



Multimedia technologies in design
Site design project UX - UI - For Duolingo App



Part 1
UX Approach

THE UX APPROACH



The Goal

THE CONCURRENCE

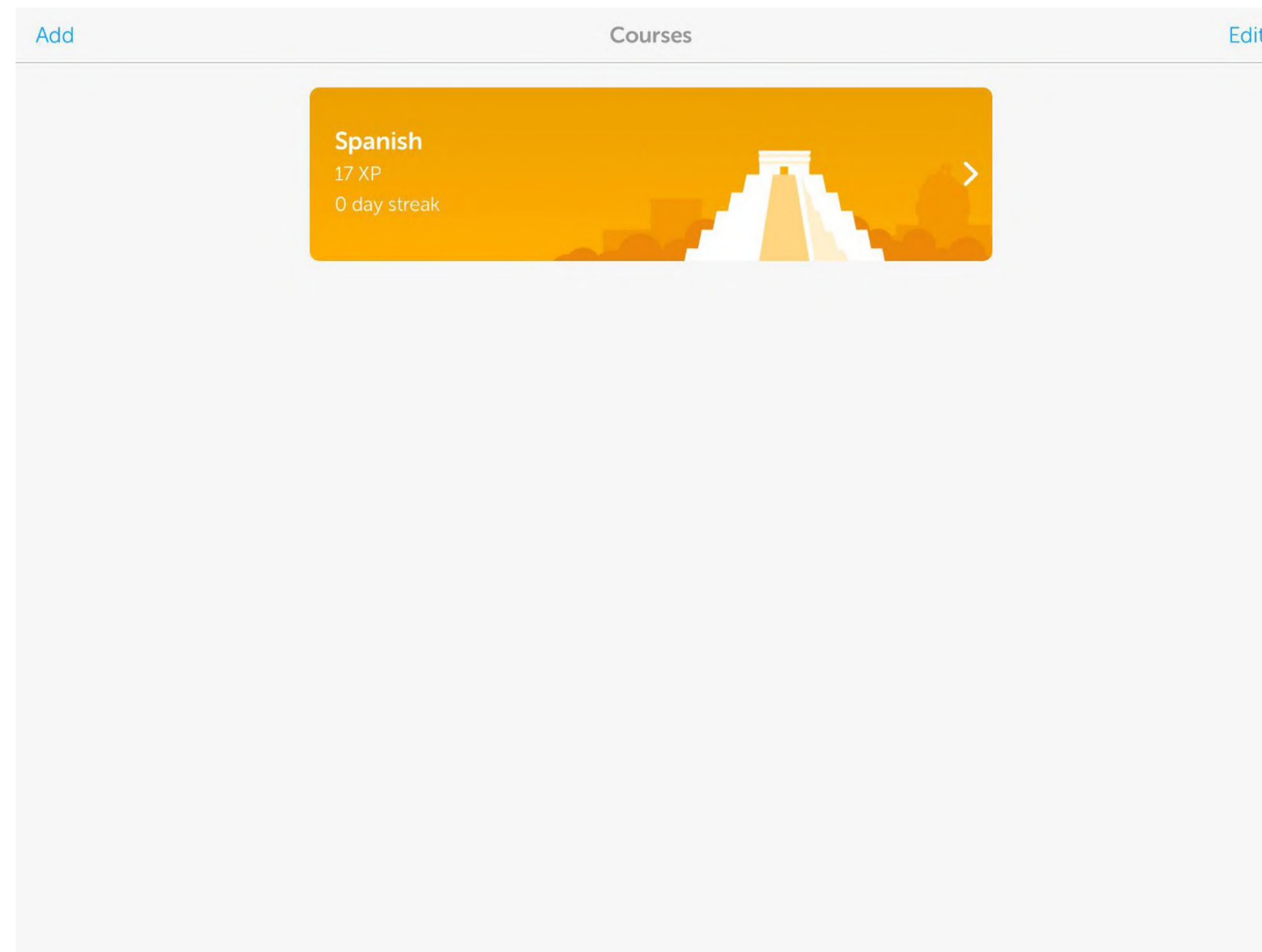
Duolingo has amassed a cult of 66 million app users who learn Spanish, French, German, Italian and Portuguese for free. However, according to CNET critic Jaymar Cabebe, “The app makes you log out and log back in to switch, which is less convenient for couples or even families who share a device.”

Intrigued by this problem,

Lean UX design principles to create a more seamless experience for families.

THE CHALLENGE

Help families and couples switch between accounts without the tedious log-in/log-back-in process. In other words, create an account switcher that reduces friction. It's called "*Click. Click. Awesome.*"



There is not a menu

I can't easy know where
add more languages

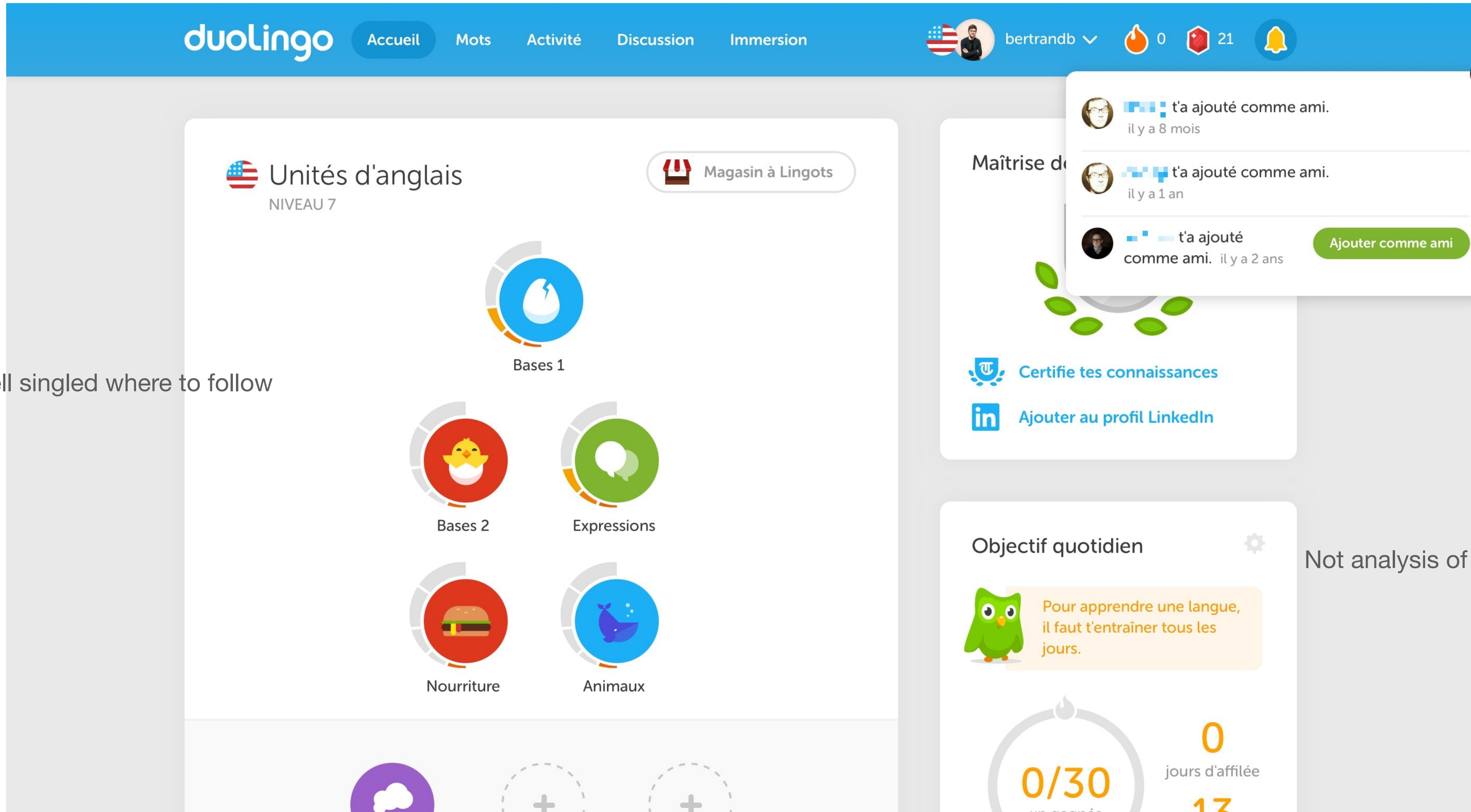
App version

THE CHANGENGE

Not for kids system

Not responsive design

Not possibly to switch between account



Not a right menu

Not very well singled where to follow

Not analysis of my current account

Web Version



Part 2
Analysis Concurrency

Analysis Concurrency

 **Global Rank**
Worldwide

▼ 445

 **Country Rank**
United States

▼ 486

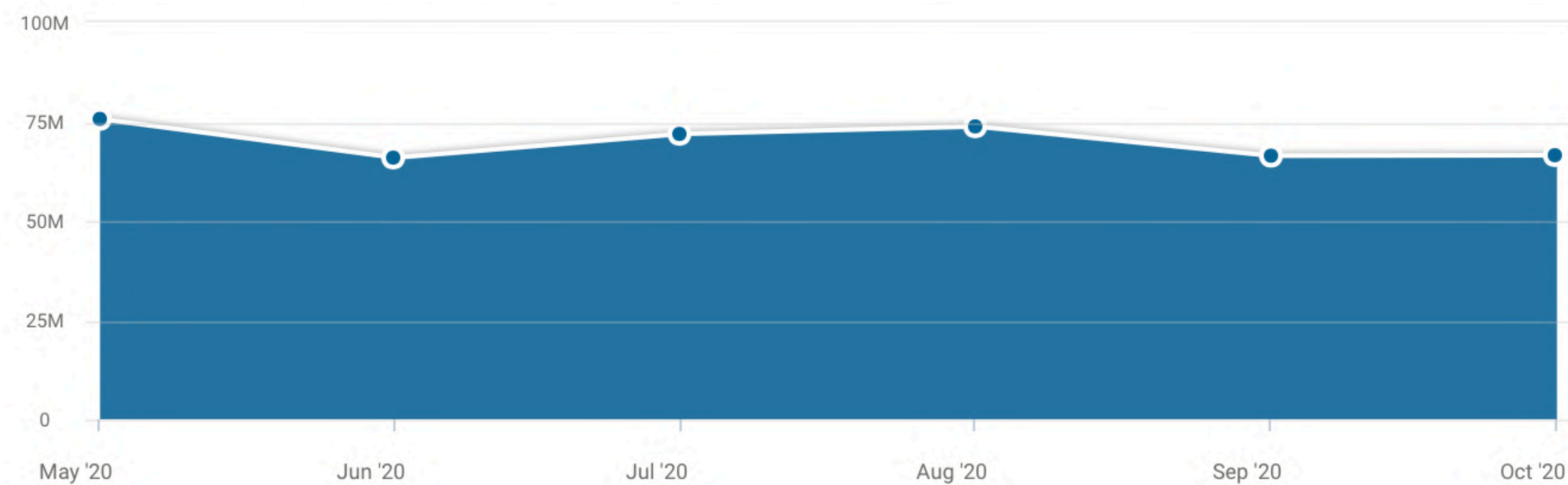
Category Rank
Science and Education > Education

▼ 15

Total Visits to duolingo.com ⓘ

Growth & total visits to duolingo.com over time

  On desktop & mobile web, in the last 6 months



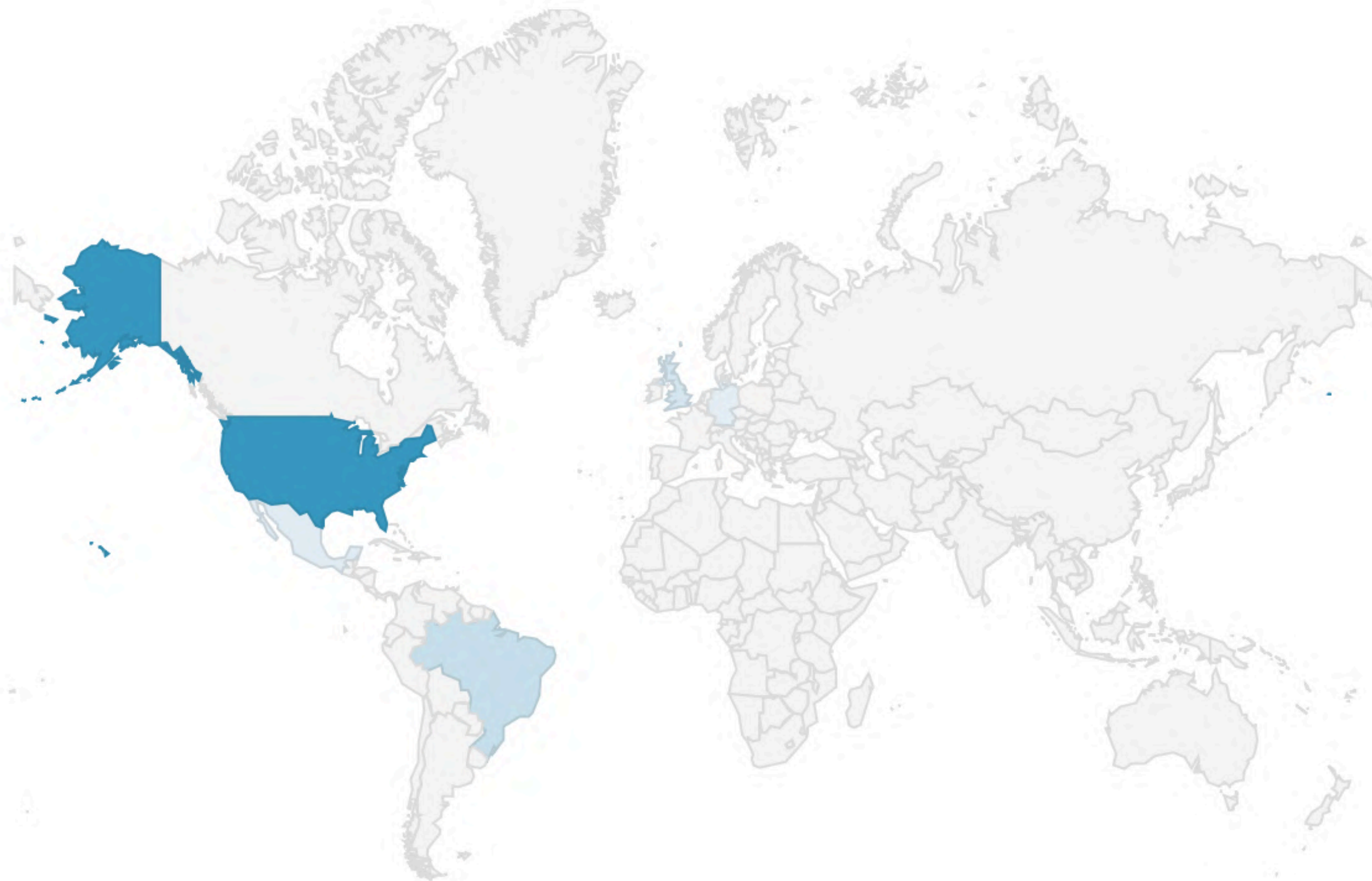
Engagement






Total Visits	66.57M ▲ 0.19%
⌚ Avg. Visit Duration	00:13:10
📄 Pages per Visit	7.25
↪ Bounce Rate	32.51%

Analysis Concurrence

Traffic to duolingo.com by country

Visits to duolingo.com by country



 United States	25.54%	^ 0.49%
 Brazil	7.40%	^ 4.22%
 United Kingdom	5.57%	v 3.55%
 Mexico	4.04%	^ 3.79%
 Germany	3.63%	^ 7.84%

Analysis Concurrency



13.29%

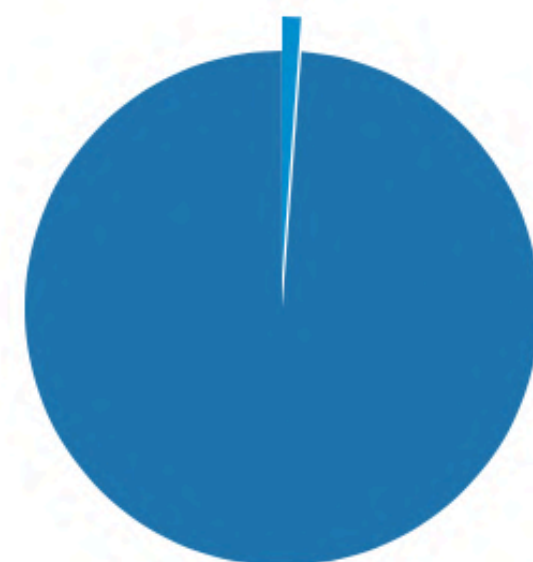
Of traffic is from Search

98.81% Organic

Top 5 Organic keywords

Out of 18,552: ⓘ

duolingo	51.38%	▼ 4.88%
doulingo	1.79%	▼ 16.57%
дуолингo	0.99%	▼ 3.88%
duolingo english test	0.91%	▼ 1.23%
dulingo	0.73%	▲ 12.43%

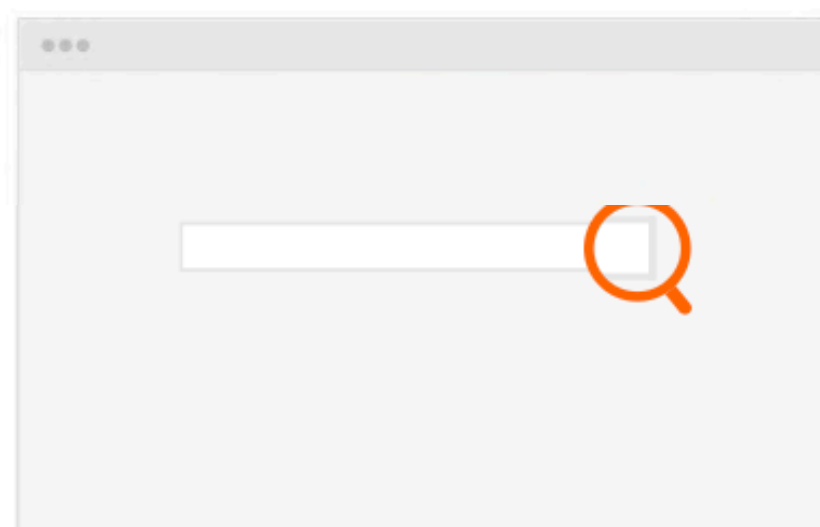


1.19% Paid

Top 5 Paid keywords

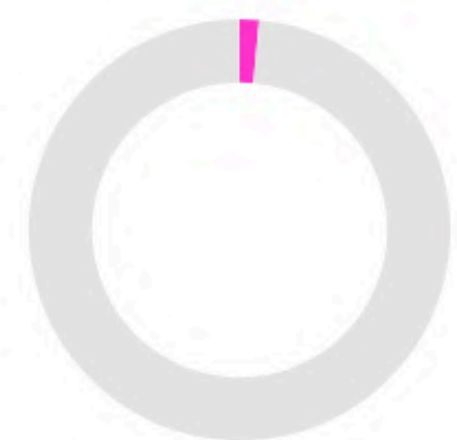
Out of 165: ⓘ

duolingo english test	0.24%	▲ 20.97%
duolingo test	0.09%	▲ 8.49%
toefl	0.03%	▼ 38.35%
toefl test	0.02%	▲ 104.3%
english test	0.02%	▲ 2.09%



Analysis Concurrency

Display Advertising



0.06%

Of traffic is from Display Ads

Top Publishers

tumblr.com

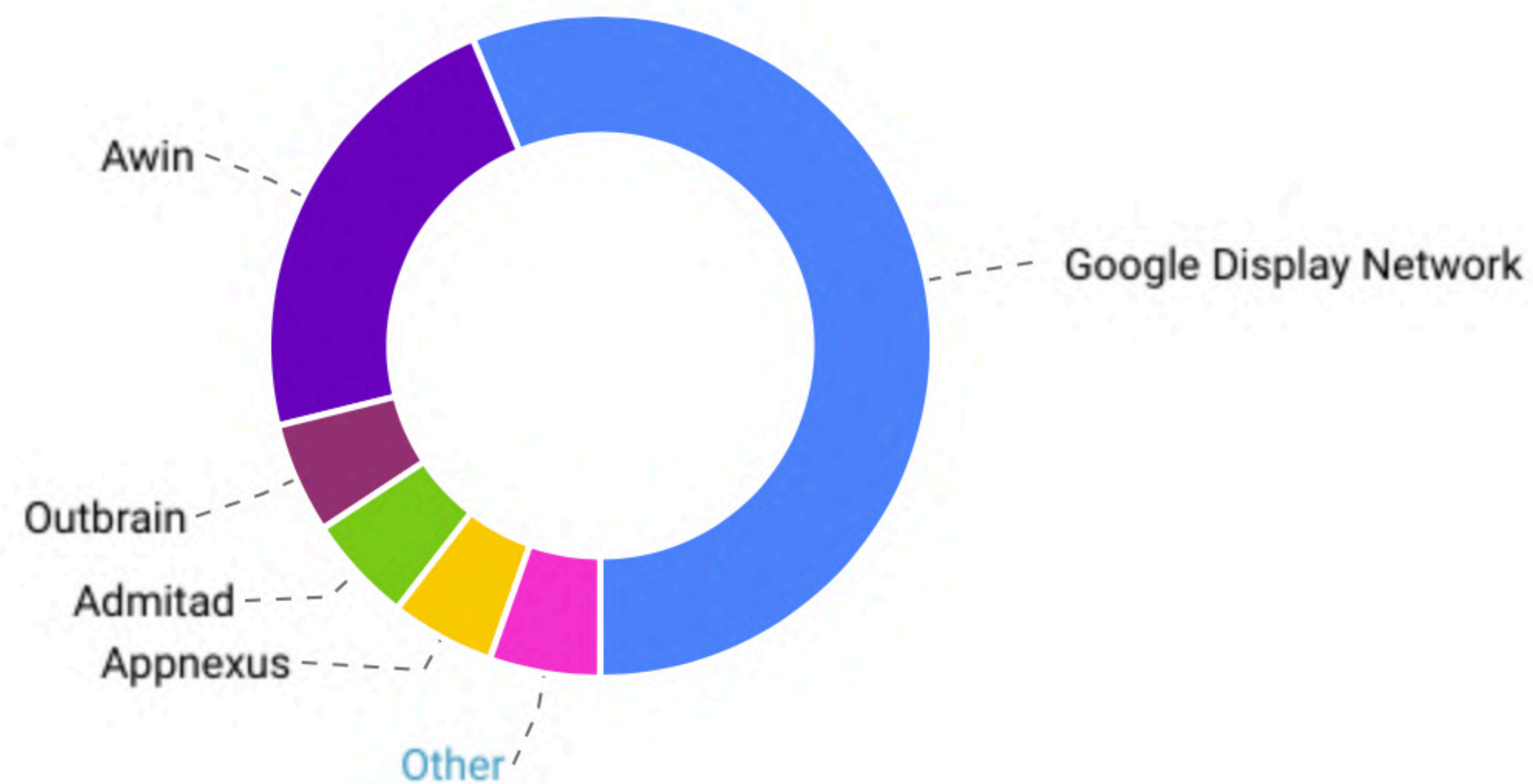
gmx.net

imageneseducativas.com

duolingo.knoji.com

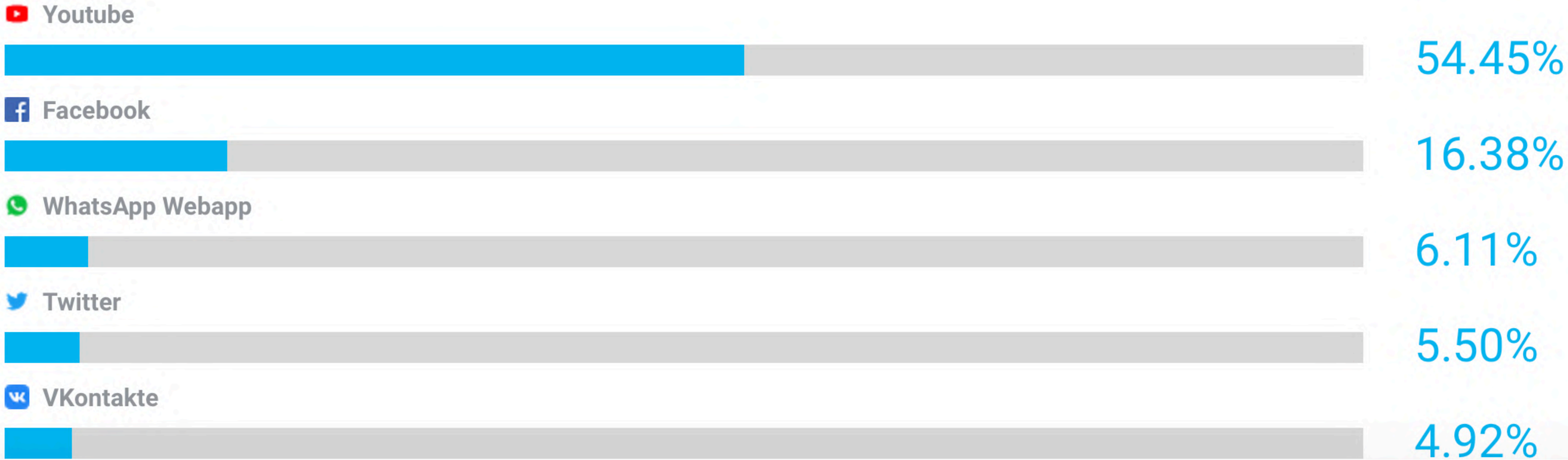
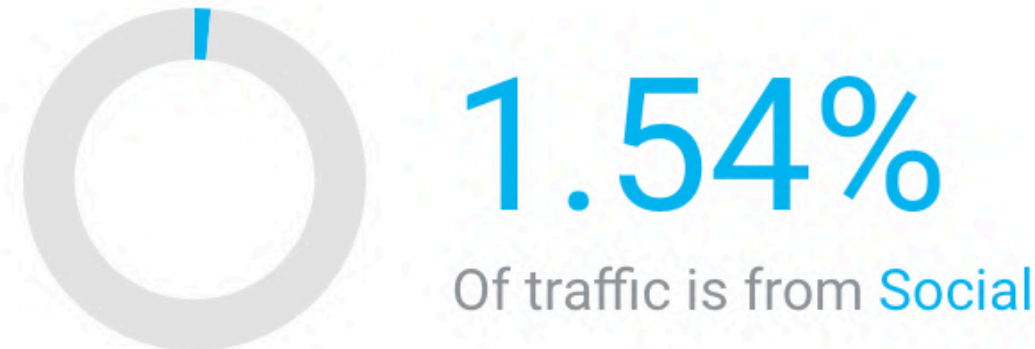
youtube.com

Top Ad Networks



Analysis Concurrence

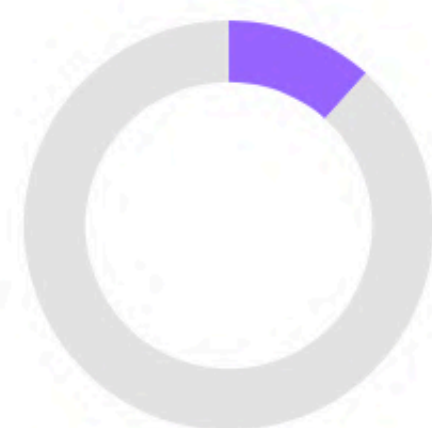
Social



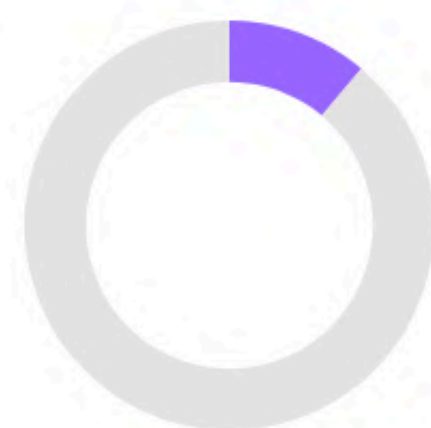
Analysis Concurrency

Audience Interests

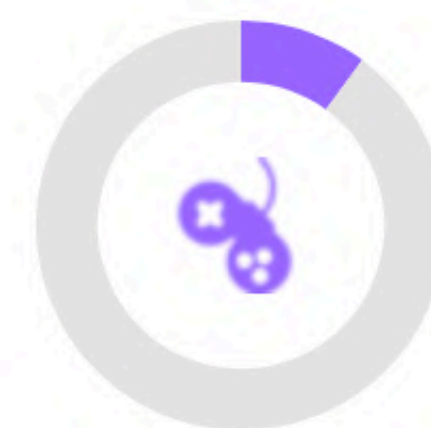
Categories



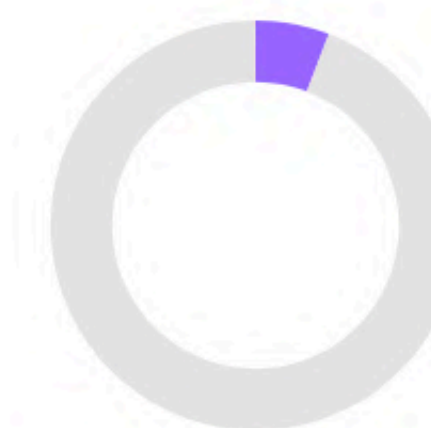
Computers Electronics And
Technology > Computers
Electronics And Technology



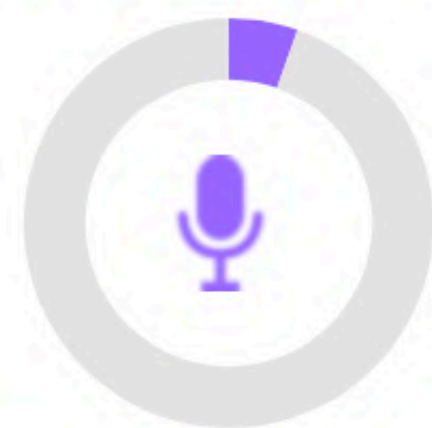
Computers Electronics And
Technology > Programming
And Developer Software



Games > Video Games
Consoles And Accessories



Reference Materials >
Dictionaries And
Encyclopedias



News And Media

Analysis Concurrency

Also visited websites

 translate.google.com

 en.wikipedia.org

 quora.com

 t.co

 open.spotify.com

Topics





Part 3
Analogy Study

Analysis

fluentu.com

memrise.com

babbel.com

busuu.com

majortests.com

khanacademy.org

thoughtco.com

coursera.org

curso-ingles.com

fluentin3months.c...

Similar Websites

Complete English > Upgrade now

Beginner A1 - 0%

Unlock your full language learning journey Upgrade now

Lesson 1: Welcome! Greeting people 0%

Get started with A1 English! 1 minute

Lesson 2: I'm Sara Saying your name 0%

+Babbel Home My Level More Courses Review Prices Help Charlie

Hei Charlie

In 11 lessons, you'll complete **Newcomer - Course 1**

Hei! Part 1 You're getting there! Keep it up! Do again

Unlock all Norwegian courses

Subscribe for full access to all lessons—and keep learning! See plans

My activity

Weekly goal Ready, set, goal! Set goal

NOVEMBER 2020

MO	TU	WE	TH	FR	SA	SU
16	17	18	19	20	21	22

Welcome back! Brush up on your vocab with a review

Help

- ADD A NEW LEARNING LANGUAGE
- Danish
- German
- French
- Indonesian
- Italian
- Dutch
- Polish
- Portuguese
- Russian
- Spanish
- Swedish
- Turkish

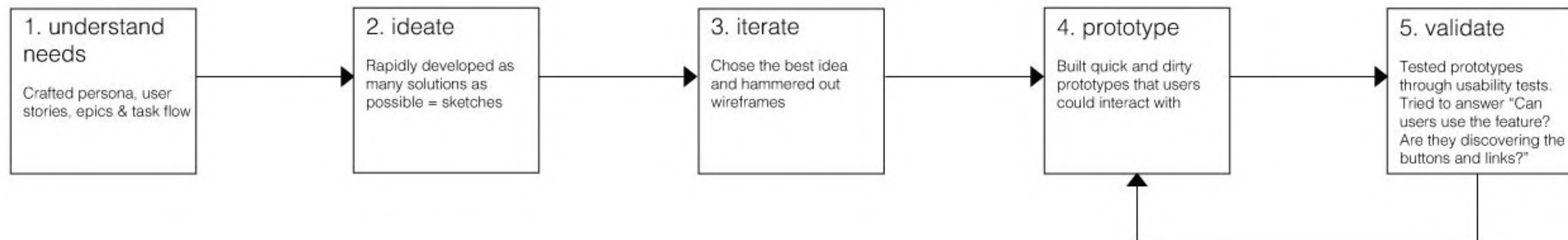


Part 4

Case Study

THE PROCESS

Ran a design sprint in two weeks where I prototyped and tested account-switching flows for the iOS tablet app. Below is my two week design process.

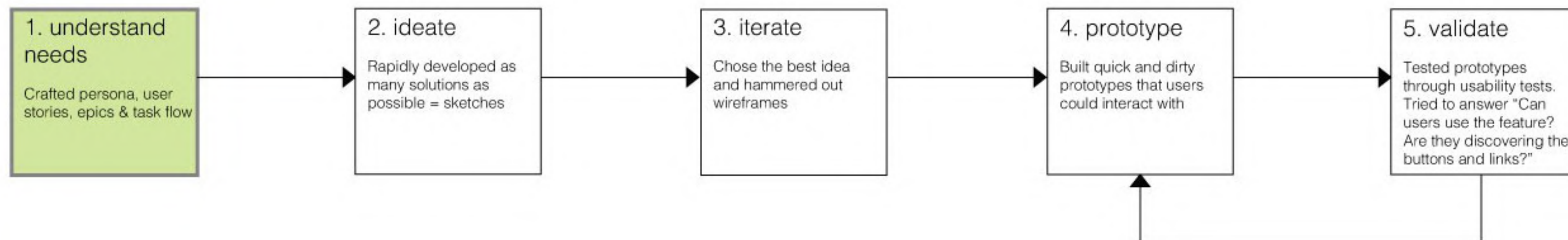


1. Understand Needs

Persona:

Personas put people at the heart of the design process. It's a powerful storytelling technique that informs design strategy.

Meet Ann Karn: Ann is a stay-at-home mom. She's fascinated by languages.



1. Understand Needs (Case)

ANN

AGE 35

JOB Stay-at-home mom

STATUS Married, has 2 sons

LOCATION New York, NY

INTERESTS Loves to learn languages - fluent in French and just started to learn Spanish

BEHAVIORS

- Seeks out learning tools for kids
- Learns Spanish on Duolingo with her boys
- Each family member has an account. They take turns playing.
- Shares one iPad with entire family

NEEDS

- Would like to switch between accounts without signing out and signing back in everytime
- Would like to push herself and kids to learn Spanish in a fun way
- Would like to use Duolingo as a supplement to flashcards



This need can be summed up with a user story statement:
 [As a **<type of user>**, I want **<some goal>** so that **<some reason>**]

To put this in perspective for Ann or any similar persona, here's what a complete user story statement looks like:

As a mom who shares an iPad with the whole family, I want an easy way to switch between accounts so that I don't have to log out and log back in to play Duolingo.

1. Understand Needs (Case)

To put this in perspective for Ann or any similar persona, here's what a complete user story statement looks like: As a mom who shares an iPad with the whole family, I want an easy way to switch between accounts so that I don't have to log out and log back in to play Duolingo.

How can I help Ann and her family?

After crafting a persona and user story, I wrote down epics and needs. The purpose of the epic and the needs is to understand the scope and figure out how to meet your users' needs.

Epic = big, coarse-grained user story*

Needs = small, detailed stories that are clear, feasible and testable*

1. Started with Epics, which are high-level user stories
2. Decomposed epics into smaller, detailed stories until they are clear, specific and testable.

A user can ...

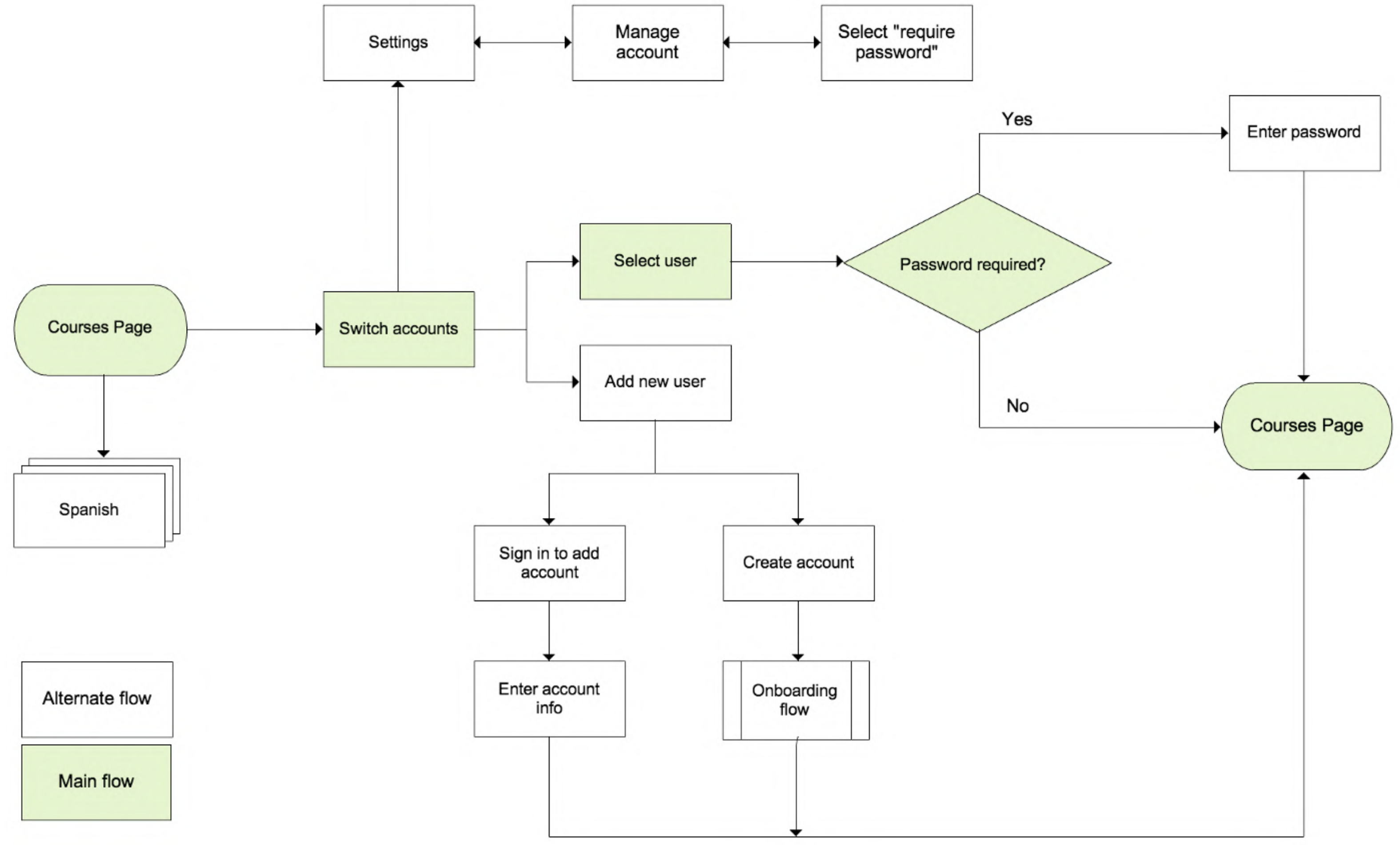
- Switch accounts
 - move out of current account & select their own account & access own "Courses" page
- Link an existing account
 - sign-in to add account
 - enter username/email } 1
 - enter password } 1
 - use Google+ or Facebook credentials } 2
- Link a new account
 - enter full name } 1
 - enter password } 1
 - use Google+ or Facebook sign-in credentials } 2
- Modify settings
 - require password upon entry into account during switch

■ Epics
● Needs

This also helps layout all of the tasks that need to be addressed by design and eventually engineering.

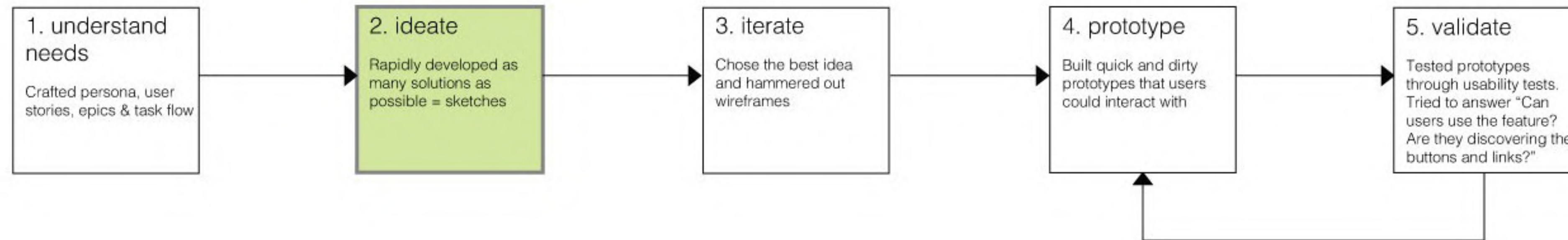
TASK FLOW

The flow diagram below depicts how a user travels through the system as they switch accounts. The diagram also shows alternate flows and edge cases (unexpected things that happen with the feature) that a user may run into while performing an account switch.



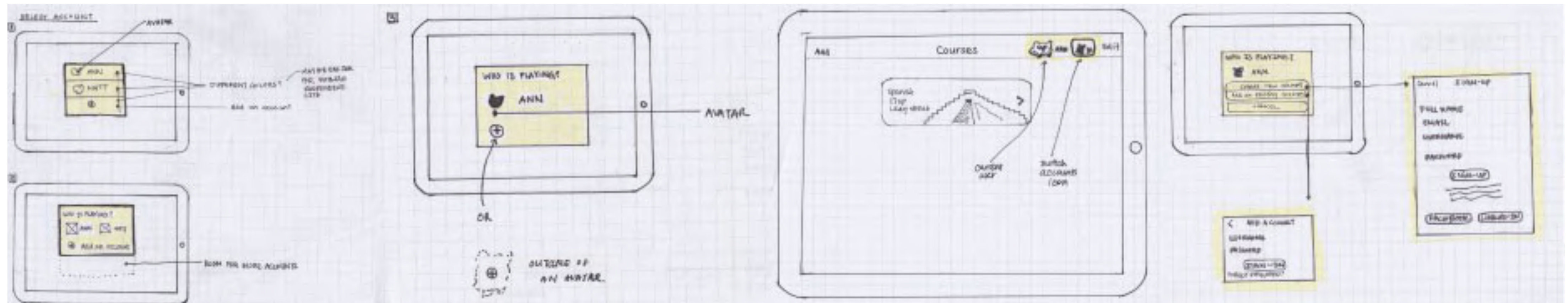
Based on the scope of this exercise, the "password required" page will not be addressed.

2. IDEATE



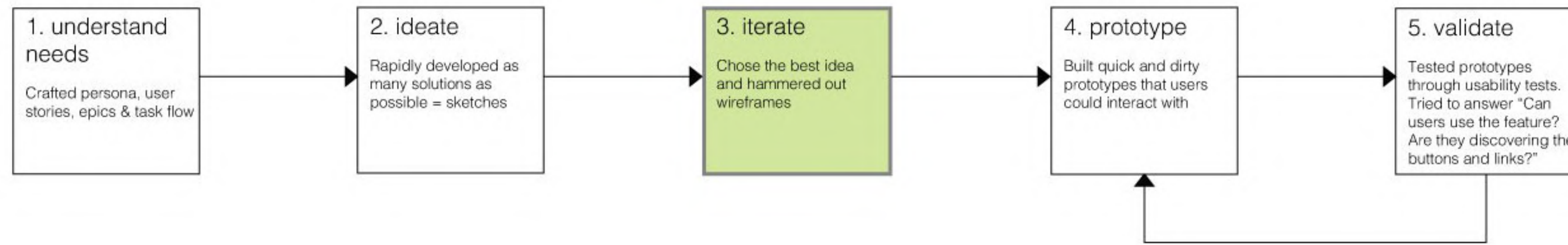
Sketches:

Next, I experimented with as many solutions as possible. I create this on paper to ideate quickly. After I sketched, I talked to a few people about the sketches to make sure I wasn't missing any major part of the experience.



A sample set of sketches that I did with graph paper, a sharpie and a highlighter

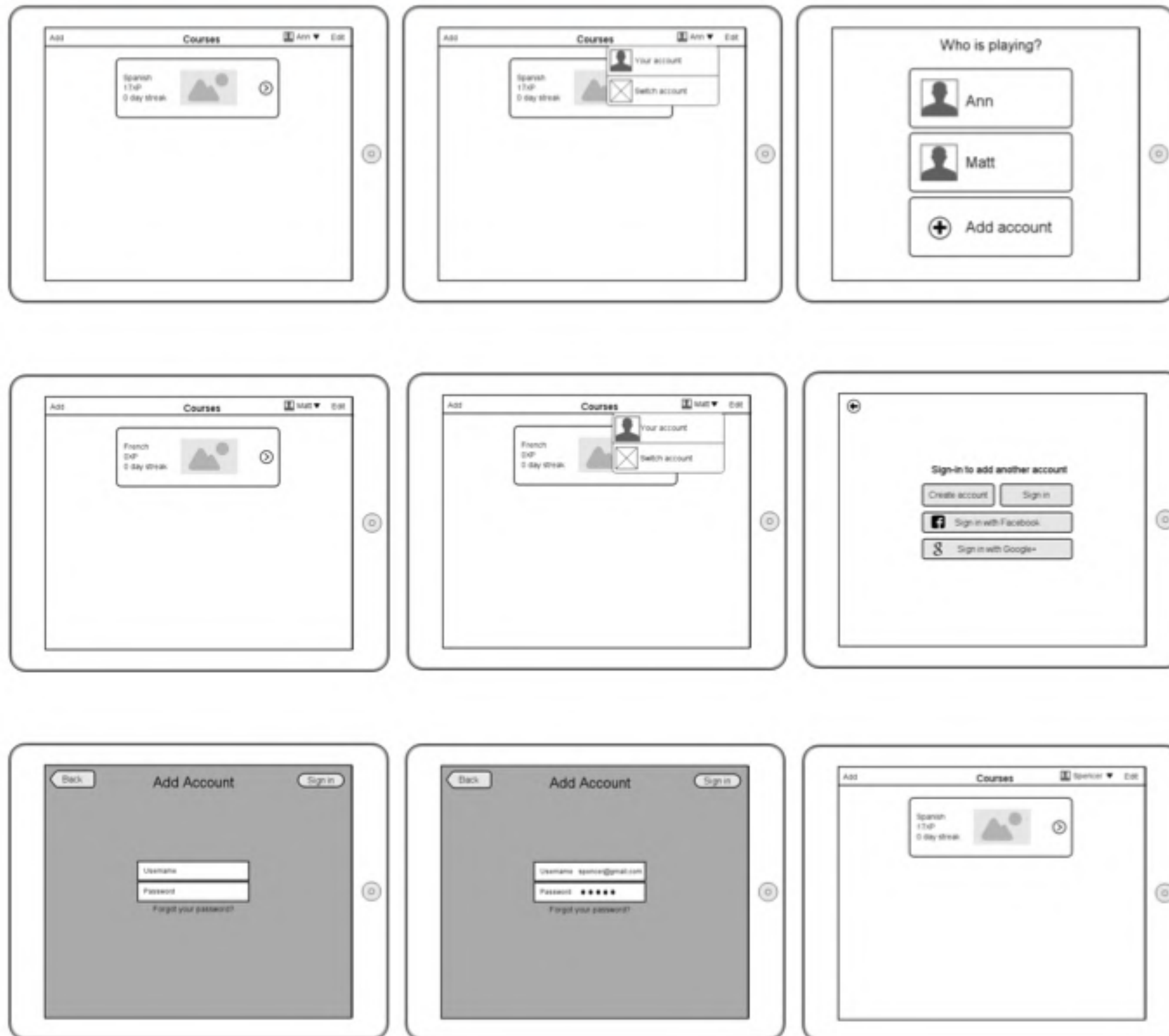
3. ITERATE



I extracted the top sketches and converted them into wireframes. The wireframes explain the copy, call-to-actions, and other interface elements, as well as how they all work together.

The scenarios and design considerations acted as anchors. I was able to imagine how Ann's family would move through the account switching feature.

3. ITERATE



With those scenarios we make the anchors points

Scenarios

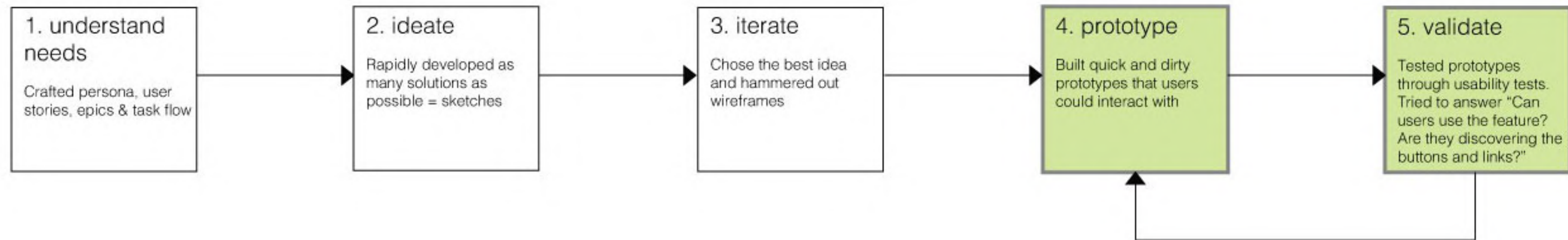
Scenario 1: Ann was playing Duolingo on her iPad. She gave her iPad to Matt (her husband) to play Duolingo. He needs to switch out of Ann's Duolingo account to his existing account that has already been linked to the iPad.

Scenario 2: After Matt plays with Duolingo, he gives the iPad to his son Spencer. Spencer wants to switch from his dad, Matt's account to his own. Spencer has an existing account with Duolingo. However, his account has not been linked to the iPad yet.

Design Considerations

The Karn family shares one iPad. A design consideration I set forth was: all accounts are equal. There are no master accounts or sub-accounts. Duolingo is not a paid service like Netflix where the paying member controls all of the accounts.

4 & 5. Create Prototype and Validate with Real Users



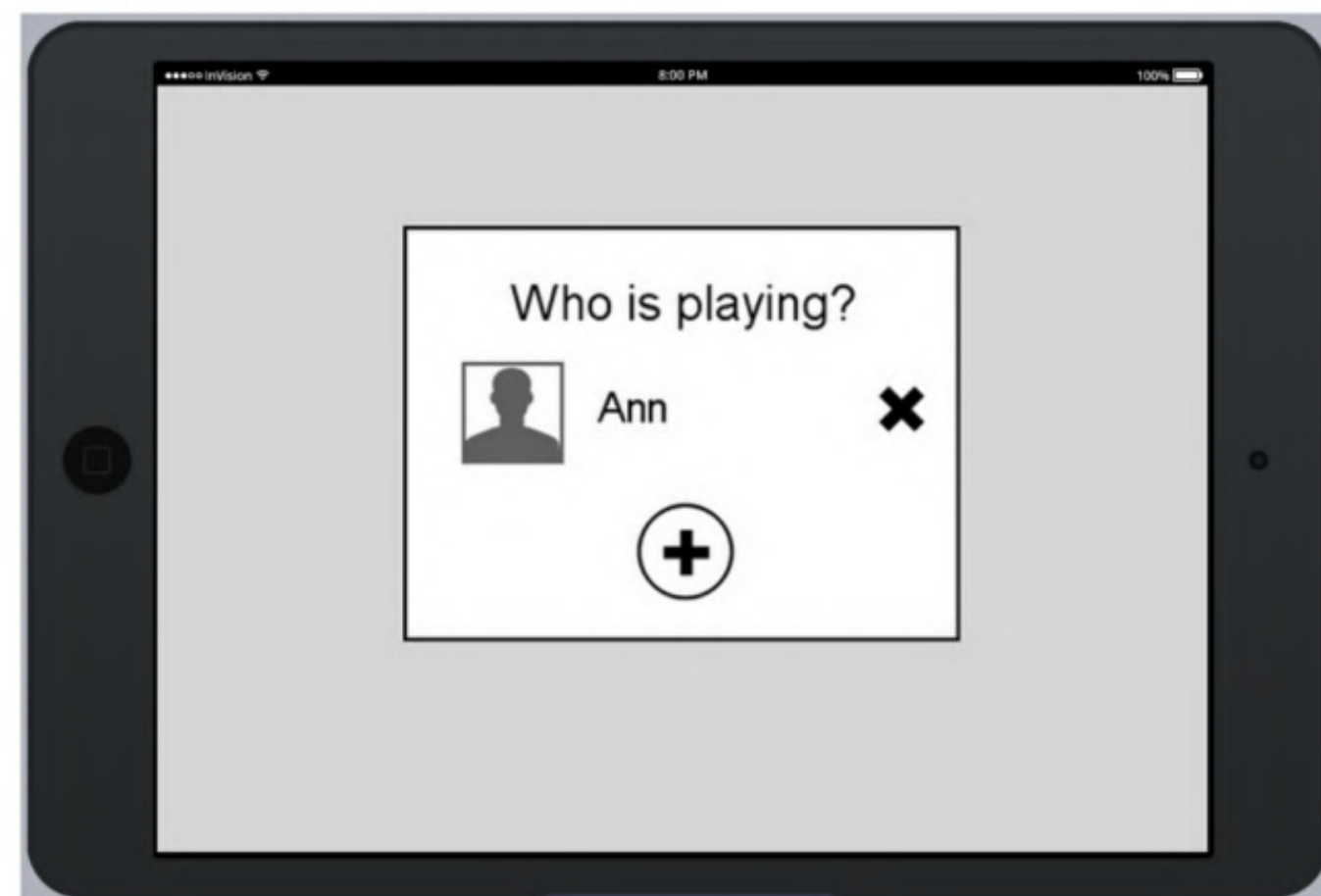
Each prototype tested different approaches to switching accounts. The objective here was to figure out where the confusion was when users move through the flow.

There were: 3 rounds of usability tests (groups of 5 users) 15 users tested

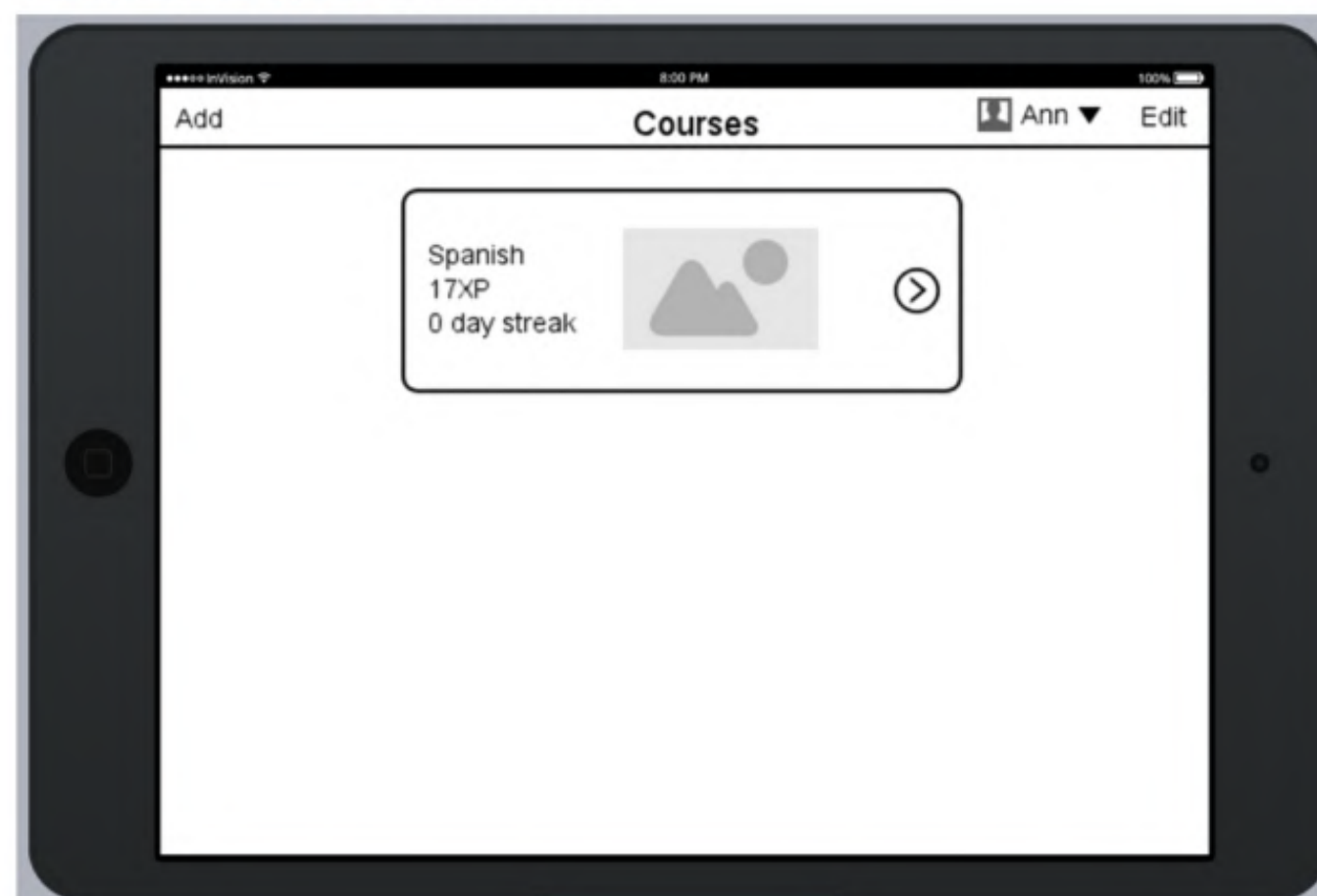
In the first two sets of prototypes, users got stuck. A common reaction was: “I don’t get it. I’m confused.” Making a simple feature like an account switcher is actually incredibly complicated. (Thank goodness people failed! The usability tests informed how I could move forward and iterate.)

4 & 5. Create Prototype and Validate with Real Users

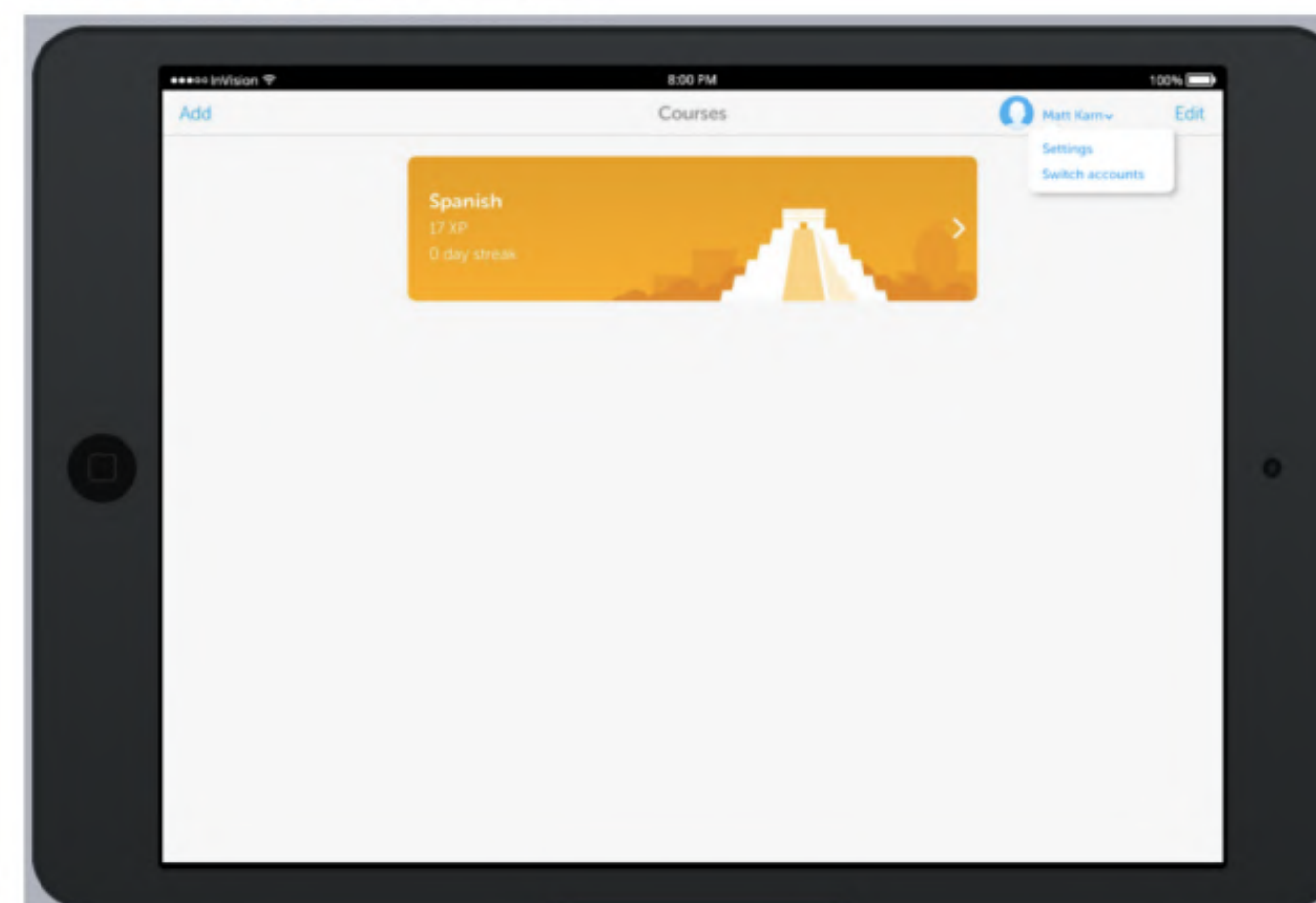
Interactive Prototype 1: 5/5 people failed



Interactive Prototype 2: 4/5 people failed



Interactive Prototype 3: 5/5 succeeded!



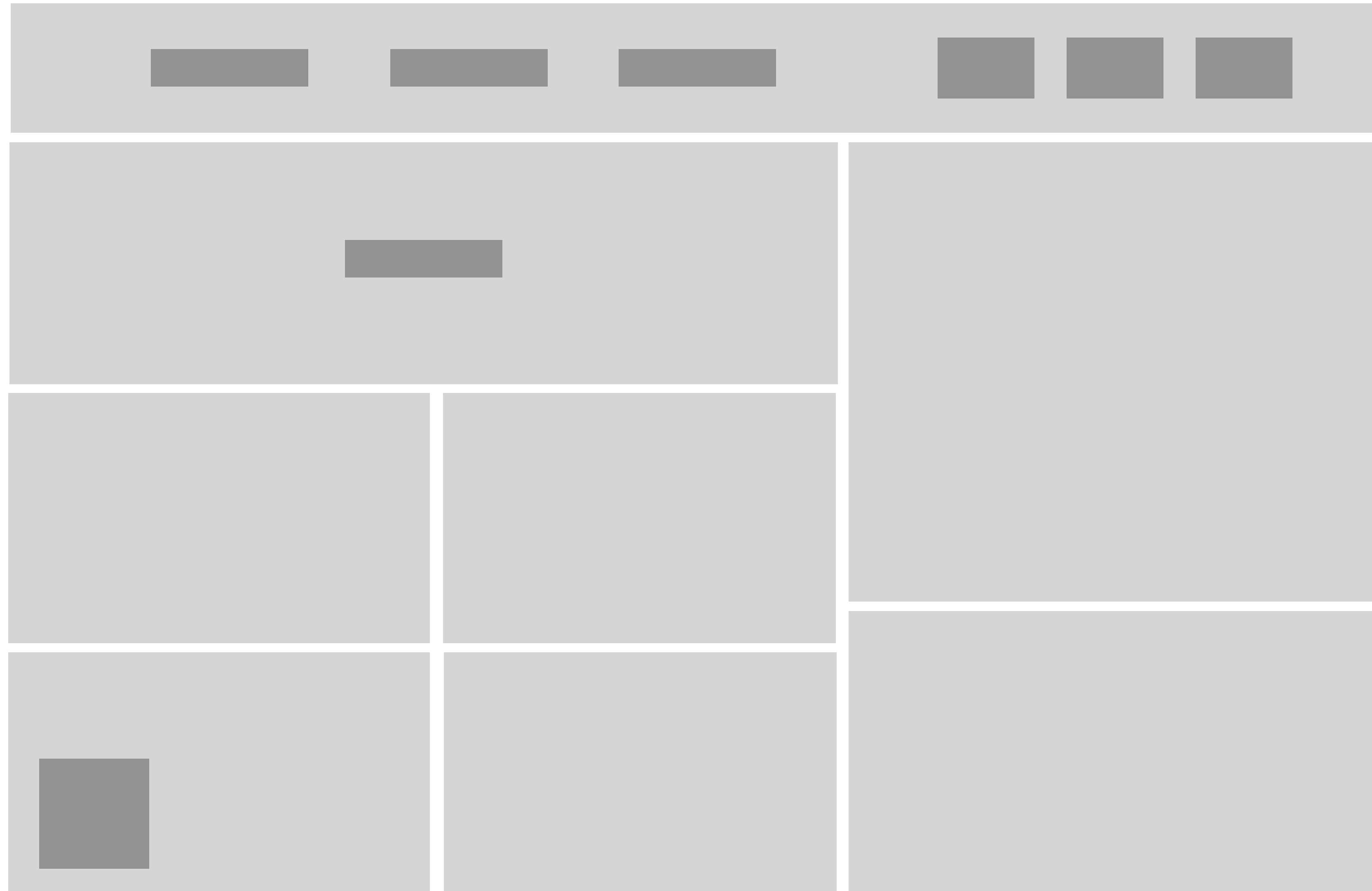
Tested three interactive prototypes. These are screenshots.



Part 5

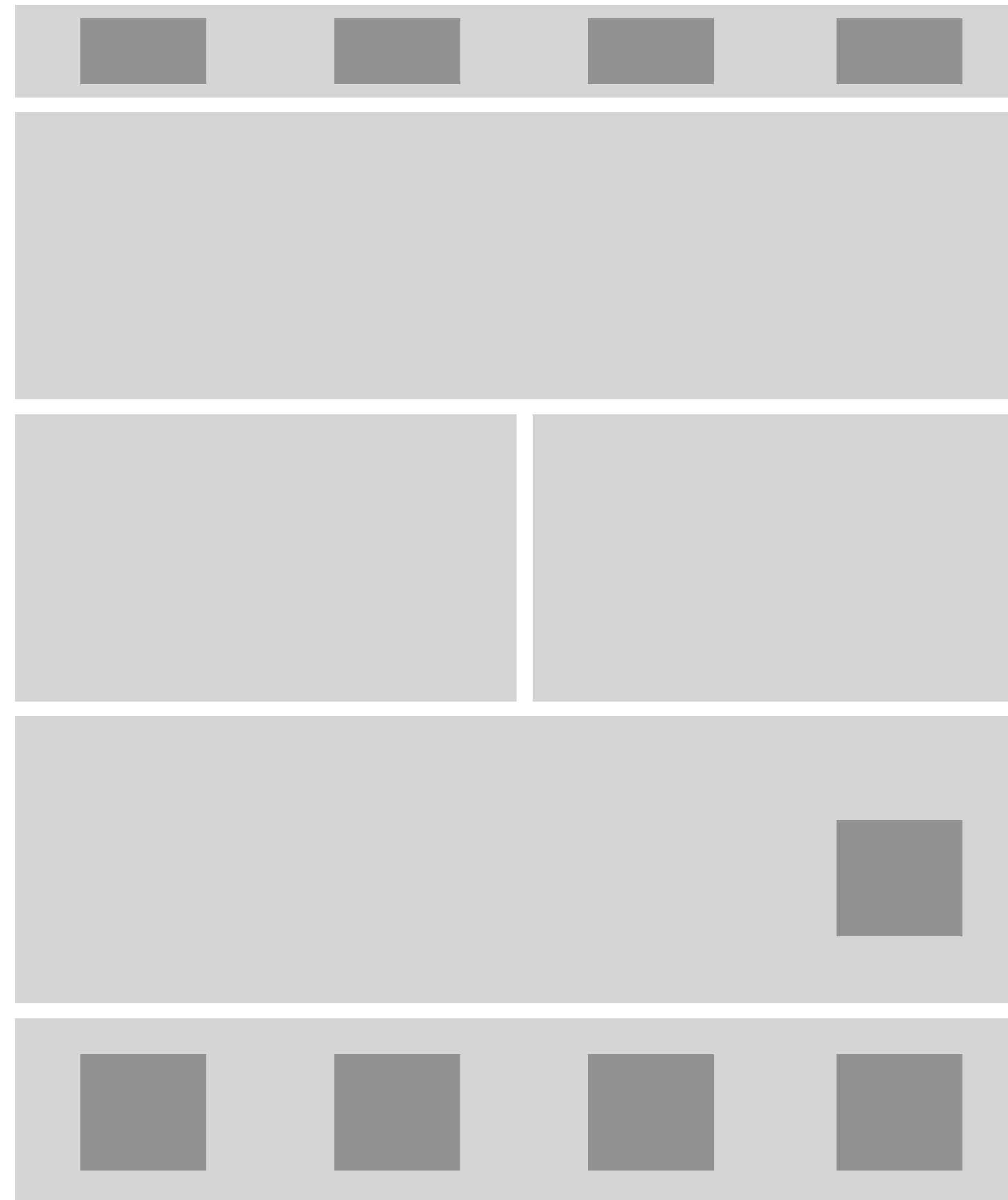
UI Approach

UI DESIGN



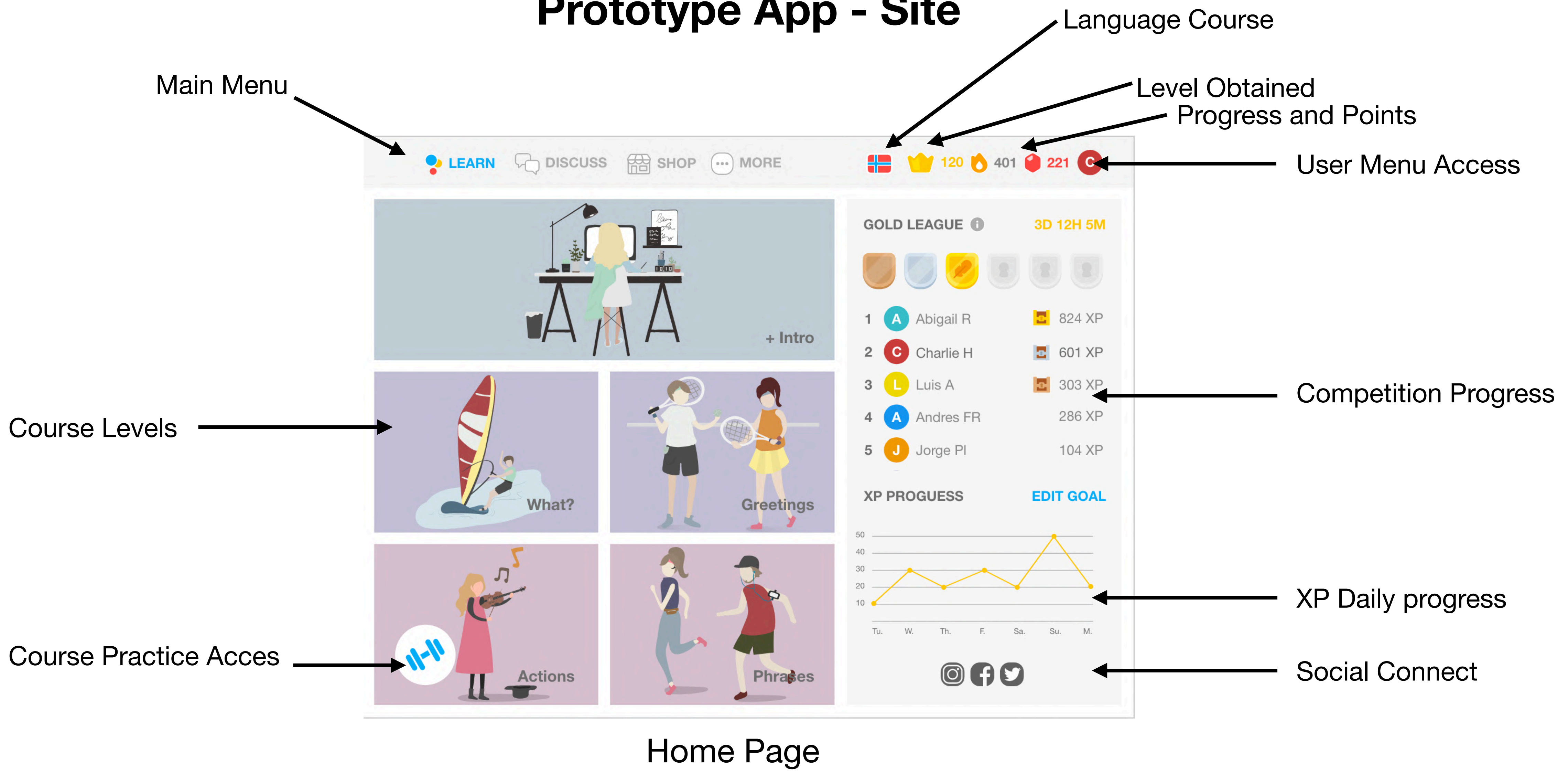
Structure of the app website, developed by divisions and sectors

UI DESIGN



Structure of the Mobile app, developed by divisions and sectors

Prototype App - Site



Prototype App - Site

Home Page

The Home Page features a top navigation bar with 'LEARN', 'DISCUSS', 'SHOP', and 'MORE' options, along with user stats (120 lingots, 401 XP, 221 C). Below the navigation is a 'GOLD LEAGUE' section showing a leaderboard of users: Abigail R (824 XP), Charlie H (601 XP), Luis A (303 XP), Andres FR (286 XP), and Jorge PI (104 XP). An 'XP PROGRESS' graph shows a weekly trend. The main content area includes a large illustration of a person at a desk, and several smaller cards for 'What?', 'Greetings', 'Actions', and 'Phrases'.

Feed News

The Feed News page has a top navigation bar similar to the Home Page. It features a 'POPULAR' section with a grid of news items, including 'SWEDEN MEETING', 'THE BEST WAY TO LEARN', 'READ STORIES', 'NORWEGIAN GRAMMAR', 'STUDY FINLAND', and 'LET'S TALK'. A 'NEW POST' button is visible. On the right, there is a 'YOUR SUBSCRIPTIONS' section with a list of forums: FIN FORUM, NORSK FORUM, SVIERGE FORUM, GERMAN FORUM, SPANISH FORUM, ENGLISH Q&A, LEARN Q&A, DUO - EVENTS, and SUPPORT.

Store

The Store page features a top navigation bar. The main content area is dominated by a 'duolingo PLUS' promotion, which includes a 'TRY FOR FREE' button and a description: 'Remove ads, download lessons on mobile, get a free streak repair monthly and support our mission.' Below this are 'POWER-UPS' such as 'Streak Freeze' (10 lingots), 'Double or Nothing' (5 lingots), and 'Timed Practice' (20 lingots). At the bottom, there is a 'What is a lingot?' section explaining the virtual currency.

Events

The Events page features a top navigation bar. The main content area is titled 'DUOLINGO EVENTS' and includes a sub-header: 'Ready to practice speaking with real people? Find fun and effective language events all over the world!'. It lists three events: 'Spanish for beginners (Gammes/Juegos) Prof Rudy' on Tuesday 12:00 AM, 'Norwegian for experts (Gammes/Juegos) Teacher Erik' on Tuesday 15:00 PM, and 'Swedish for beginners (Conversation) Teacher Gunnar' on Friday 9:00 AM. An illustration of three people is shown on the right.

Dictionary

The Dictionary page features a top navigation bar. The main content area is for the Norwegian dictionary, with a search bar and a 'SEARCH' button. Below the search bar, there is a 'TRANSLATION' section for 'Norge' (Norway) with three example sentences: 'Hvor i Norge er dere?', 'Hun og jeg er i Norge.', and 'Hvor i Norge er hun?'.

Words

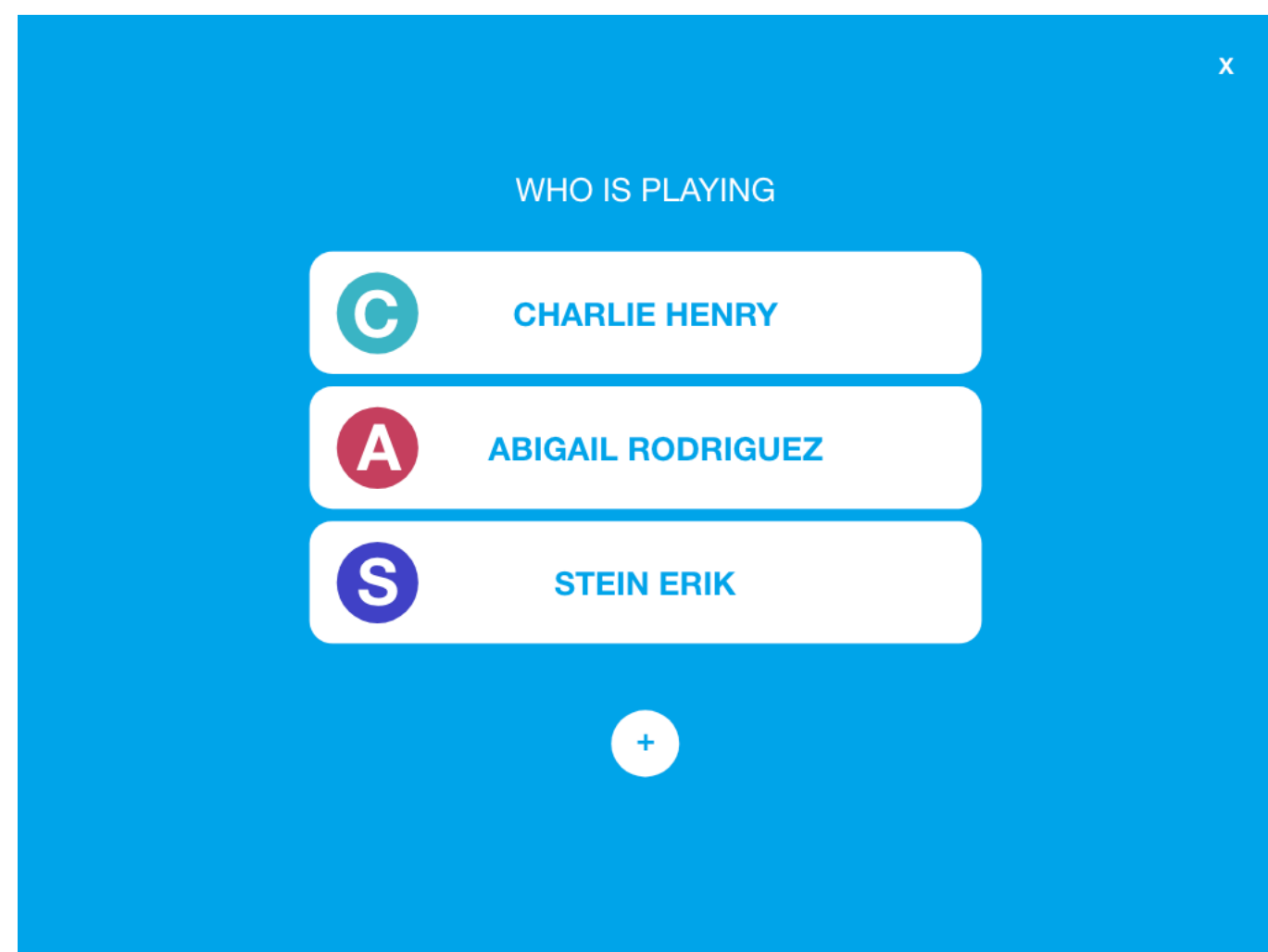
The Words page features a top navigation bar. The main content area is titled 'NORWEGIAN (BOKMÅL) WORDS LEARNED' and includes a '+ NEW WORD' button. It displays a table of words with their last practiced date and strength level. The table is as follows:

Word	Last Practiced	Strength
aldri	2 weeks ago	Strong
alle	1 week ago	Good
amerikanere	5 days ago	Good
and	3 days ago	Good
anden	1 month ago	Good
arbeider	4 weeks ago	Good
asrtid	3 days ago	Good
åtte	1 day ago	Good
blant	4 weeks ago	Good
bjørn	1 day ago	Good
bok	1 month ago	Good
bor	2 months ago	Good

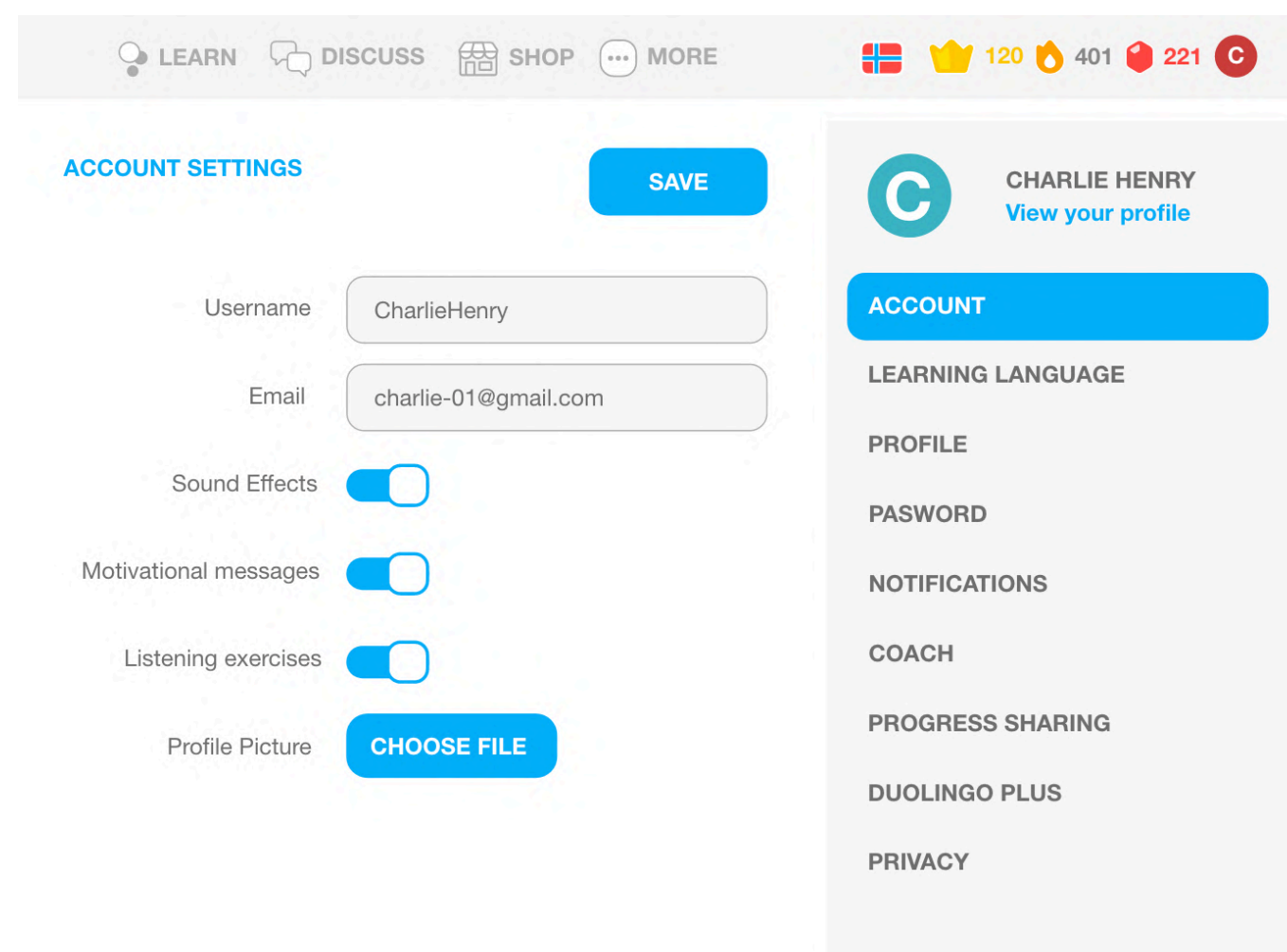
Below the table is a 'SPACED REPETITION' section with a legend for 'Still strong', 'Pretty good', 'Time to practice', and 'Overdue'. An 'XP PROGRESS' graph is also visible at the bottom.

Prototype App - Site

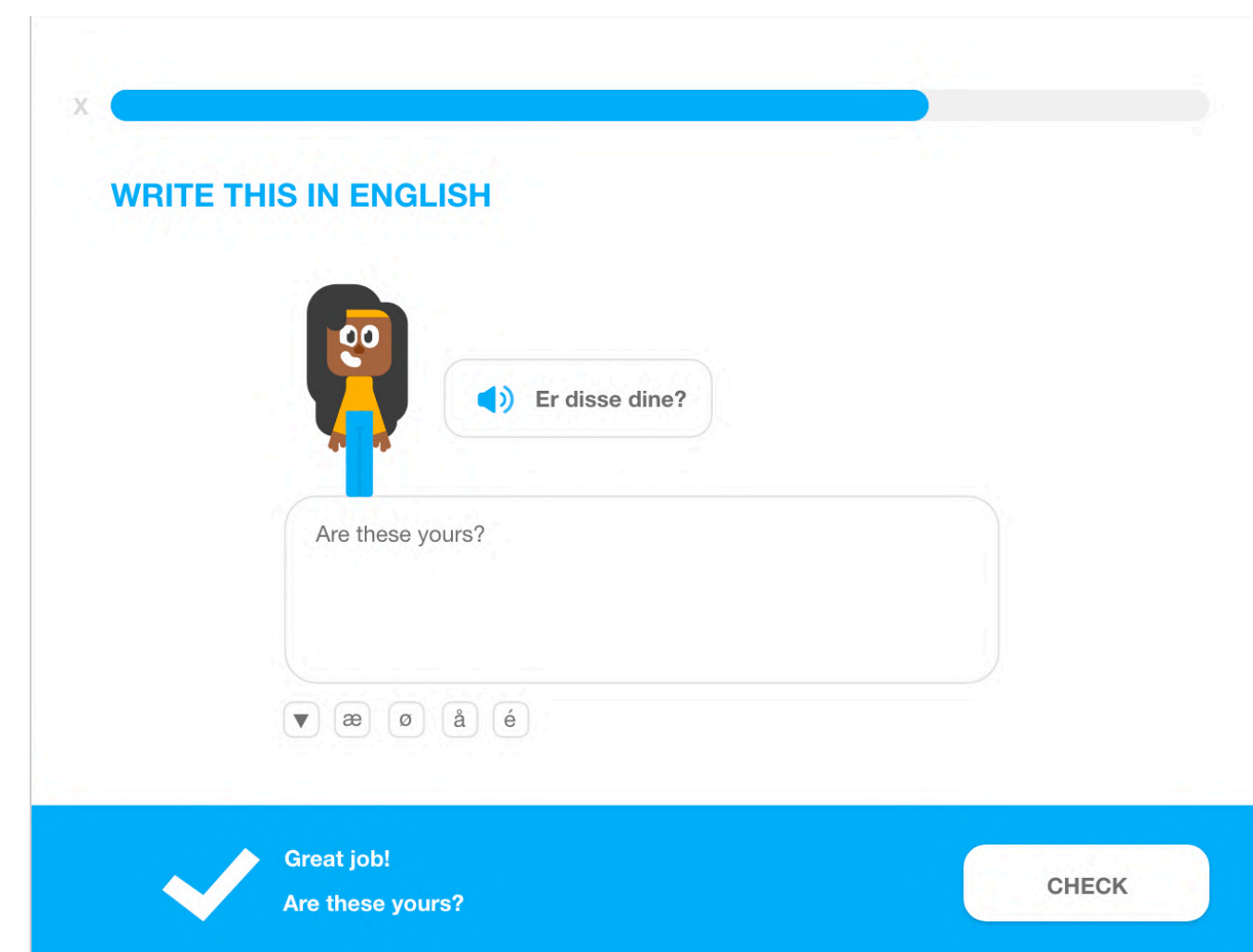
User Interface



User Settings



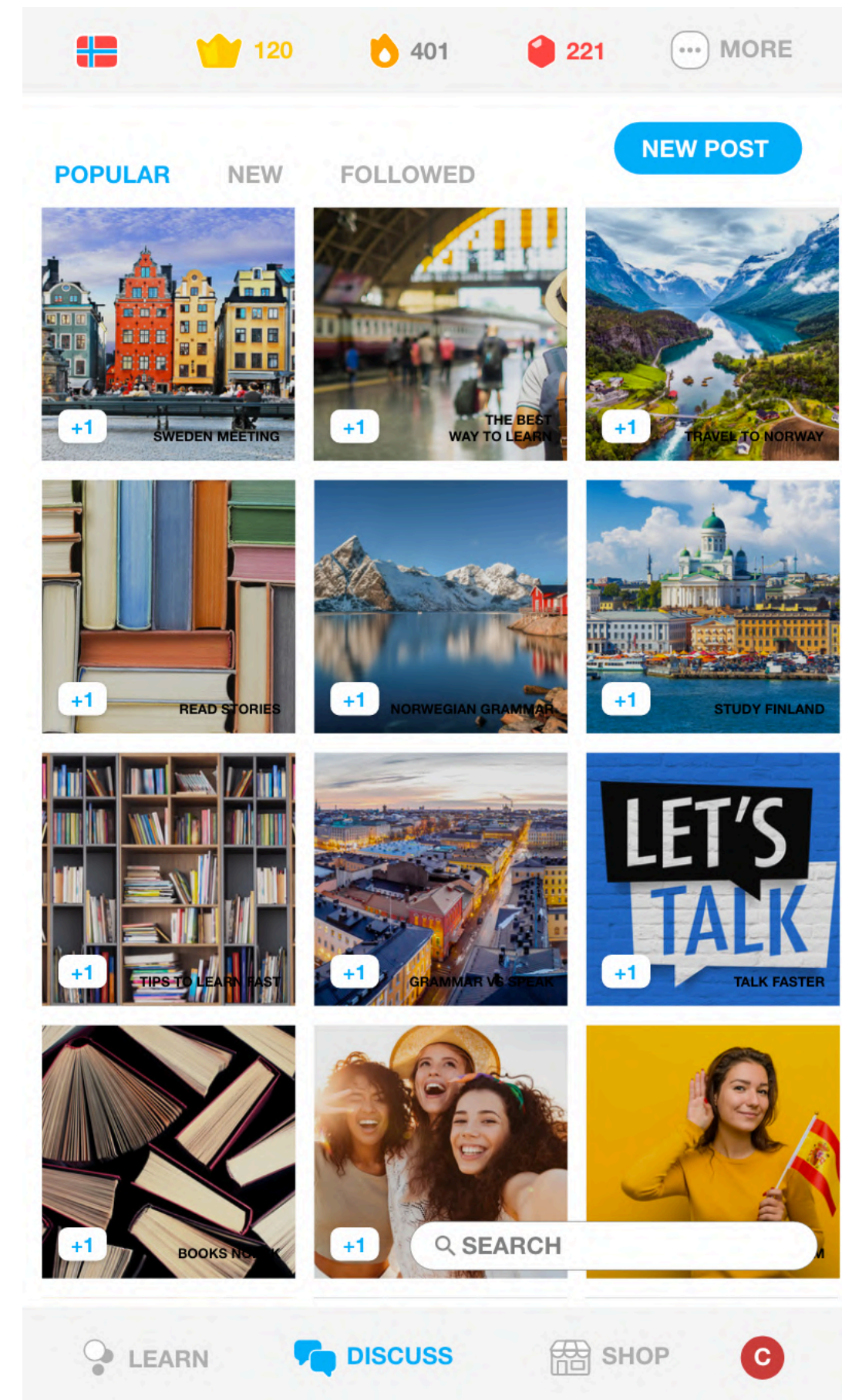
User Course



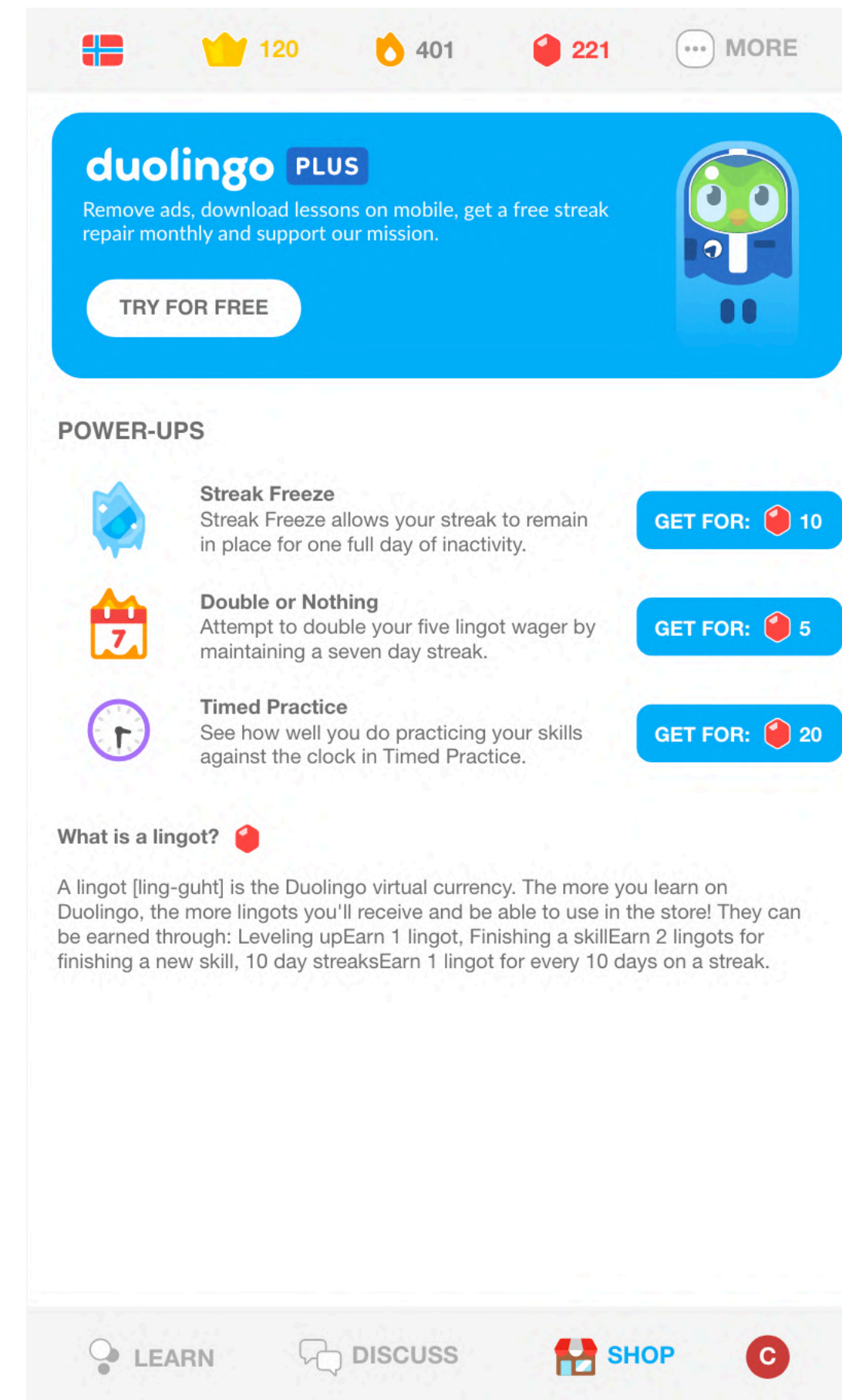
Prototype Mobile App



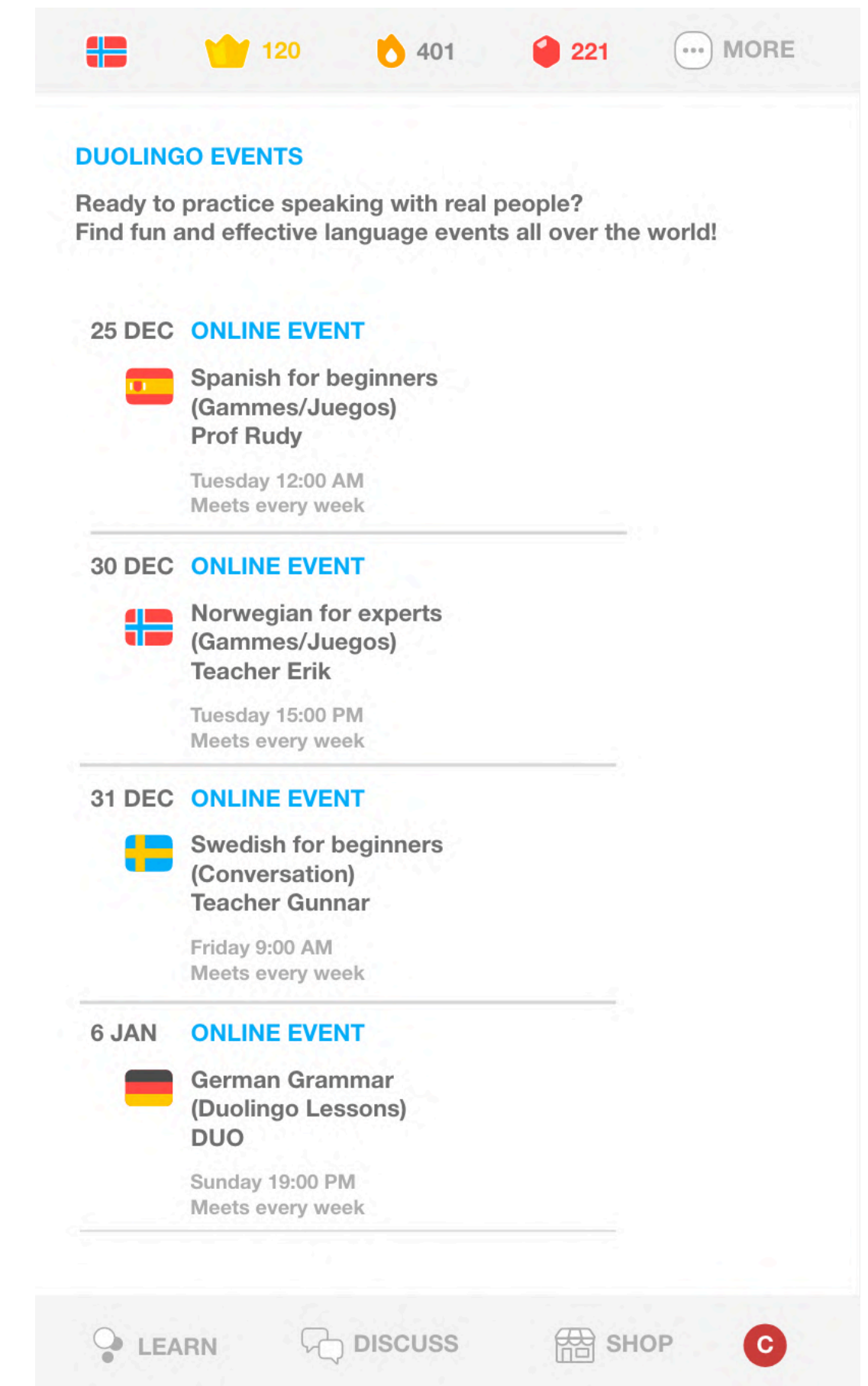
Home Page



Feed News



Store



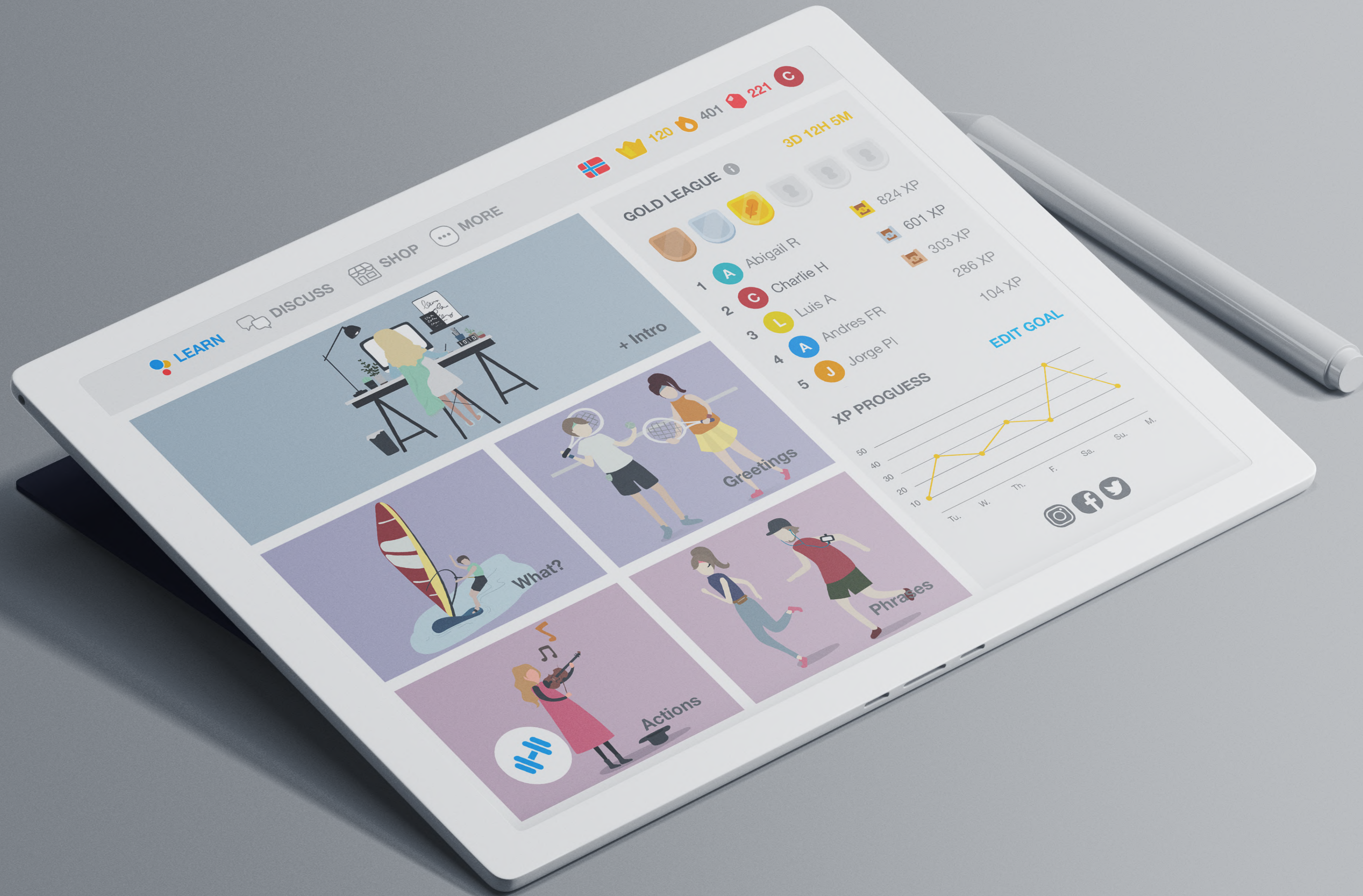
Events

<https://xd.adobe.com/view/561d0ba2-7b92-48ad-ae31-7b59a9f3281b-034e/?fullscreen>

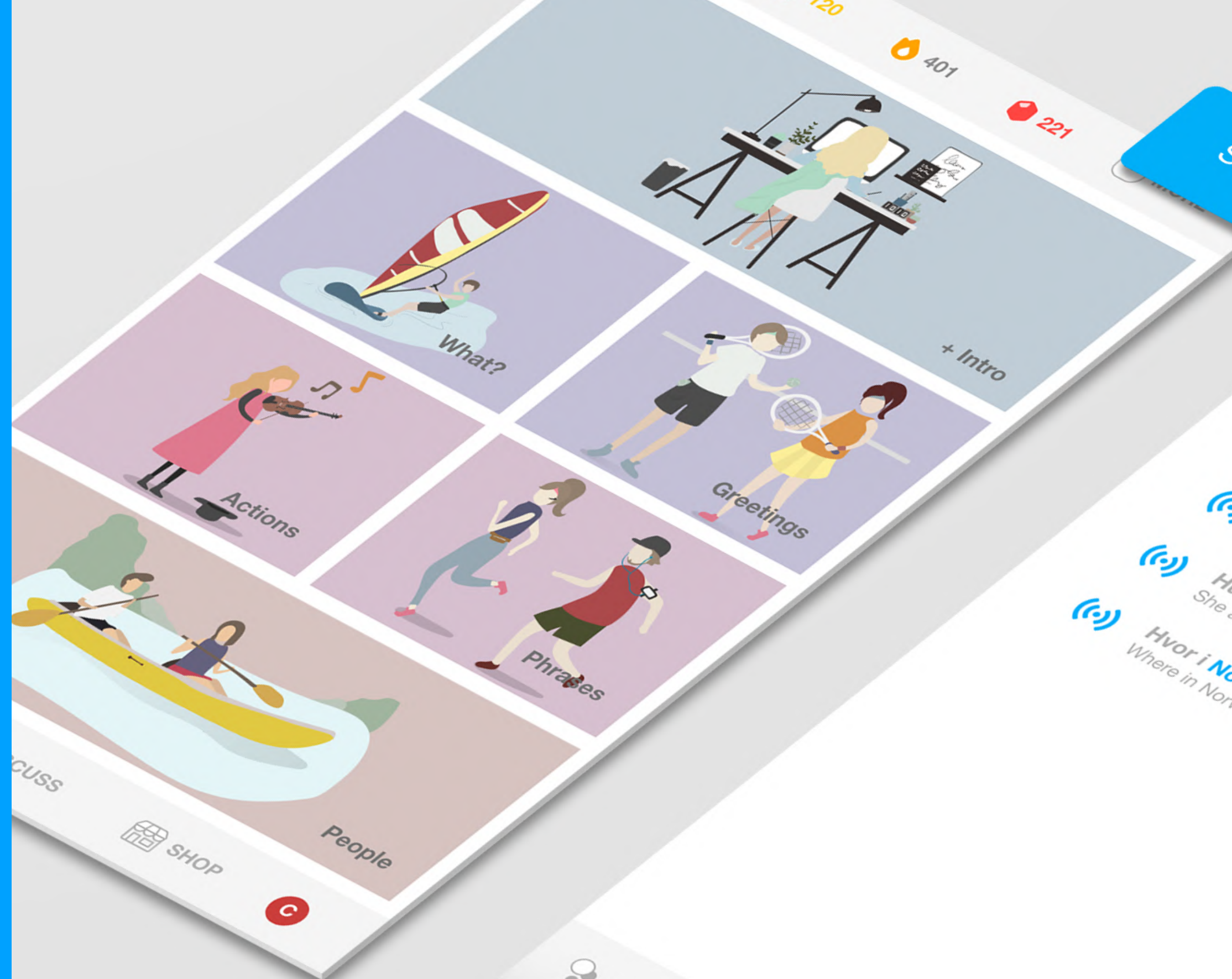


Part 6
Final product

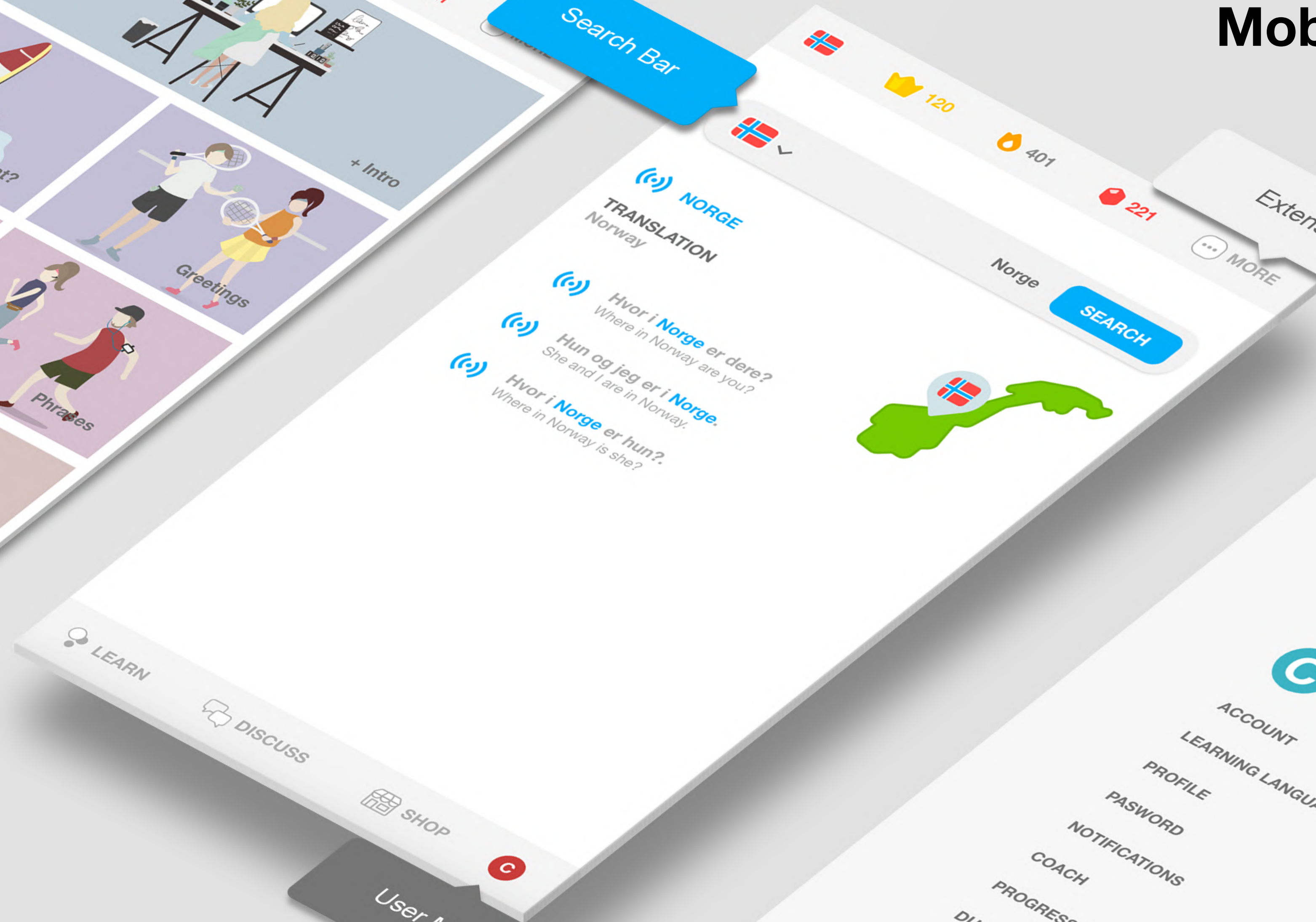
Tablet App Site



Mobile App Site



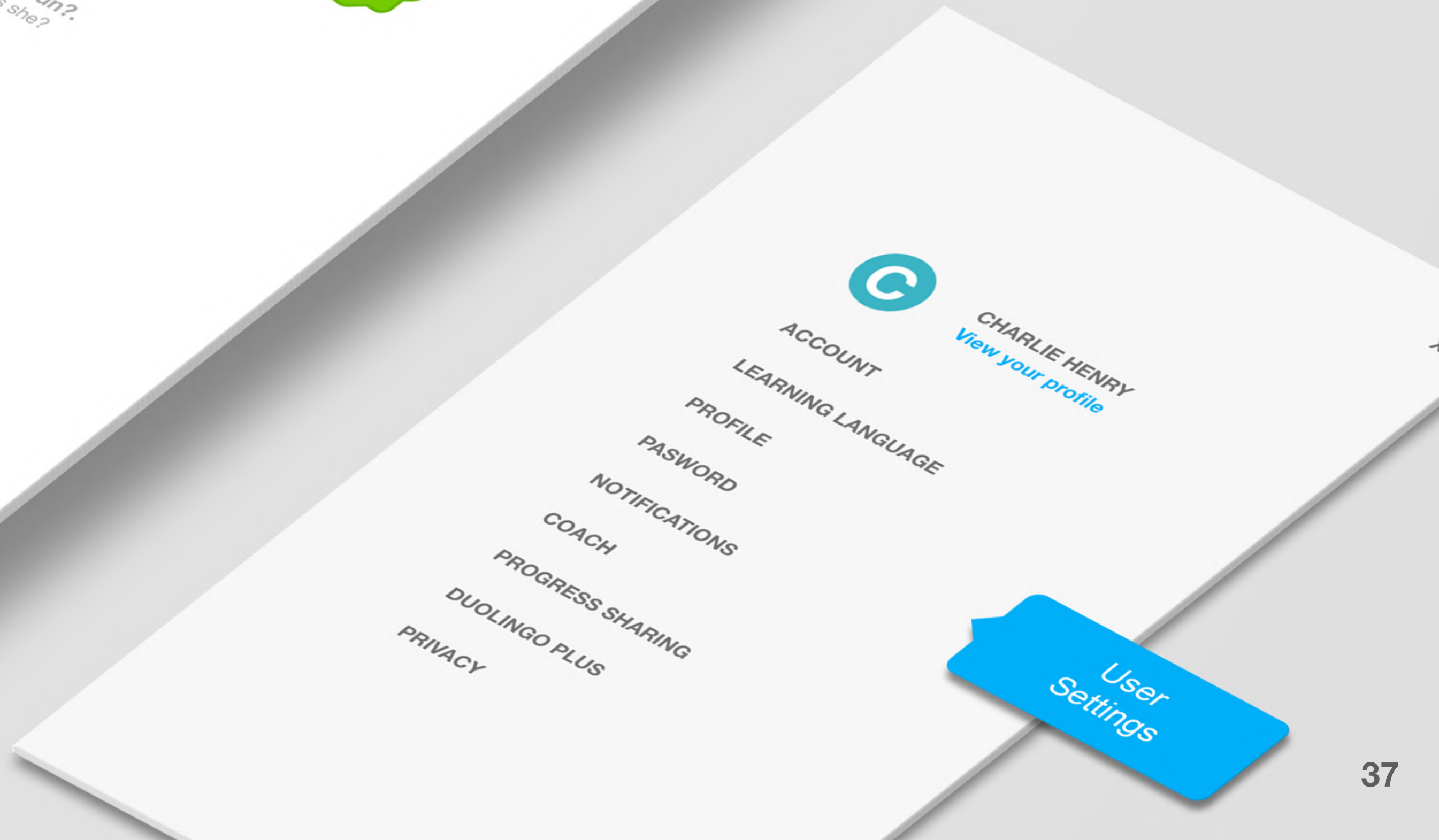
Search Bar



Extension



User Menu



User Settings

Conclusion:

The primary goal of any business is to increase its sales and increase the growth of the business. UX/UI Design plays an essential role in achieving this goal. The UX/UI Design of the application improves the user experience and customer satisfaction that ultimately helps increase the number of users of the specific application. With users having lots of choices and alternatives for the products and/ or services you are offering them, the span of time you get to grab the attention of your users is quite less and you have to hit the bullseye in this short span of time. The UI and UX Design help to win the consumers' confidence and make them use your application or website providing them what they are looking for. The number of consumers you are getting on your website/application can measure the success of the great UI and UX. For a start-up or a small venture, the importance of UI and UX Design becomes even more crucial as the first impression lasts long and using UI and UX designing can make or break the brand recognition.

Key components of UI/UX design:

- Information Architecture
- Interaction Design
- Usability
- Wireframing
- Visual Design