design, interface design...

# Personas: continued

- Persona is a hypothetical stakeholder archetype used **throughout design process**
- **Where from:** Compiled from ethnographic interviews and other studies with real people
- **How:** Defined by goals, motivations, behaviors, of real primary stakeholders
- **Why:** Helps focus on people & context, assist in decision-making & communication
- **Tool:** Designing for archetype can satisfy bigger group

# Primary Persona

- Demonstrates key goals & behavior patterns of **primary stakeholder**
- If the design fails for the primary persona **the product is a failure**
- Each primary persona may require a different interface design
- Secondary Personas (secondary stakeholders) and Anti-Personas (non-users) can be useful too

# Persona Examples

- **Digital Family Calendar** persona category examples:
  - Career parent
  - Stay-at-home-parent
  - Teenager
  - Extended family member (grandparents)
- Select to cover a broad range of primary stakeholder possibilities




# Personas are your Friends

“When presenting, talking about your personas, or referring to them in writing, communicate **as though they are real people, people that you know. Express it like you are talking about a friend.**”

# Create Personas

- **User Profile**
  - Age, job, personality traits
- **Key Task Goals**
- **Motivations/Frustrations**
  - Or pain points
- **Quote**
- **Personal Stories**
  - Related to the task/experience



## Lance

mobile gourmet

*I know it's important to eat well for all the right reasons, and I love delicious food. But in reality, it's really tough to make time for shopping and cooking. Fresh stuff requires more frequent trips to the grocery store, planning, and preparation, which I really just don't have time to do.*

secondary persona

**Personal Details**

Age: 32

Profession: **Architect**

Home: **Nashville, TN**  
Small house, also functions as his studio.

**Goals and Priorities**

Convenience above all

New flavors and experiences

Balanced healthy ingredients

Lance Facts	
Serving Size: 1	
Serving Per Container: 1	
Amount Per Serving	
Age: 32	Nashville, TN
Health Facts*	
Total Weight: pounds	140
Height: inches	64
BMI	24
Cholesterol: 194 mg/dl	Normal
Sodium: 148 mEq/L	Elevated
Glucose: 116 mg/dL	Normal
Blood press.: 128/74 mmHg	Good
Not a significant health risk. Adding healthier daily nutrition and exercise will improve.	
*Based on blood test a part of his yearly physical.	

Lance is always juggling 2 (or more likely 5-6) projects at once. He is an architect with a focus on green housing, and he supervises a team of off-site collaborators and on-site contractors. Lance loves to eat healthy and tasty food, but prioritizes his nutrition and health like everything else in his life (deadlines *always* come first).

His main objective in buying food is convenience and flavor. Lance really loves trying new flavors and new food experiences. He considers himself a sushi expert, sandwich snob, and barbecue aficionado. With his busy work life, he tends to fall back on restaurant meals to feed his needs, but he knows that too much of that really hits the waistline and drags his energy level down. He's also lactose intolerant, and it can be tricky avoiding dairy in restaurant food.

The majority of his groceries come from Amazon Fresh®, and he appreciates the flexible functionality of the site. For example, keeping lists, maintaining a grocery history, and adding alerts for items he frequently buys. Since he's always online, in the studio and in the field, he's really comfortable using technology to get things done.

**Lance's Goals and Priorities**

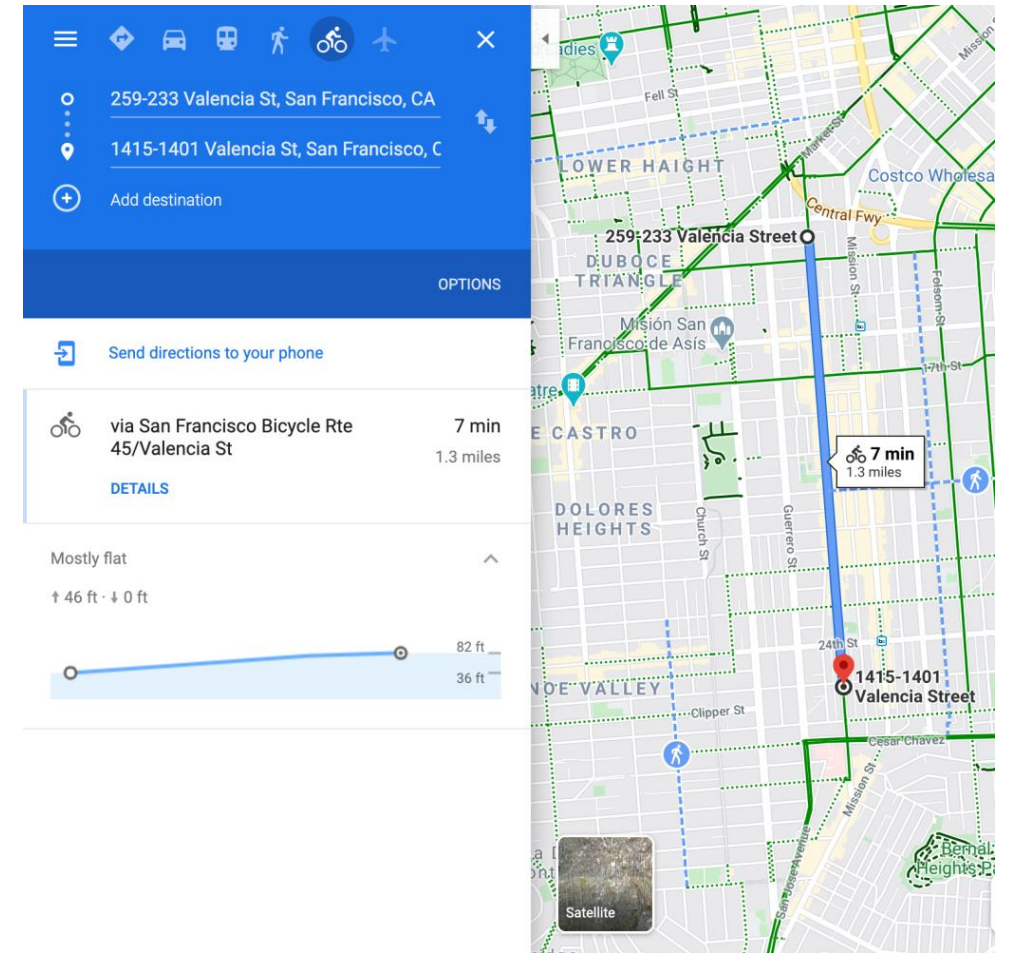
- Convenient food where and when he needs it
- Stay healthy so he can maintain his high-energy lifestyle
- New flavors that satisfy his adventurous palate
- Mobile solution that keeps up with him
- Easy, so it doesn't take any more valuable time

# Create Persona: Practice (~5 mins)

Work with the person next to you:  
Create a **primary persona** regarding  
the **primary stakeholder** for the bike  
route planning experience in a map  
app, including:

- User Profile
- Key Task Goals
- Motivations/Frustrations
- Personal Stories

\*Note your assumptions!



# Personas and Scenarios

- **Personas and scenarios** go together
- **Personas** become **the characters in scenarios** which describe the current situation or your proposed solution

# Scenarios

- A scenario is a description of people using **artifacts** within **environments** carrying out **tasks or activities**
- Scenarios summarizing field study work focus on **current state of user activities** and exclude the proposed system
- Scenarios are typically expressed in plain writing
  - But they can be done graphically, i.e., with storyboards

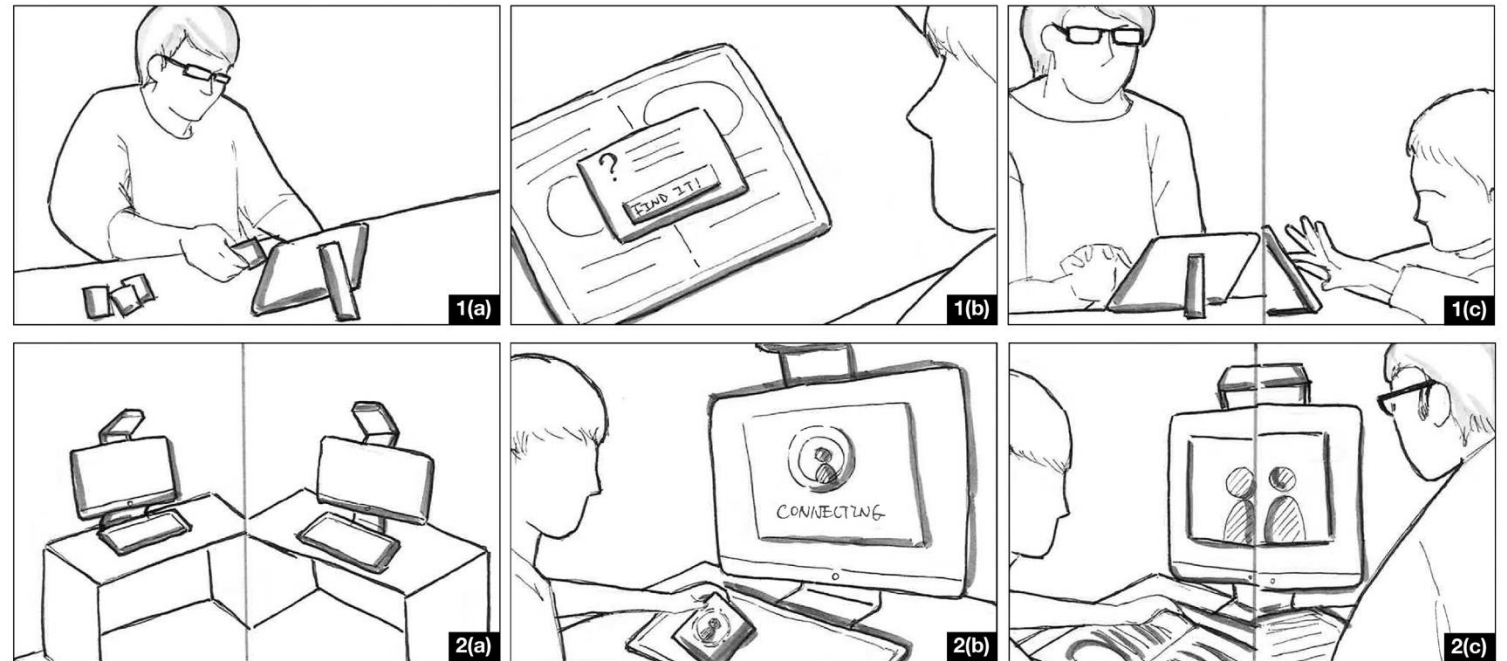
# Scenarios: Example

**Bob** is a project manager in an advertising company, who **often works from home**. One day **he forgot his iPhone at home** and **had meetings with clients across town**. While attending an important meeting he realized that **he was about to miss his lunch appointment, but he didn't have the phone number to cancel his scheduled lunch**

# Day-in-the-life Scenarios

- Characterize what happens when people perform **typical tasks**
- Can be acted out as a form of **walkthrough**
- Can be shown **to study participants for confirmation of accuracy**

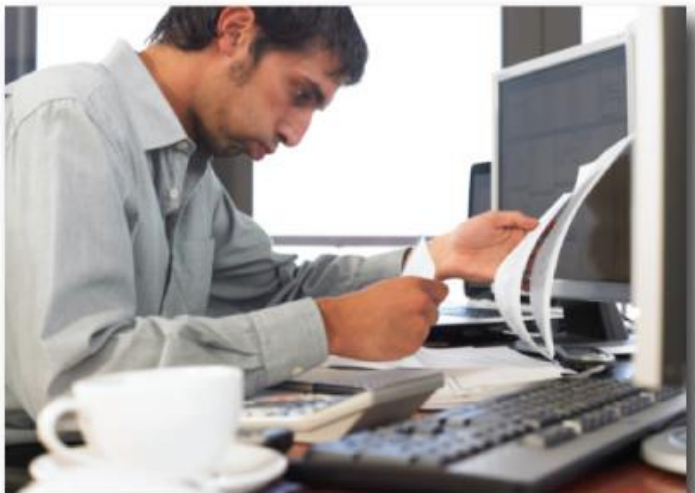
# Scenarios with Storyboards





# Personas in Scenario

- Age 32
- Office worker (ad account manager)
- No children, lives alone
- Dog died (used to walk it for exercise)
- Starting to put on weight
- Used to play football at university, much less active now
- Active social life
- "I want to stay fit, but on my own time and fitting in to my schedule"



## BJORN

1. Home from work, he was meant to go out the previous evening but got invited out to a dinner party instead. This evening is now free so he decides to go for a run.

2. He's in his living room and sets up his run. This involves:
- o route choice
  - o exercise level, eg easy jog or hard run (specific pacing feedback choice, eg within PB)
  - o music choice
  - o disturbability status (eg, open to contact/running partner)
  - o weather
  - o (warm up/stretching?)

3. He gets changed and leaves the house, the handover is transparent from living room companion to mobile device based companion and is aware of all Bjorn's choices regarding run setup.

4. Just as he's about to begin, the sun breaks through the clouds and Bjorn decides he'd rather go for a longer run than initially selected in his living room, this change must be facilitated through his mobile companion device. Selective rather than creative process (eg, chose run three on route 2)

5. He starts running hard.

6. Asked whether he's warmed up as he's running above a warm up rate.

7. He slows down to a more gentle jog and reaches his start point.

8. A touch of the device indicates he's starting his run.

9. Music begins

10. Pace setting tactile feedback begins.

11. Midway through run he's informed that Julie is also running in the woods and has set her DS at open to running partners (this is a closed list of pre-set social network that Bjorn belongs to).

12. He slows down and runs on the spot and sends her a greeting asking if she'd like to join him, she says yes.

13. She catches up and the companion automatically reconfigures his pacing settings to match hers.

14. After a circuit they part ways and Bjorn heads home.

15. On entering the house Bjorn warms down and stretched which induces a brief summary on his mobile device whilst the detailed data from his run is transparently transferred to his home network.

16. He walks into the kitchen to grab a glass of water and plan what to make for dinner. His home companion notes that he went for a long run today so must be hungry, and suggests some recipes based on what he has in his fridge "how bout that steak, it goes out of date tomorrow". Nothing takes his fancy so he asks the companion to search online whilst he has a shower. Takes shower, comes down and is presented with some new recipes and the fact that Julie called and asked him for a drink that night.

17. At a later time he asks for an overview of his past three months exercise, his companion notes that his heart rate is recovering quicker which suggests he's getting fitter, but for the past two weeks he's not been running for as long.

# Types of Scenarios

- **Stories** are the real-world experiences of people.
- **Conceptual scenarios** are more **abstract** descriptions in which some details have been stripped away.
- **Concrete scenarios** are **generated from abstract scenarios** by adding specific design decisions and technologies and once completed these can be represented as use cases.
- **Use cases** are **formal descriptions** that can be given to programmers.

# Scenarios at Different Stages

- Many **stories** will be represented by a few **conceptual scenarios**. Also, **each conceptual scenario** may **generate many concrete scenarios**.
- **Several concrete scenarios** will be represented by a single **use case**.

# Scenarios at Different Stages

- Designers **abstract** from the details of **stories** to arrive at **conceptual scenarios**.
- They specify **design constraints** on conceptual scenarios to arrive at **concrete scenarios**.
- Finally, they formalize the design ideas as **use cases**.

# Stories

- Stories are the **real-world experiences, ideas, anecdotes and knowledge of people**.
- These may be captured in any form and **comprise small snippets** of activities and the contexts in which they occur.
- This could include videos of people engaged in an activity, diary entries, photographs, documents, the results of observations and interviews and so on.
- People's stories are **rich in context**.
- Stories also capture many **seemingly trivial details** that are usually left out if people are asked to provide more formal representations of what they do.

# Stories: Example

"I needed to make an appointment for Kirsty, my little one. It wasn't urgent – she had been having a lot of bad ear-ache every time she had a cold – but I did want to see Dr. Fox since she's so good with the children. And of course ideally it had to be when Kirsty was out of school and I could take time off work. I rang the surgery and the receptionist told me that the next appointment for Dr. Fox was the next Tuesday afternoon. That was no good since Tuesday is one of my really busy days so I asked when the next one was. The receptionist said Thursday morning. That meant making Kirsty late for school but I agreed because they sounded very busy – the other phone kept ringing in the background – and I was in a hurry myself. It was difficult to suggest a better time without knowing which appointments were still free."

# Conceptual Scenarios

- Conceptual scenarios are more **abstract** than stories.
- Much of the context is stripped away during the **process of abstraction** and **similar stories** are combined together.
- Useful for generating design ideas and for understanding the requirements of the system.
- **Once the designer has accumulated a collection of stories, common elements will start to emerge.**

# Abstraction

- **Classification and aggregation:** moving from **the details** of specific people undertaking specific activities in a specific context using a particular piece of technology to **a more general description** that still manages to **catch the essence of the activity**.



# Aggregation

- **Aggregation** is the process of treating a whole thing as a single entity rather than looking at the components of something.
- In most domains, **for example**, one would aggregate a screen, processor, disc drive, keyboard and mouse and treat this as a single thing – a computer – rather than focusing on the components

# Classification

- **Classification** is the process of recognizing that things can be collected together, so that dealing with the class of things is simpler (more abstract) than dealing with the individual things.
- **There are no set ways to classify things**, so the analyst has to work with the stories that have been gathered and with the users themselves to decide which things belong together and why.

# Conceptual Scenarios: Example

**Booking an appointment:** People with any degree of basic computer skills will be able to contact the doctors' office at any time **via the Internet** and see the times which are free for each doctor. **They can book a time and receive confirmation of the appointment.**

# Conceptual Scenarios: Example

- **Little or no specification** of precise technologies or how the functions will be provided.
- Could be made
  - **more abstract** by not specifying that the Internet should be used
  - **more concrete** by specifying that the booking should be made from a computer rather than a mobile phone.
- Finding **an appropriate level of abstraction** at which to describe things for a given purpose is a key skill of the designer.

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