CS160

USER INTERFACE DESIGN

FALL 2018
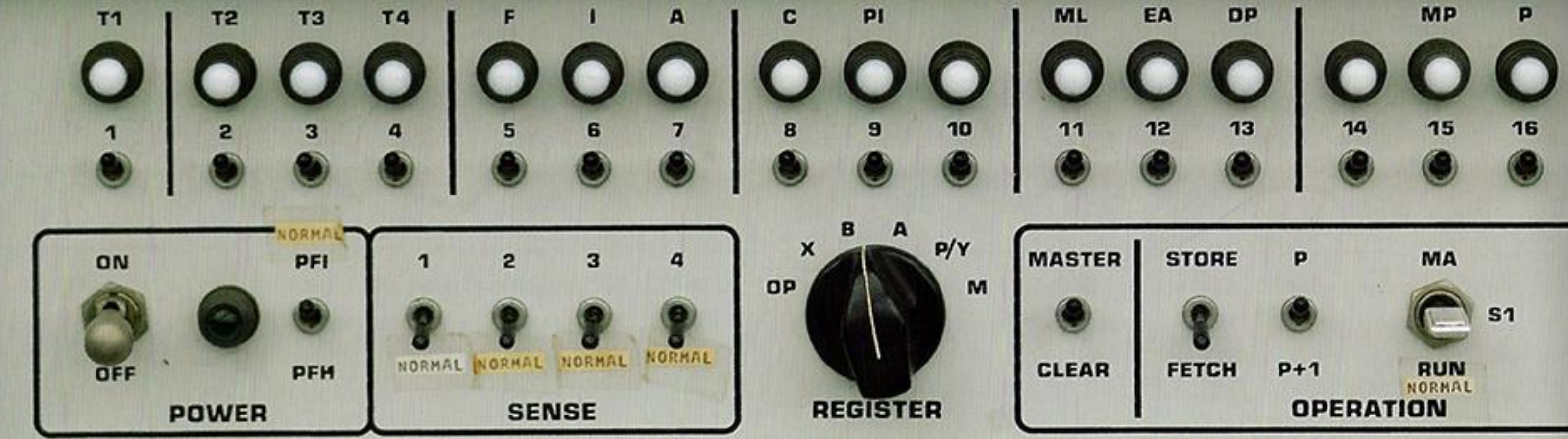
STORYBOARDS, SCENARIOS, AND PERSONAS

10 SEP 2018

ERIC PAULOS

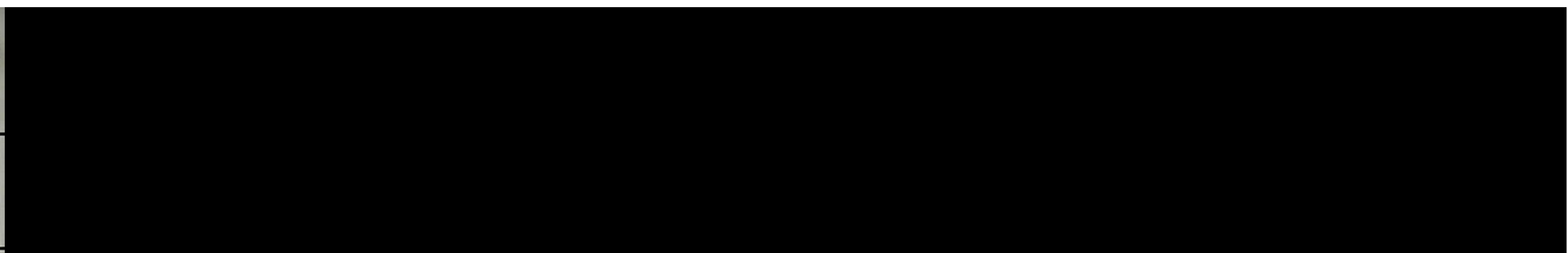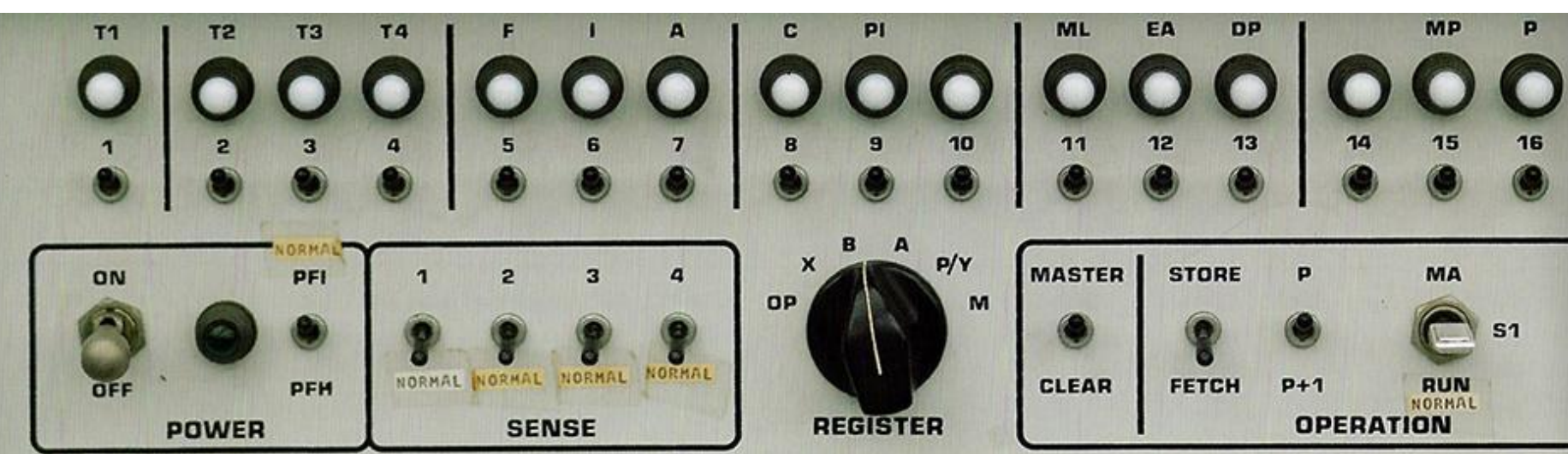www.paulos.net

UNIVERSITY OF CALIFORNIA Berkeley

ANNOUNCEMENTS

Congrats on completing PROG 01!

PROG 02 - out this week
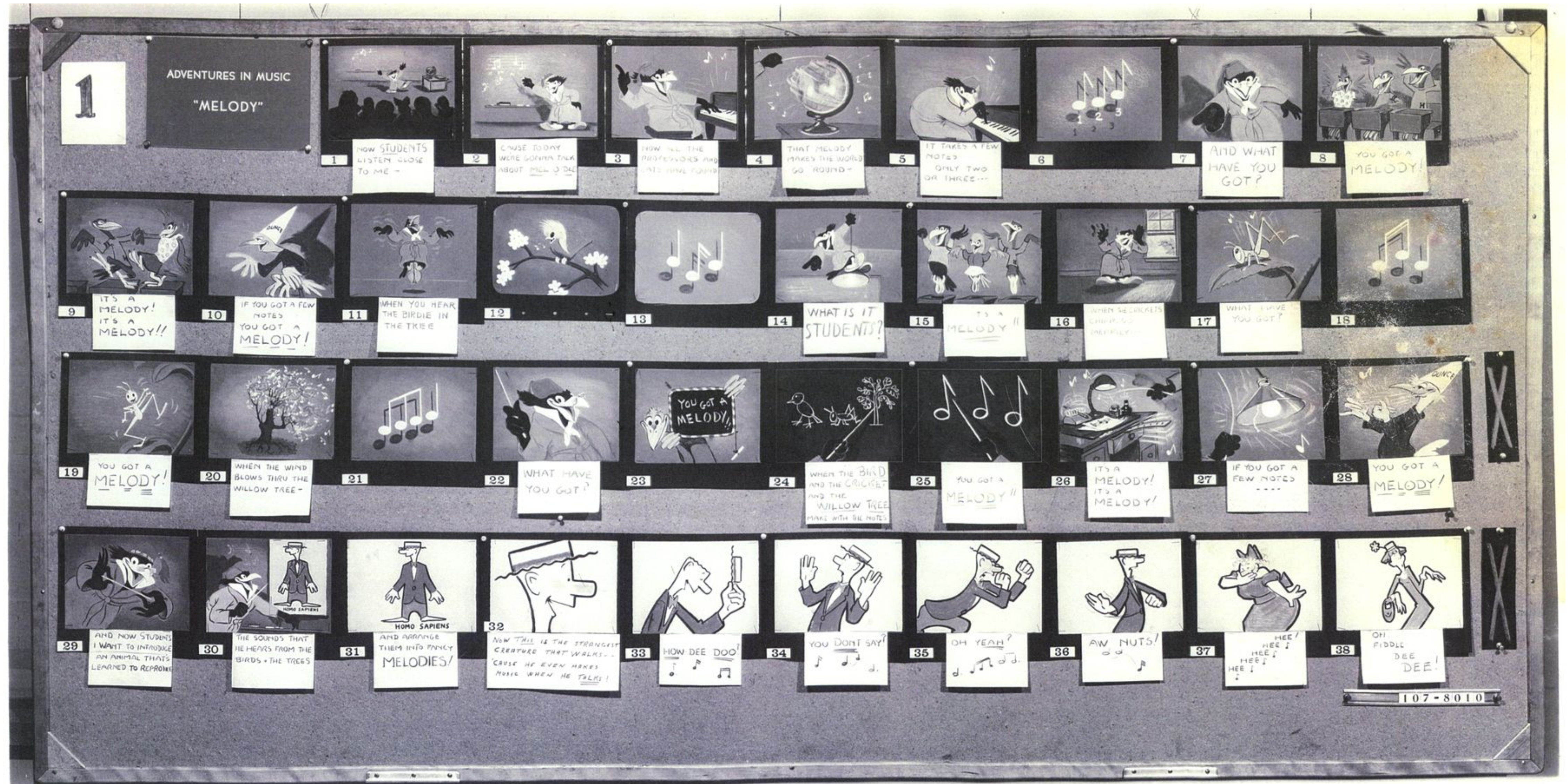
FEED 01 - team formation survey out this week

Section - working with APIs in Android

STORYBOARDS

STORYBOARDS

STORYBOARDS

STORYBOARDS FOR UI DESIGN

Goal: Understand how your product or application fits into a larger context.
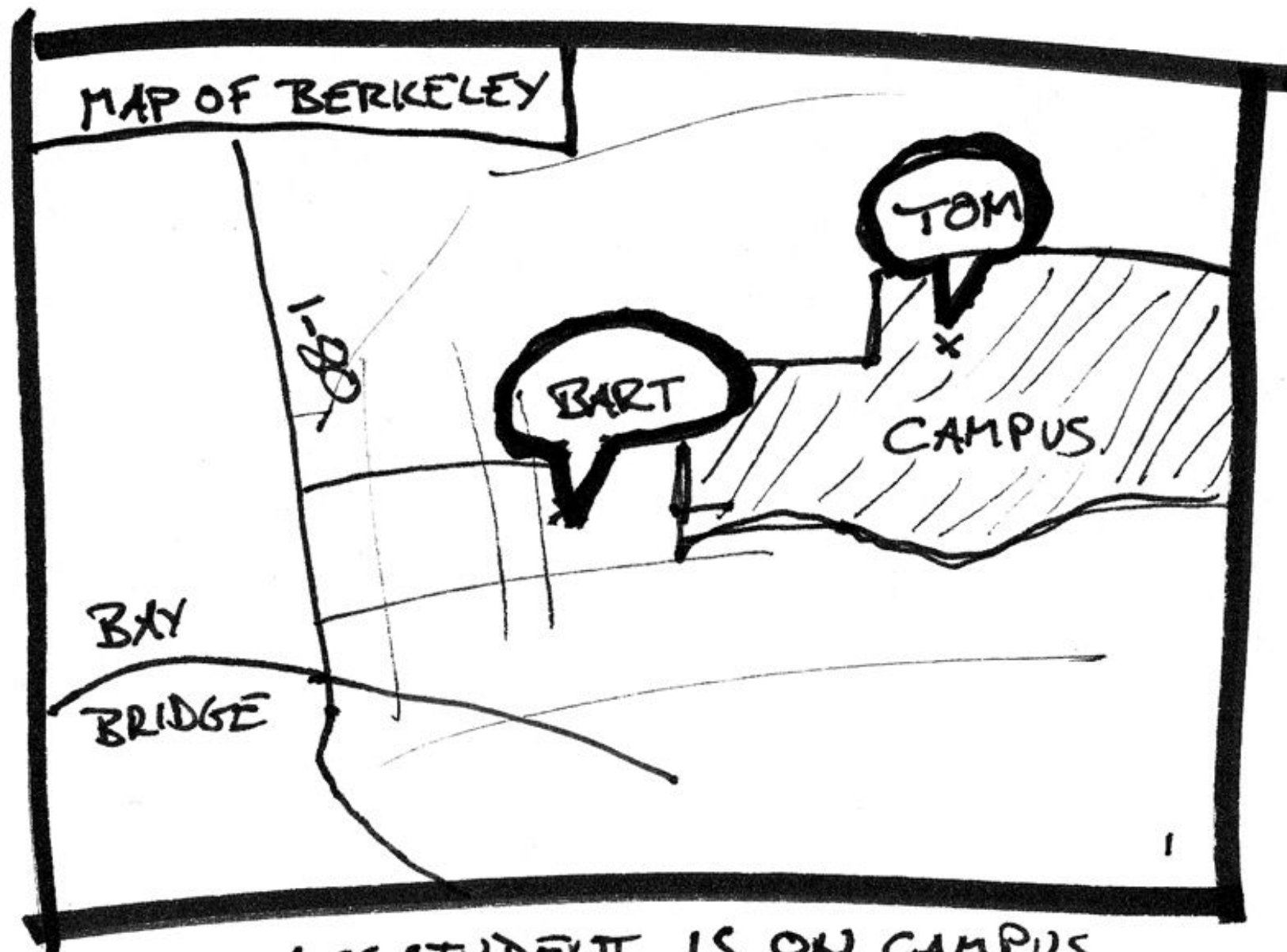
Shows a single scenario / tells a single story

Start by setting the stage:

Who? What? Where? Why? When?

Then show key interactions with your application

Zoom back out and show the consequences of using the application

Could be satisfaction, but also think about errors

1. TOM, A CS STUDENT, IS ON CAMPUS AND WANTS TO TAKE A TRIP TO SF BY BART.
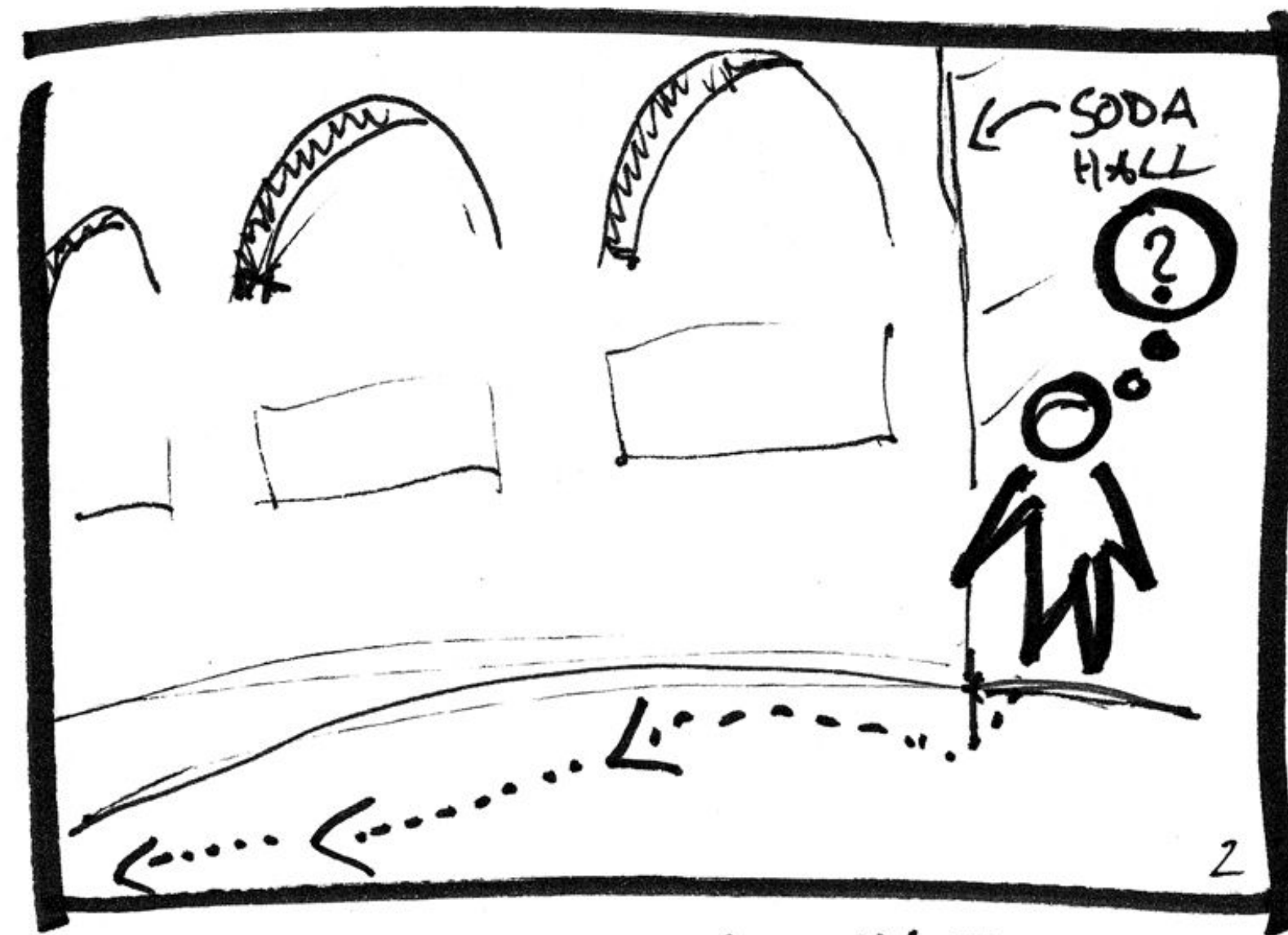
2. "I WONDER WHEN I'LL HAVE TO START WALKING DOWN HILL TO CATCH THE TRAIN..."

3. SO HE PULLS OUT HIS PHONE AND LAUNCHES THE "C.T.T." APP

4. USING DROPDOWN MENUS, HE SELECTS THE DOWNTOWN BERKELEY BART, AND 10 MINUTES OF WALK TIME
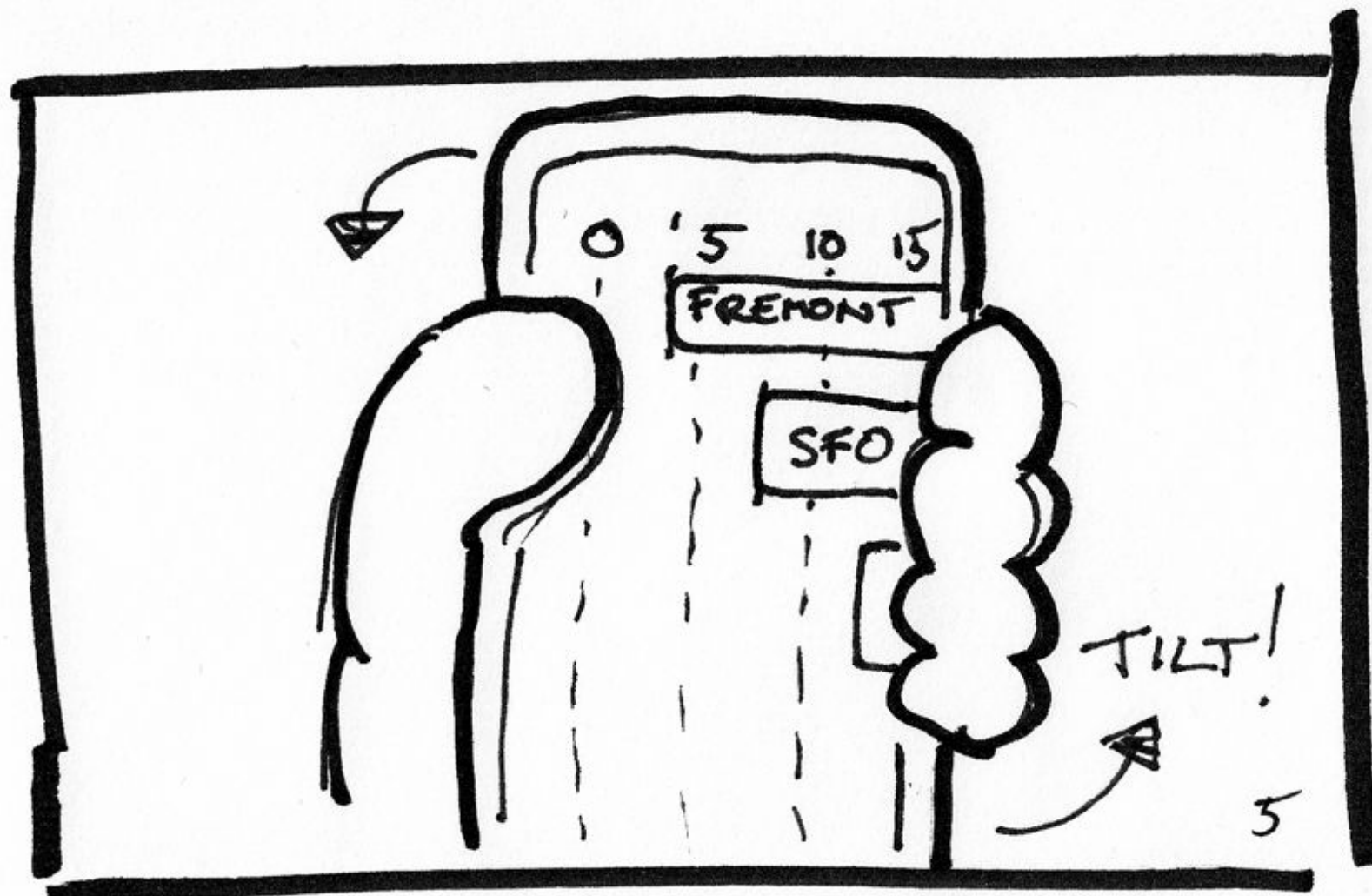
THE C.T. APP SHOWS A GRAPHICAL OVERVIEW OF HOW MUCH TIME TOM HAS LEFT. TO SEE MORE DETAIL, ...
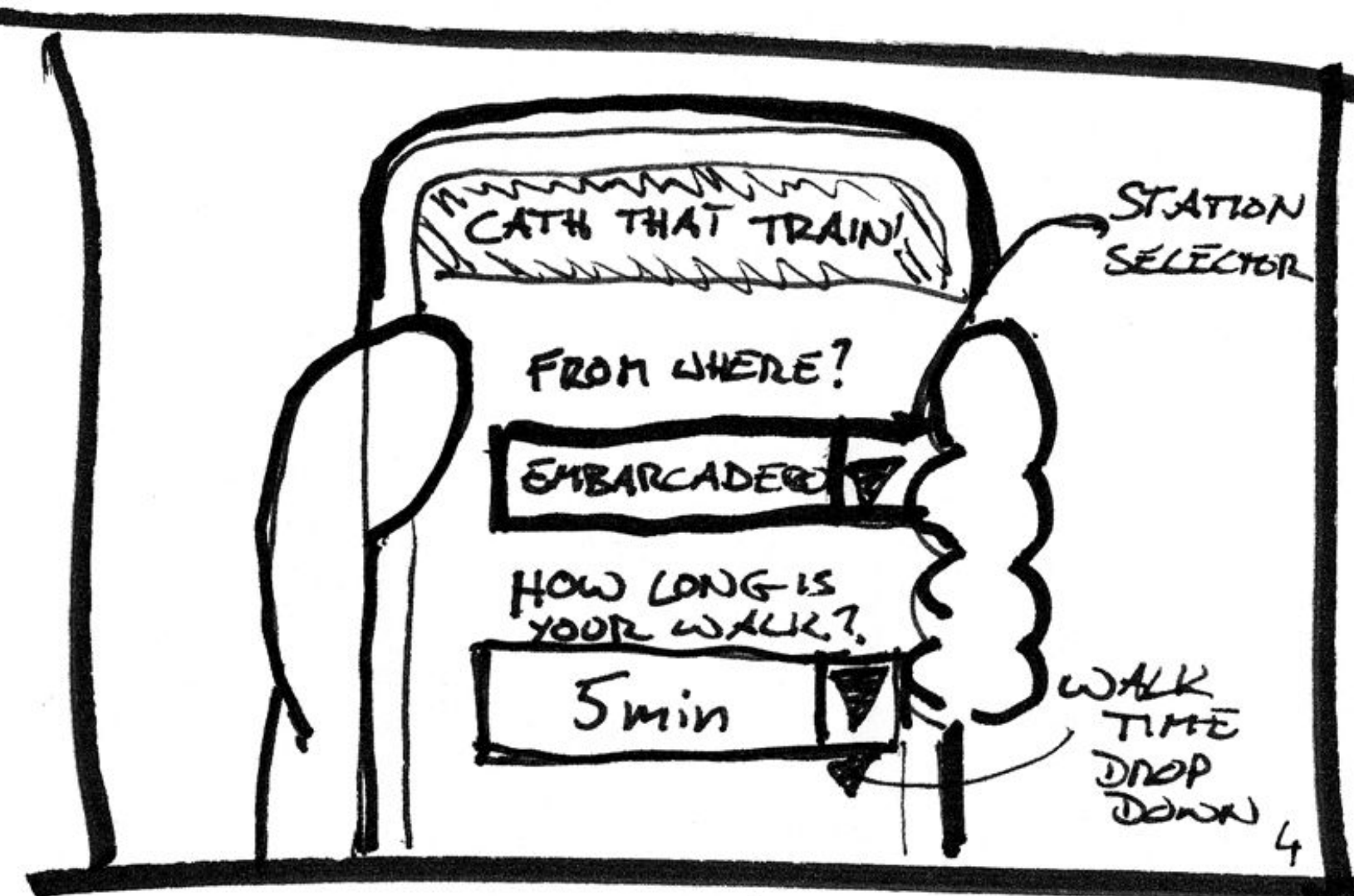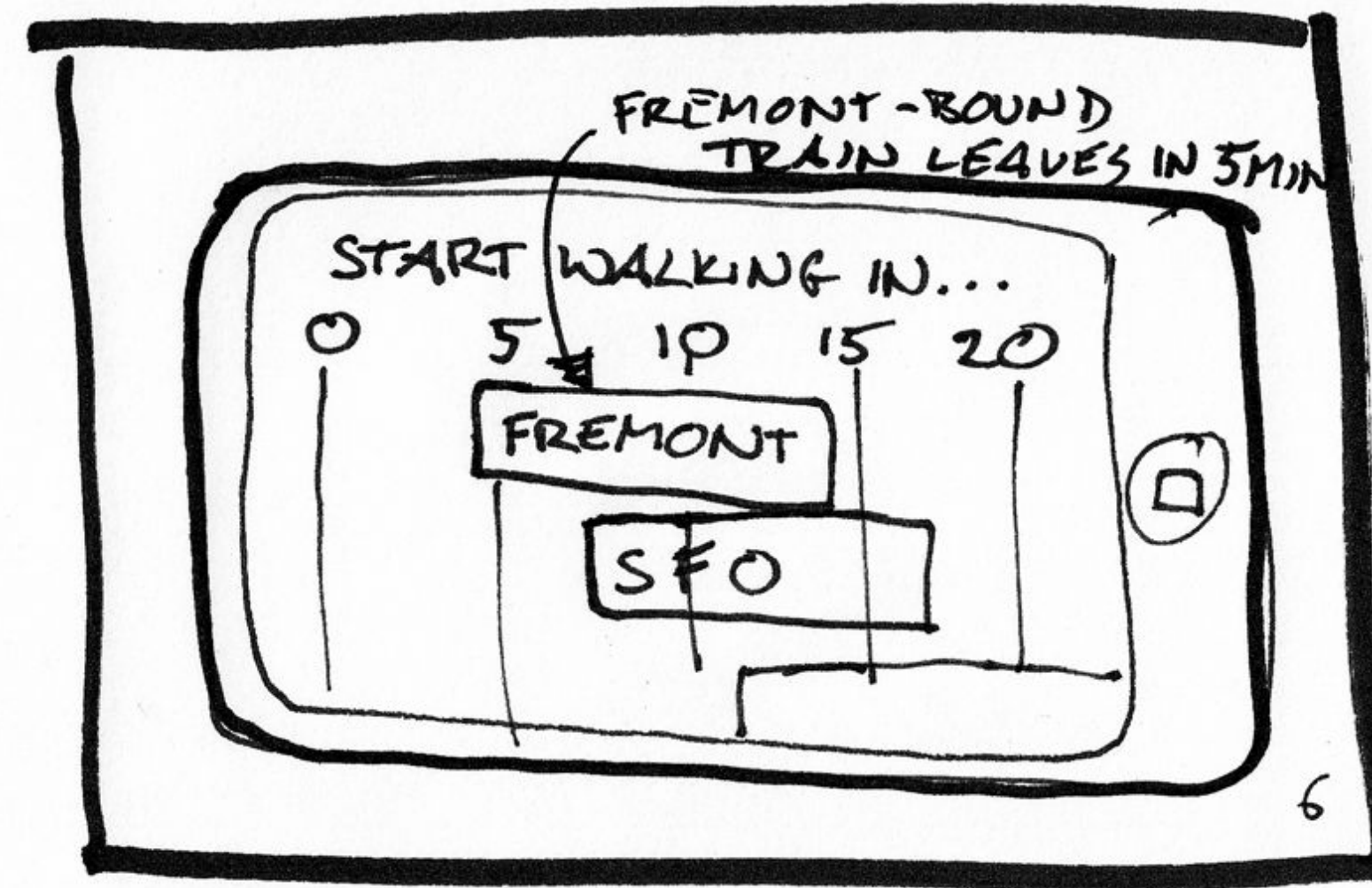

... HE TILTS HIS PHONE TO LANDSCAPE MODE. HE HAS 8 MINUTES BEFORE HE HAS TO LEAVE...

ENOUGH TIME TO GRAB A QUICK ESPRESSO AT BREWED AWAKENING!

Critique this storyboard in two ways:

• Formally (i.e., how well does the storyboard itself convey the idea)

• Content (i.e., critique the application idea itself)
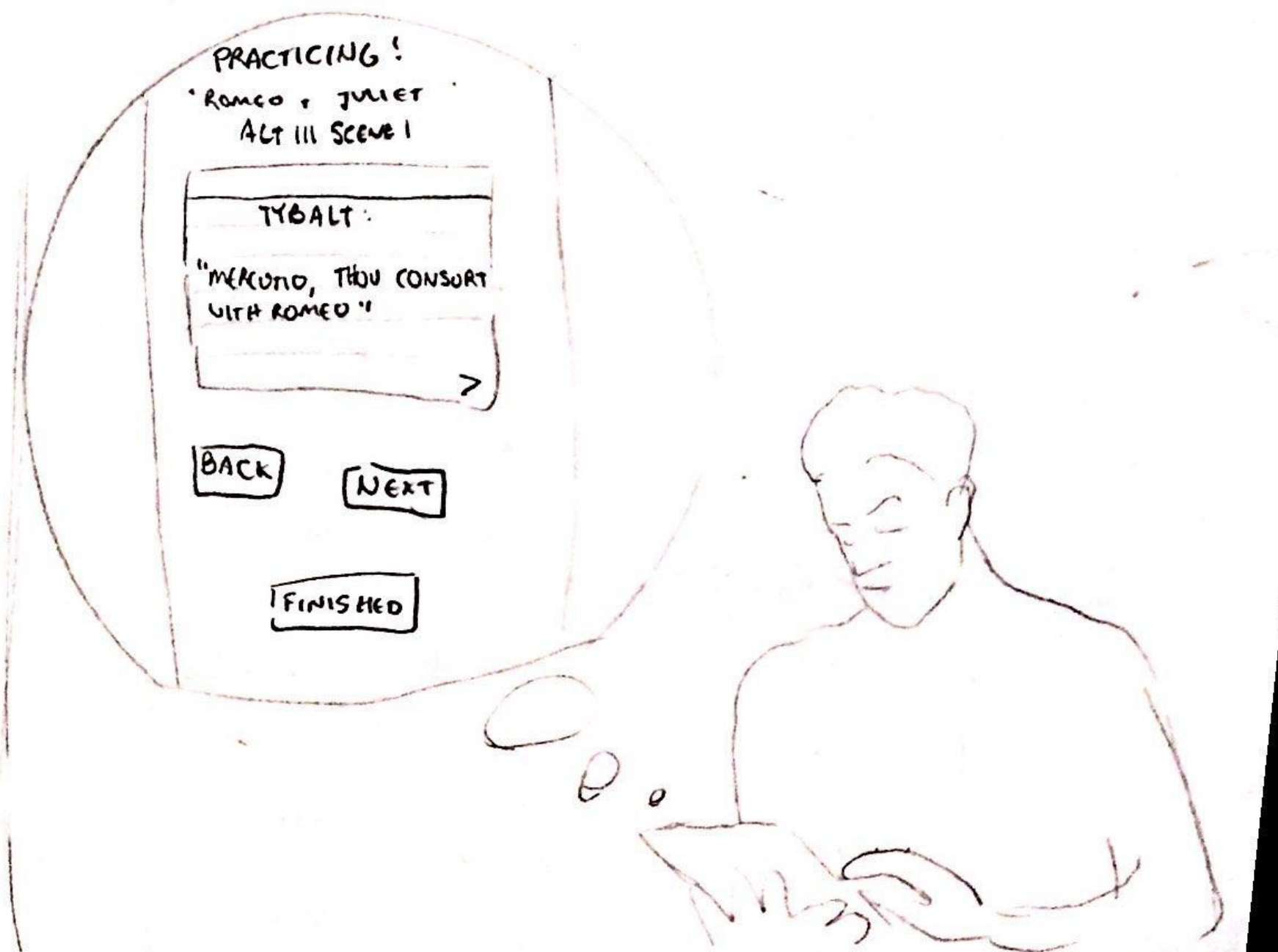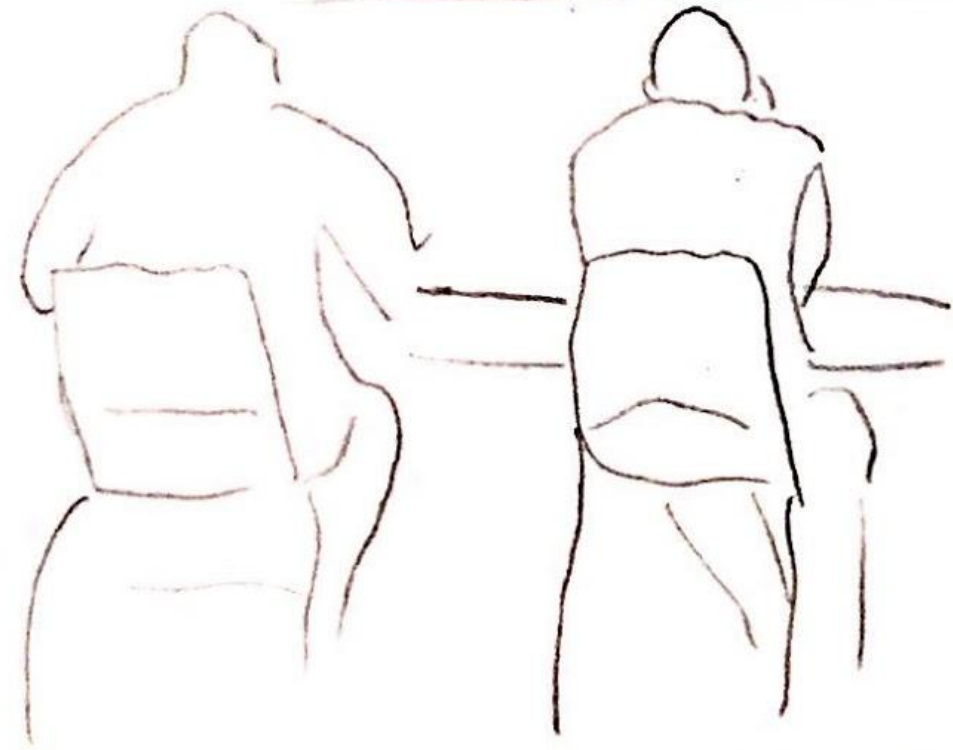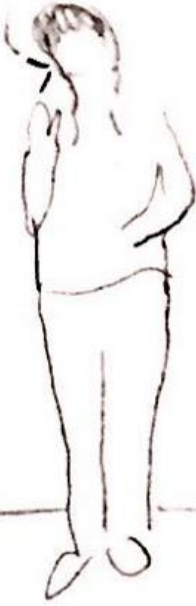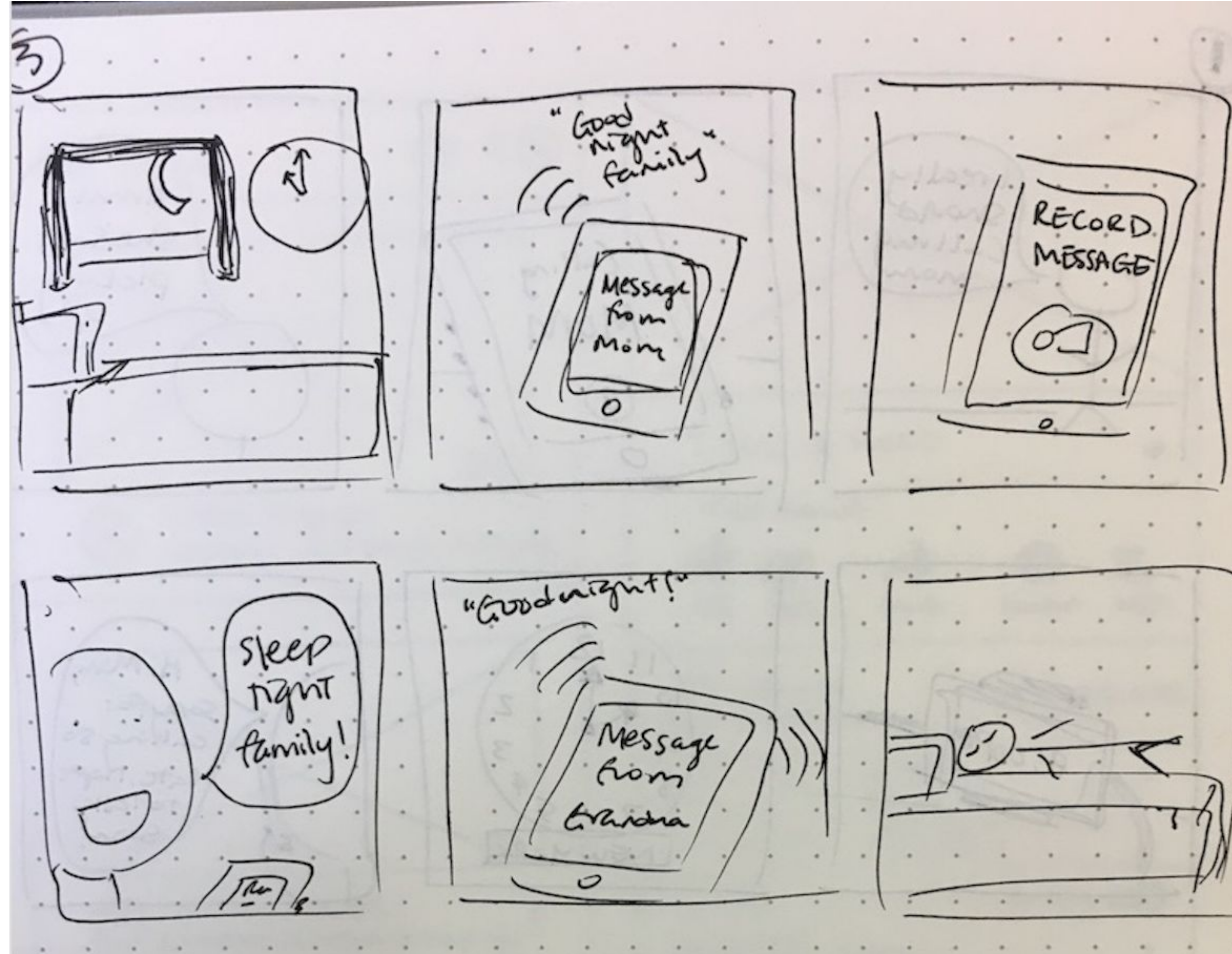
EXERCISE

Choose one of your ideas from Design01 and draw a storyboard for that app idea

Keep in mind...

Show the context of using the app

Show key interactions of how to use the app
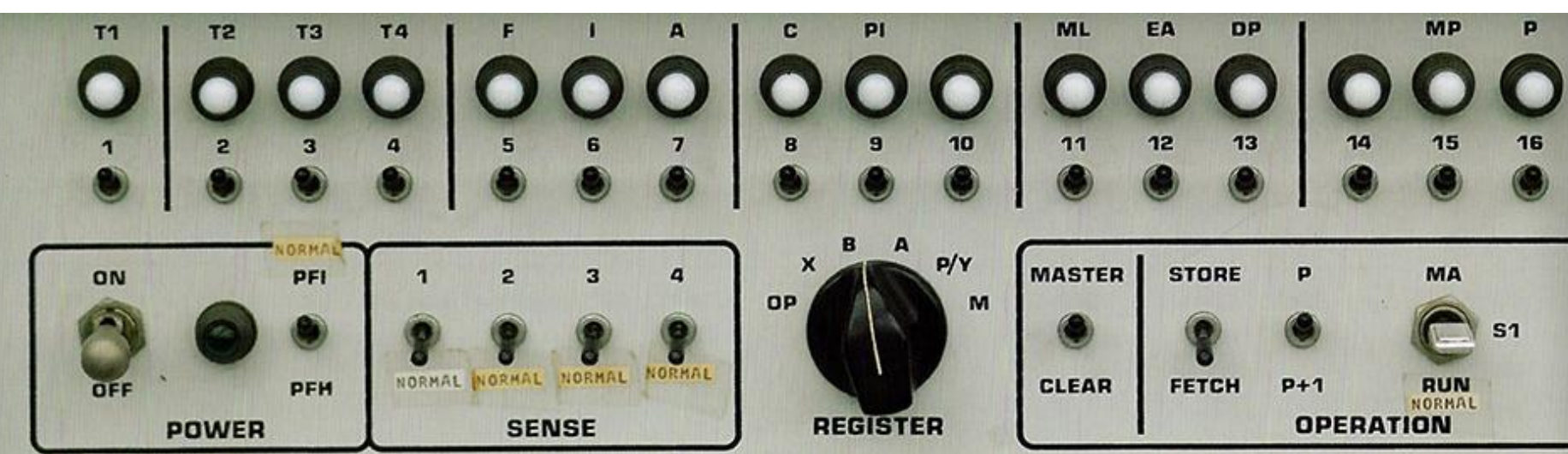
PERSONAS

PERSONAS (FROM COOPER)

"Hypothetical Archetypes"

Archetype:

An original model or type after which other similar things are patterned; a prototype

An ideal example of a type; quintessence

A precise description of user in terms

Capabilities, inclinations, background

Goals (not tasks)

PERSONAS

Personas represent a class or type of user but should be used as an individual

Types of users are a **range** not an **average**

Not a stereotype – which are usually not based on assumptions not factual data

Reuse personas

Personas must have motivations / goals

PERSONA EXAMPLES
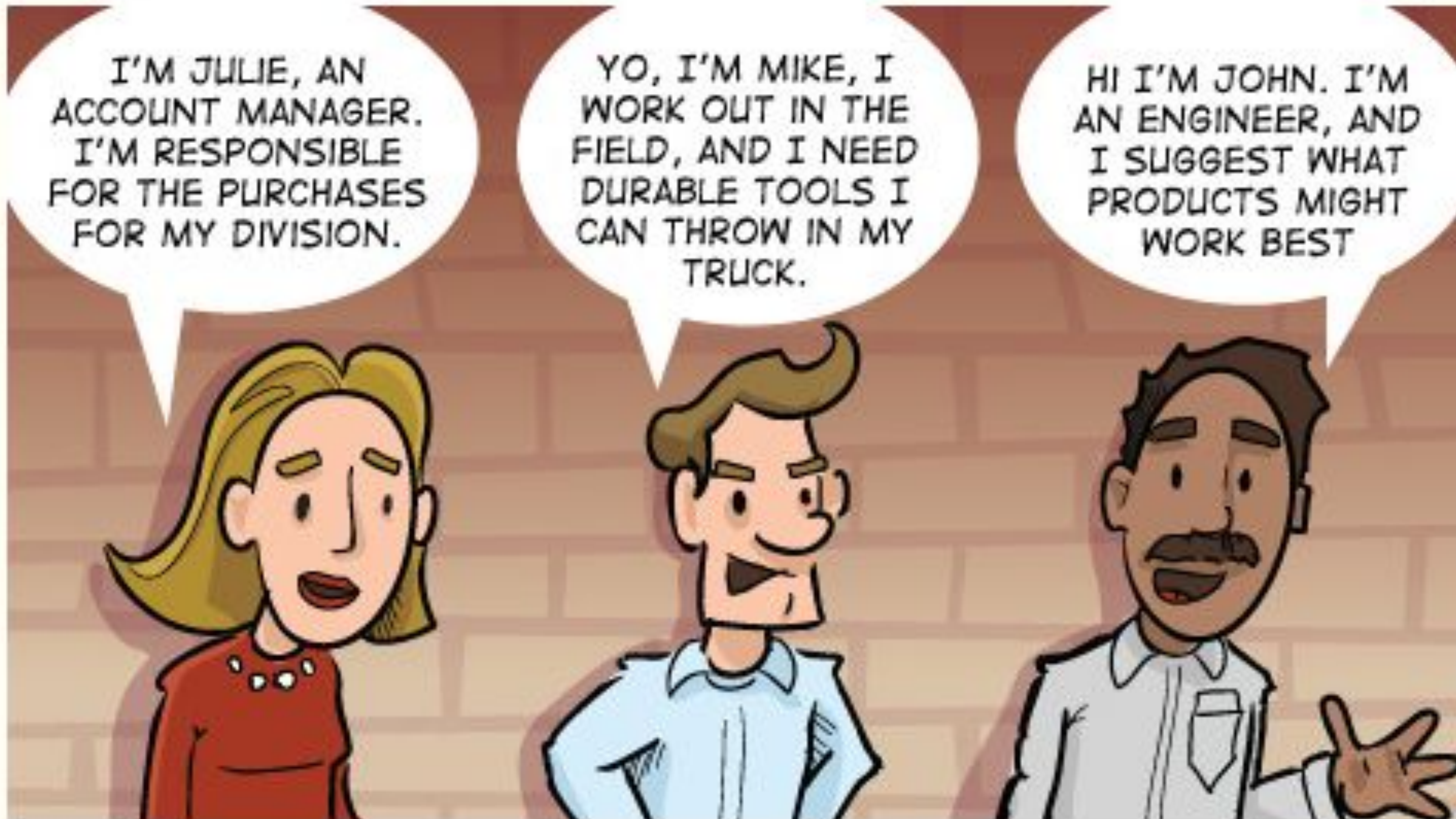
WHY PERSONAS?

It's hard to reason about users in aggregate, and impossible to please everyone.

General users have too many conflicting goals.

WHY PERSONAS?

It's easier to reason about specific fictional people.

Specific personas have clear, well-articulated **goals**

Alesandro's goals
- Go fast
- Have fun

Marge's goals
- Be safe
- Be comfortable
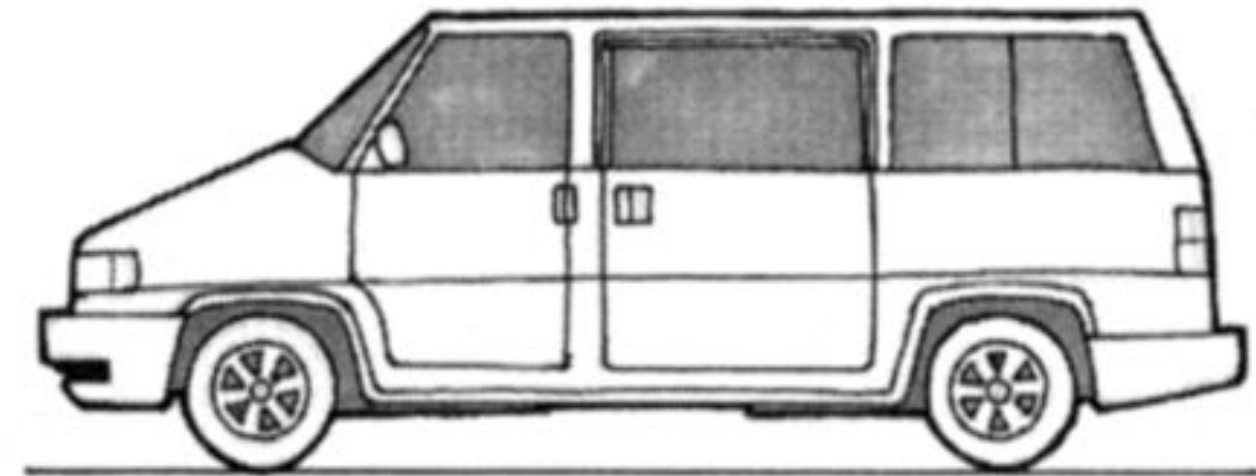
Dale's goals
- Haul big loads
- Be reliable
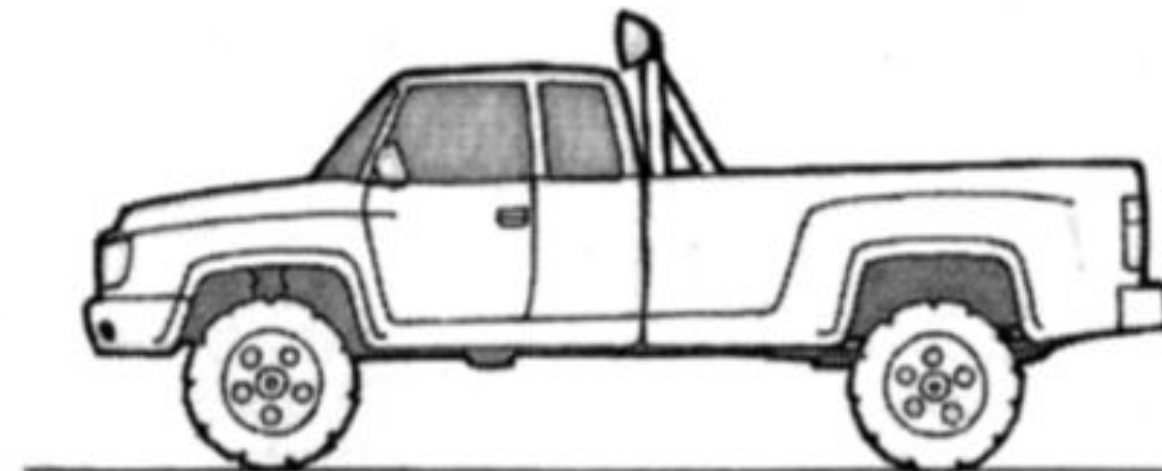
DEFINING PERSONAS

Identify major clusters from multiple user interviews/inquiries

Based on real-world observations

Interviews

Information supplied by stakeholders and area experts

Market research

Data from literature

Direct user observations are best!

Give them names

PERSONAS VS. OBSERVATIONS

How do personas differ from the people you observe in an inquiry?

PERSONA GOALS

Experience goals – simple, universal, and personal

…how someone wants to feel while using a product

"feel smart or in control"

"have fun"

"feel cool or hip or relaxed"

"remain focused and alert"

PERSONA GOALS

End goals – users motivation for performing the task associated with product

…when you open an app you usually have a desired goal

"get the best price"

"get home on time"

"stay connected to friends"

"be aware of problems before the become critical"

PERSONA GOALS

Life goals – personal aspirations of the user beyond the product design designed…usually long term

"live a health life"

"be a connoisseur of …"

"be attractive, popular, or respected by my peers"

"live off the grid"

PERSONA GOALS

Technical goals

Run in a variety of browsers

Safeguard data integrity

Persona relationships

Social applications

Parents

Teacher – student

Nanny – child – parent

PERSONA GOALS

Business goals

Increase profit
Retain customers

Organization goals

Educate the public
Raise enough money to cover overhead

Primary
Secondary
Customer – rather than end user
Negative – who is this not built for

PERSONA GOALS

Synthesize their goals

Check for completeness and specificity

Specificity prevents "elastic user" – design team stretches user to fit needs

Try them out by developing narrative

	AMANDA	GLORIA	CHARLES
Age	7	34	66
Occupation	Second grade student	Part-time office administrator	Retired accountant
Home Life	Lives with her mother, father, and younger sister in the suburbs of a large city.	Lives with her husband and two children in a mid-sized city.	Lives with his wife in the suburbs; has four children and six grandchildren.
Education	In elementary school	Has a bachelor degree	Has an MBA

LIFESTYLE

	AMANDA	GLORIA	CHARLES
Activities	Plays soccer, reads, and takes ballet lessons; saves her birthday money and allowance to spend at the mall.	Enjoys crossword puzzles and reading mystery novels. Spends a lot of time driving her children to activities.	Likes to work in the garden and drink wine. Enjoys traveling with his wife and investing in the stock market.
Ultimate Goal	Goal is to turn 10 so that her parents will let her baby-sit her cousins.	Goal is to make sure her family is taken care of and to find a little time for herself each day.	Goal is to make sure he and his wife have enough money to enjoy retirement and leave his children an inheritance.

WEB USE AND INFORMATION NEEDS

	AMANDA	GLORIA	CHARLES
WEB USE AND INFORMATION NEEDS			
Web Usage	Uses the Web for school projects and playing with Webkinz.	Uses the Web for shopping, news, and communication. Restricts the websites that her children visit.	Uses the Web for email and occasional research. Also shares images and videos of his grandkids.
Web Competency	Moderate competency	High competency	Low competency
Frustrations	Gets frustrated because her parents don't always buy her the cool stuff that her friends have.	Gets frustrated by traffic and waiting in line. Feels like there is never enough time.	Gets frustrated when he calls customer service and can't get a human on the phone.
Frequent Sources of Information	Friends, school, and parents	*Oprah*, amazon.com, and local TV news	Cable network news and *Consumer Reports*
Quote	"I can't wait until I'm in the fourth grade and get a locker at school."	"I love being a mom but I often feel stressed and need more balance in my life."	"I worked hard my whole life and now I am enjoying my retirement with my family."

MEET AMY
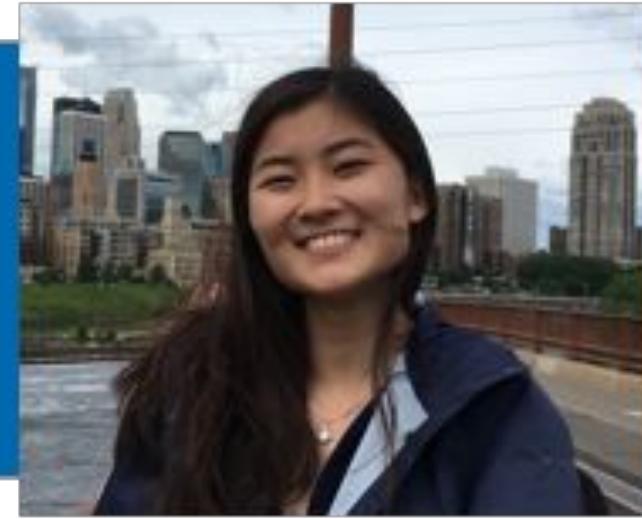
Role: Student

Age: 20

Education: Sophomore at UC Berkeley, studying Arts Practice

LIFESTYLE

- She lives in a dorm in Southside
- She participates in a variety of extracurriculars such as her dance club and ceramics
- She and her friends are adventurous and like to explore different things to do around the Bay Area
- Her family lives in LA and visits her once in awhile on weekend trips
- She hears about events happening at BAMPFA from her professors and her classmates

GOALS/MOTIVATIONS

- She hasn't been to many events at BAMPFA, but she's interested in attending more events
- She is also especially interested in ceramic art
- She wants to stay up to date with what is going on in the art world.
- She wants to take her friends and family to BAMPFA's events when they want to do something fun together

WEBSITE USE

- Amy is always on her smartphone for texting and social media. She is usually connected through her phone.
- She tries to take breaks during the day from constantly being on her phone, especially when she's working on her art.

SCENARIOS

1. Amy's mom and younger sister are visiting her this upcoming weekend, and she wants to figure out they can do while they're in Berkeley. She wants to see if there are any events happening at BAMPFA that her family might be interested in.
2. Amy's professor mentions that there is an in-person talk at BAMPFA for one of the artists that was featured in class. Amy wants to see if she is able to attend the event, given her busy class schedule.

Rachel Goldberg

Problem-solver   Creative   Collaborative

"I love seeking new opportunities and challenges. One day, I hope to have an impact on the world through technology."

Age: 21
Work: Looking to intern in Software Engineering
Family: Only child
Location: San Francisco, CA

Personality

Introvert	Extrovert

Analytical	Creative

Dedicated	Disloyal

Passive	Active

Goals

- To work in Software Engineering or Analytics at a large company
- To succeed as a Computer Science major while staying healthy and active
- To find a role-model and community that supports her

Frustrations

- Not being taken seriously in upper-division classes and technical electives by peers and professors
- Constantly being the only female in classes and clubs
- Finding friends and mentors with similar passions

Biography

Rachel is an extremely driven 21-year-old looking for opportunities in the Bay Area that involve problem-solving and analyzing data. Ever since she was a child, she has loved painting, drawing, and throughout college, she discovered a love of coding. She loves challenges and is a fast-learner. Her friends often describe her as the creative one of the group as she is often seen painting or creating crafts to decorate their apartment. Rachel hopes to explore the intersection of art and technology to improve the world around her.

Technical Skills

Java

Python

HTML

CSS

Javascript

Preferred Channels

Email

Mobile

LinkedIn

Instagram/Facebook
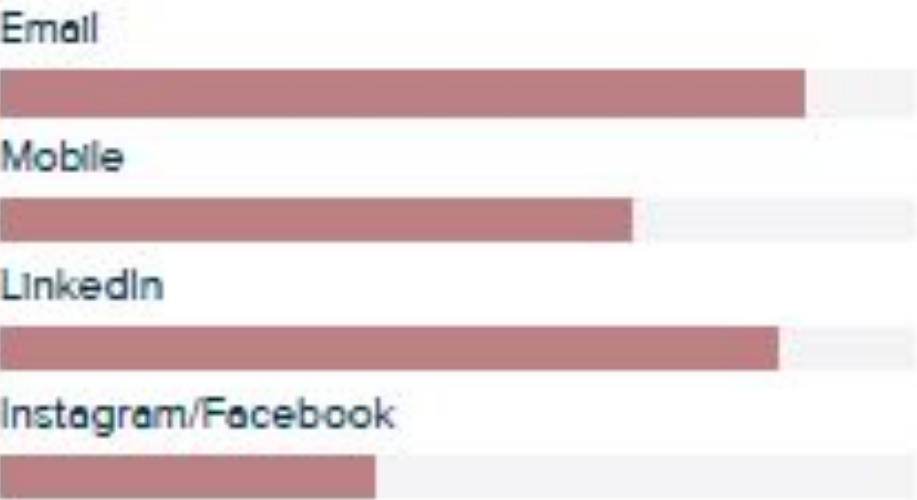
June MayLin Chan, ScD

Program Director, Genitourinary Cancer Epidemiology and Population Sciences, Department of Urology, UCSF
Steven and Christine Burd-Safeway Distinguished Professor, UCSF

Cancer Center Program Memberships
Prostate Cancer

Bio: Dr. June Chan is senior director of nursing practice at UCSF Hospital. She received her BA in Applied Math in Biology from Harvard College and her doctoral degree from Harvard Medical School. At her age of 45, she has already received many accolades for her groundbreaking research in how external factors such as diet and exercise, and internal factors such as hormones and genetics, contribute to prostate cancer.

As the director of nursing practice, she is in charge of the nursing units, as well as making sure all operations go smoothly. She also cares about the overall effectiveness of programs launched at UCSF, such as the new Delirium Reduction Initiative. She is also a researcher, professor at UCSF, wife, and mother to three young children. She's not particularly tech savvy and a busy woman, so she needs an easy interface to explore the data pertaining to the Delirium Reduction Initiative. With an accessible interface, she can quickly decide the overall effectiveness of the program and whether or not to support the program moving into the next quarter.

Goals: June's goal is to easily see a high-level view of the Delirium Reduction Initiative's performance. This will also help her to understand the financial performance of the program to make funding decisions. As for her personal aspirations, she wants to not only see patients' successes at UCSF, but also demonstrate her leadership and decision making skills to the UCSF board of directors.

USING PERSONAS

Will Julie want to perform this operation often?

Will she ever?

Can help prioritize functions with improved clarity

Design each interface for a single primary persona

Salesforce's Data-Driven Personas

"We create our personas based on **data from large-scale surveys of our users**. These surveys collect information about who our users are, their responsibilities in their jobs, the software tools they use (including Salesforce, of course), and their pain points and incentives. In particular, we focus on learning about our users' **job behaviors and responsibilities that are tool agnostic**: for example, we first ask how often our users need to do a particular task in their job, and then we ask them which tool they use to do it.

We then take our survey data and use **clustering analysis and factor analysis** to reduce a broad range of behavioral variables into clear, mutually-exclusive categories: our user personas."
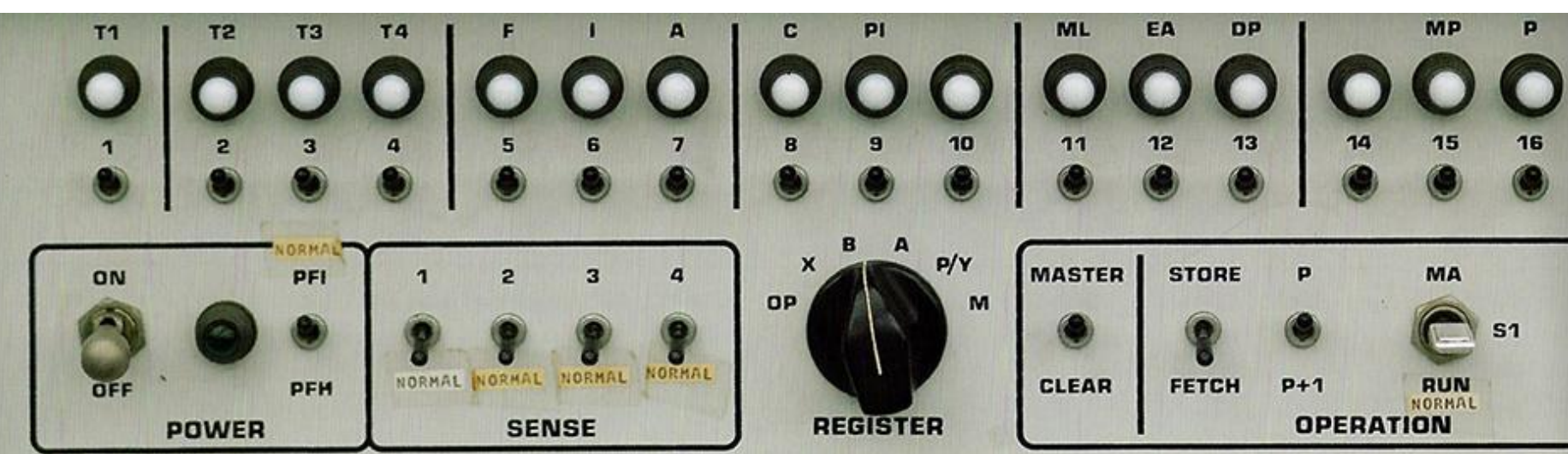
Salesforce's Data-Driven Personas

https://medium.com/salesforce-ux/data-driven-personas-at-salesforce-cdd0dd321281
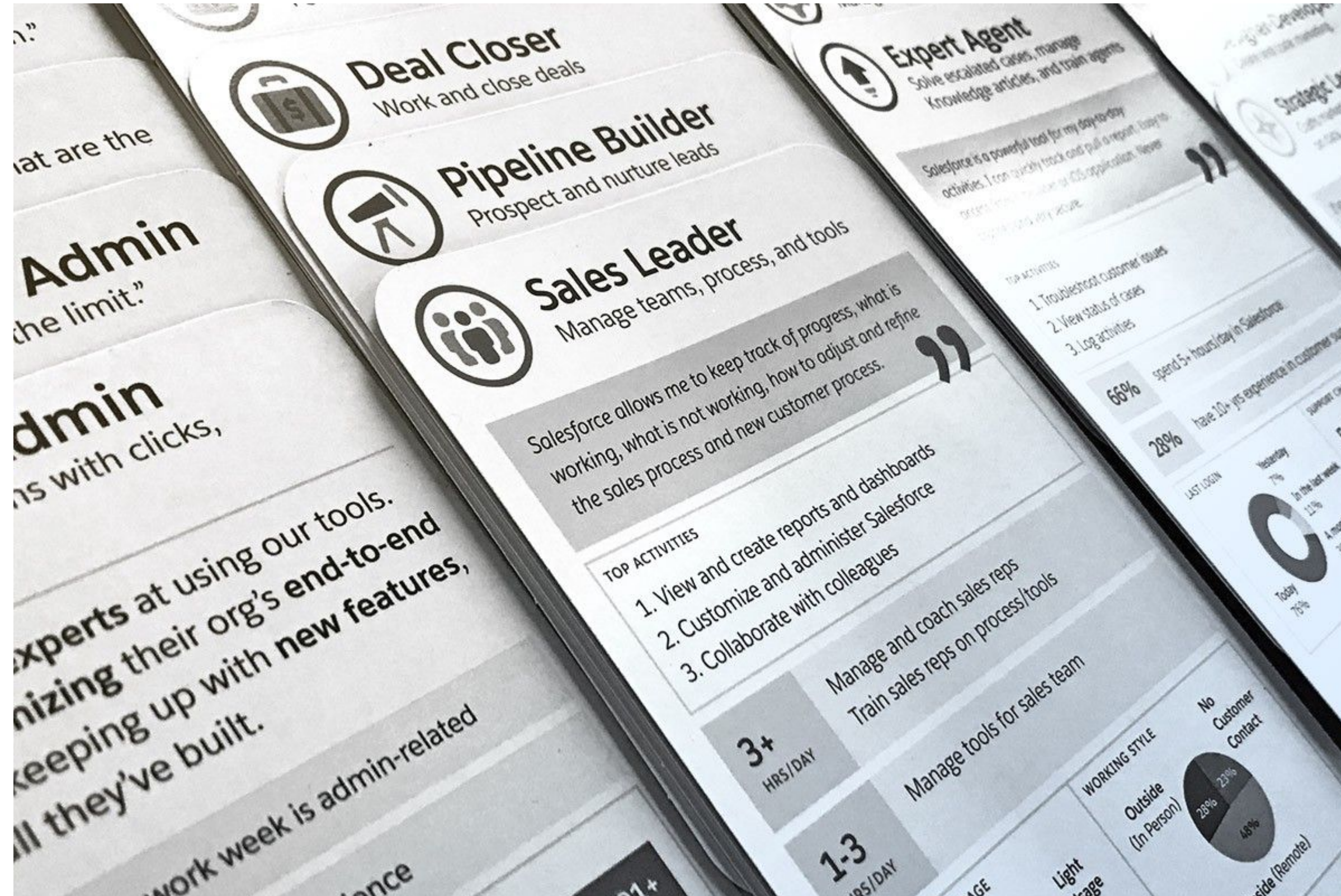
EXERCISE

Share the PROG 01 personas you created for RR03

SCENARIOS

SCENARIOS

Narrative as a design tool

Scenario should be simple and focused

Contain detailed rather than abstract points (2pm Chem 1A class in LeConte Hall not "attend class")

Use personas in scenarios – how does it serve their needs?

Context scenarios – day in the life scenario

Unboxing scenario – first usage and setup

SCENARIOS

In what setting(s) will the product be used?

.. Will it be used for extended amounts of time?

.. Is the persona frequently interrupted?

.. Are there multiple users on a single workstation or device?

.. With what other products will it be used?

.. What primary activities does the persona need to perform to meet her goals?

.. What is the expected end result of using the product?

.. How much complexity is permissible, based on persona skill and frequency of use?

SCENARIOS

Motivation – what prompted the persona to embark on the scenario?

Context – where is the person while the scenario is taking place? Does it change? Who else and where else is involved?

Distractions – What kinds of distractions or interruptions typically occur and how does the persona deal with them?

Goal – What is the persona's goal? Information seeking? An artifact? An emotion?

EXAMPLE - DESIGNING THE IPHONE

Getting to a new classroom

It's the first day of Marta's sophomore year at NYU. She just finished eating lunch at a cafe on Waverly Place and is scanning her afternoon schedule in iCal, which she synced to her iPhone from her laptop the night before.

Marta notices that her 2:00pm class is held in the Puck Building. Although Marta is a sophomore, she's never taken any classes at Puck. She goes to NYU web site using Safari on her iPhone, but the site isn't formatted for the device. After several minutes of pinching and zooming, Marta finally finds the building. It's not linked to Google Maps, so she mentally notes the cross streets before exiting Safari.

EXAMPLE - USABILITY.GOV

Mr. and Mrs. Macomb are retired school teachers who are now in their 70s. Their Social Security checks are an important part of their income. They've just sold their big house and moved to a small apartment. They know that one of the many chores they need to do now is tell the Social Security Administration that they have moved. They don't know where the nearest Social Security office is and it's getting harder for them to do a lot of walking or driving. If it is easy and safe enough, they would like to use the computer to notify the Social Security Administration of their move. However, they are somewhat nervous about doing a task like this by computer. They never used computers in their jobs. However, their son, Steve, gave them a computer last year, set it up for them, and showed them how to use email and go to websites. They have never been to the Social Security Administration's website, so they don't know how it is organized. Also, they are reluctant to give out personal information online, so they want to know how safe it is to tell the agency about their new address this way.

EXERCISE

Come up with two **personas** for a "friend finder" app

Write down a **scenario** that motivates use

Draw a **storyboard** for the scenario

SUMMARY

Storyboards

How action and narrative is framed around interaction

Personas

Specific archetype of target user

Build based on contextual inquiries/interviews

Scenarios

Use of narrative, persona, and context