



¿HABLAS
ESPAÑOL?

GlobalGreet 1.0

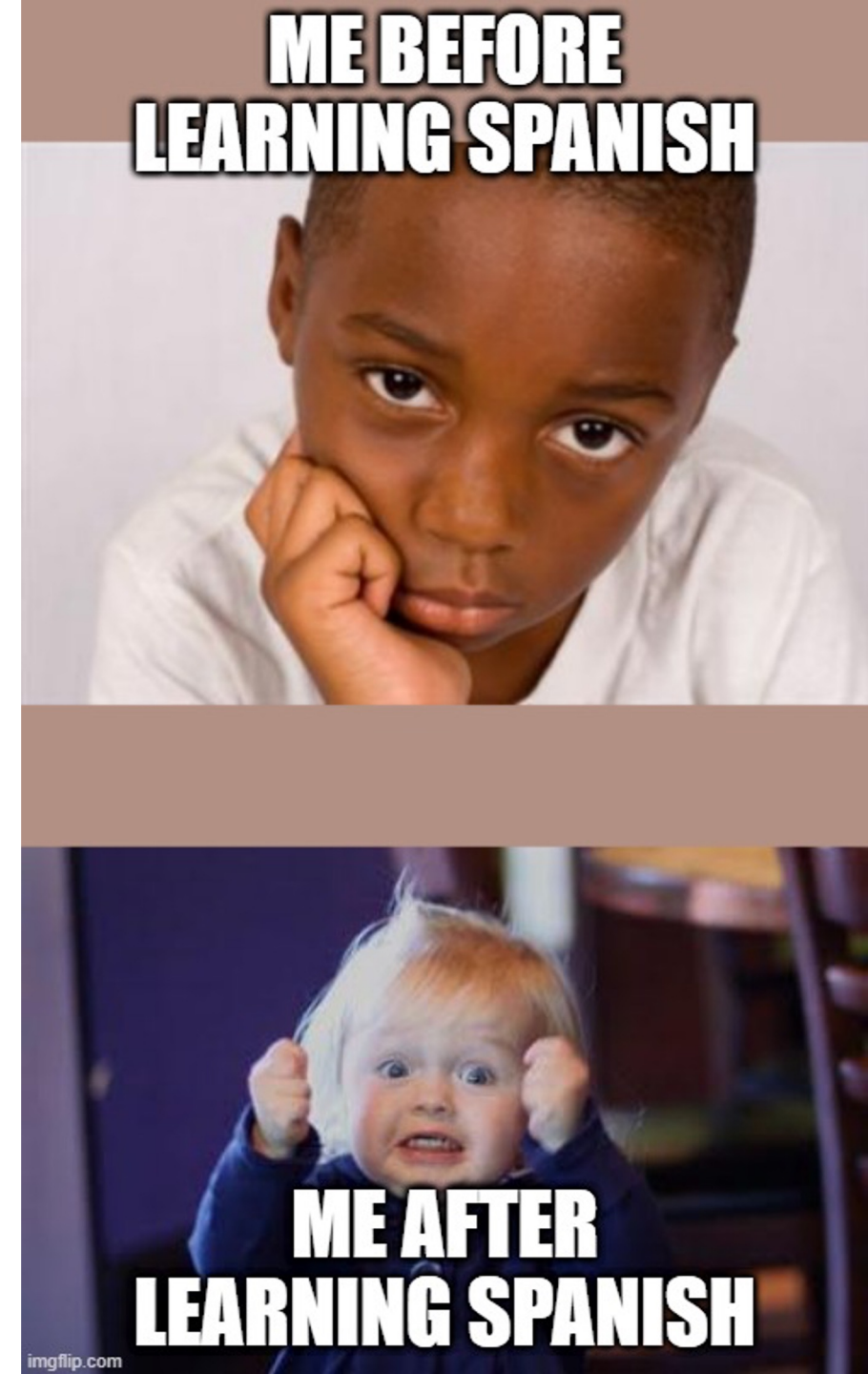
Project Description

Product Description:

The GlobalGreet app is designed to bring people all over the world together, no matter what language they speak, no matter what cultural peculiarities prevail. **We want you to connect!** For that we designed a special language learning app and started by concentrating on the Spanish language and culture.

Reason for testing:

Our concern was to investigate competing products to find the essences that create the connection between people, no matter where they are, and to finally unite them in our product prototype.





But Really... Why?

- There are already many language learning apps on the market with various of different approaches to learn
- One thing that is mostly missing though is
CULTURE
- But social culture and connecting with other people are a huge parts of learning a language....
...which is why we want to bring together what belongs together!

Method Overview

For that we evaluated...:

- Personas & Use Cases
- Task Analysis
- Competitor Analysis
- Heuristic Evaluation
- Cognitive Walkthrough
- Qualitative User Testing:
Moderated Task-based Usability Test
- Design Thinking Workshop
- Prototyping & Moodboard

so now join our journey! _____



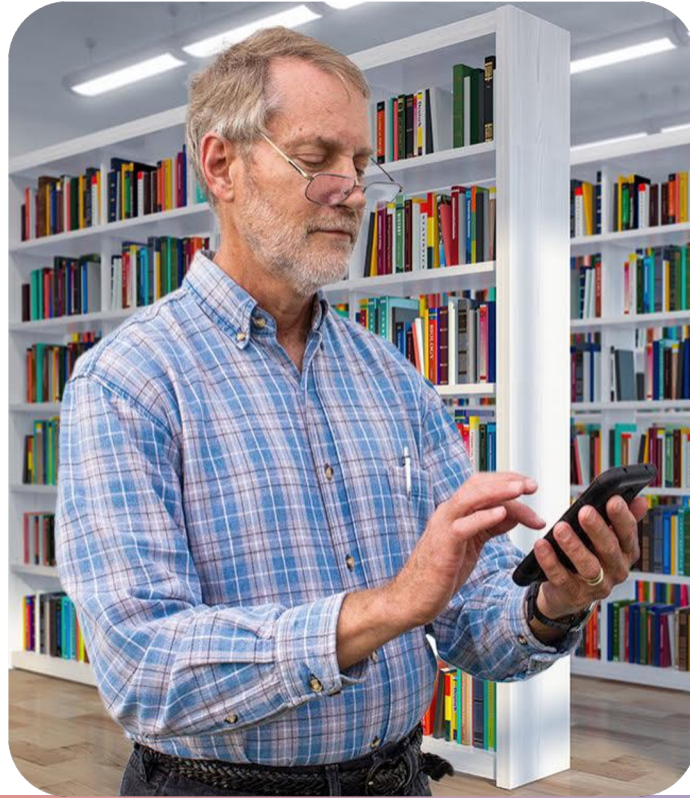


Personas



Traveling is my passion

**Lisa-Sophie
Lehmann**



The busy Pensioner

**Joachim
Hartmann**



Performer

**Max
Franke**



Lisa Sophie Lehmann

Age: 21

Financial situation:
500€ / month

Job: Design Student

“Broadening the horizon of your dreams” ✨



Story

With an **insatiable wanderlust** coursing through her veins, Lisa's heart belongs to the world of **exploration and cultural immersion**. Her Instagram feed serves as a vibrant canvas, showcasing her adventures, a kaleidoscope of experiences. For Lisa, traveling isn't just a hobby, **it's a way of life**. Her passionate desire to delve deep into the heart of Spanish culture propels her to learn the language with gusto. Armed with a language learning app, Lisa seeks to seamlessly navigate everyday situations, from ordering her favorite café con leche to striking up small talk with locals. She does not only want to interact, **she wants to blend in - even if it's just for a week**.

Lisa is not only a design student but also an **avid trendsetter**, constantly keeping up with the latest trends on TikTok. She loves minimalism and tries to implement it in every part of her life.

Just as she curates her Instagram feed with precision, Lisa approaches language learning with a similar sense of finesse. She is **well organized and planning ahead**. She views language as a canvas upon which she can paint her experiences, choosing words and phrases with care to **make her trip unique**.

Goals



- Learn do's & don'ts of culture
- Learn how to handle everyday situation
- Learn vocabulary for Smalltalk and making friends for life

Needs

Lisa wants to **fully immerse herself** into the Spanish culture. Therefore, she desires to **get some hands-on advice to avoid faux pas**.

She wants to **make friends to have great social interactions** and unforgettable memories.

She wants to **identify with the locals**, she wants to really feel part of it.



Joachim Hartmann

Age: 62

Financial situation:

Trouble-free

Job:

Retired Official

*“One is never
too old”*



Story

Joachim has recently found himself in an unsettling phase of life called **mid-life crisis**. Having spent the majority of his life as an engineer and father, Joachim now enjoys **the freedom to explore new horizons**. His latest adventures will take him to Spain.

Joachim's English proficiency is, let's say, somewhat limited. Spanish, on the other hand, is a completely uncharted territory for him. In addition, although he still feels very young, **his digital skills tell another story**.

Goals



- Learn how to handle everyday situation.
- Use an app and understand the usage quickly.
- Continue learning with the app after his journey.

Needs

Joachim is determined **not to let language barriers hinder his exploration** of Spanish cuisine and culture.

He needs an app that **is easy to understand**.

Joachim is a truly **lifelong learner**. He wants to continue his journey with **regular trainings**.

Reason he is not the ideal user

Joachim has a desire to dive into the language **more deeply** than just phrases and words for some everyday situations.

Also, money is not a problem for him. Accompanied by continuous learning, he **requires more features and content**. For this, he is also willing to pay more



Max Franke

Age: 32

Financial situation:
Enough to show off

Job:
Engineer

*“Ain’t nobody got
time for that”*



Story

With his lederhosen neatly packed away, Max sets his sights on sunny Spain for a bit of deep relaxation and **wild partying**. Max’s primary objective in Spain is simple: **have a good time**. He sees himself as a **high performer**, driven by a relentless pursuit of success in both his professional and personal endeavors. Exuding an air of **casual confidence**, never stressing too much over the little things, Max’s approach to language learning is as straightforward as they come – he wants the **bare minimum required** to get by. He has no interest in conjugating verbs or mastering grammar; he just wants to know enough to order a cerveza and charm the señoritas. That’s why, learning Spanish is less about academic achievement and **more about practical necessity** for Max. He already had to learn standard German, why should he learn another language?

Goals



- Order drinks, food and socialize on parties.
- Only learn phrases and vocabulary for the time of the trip.

Needs

He wants to know the most important words and phrases for having a good time. Max doesn’t want **to invest much time**. Even an app installation is much effort. **Showing off** is in his blood.

Reason he is not the ideal user

Max does not have time to learn Spanish before the trip and rather wants to know what to say in the exact moment. He requires **direct translation** in the moment of the conversation, therefore he is rather a Google Translate user.

Use Case 1

Actor	Lisa
Goal	Learn Do's and Don'ts of Spanish culture
System	<ol style="list-style-type: none">1. Open the App2. Navigate on the menu to the culture section3. Have picture's/video's visually example's on how to behave/respond4. Give me "critical" situation and options to choose from

Use Case 2

Actor	Lisa
Goal	Learn to handle everyday situation in Spanish/ Smalltalk
System	<ol style="list-style-type: none">1. Open the App2. Navigate on the menu to topics3. Choose Restaurant section4. Learn Restaurant vocabulary5. Know that you are capable of ordering a drink.

Use Case 3

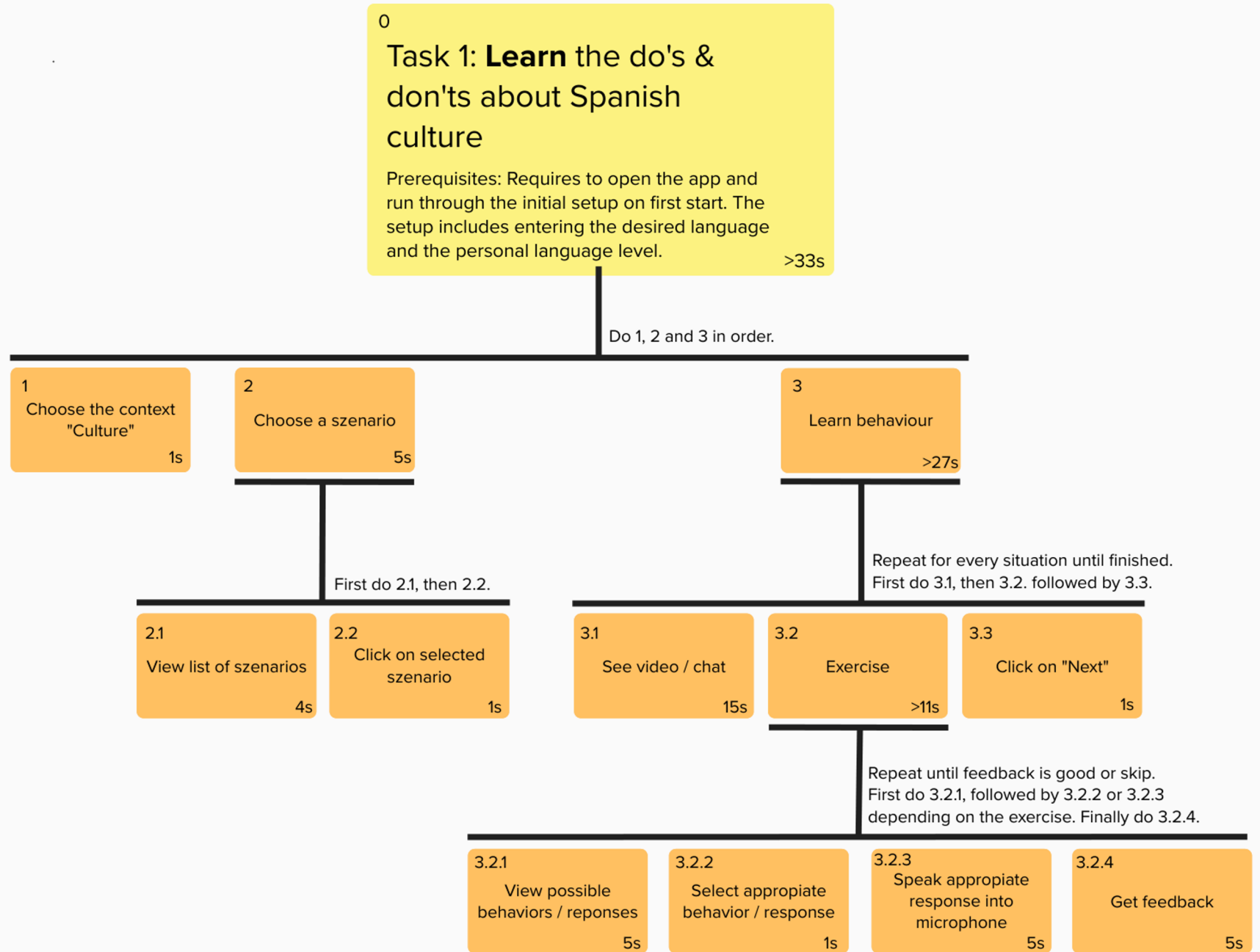
Actor	Lisa
Goal	Learn phrases to make friends (introduce yourself, say where you are from etc.)
System	<ol style="list-style-type: none">1. Open App2. Navigate on the menu to the topic3. Choose section "Social"4. Learn Social Vocabulary5. Practise a situation



Task Analysis

Goal

Systematically examine the task (or set of tasks) to understand the actions and decisions involved. It provides a detailed understanding of how tasks are performed and where potential difficulties or inefficiencies may arise.



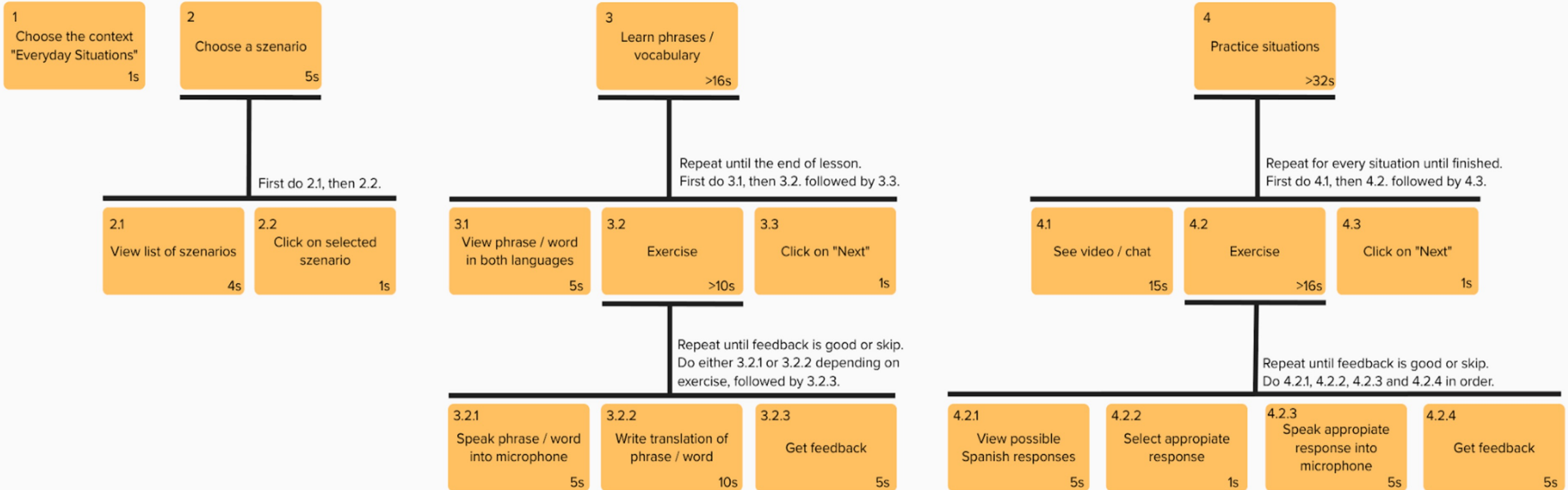
0

Task 2: **Learn** how to handle everyday situation in Spanish

Prerequisites: Requires to open the app and run through the initial setup on first start. The setup includes entering the desired language and the personal language level.

>22s

Do 1, then 2. Depending on learning session goal do 3 and/or 4.



0
Task 3: Learn phrases to make friends
 Prerequisites: Requires to open the app and run through the initial setup on first start. The setup includes entering the desired language and the personal language level.
 >22s

Do 1, then 2. Depending on learning session goal do 3 and/or 4.

1
 Choose the context "Social"
 1s

2
 Choose a szenario
 5s

First do 2.1, then 2.2.

2.1
 View list of szenarios
 4s

2.2
 Click on selected szenario
 1s

3
 Learn phrases / vocabulary
 >16s

Repeat until the end of lesson.
 First do 3.1, then 3.2. followed by 3.3.

3.1
 View phrase in both languages
 5s

3.2
 Exercise
 >10s

3.3
 Click on "Next"
 1s

Repeat until feedback is good or skip.
 Do either 3.2.1 or 3.2.2 depending on exercise, followed by 3.2.3.

3.2.1
 Speak phrase into microphone
 5s

3.2.2
 Write translation of phrase
 10s

3.2.3
 Get feedback
 5s

4
 Practice situations
 >32s

Repeat for every situation until finished.
 First do 4.1, then 4.2. followed by 4.3.

4.1
 See video / chat
 15s

4.2
 Exercise
 >16s

4.3
 Click on "Next"
 1s

Repeat until feedback is good or skip.
 Do 4.2.1, 4.2.2, 4.2.3 and 4.2.4 in order.

4.2.1
 View possible Spanish responses
 5s

4.2.2
 Select appropriate response
 1s

4.2.3
 Speak appropriate response into microphone
 5s

4.2.4
 Get feedback
 5s



Competitor Analysis

Competitor Analysis

Goal

Systematically evaluate and understand the strengths and weaknesses of our competitors products. We wanted to understand how others already perform in our chosen use cases but also their overall visual design.

Process

For that we chose the following 3 competitor products:

1. **Duolingo:** as one of the worldwide market leaders
2. **Memrise:** because of their unique learning approach and variety of offered learning content
3. **Bravolol:** because of their minimalistic and basic approach

To evaluate and compare them we chose the following aspect for the analysis:

- **Home Screen:** overall structure and design
- **Use Case 1:** Do's and Don'ts about culture
- **Use Case 2+3:** Learn to handle everyday situations/ make friends
 - Feedback , scope of interaction, Gamification

Free basis version (but paid ad-free version available)

Main interaction based on **gamification**

over **300 million** users worldwide

One of market leaders

duolingo

Over **30 different** language courses



Meet the mascot Duo!



Home Screen

Easy switch of languages

1

Encouragement & Help of setting a goal

2

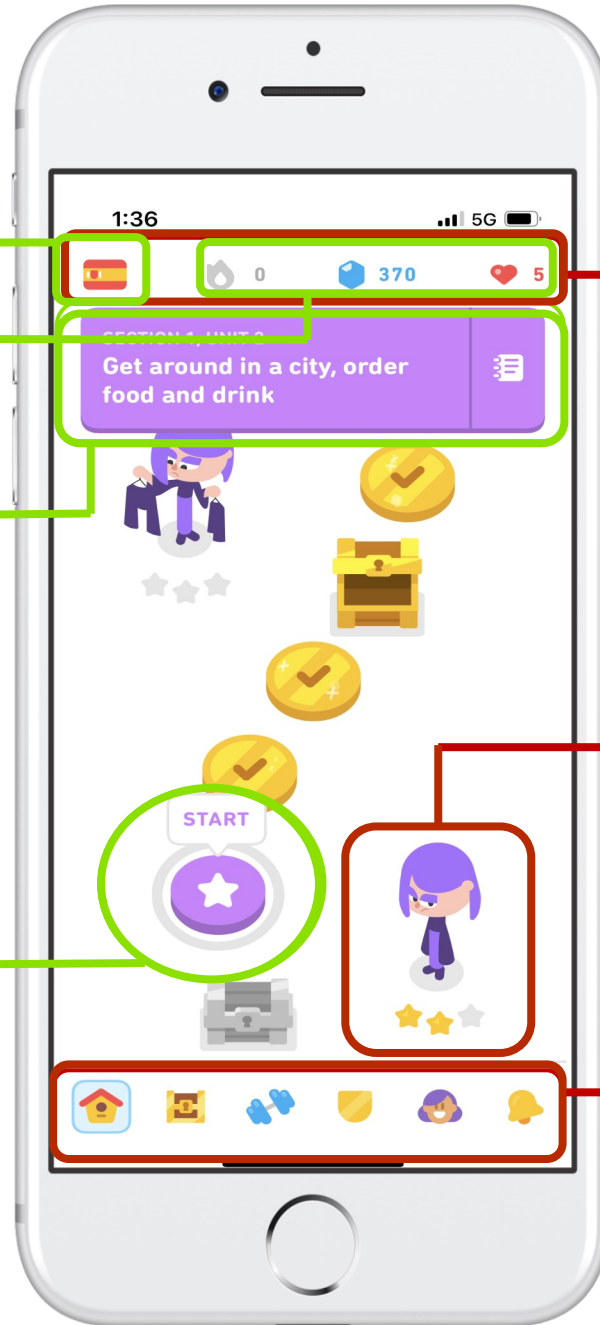
Level & topic overview:

- Current learning content
- Clear structure
- Level assessment

3

Progress status: completed and current lectures, next steps

4



1

✗ Top bar contains a lot of information but also navigation options (like switching language) = **no consistency**

2

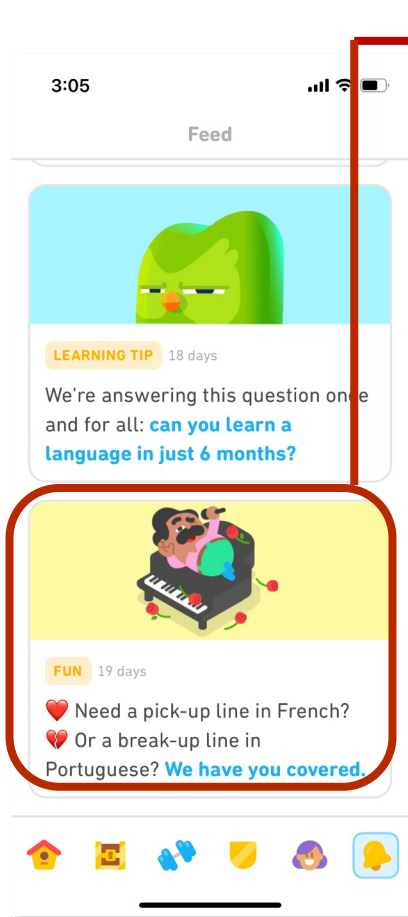
✗ A lot of distractions due to **gamification and movement**

3

✗ Bottom navigation: lot of tabs
• Page content not clear
• Need to be familiar with the icons first
= **try and error**



Use Case 1: Learn do's & don'ts about culture



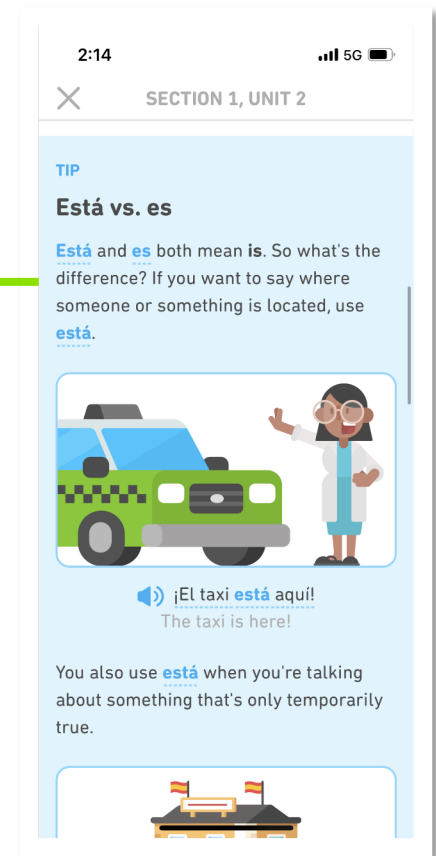
1

- ✗ “Feed” Tab as **only option** for possible cultural aspects
- ✗ Only extern blog entries
- ✗ **Limited options**
- ✗ No according content association to icon

Some cultural content included in section overviews and lectures

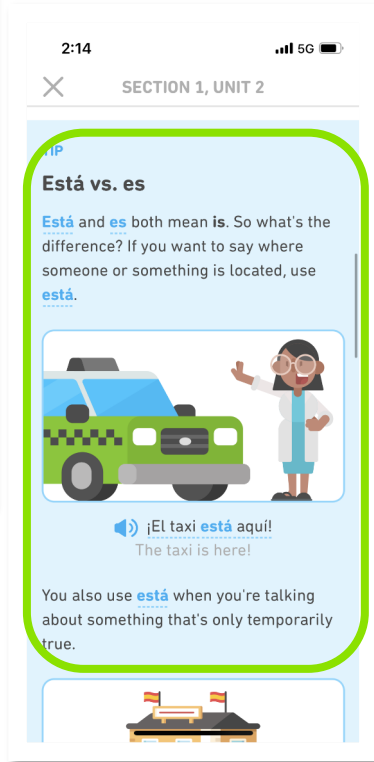
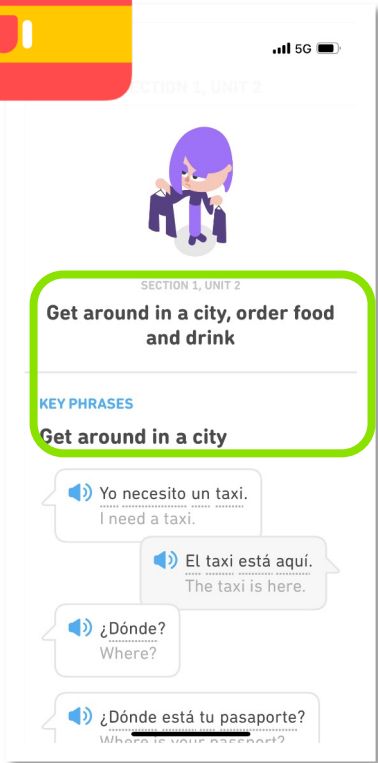
2

- ✗ Not for every section
- ✗ Does not meet expectation: **dependent of coincides**





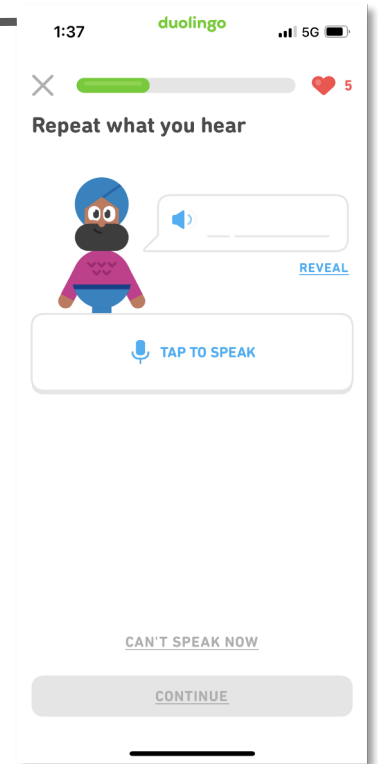
Use Case 2 & 3: Learn to handle everyday situations/ make friends



Many lectures on different topics
Practicing listening, speaking, comprehension and writing

- ✗ Some sentences are **not applicable** in real world
- ✗ **Not specific** to one situation selectable
- ✗ Higher level lectures not yet accessible

1



2

topic related overview of Key Phrases & vocabulary

Accessible without starting a lecture

Basic grammar references

Available for **every section**

Option of choosing sections that are fitting for **individual needs** (e.g. traveling)

- ✗ **Only option** for grammar references: not a part of the lectures themselves and no overview



Use Case 2 & 3: Getting Feedback

- ✗ Full use of list of mistakes needs a pro account (rehearsing)
- ✗ **No sorting** of mistakes

VS.

1

2

3

4

Encouragement for right answers
 Salient Feedback badges
 Corrections for mistakes
 Rehearsing mistakes at end of lectures

- ✗ not enough **explanation** of mistakes: grammar, vocabulary,...

Centralized list of mistakes

- ✗ **Too many options** (=4) for achievement badges for regular practice
- ✗ No translation of achievements into language skills



over **55 million** users
worldwide

Over **40 different**
language courses

Restricted free basis
version (but paid ad-free
version available)

Main interaction
based on Spaced-
Repetition- method

Real life scenarios
& conversation
exercises



Have conversations with
their own MemBot!



Home Screen

Easy and minimalistic top bar navigation

Visual design in general simple and appealing

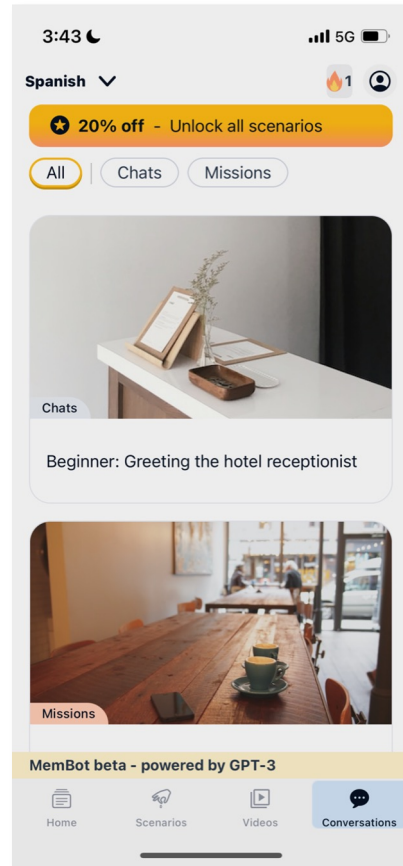
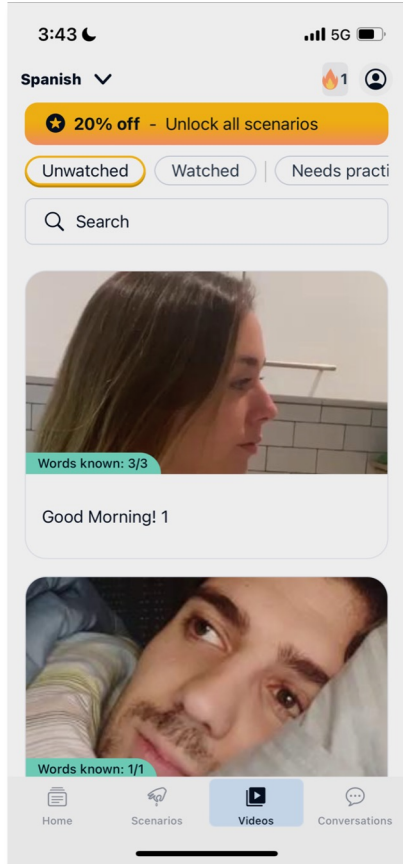
Icons minimalistic and additional description
Minimalistic bottom bar navigation



- 1 ✗ **Progress status not clear:**
What are completed and current lectures, next steps?
- ✗ Home screen seems cluttered and not clearly structured
- 2 ✗ colour coding **not explanatory**



Use Case 1: Learn do's & don'ts about culture

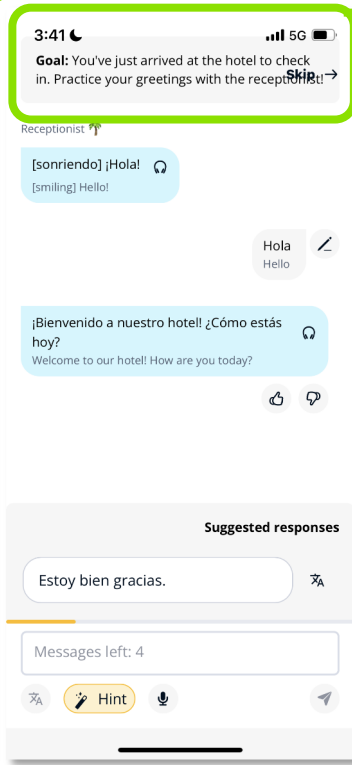
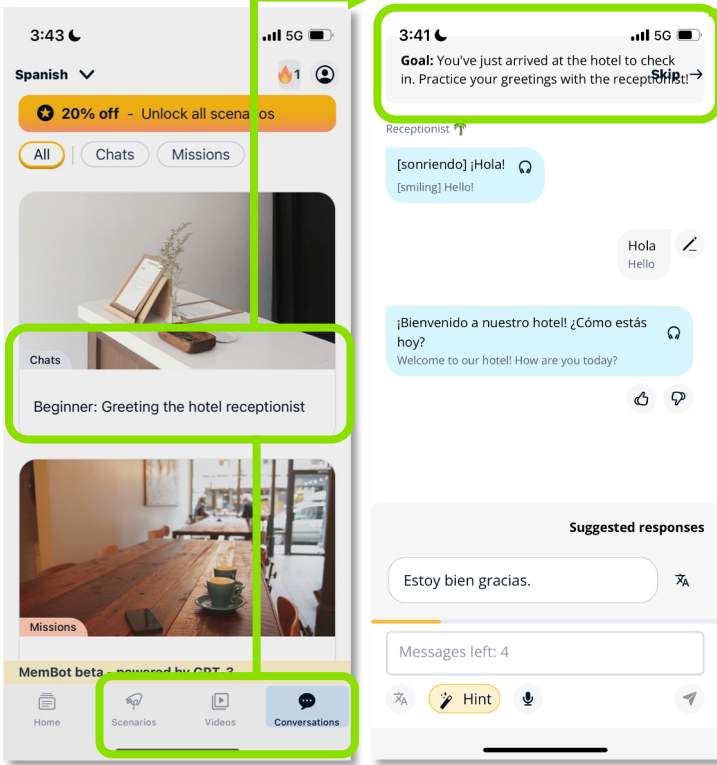


Some cultural aspects included in conversations:
expressions, how to greet someone,...
=general language use

- ✗ **Only option** for cultural aspects
- ✗ **No dedicated tab** or conversations and videos
- ✗ Videos are very basic, sometimes without translation or context
- ✗ Very **limited information**
- ✗ Content placement does not meet expectation:
dependent of coincides



Use Case 2 & 3: Learn to handle everyday situations/ make friends

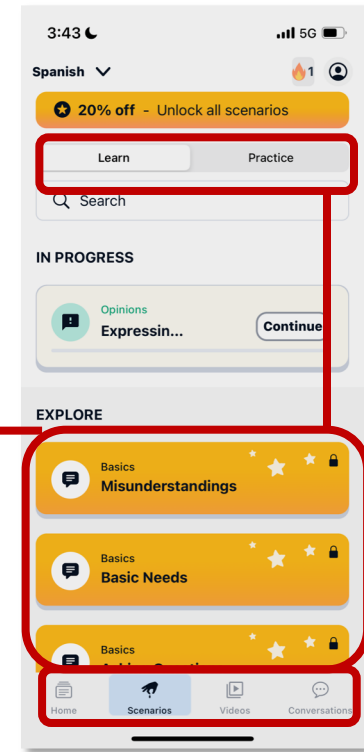


1

Choice of various specific situations
Provided as chats with AI
(conversation training) but others
also as videos or learning scenarios

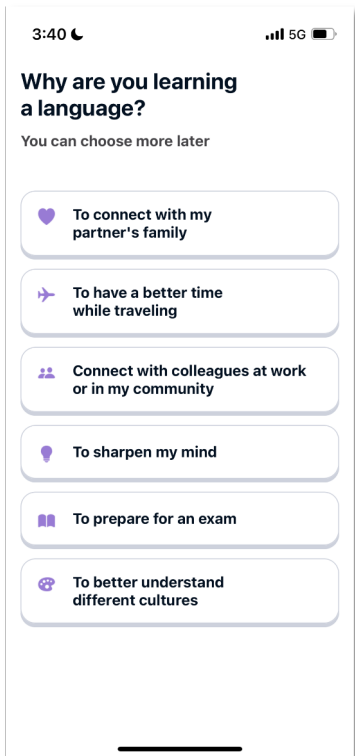
- ✗ Some only accessible with pro version
- ✗ Too many different feature options (for lessons, goal setting,...)
- ✗ Practicing scenarios & conversations for beginners hard without basic vocabulary

2





Use Case 2 & 3: Learn to handle everyday situations; make friends

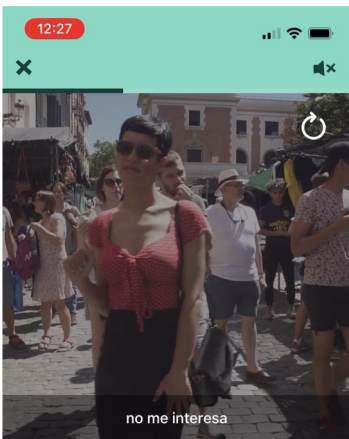


Personalized goal setting and progress structure
(**but** content also depending on pro or basic version)
Detailed level assessment
Practicing speaking, listening, comprehension and basic vocabulary

- ✗ Key phrases and vocabulary not **centrally organized**
- ✗ **No alternative** for listening comprehension and pronunciation when not able to listen to the videos



Use Case 2 & 3: Getting Feedback



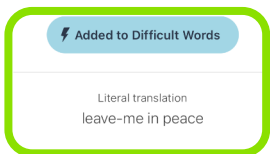
1

✗ Immediate but short feedback (1 sec) without explanation of mistake (grammar, vocabulary,...)



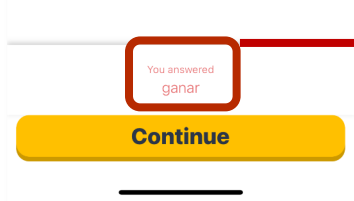
1

Visual metaphor for learning process



2

Extra list for repetitive mistakes
Various translations

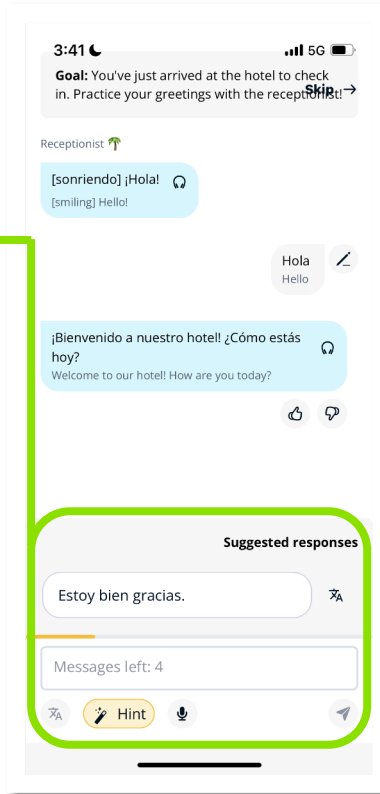


2

✗ No salient feedback on previous mistake, still no explanation

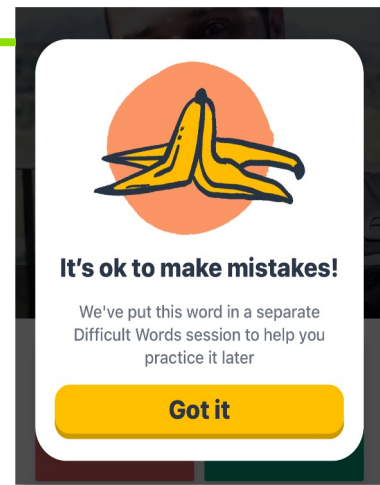
3

Hints and suggested responses provided from MemBot AI [but needs certain level of learning level]



2

Positive encouragement for mistakes [but accessibility of difficult word session not clear]



No account needed

basic version with ads
available

Really basic and
easy interaction and
therefore perfect as
“travel dictionary”



Bravolol

App for only basic
sentences and
vocabulary

Part of a variety of
other language apps

18 different
languages available

30 million users





Home Screen

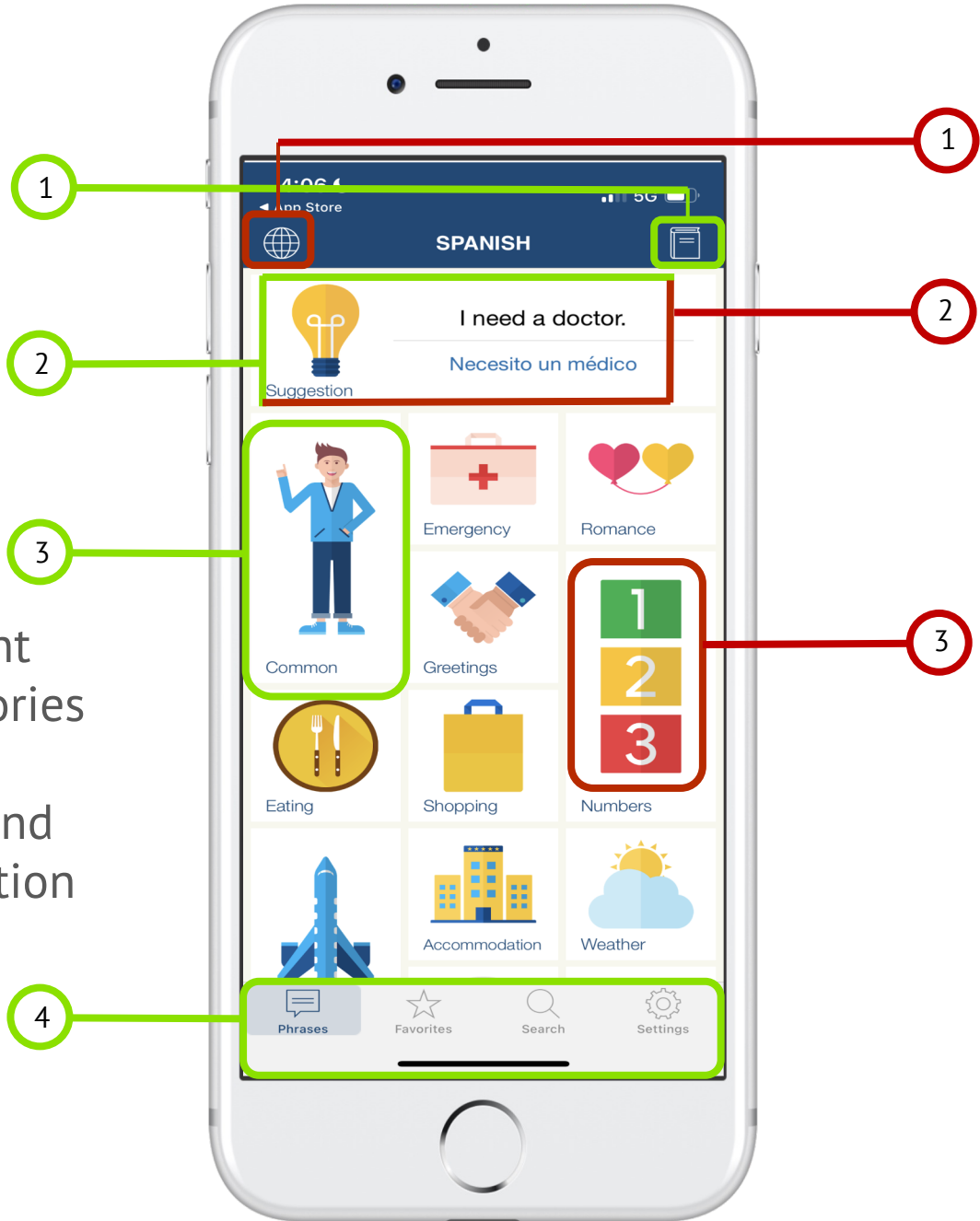
option of connecting a dictionary

Daily suggestions

Easy overview:

- Choice of different topics and categories simply organized
- Shown as icons and with text description

Easy and minimalistic navigation



✗ No switch of language possible: need to download specific app for every language

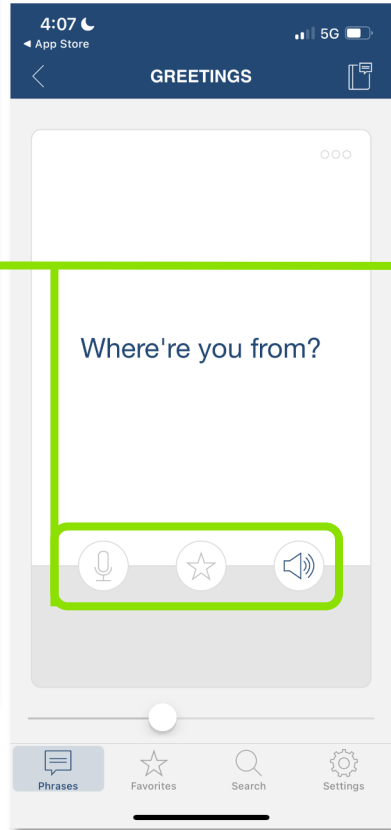
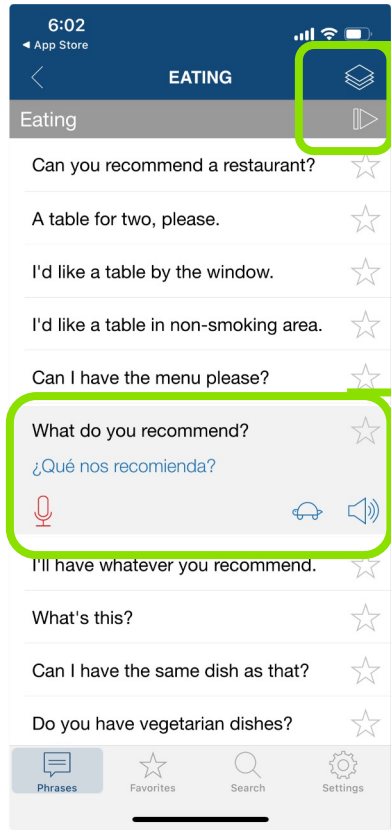
✗ Suggestion randomly chosen and not always helpful

✗ Visual design



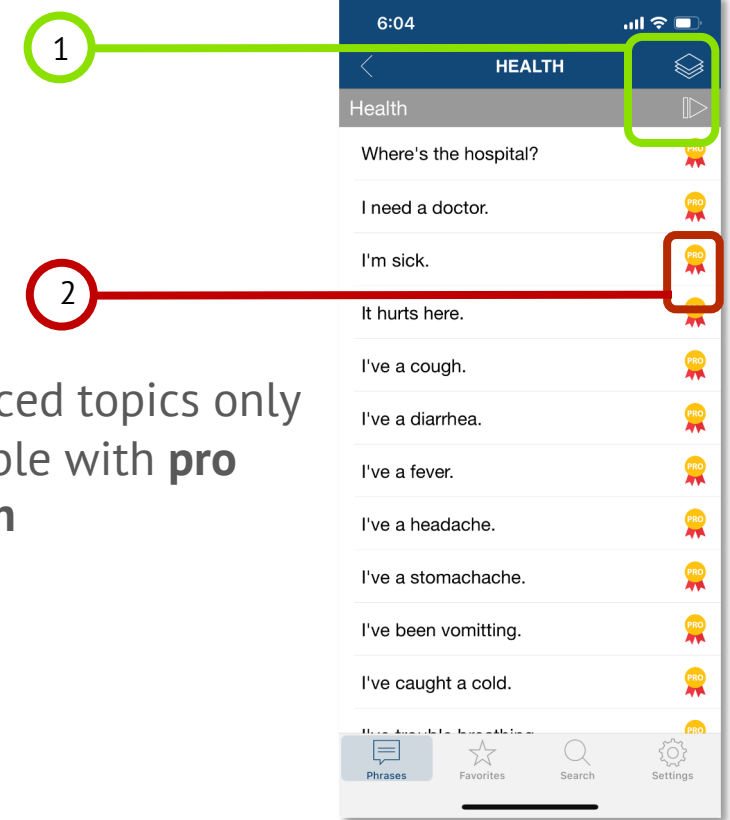
Use Case 1: NA

Use Case 2+3: Everyday Situations and Feedback



Easy switch of learning mode
Basic phrases and vocabulary for **daily use**
simply organized and accessible





















- Practicing listening comprehension, speaking
- ✗ No way of keeping track of own **learning progress**
- ✗ **No Feedback**
- ✗ Visuals really basic: **lack of aesthetics**



✗ Advanced topics only available with **pro version**

✗ Many positive aspects, but in general really **limited functionalities** considering demands of use cases

Competitor Analysis: Summary

	Home Screen	Use Case 1	Use Case 2 & 3	scope of interaction	Feedback	Gamification
						
						
		NA				

Heuristic Evaluation

Identification potential

Usability issues



Heuristic Evaluation

Goal

Completing use cases in competitor products and evaluate using heuristics to **identify potential usability issues** for our main persona Lisa

Method

Materials:

- defined Heuristics
- 2 smartphones with 3 competitor apps

Process:

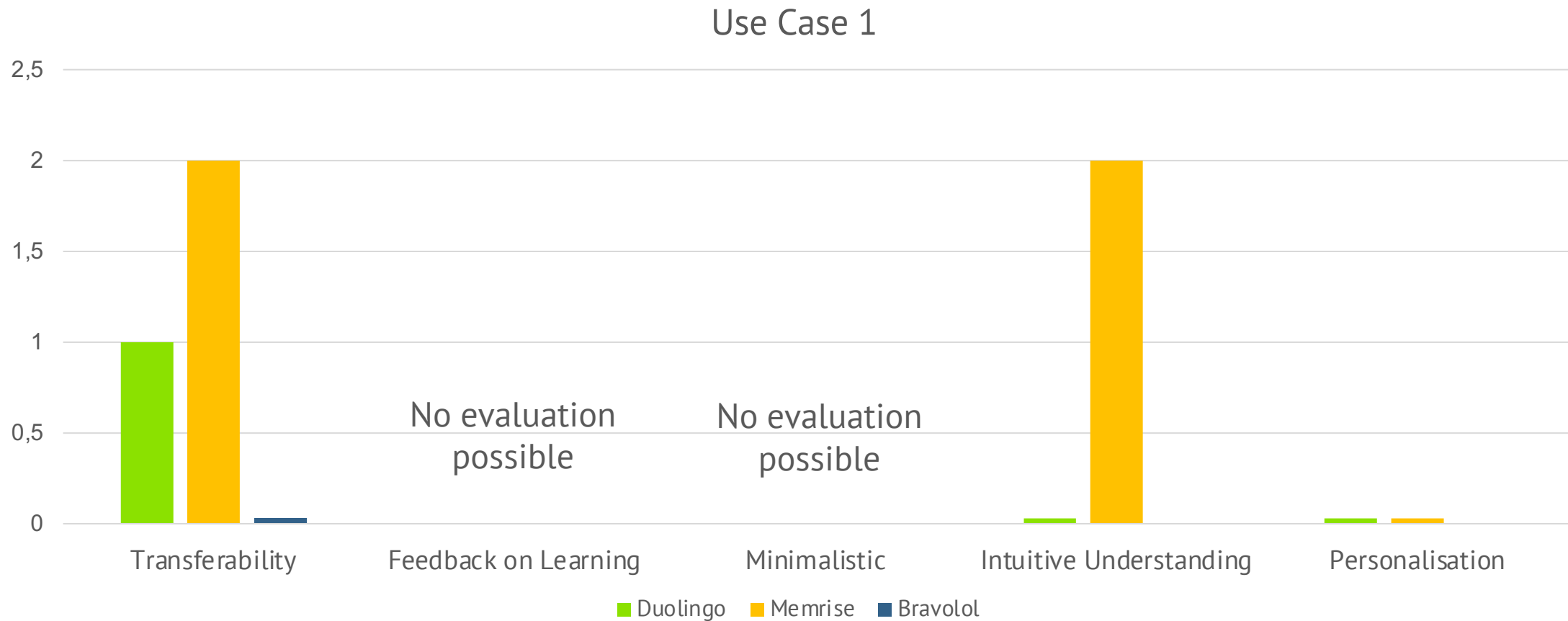
5 UX experts rank 5 heuristics on scale from **0 (poorly implemented) to 10 (implemented very well)** for each competitor and use case:

- Use Case 1: Learn Do's and Don'ts of Spanish culture
- Use Case 2: Learn vocabulary for everyday situation (e.g. visit a restaurant)
- Use Case 3: Learn vocabulary for making friends
- Score is computed by calculated mean of all expert values

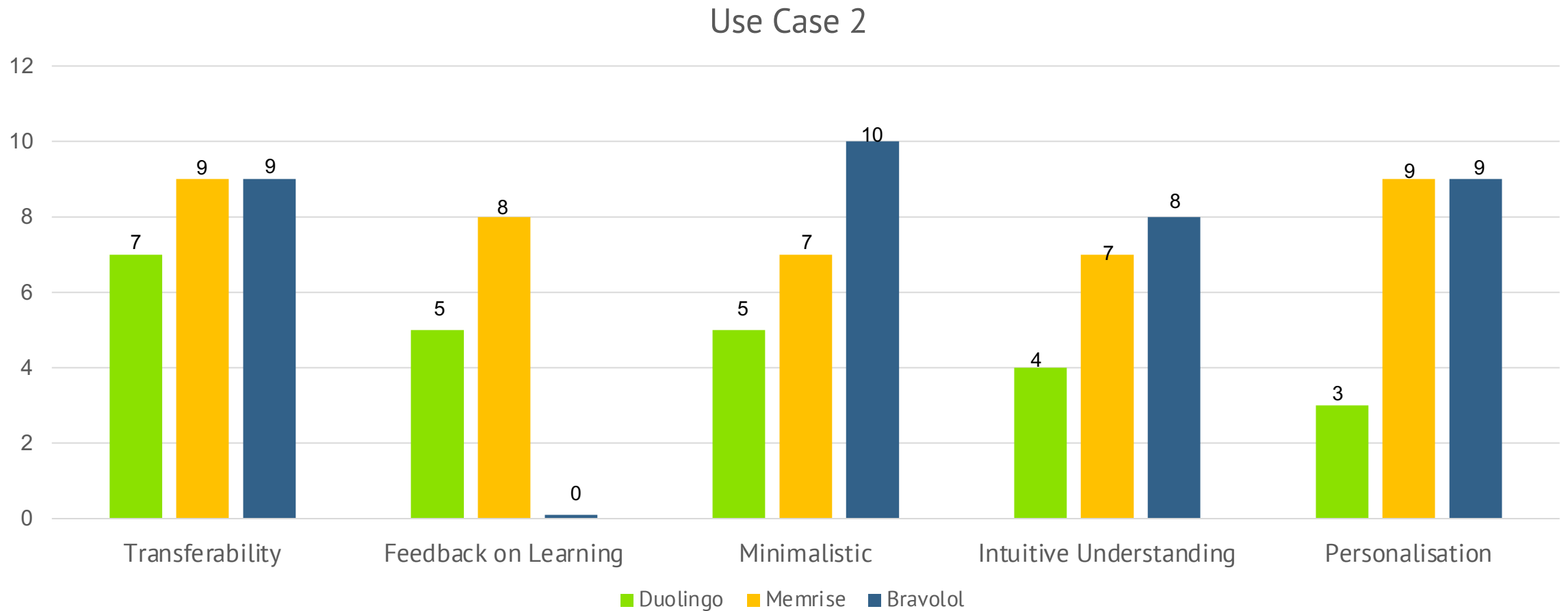
Used Heuristics

Transferability	How much can you use the vocabulary learned in everyday life?
Feedback on Learning	How is the user corrected & is the answer clear enough to learn from the mistake?
Minimalistic	How simple is the app designed? How many colours are used in the app? How bright are the colours?
Intuitive Understanding	How easy to understand are icons? How easy and quickly can you navigate the app?
Personalisation	How well can you choose what you learn (e.g. selecting scenarios)?, Can you save the words you want to remember?

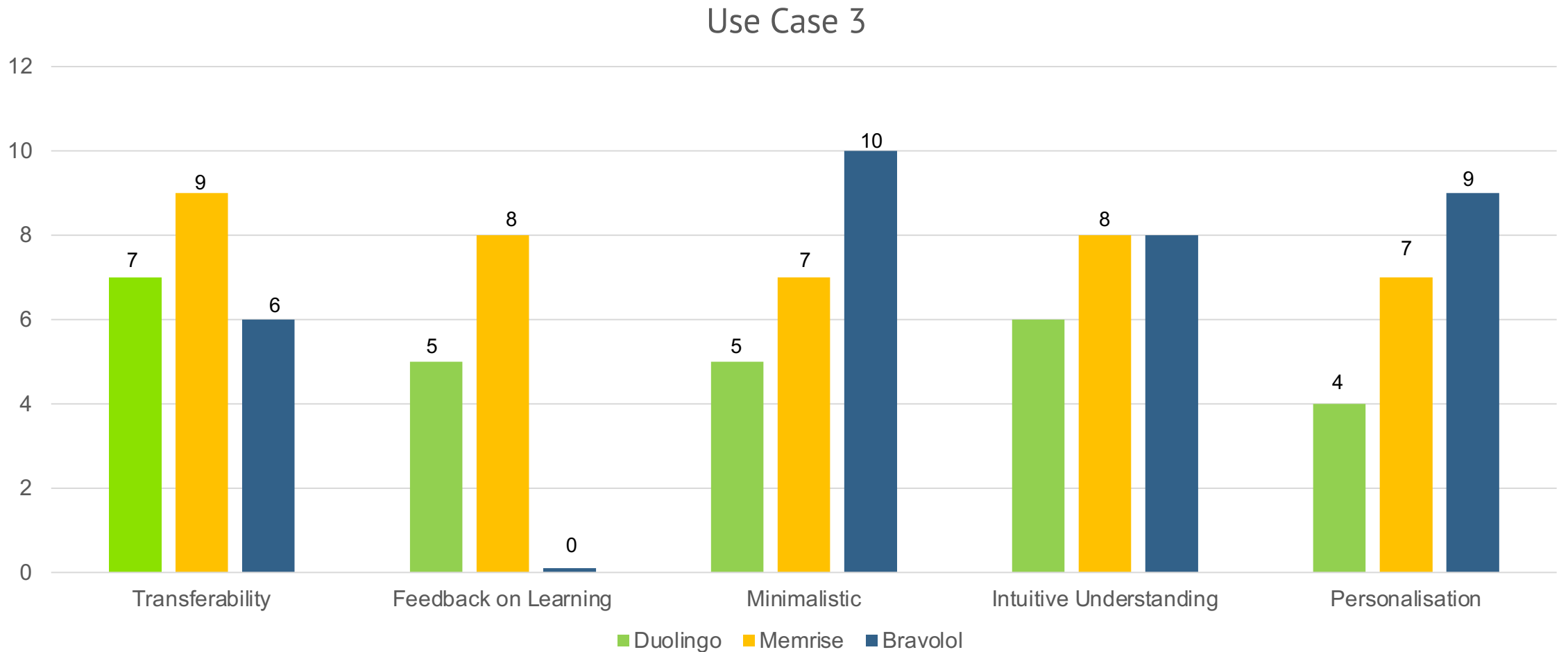
Numeric Results: Use Case 1



Numeric Results: Use Case 2



Numeric Results: Use Case 3



Problem Listing

Problem Details	Problem Severity	Function / Property	Affected Heuristic(s)	Ideas for improvement
No explanation for grammatical errors	4 (Catastrophic)	Learning a Lesson	Feedback	explanation of error and tips for improvement
Words and Sentences sometimes don't fit to the topic of the lesson	3 (major)	Learning a Lesson	Transferability, Personalisation	better matching of topic and content, give individual choices of vocabulary
A lot of tabs / windows leads to no easy navigation of the content possible	3 (major)	Navigation	Intuitive Understanding	simplify lesson selection, fewer features
few themes to choose from (in the free version)	2 (minor usability issue)	Selecting a lesson	Transferability, Personalisation	None - business decision
Homescreen structure messy	1 (cosmetic usability issue)	Navigation	Intuitive Understanding	find a solution to better display the user progress, make homescreen widgets closable
No feedback given	4 (Catastrophic usability issue)	Feedback	Feedback on Learning	Add feedback on recorded audio
It's unclear that swiping left / right is way of navigation	2 (minor usability issue)	Navigation	Intuitive Understanding	Add simple onboarding which shows navigation



Design Recommendations

- **Transferability:**
 - vocabulary and phrases learned should be directly applicable when on holiday, e.g. Memrise conversations “Good morning, which coffee do you want?”
 - Avoid phrases that are not part of typical [holiday] vocabulary (e.g. Duolingo “The duck is eating an apple”)
- **Feedback on Learning:**
 - Feedback should be given in an encouraging way (e.g. Memrise: “You learned a new word!”) and explanation of the error
- **Aim for minimalistic design like Bravolol or Memrise**
 - Aim for simple home screen (e.g. Bravolol)
 - Limit number of tabs to avoid a crowded display (opposite to Duolingo)
 - Limit number of colors (e.g. Memrise)



Design Recommendations

- **Intuitive Understanding:**

- Naming of the tab in addition to an intuitive icon (e.g. Memrise & Bravolol) helps to understand what tab is for/ what content to expect
- Clear home screen structure (e.g. Bravolol) makes first understanding and navigation easy and fast

- **Personalisation:**

- Allow free choice of learning topics (e.g. Bravolol)
- Make it possible to save words to list which are harder or need to be used often (e.g. Memrise)
- Provide clear naming and descriptions for topics and do not mix multiple topics together (as done in Duolingo) to avoid confusion



Design Recommendations

- **Intuitive Understanding:**

- Naming of the tab in addition to an intuitive icon (e.g. Memrise & Bravolol) helps to understand what tab is for/ what content to expect
- Clear home screen structure (e.g. Bravolol) makes first understanding and navigation easy and fast

- **Personalisation:**

- Allow free choice of content
- Make it possible to customise content to be used often (e.g. Bravolol)
- Provide clear naming for content to avoid mix multiple topics and confusion

Due to the results of the Heuristic Evaluation and Competitor Analysis, **Duolingo won't be part of further evaluation**



Cognitive Walkthrough

Addressing Limitations of
Heuristic Evaluation





Cognitive Walkthrough

Goal

Identifying potential usability issues by completing use cases in our competitor products from our users point of view.

Method

Materials:

- defined Task Analysis
- 1 smartphones with 2 competitor apps

Process:

1 UX experts tries to empathize and walk the shoes of a **normal user**. Trying to complete each Task Analysis for each chosen App: Memrise & Bravolol

- Use Case/ Task 2: Learn vocabulary for everyday situation (e.g. visit a restaurant)
- Analyse on which level problems arise
 - special focus on problems resulting from Heuristic evaluation:
 - feedback, intuitive understanding, transferability



Cognitive Walkthrough

Method

Process:

- **Duolingo will not be further evaluated** due to bad results in all heuristics
- good examples for Use Case 3 (Culture) couldn't be found in any of the competitors
 - will not be evaluated in Cognitive Walkthrough
 - instead, this will be a focus during the design thinking
- Cognitive Walkthrough will be used to **compare Use Case 2 / Use Case 3** (due to similar steps of the 2 Use Cases only one will be evaluated) **between Memrise and Bravolol** to differentiate both apps better
 - apps still quite different
 - mix of them might be superior



Memrise

0
Task 2: Learn how to handle everyday situation in Spanish
 Prerequisites: Requires to open the app and run through the initial setup on first start. The setup includes entering the desired language and the personal language level.
 >22s

Do 1, then 2. Depending on learning session goal do 3 and/or 4.

1
 Choose the context "Everyday Situations"
 1s

2
 Choose a szenario
 5s

there are also topics in the chat list, but no search/filter functions for the missions -> unsatisfied

First do 2.1, then 2.2.

2.1
 View list of szenarios
 4s

2.2
 Click on selected szenario
 1s

3
 Learn phrases / vocabulary
 >16s

Repeat until the end of lesson. First do 3.1, then 3.2. followed by 3.3.

3.1
 View phrase / word in both languages
 5s

3.2
 Exercise
 >10s

3.3
 Click on "Next"
 1s

Repeat until feedback is good or skip. Do either 3.2.1 or 3.2.2 depending on exercise, followed by 3.2.3.

3.2.1
 Speak phrase / word into microphone
 5s

3.2.2
 Write translation of phrase / word
 10s

3.2.3
 Get feedback
 5s

4
 Practice situations
 >32s

"Missionen" and "Chats" both end up within a Chat, no noticeable difference -> unnecessary confusion

Repeat for every situation until finished. First do 4.1, then 4.2. followed by 4.3.

4.1
 See video / chat
 15s

4.2
 Exercise
 >16s

4.3
 Click on "Next"
 1s

unclear upfront, how long the videos are. Frustrates me to skip or click back

Repeat until feedback is good or skip. Do 4.2.1, 4.2.2, 4.2.3 and 4.2.4 in order.

4.2.1
 View possible Spanish responses
 5s

4.2.2
 Select appropriate response
 1s

4.2.3
 Speak appropriate response into microphone
 5s

4.2.4
 Get feedback
 5s



Bravolol

0
 Task 2: **Learn** how to handle everyday situation in Spanish

Prerequisites: Requires to open the app and run through the initial setup on first start. The setup includes entering the desired language and the personal language level.

>22s

Do 1, then 2. Depending on learning session goal do 3 and/or 4.

1
 Choose the context "Everyday Situations"
 1s

2
 Choose a szenario
 5s

First do 2.1, then 2.2.

2.1
 View list of szenarios
 4s

2.2
 Click on selected szenario
 1s

3
 Learn phrases / vocabulary
 >16s

Repeat until the end of lesson. First do 3.1, then 3.2. followed by 3.3.

3.1
 View phrase / word in both languages
 5s

Only from german --> spanish possible, I feel restricted..

3.2
 Exercise
 >10s

3.3
 Click on "Next"
 1s

Repeat until feedback is good or skip. Do either 3.2.1 or 3.2.2 depending on exercise, followed by 3.2.3.

3.2.1
 Speak phrase / word into microphone
 5s

3.2.2
 Write translation of phrase / word
 10s

3.2.3
 Get feedback
 5s

4
 Practice situations
 >32s

Repeat for every situation until finished. First do 4.1, then 4.2. followed by 4.3.

4.1
 See video / chat
 15s

4.2
 Exercise
 >16s

4.3
 Click on "Next"
 1s

Which exercise, I can't interact with the App (no input possible) !

Repeat until feedback is good or skip. Do 4.2.1, 4.2.2, 4.2.3 and 4.2.4 in order.

4.2.1
 View possible Spanish responses
 5s

4.2.2
 Select appropriate response
 5s

Can't select anything, I'm confused

4.2.3
 Speak appropriate response into microphone
 5s

4.2.4
 Get feedback
 5s

I can speak into the App but don't get any Feedback at all.. I'm disappointed and frustrated



Cognitive Walkthrough - Summary

- Scenario/Content selection works better in Bravolo
- But: Practice scenarios works better in Memrise

☒ **Combination of both apps might be advisable**





User Interviews

Qualitative User Testing

User Interviews

Goal

Identifying **potential usability issues** for our main persona Lisa and effectiveness of function implementation by conducting moderated task-based (based on our 3 use cases) user interviews

Method

Participants:

- 2 Participants (1 male and 1 female) of the age of 25 that are fitting with the needs of our main persona “Lisa”
- Participants were non-users of the apps

Materials:

- Smartphone with downloaded version of Memrise or Bravolol App (based on findings of our Heuristic Evaluation) ready to use for participants
- Recording device, guideline and protocol

User Interviews

Process:

- Guided Interview with 1 Interviewer, 1 Observer and 1 Interviewee
- Timeline: 1 hour
- Random assignment of one of the 2 Apps (Memrise or Bravolol)
- After **general questions** about traveling and use of language learning apps the participants were asked to **perform 2 tasks** (based on 3 Use cases) within the app:
 - Task 1: Imagining an **everyday situation in Spain** (ordering coffee) and try to prepare with the language learning app [Need for fitting vocabulary and sentences]
 - Task 2: Want to find out more about **do's and don'ts of Spanish culture**
- Lastly:
AffectGrid on feedback and general visual design of the app

Interview Goals:

- Find out how good they can perform the 2 tasks even though they never used it before
= **Is app easy to navigate for user?**
- Determine **how minimalistic** user wants the app to be designed and **how much gamification** is wanted
- Test how user perceives **feedback** in app
- Is learned content **applicable in real world** situations?

Findings Interview #1 - Memrise

- mostly **minimalistic design**: organized, easy to navigate (except homescreen), clean
- wished for **more gamification**: to have a stronger bond to the app and higher commitment to practice
- **feedback was not** satisfying needed some time to understand
- Various categories are rated as good and perceived as 'classic'
- Multimodal learning with videos and chats is rated as positive due to the multimodal learning effect: but features are expandable
- Not all functions of the categories (e.g. premium area, 'scenario' as a name for vocabulary lists for corresponding scenarios) are recognized correctly; symbols and wording obviously need to be presented or formulated more clearly



Findings Interview #1 - Memrise

Use Cases

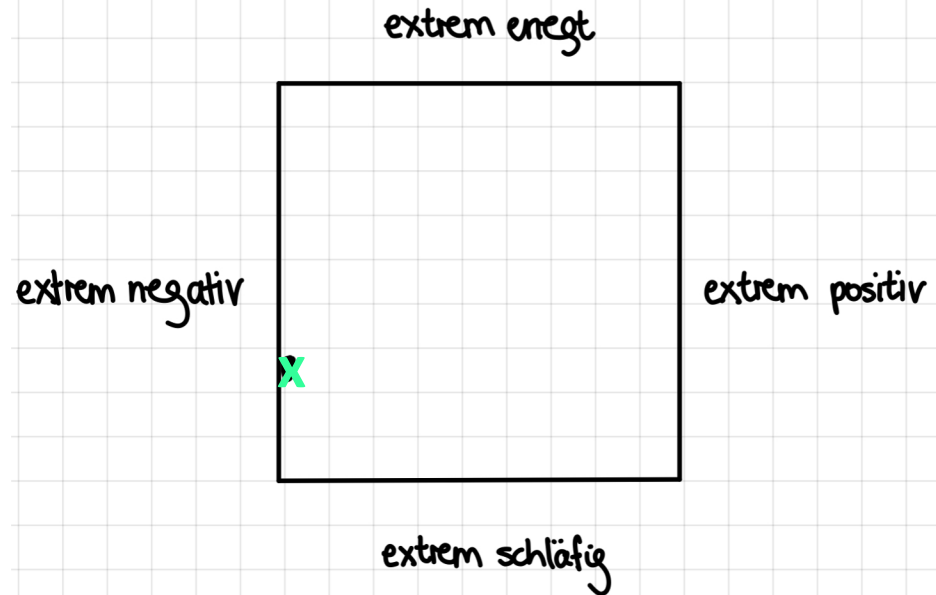
- Task 1:
 - Features the app has, are appreciated but **implementation expandable** = content just **partly applicable** to real life
 - potentially solvable, but more for general scenarios, not for more specific scenarios, would rather use external resources
 -
- Task 2:
 - Options for cultural input **not sufficient** enough: cannot be solved because it contains content but cannot be deciphered without language knowledge
 - But content was wished for:
travel companion rather than language learning app



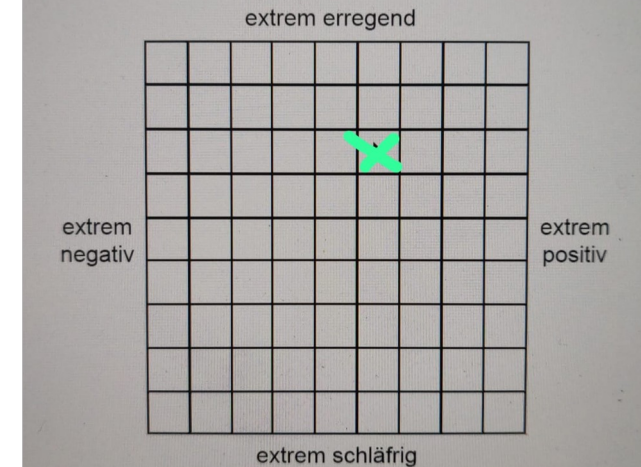
Findings Interview #1 - Memrise

AffectGrid

Wie empfindest du die Darstellung des Fehlerfeedbacks?



Wie empfindest du die Gestaltung der App generell?



Findings Interview #1 - Memrise

User Quotes



„**Strukturiertes Design**, aber die **Startseite fand ich nicht so** verständlich. Schlicht und nicht so bunt, vielleicht wären ein paar mehr Farben ganz gut gewesen, ist schon **sehr minimalistisch gehalten, fand ich aber auch ganz gut so**“

*“Hier sind Videos, kann man sich anschauen, um Wörter zu lernen, find ich cool weil das auch **multimodales Lernen** ermöglicht, nicht nur Texte zu bearbeiten“*

*„Die Chats sind zwar eine nette Idee, aber da sind z.B. DeppL etc. als Übersetzungstool effektiver, **die App hat ja eigentlich einen anderen Zweck**. Als Zusatzfunktion einen Übersetzer fänd ich aber ganz praktisch“*

Findings Interview #2 - Bravolol

- **Categories are generally good**, but are not immediately assignable and intuitive, and are perceived as **confusing**
- Expectations of **subcategories** (e.g. in the breakfast category, subcategory pancakes) were not met, otherwise expectations of selection were met
- The imagery of the icons was rated as positive but rather childish, an overall overview was desired for clarity

Use Cases

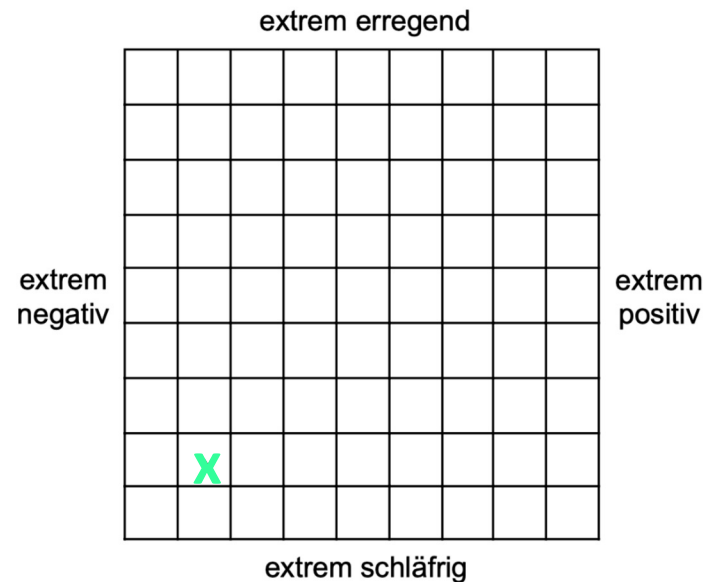
- Task 1:
 - potentially solvable, but more for general scenarios, not for more specific scenarios
 - Rather than using app for learning, participant was positively surprised by feature to listen to common sentences directly (and use it for everyday situation)
- Task 2: cannot be solved because it does not exist (no cultural content in the app)



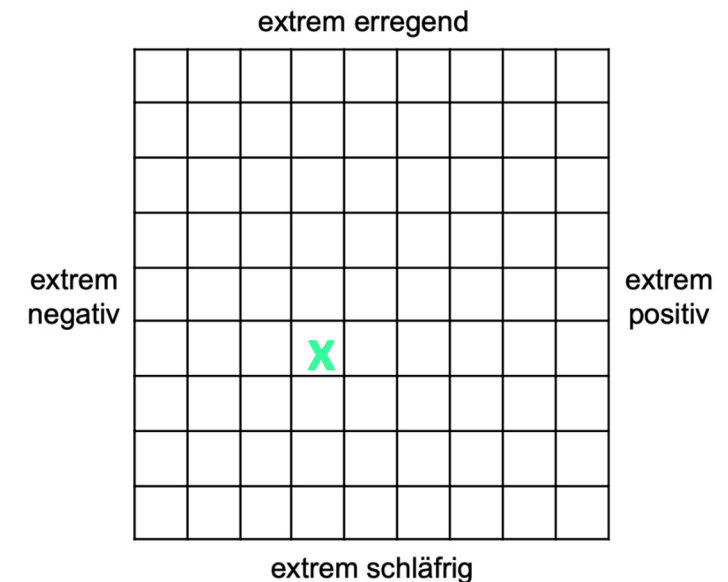
Findings Interview #2 - Bravolol

AffectGrid

Wie empfindest du die Darstellung
des Fehlerfeedbacks?



Wie empfindest du die Gestaltung
der App generell?



Findings Interview #2 - Bravolol

User Quotes

„Wo etwas über Kultur in der App zu finden wäre wüsste ich jetzt nicht so ganz, würde auch nicht auf die Idee kommen in einer Sprachapp danach zu suchen (...) finde ich aber sehr smart, da es ein doppeltes Learning ist und auch zum Sprache lernen dazugehört. (...) es ist respektvoll über die Kultur Bescheid zu wissen - Reiseführermässig: was isst man da, was sind typische Gebräuche, wann sind Essenszeiten, wie verhält man sich auf der Straße, Trinkgeld, wo kann man sich etwas anschauen ,wie man an Locals rankommt,“



“Ich finde es gut, dass man Sätze abspielen kann ohne dass man es vielleicht aussprechen kann weil man dann direkt verstanden wird“

“Icons finde ich gut, weil man es direkt bildlich hat, um was es eigentlich geht, stört nur, dass man nicht alles auf einmal sieht und man ein bisschen mehr suchen muss, um was zu finden“

User Interviews - Summary

1. Find out how good they can perform the 2 tasks even though they never used it before

= **Is app easy to navigate for user?**

- Task 1 is performable in Memrise but needs to be improved: feature satisfaction varies
- In Bravolol Task 1 is only partially successful
- Task 2 (cultural content) is not applicable in both apps and leads to disappointment for the users

2. Determine **how minimalistic** user wants the app to be designed and **how much gamification** is wanted

- The minimalistic structure from Bravolol was much appreciated
- Nevertheless, the overall design from Memrise was rated better from Interviewee 1
- Interviewee 1 also mentioned to like more gamification (like Duolingo has)
- = perfect amount between minimalism and gamification needs to be further explored

3. Test how user perceives **feedback** in app

- Both interviewees were extremely unsatisfied with the feedback they were given by the apps

4. Is learned content **applicable in real world** situations?

- Issue was only partly addressed and needs further research

Empathy

- What would you want to learn about culture in a new country (Spain)?
- What cultural things should address a language learning app?

Define

- Sum up the desired cultural content and, associated therewith, wishes, needs, emotions and fear.

Ideate

Based on Bravolol-App:

- Sketch ideas where to locate cultural content on home screen.
- Sketch ideas how the content should be learned.
- Sketch ideas how to make the process engaging for the user.

Proto- type

- Develop one prototype based on the previous ideas.

Test

- Gather feedback from all participants, discuss and find similarities and differences from both ideas

Goal:

- Find out what kind of cultural content the user wishes for and expects

Used materials:

- Sticky Notes
- Pencils & paper
- Whiteboard

Process:

2 participants were moderated by 1 expert.

Persona **Lisa** was introduced (including needs & pains) at beginning so that participants could empathize with her .

Each step was first completed alone, then discussed in the group to choose the best ideas.

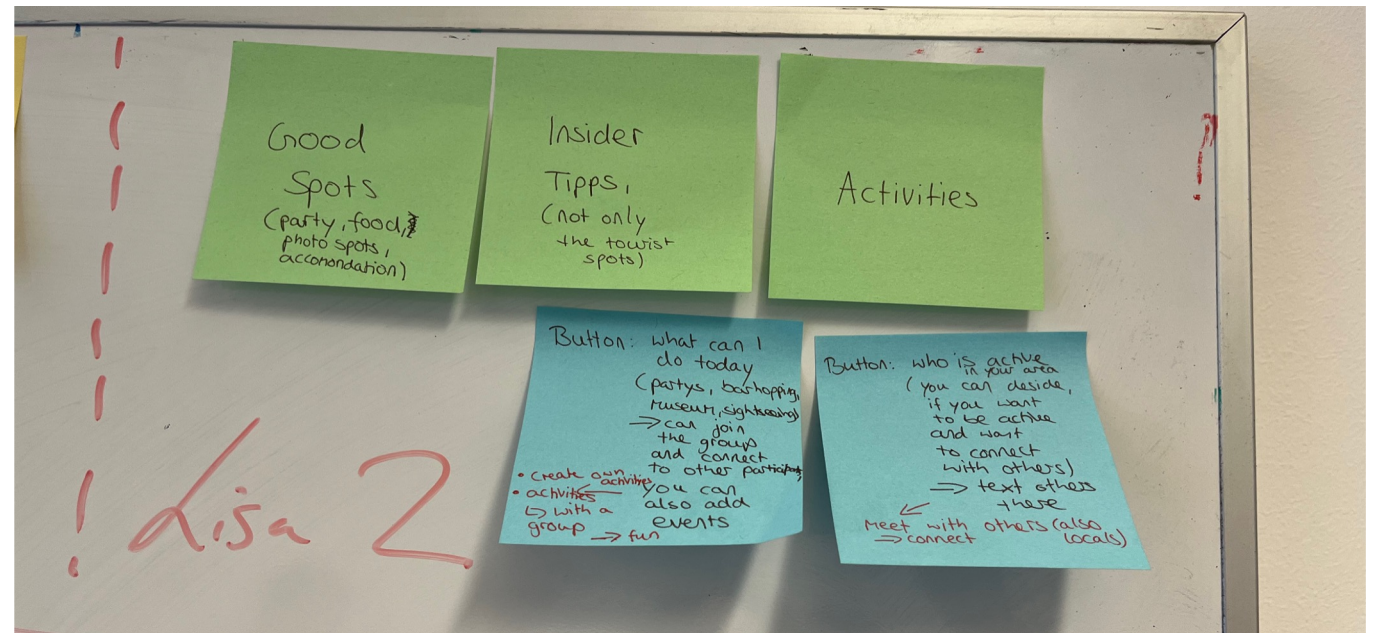
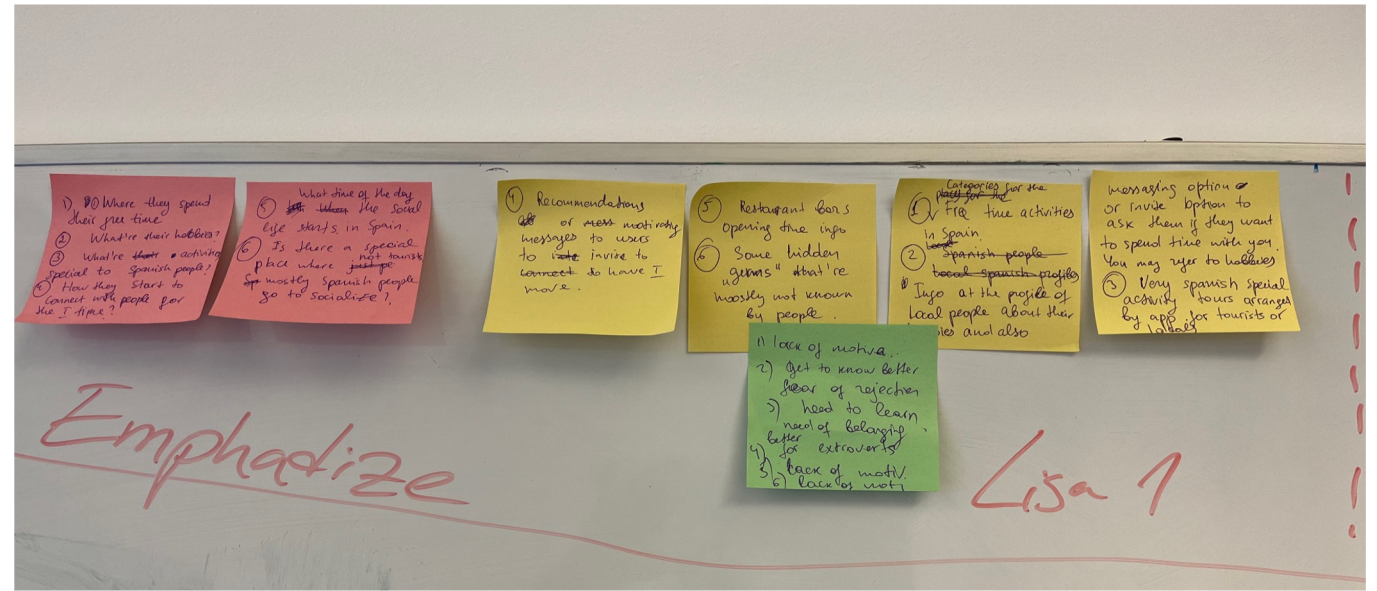
Empathy

Imagine you are Lisa and want to learn about the social culture of Spain, because you just arrived and now want to connect to locals for the first time.

What do you want to know and why?

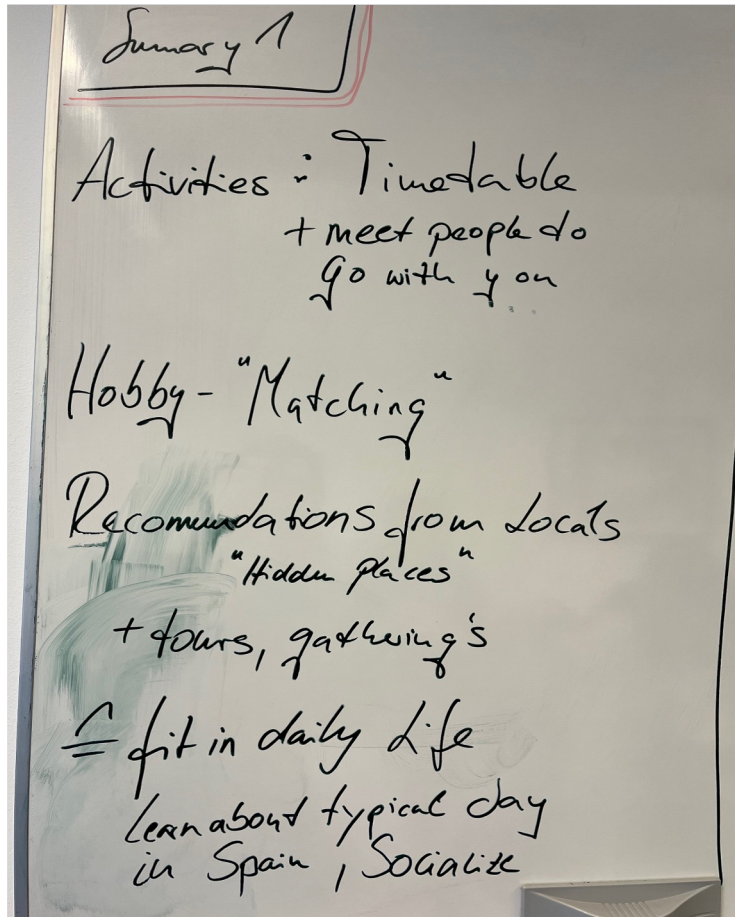
Same scenario: But now you want to use your language learning app.

What content would you expect/ do you wish for?



Define

Now sum up the desired cultural content and, associated therewith, wishes, needs, emotions and fears.



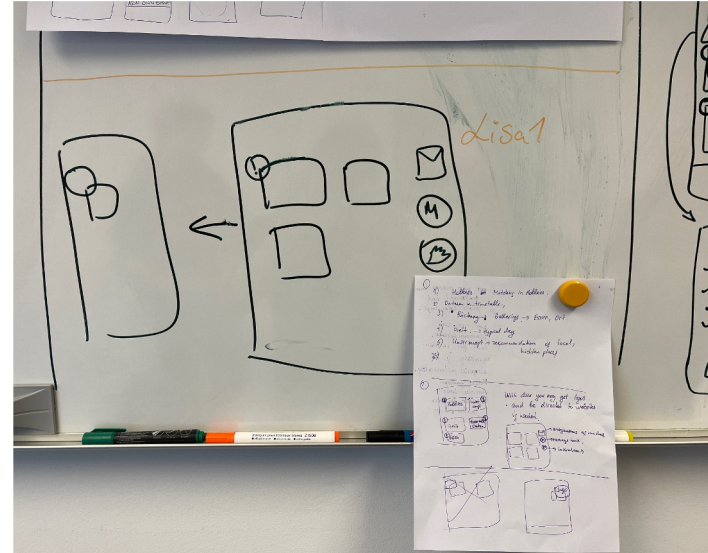
- Both were mostly hoping for **inspiration and recommendations from locals**:
hidden 'germs', must do places (restaurants, clubs,...)
- But also **social activities**:
Where so Spanish people hang out? What kind of activities do they like? When do they typically meet up and how?
- Therefore they were mostly interested in features that allows **recommendations from or connecting with locals**
- caused by **desire to be part of the Spanish culture** without being rejected or exposed as a tourist
- Also lack of motivation and time

Ideate

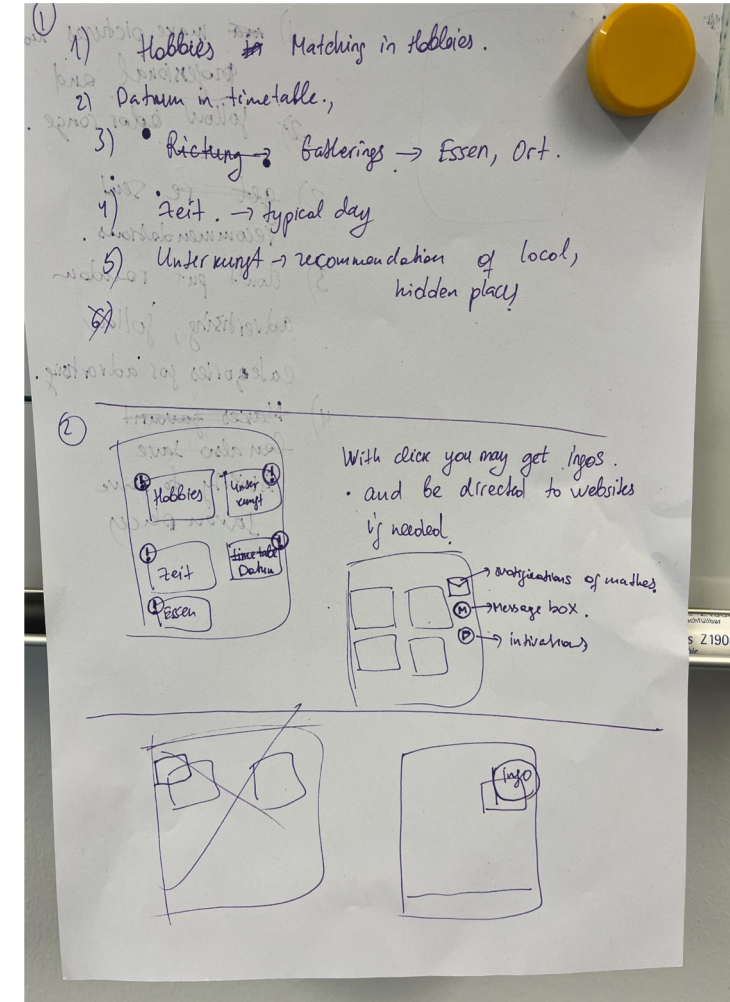
Short exploration of the App "Bravolol":

After you have seen the home screen of the app, think **about where the cultural content could be located.** (1) Also think about **how** you would like to learn the content (2) and how you **want to be engaged** in the process of learning (3).

Lisa 1



- Lisa 1 wanted to have an option for messaging & matching with locals
- But also included in the lectures/ topic page: recommendations and insider tips
- Also, more consistency within the app with a general more clean and visual attractive design

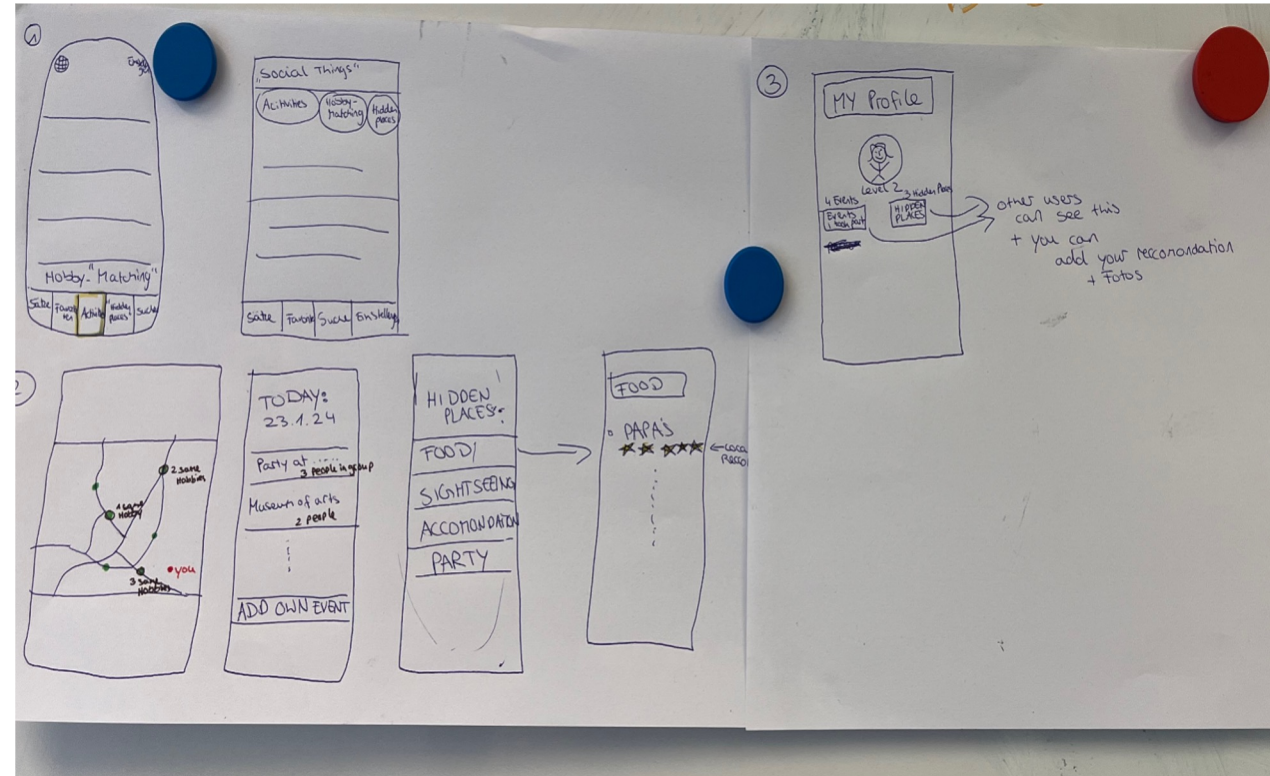


Ideate

Short exploration of the App "Bravolol":

After you have seen the home screen of the app, think **about where the cultural content could be located.** (1)
Also think about **how** you would like to learn the content (2) and how you **want to be engaged** in the process of learning (3).

Lisa 2



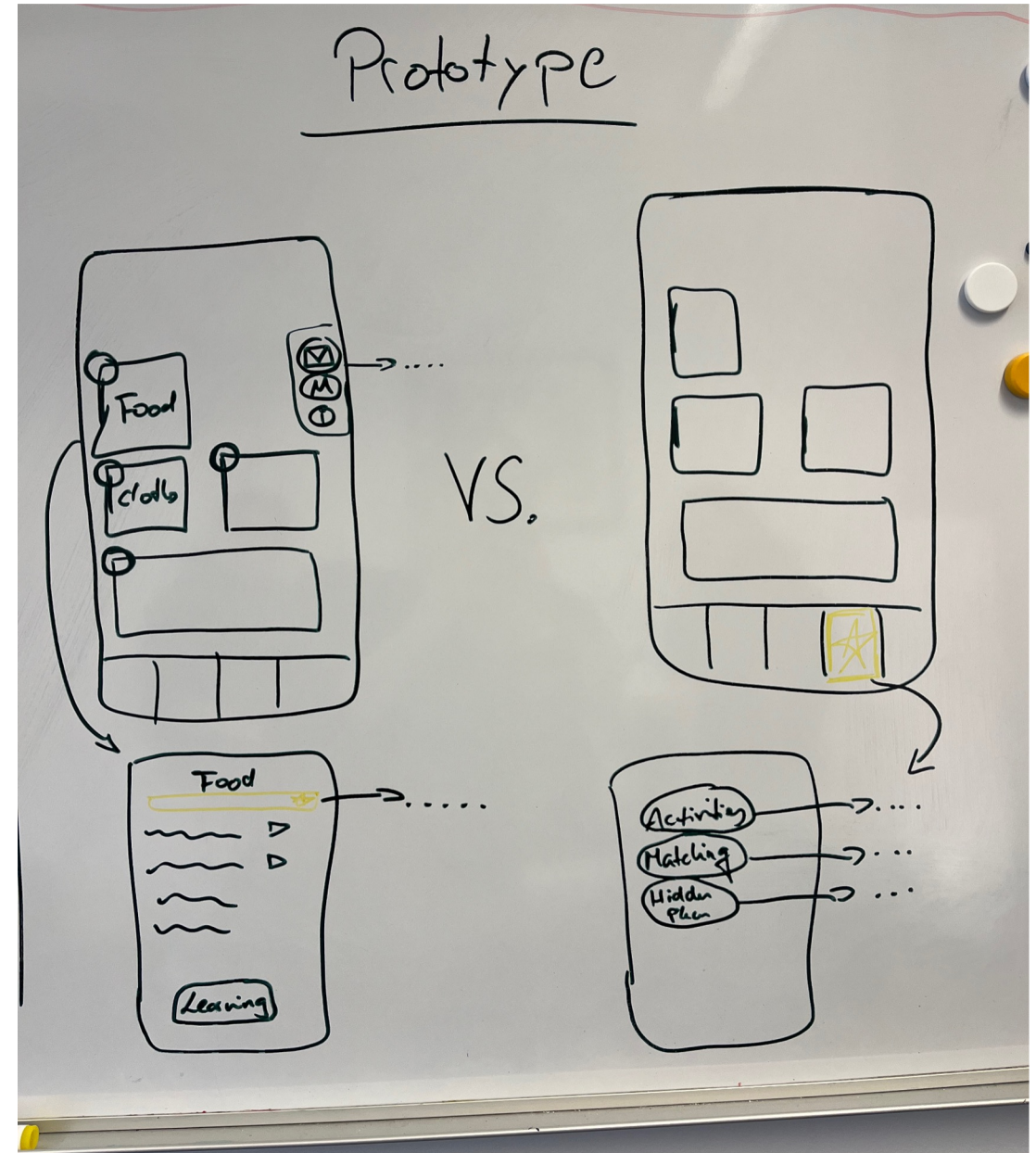
- Lisa 2 rather wanted to have an **extra tab** mostly for interacting and connecting with people
- A lot of features where you can match and schedule activities together and see what others are up to:
Mix of dating apps and social network functionalities

Prototype

Summing up the ideas together to a prototype based on differences and similarities.

2 versions:

- **Include the cultural content** in the structure of the topic and learning sessions VS.
- A **external tab** dedicated to culture and social things where you can **deep dive** in wished content



Test

Lisa 1

+ What worked ^{Lisa 1 about Lisa 2}

- 1) Local recommending rating is nice to have
- 2) "Suchen" option. nice to find quickly

- what could be improved

- 1) Simplicity
- 2) Categories selection.

Wrap up:

Feedback each others ideas

- What worked well/ what did you like
- What could be improved
- Open Questions
- Additional Ideas

? Questions

① Is this still simple for a user to have too many buttons for socializing in lang. learning app?

② Can you provide security while some people share location?

③ Is ~~it~~ sightseeing ~~helpful~~ helpful for becoming a local? It's usually ~~to~~ full of tourists

! Ideas

1) ~~It~~ Map should be placed with ~~Einstellungen~~ ~~can~~ ~~is~~ nice to ~~have~~ Add own event is nice to have, but if you want to experience some local experience, it's better to join rather than arrange

Test

Lisa 2

+ What worked

- its good integrated in the whole learning process
- I like the button with the Recommendations
- nice that you don't have extra Buttons and it's integrated

Lisa 2 about Lisa 1

- What could be improved

- maybe its a little bit confusing for the users where you can find the extra part (with Activities, Accommodation....)

Wrap up:

Feedback each others ideas

- What worked well/ what did you like
- What could be improved
- Open Questions
- Additional Ideas

? Questions

- where can you match others and how could you do that

! Ideas

- Make it more salient
→ maybe with a frame

Design Thinking Workshop: Summary

Empathy

Define

Ideate

Proto-
type

Test

- Matching view on defining “cultural content”: find hidden “germs”, trending spots and insider local tips,...
- One major aspect that we didn’t acknowledge until now - **Socializing:**
 - Lisa would not only like to know what locals typically do but would also like to be a part of it
 - Having an easy way of connecting with them
 - “Live like a local with locals”
- “**Do’s and Don’ts behavior**” or **typical Spanish traditions** (like traditional food) were not named in the Empathy/ Define process
- 2 ways of including content in a language learning app:
 - **included in the lectures/ topic** page: recommendations and insider tips along with an additional way of messaging and matching other people **VS.**
 - an **extra tab** mostly for interacting and connecting with people (social network features)
- **Presentation of cultural** content was not addressed so much by participant: lack of time and/or unclear instructions as possible reasons
☒ **Need for more research**



Inspiration



Typograhhy

FONT:
Montserrat
 Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj
 Kk Ll Mm Nn Oo Pp Qq Rr Ss
 Tt Uu Vv Ww Xx Yy Zz

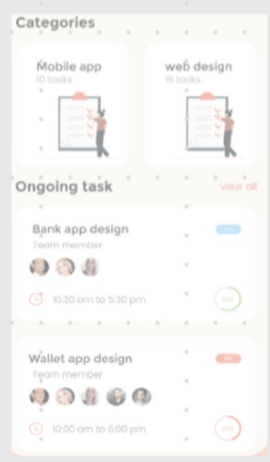
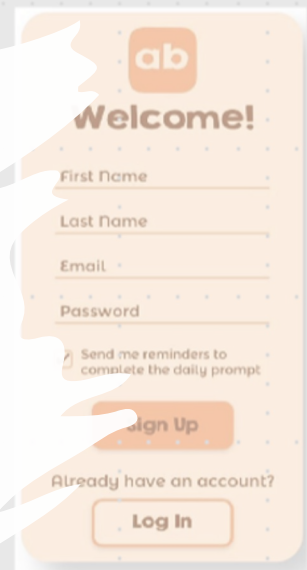
Prototype & Moodboard

Icons & Layout



straight lines

Simple lines & shapes



Colour



Peach



Prototype & Moodboard

- Figma low fidelity prototype to show results from Competitor Analysis, Heuristic Evaluation, Cognitive Walkthrough, User Interviews and Design Thinking Workshop
- Potential option for: “Cultural Content included in a language learning app”
- Access to prototype [here](#)
- Additional mood board shows look and feel of final app

Next Steps?

- Further Research on Use Case 1:
 - How should the cultural content be presented (level of engagement and interaction)
 - More detailed definition of content
- Further Research need on Use Case 2+3:
 - Feedback: how should it be presented and what should be included
 - What amount of Gamification is needed/ wished for
 - Personalization to attract more than one learning type/ Persona

Home Screen

Topic overview:

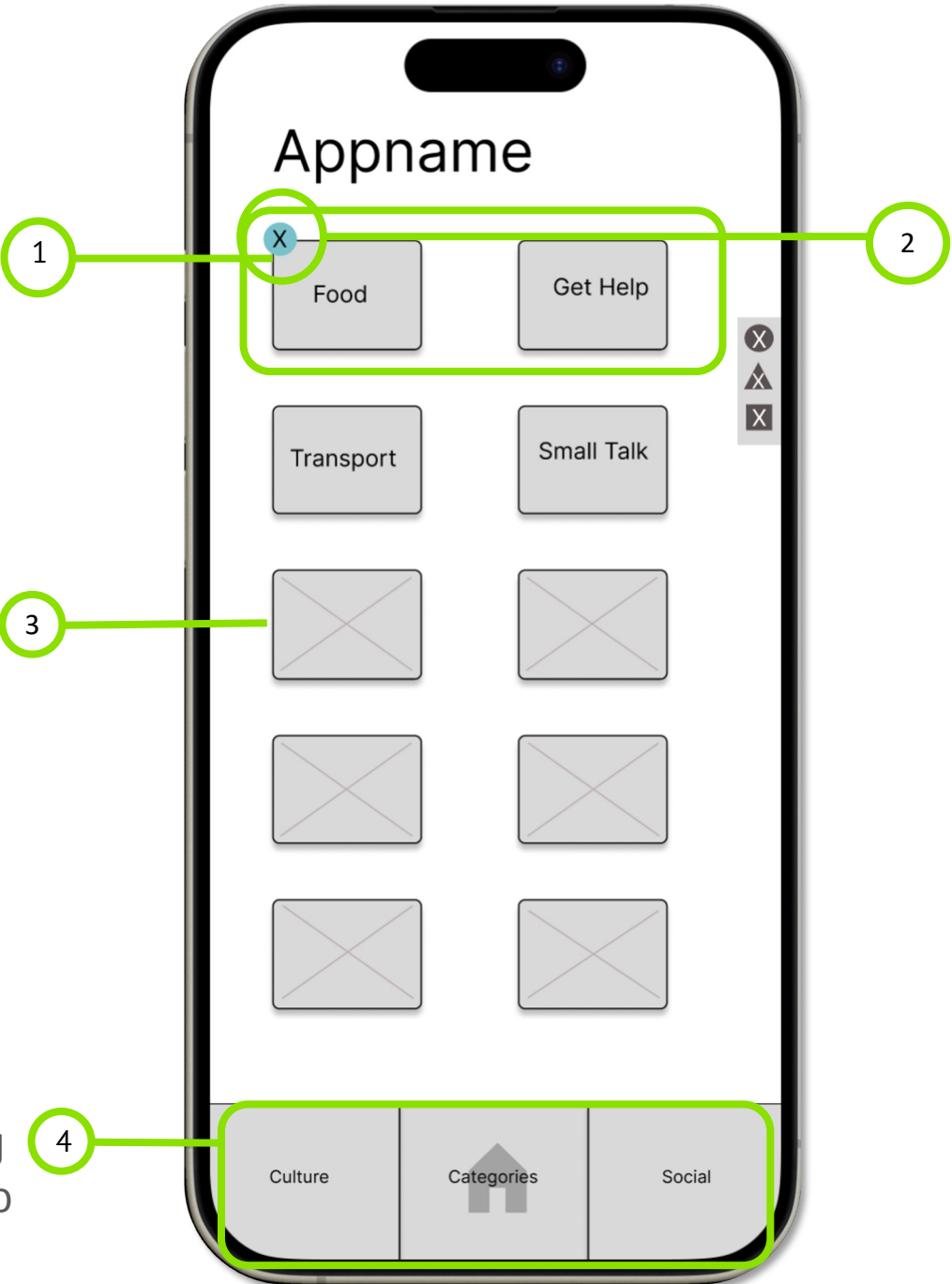
- Easy to chose
- Clear structure based on Bravolol App

Minimalistic Visual Design:

- No distraction
- Limited amount of elements

Navigation:

Limited amount of tabs with symbol and labelling (improvement to Duolingo from HE)



Simple updates:

Shows that new content is available

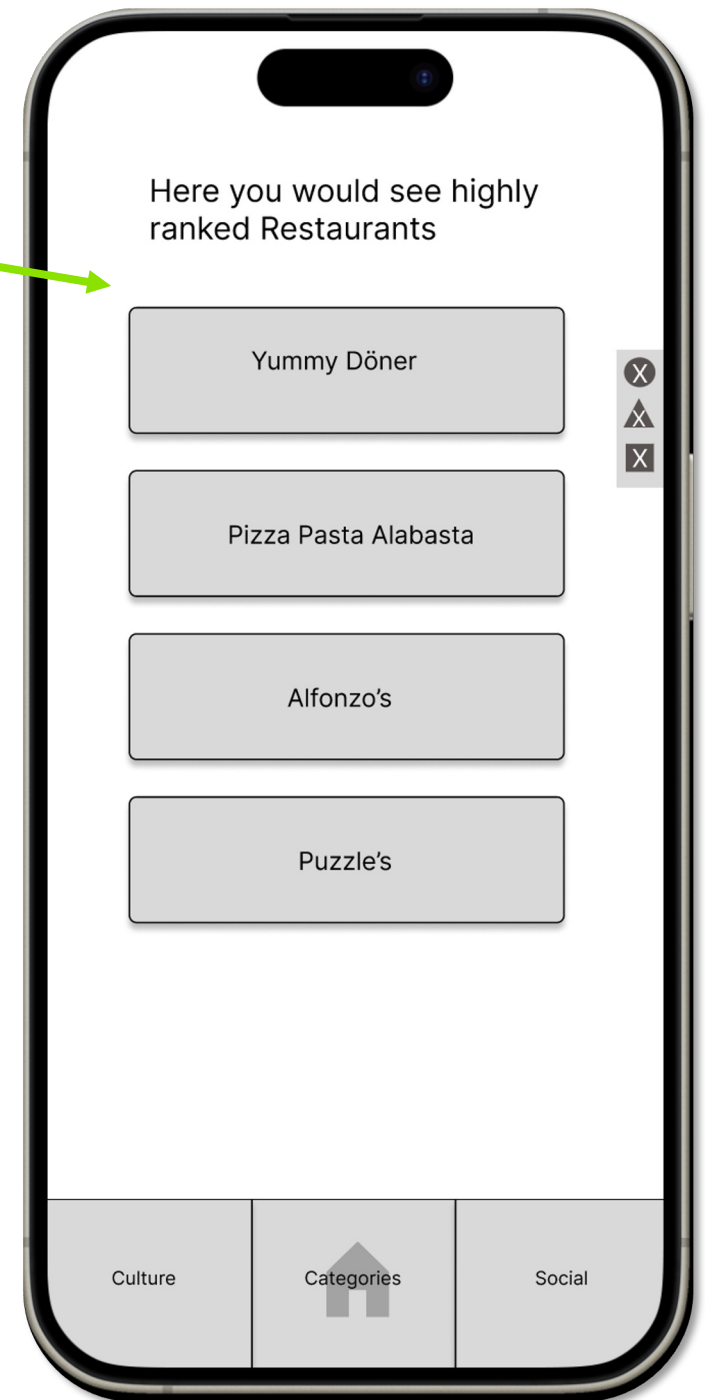
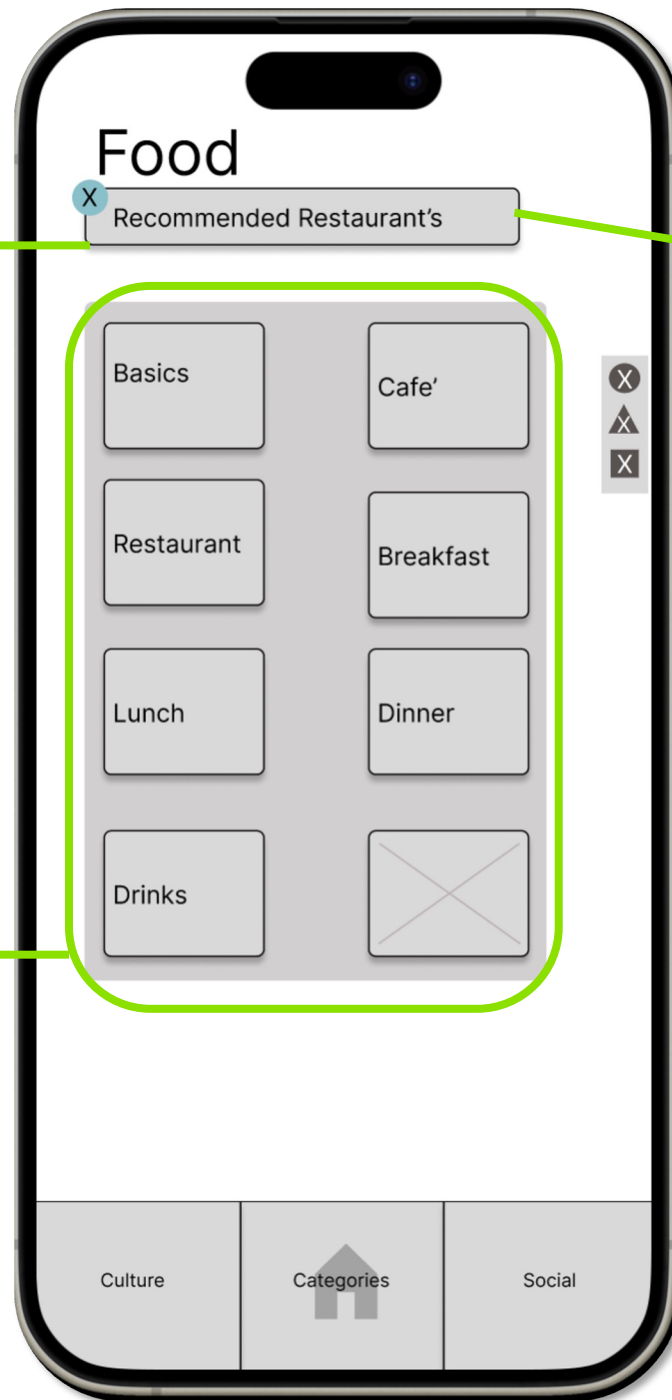
Use Case 1 – Learn Do's & Don'ts of Spanish culture

Recommendations in area:

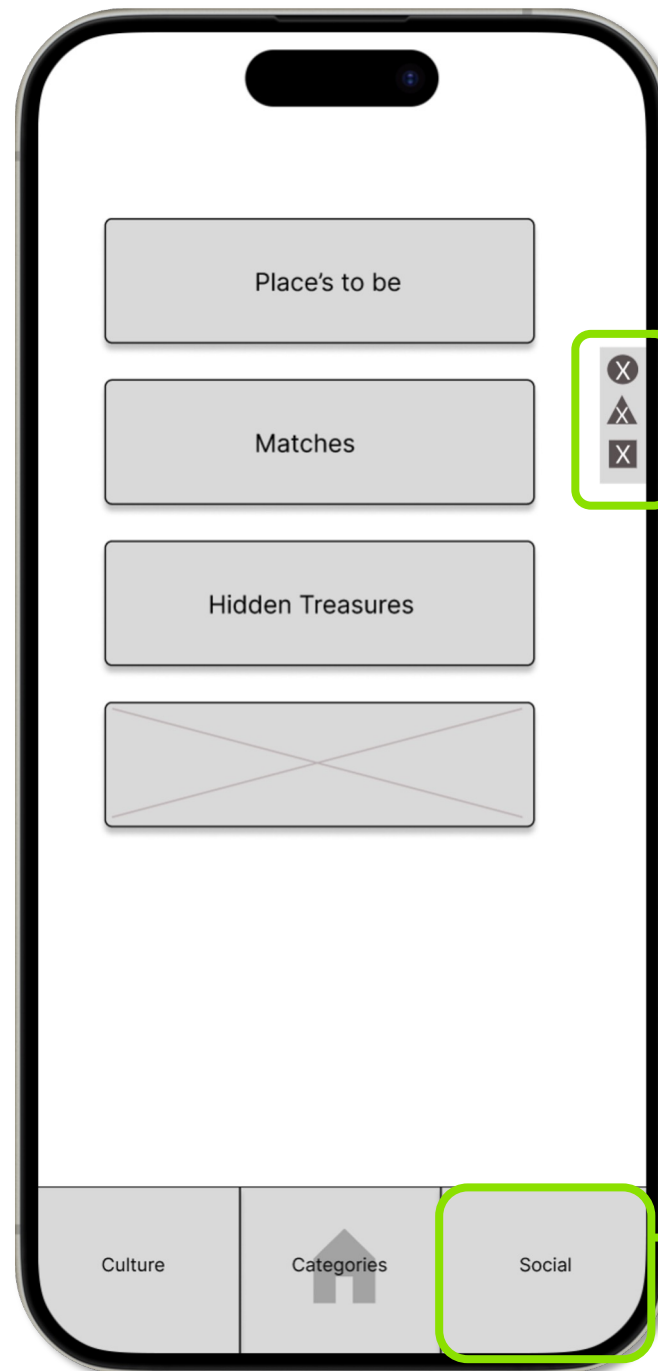
- Real recommendations to know where to go
- Apply knowledge there
- Is result of Design Thinking Workshop: participants want to feel included and know where to meet locals

Topic overview:

- Easy to chose
- Clear structure
- Topics are distinct from each other (improvement to Duolingo as found in HE)



Use Case 1 – Learn Do's & Don'ts of Spanish culture



2

Sticky Flag:

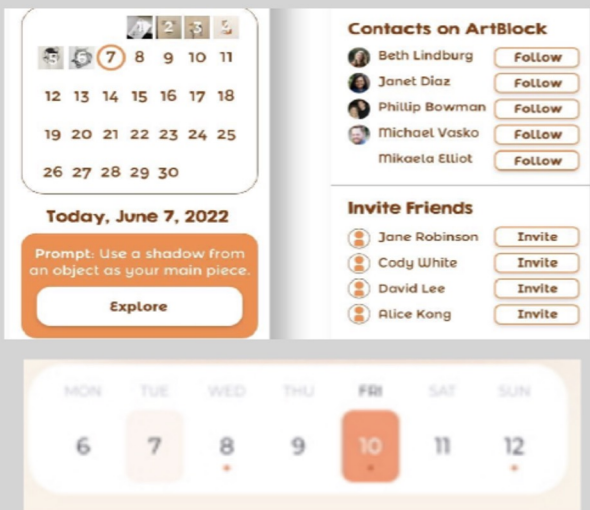
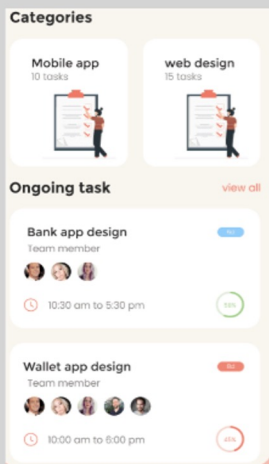
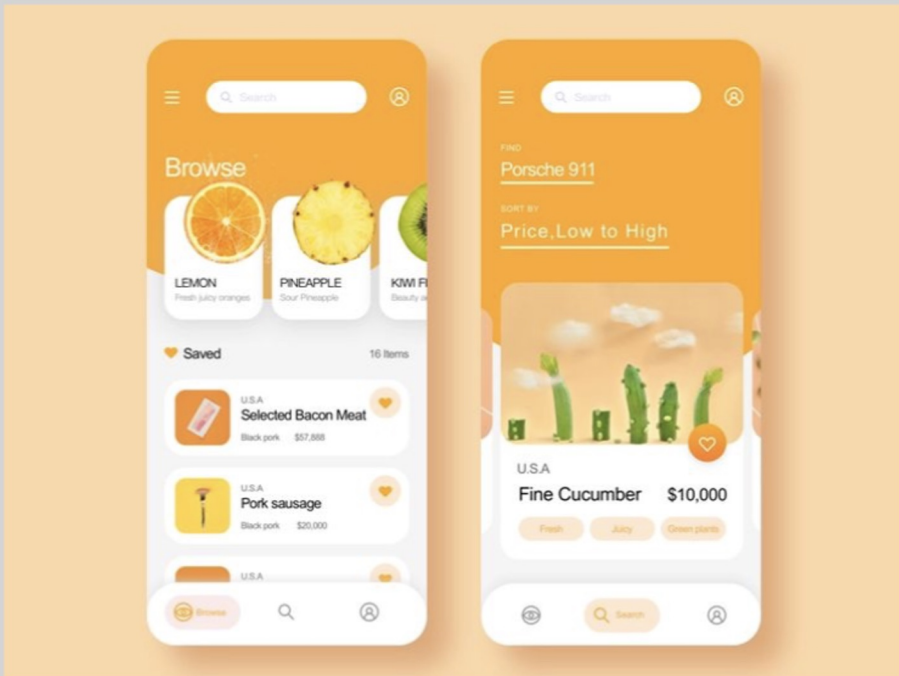
- For easy additional access for connecting with locals (e.g. messages, find people for common interests,...)

Extra social (cultural) tab:

- As result of Design Thinking Workshop: personalized social & cultural content centralized at one place

2

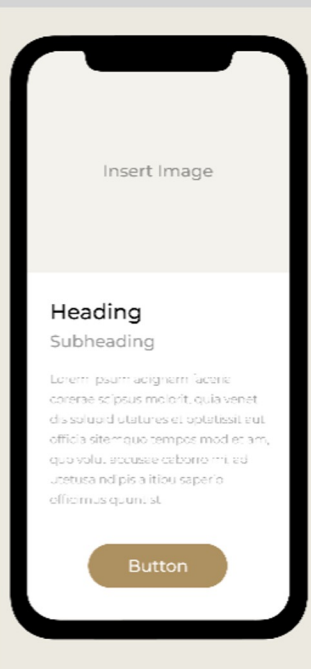
Inspiration



Typograhpy

FONT
Montserrat
 Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj
 Kk Ll Mm Nn Oo Pp Qq Rr Ss
 Tt Uu Vv Ww Xx Yy Zz

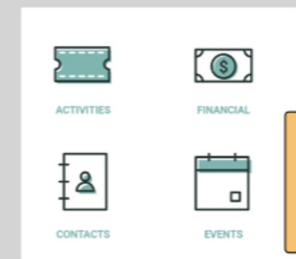
A B C D E F G
 H I J K L M N
 O P Q R S T U
 V W X Y Z
 a b c d e f g
 h i j k l m n
 o p q r s t u
 v w x y z



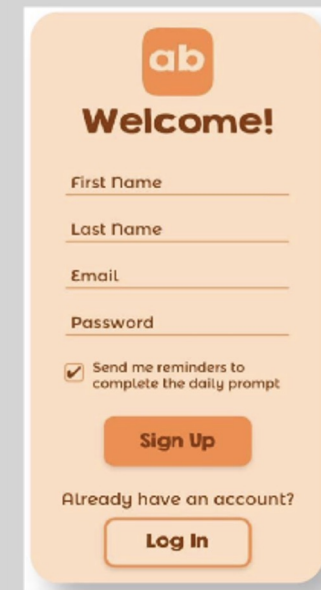
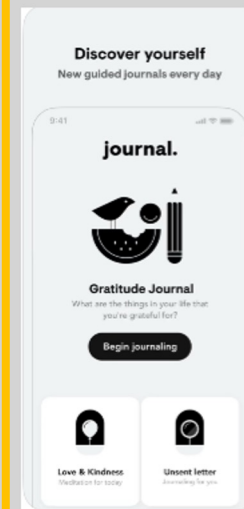
Colour



Icons & Layout



straight lines
 Simple lines & shapes





Appendix

Raw data Heuristic Evaluation

Duoling

O

Heuristic	Use Case 1 (Learning about culture)	Use Case 2 (Everyday situation in a restaurant)	Use case 3 (Making friends)	Sum
Transferability	1/10	7/10	7/10	5/10
Feedback on Learning	n.A.	5/10	5/10	5/10
Minimalistic	n.A.	5/10	5/10	5/10
Intuitive Understanding	0/10	4/10	6/10	3/10
Personalisation	0/10	3/10	4/10	2/10
Sum	0/10	5/10	5/10	

Duolingo - Problem Listing & Rating

1

Problem Details	Problem Severity	Function / Property	Affected Heuristic(s)	Ideas for improvement
No explanation for grammatical errors	4 (Catastrophic)	Learning a Lesson	Feedback	explanation of error and tips for improvement
Words and Sentences sometimes don't fit to the topic of the lesson	3 (major)	Learning a Lesson	Transferability, Personalisation	better matching of topic and content, give individual choices of vocabulary
A lot of tabs / windows leads to no easy navigation of the content possible	3 (major)	Navigation	Intuitive Understanding	simplify lesson selection, fewer features
Negatively phrased Feedback	2 (minor)	Learning a Lesson	Feedback	encouragement rather than demotivation
Icons are difficult to interpret	2 (minor)	Navigation	Intuitive Understanding	use icons that are designed skeuomorphic

Duolingo – Problem Listing & Rating 2

Problem Details	Problem Severity	Function / Property	Affected Heuristic(s)	Ideas for improvement
Personalisation, Intuitive Understanding	2 (minor)	No functionality to save words/phrases as favorites / personally structuring content	Selecting a Lesson	add feature to create shortcuts / personal dictionary
A lot of colors	1 (cosmetic usability issue)	General + Navigations	Minimalistic	harmonic colour scheme, reduce attention seeking colours
Movement of figures whilst learning	1 (cosmetic usability issue)	Navigation	Minimalistic	reduce distractors

Memrise

Heuristic	Use Case 1 (Learning about culture)	Use Case 2 (Everyday situation in a restaurant)	Use case 3 (Making friends)	Sum
Transferability	2/10	9/10	9/10	6/10
Feedback on Learning	n.A.	8/10	8/10	8/10
Minimalistic	n.A.	7/10	7/10	7/10
Intuitive Understanding	2/10	7/10	8/10	6/10
Personalisation	0/10	9/10	7/10	5/10
Sum	1/10	8/10	8/10	

Memrise – Problem Listing & Ratings

Problem Details	Problem Severity	Function / Property	Affected Heuristic(s)	Ideas for improvement
few themes to choose from (in the free version)	2 (minor usability issue)	Selecting a lesson	Transferability, Personalisation	None - business decision
Homescreen structure messy	1 (cosmetic usability issue)	Navigation	Intuitive Understanding	find a solution to better display the user progress, make homescreen widgets closable
list of errors -Feature are tough to find	1 (cosmetic usability issue)	Navigation	Intuitive Understanding	nice feature, should be displayed on the homescreen and a link to it on each error message

Bravolol

Heuristic	Use Case 1 (Learning about culture)	Use Case 2 (Everyday situation in a restaurant)	Use case 3 (Making friends)	Sum
Transferability	0/10	9/10	6/10	5/10
Feedback on Learning	n.A.	0/10	0/10	0/10
Minimalistic	n.A.	10/10	10/10	10/10
Intuitive Understanding	n.A.	8/10	8/10	8/10
Personalisation	n.A.	9/10	9/10	9/10
Sum	0/10	7/10	7/10	

Bravolol - Problem Listing & Ratings

Problem Details	Problem Severity	Function / Property	Affected Heuristic(s)	Ideas for improvement
No feedback given	4 (Catastrophic usability issue)	Feedback	Feedback on Learning	Add feedback on recorded audio
It's unclear that swiping left / right is way of navigation	2 (minor usability issue)	Navigation	Intuitive Understanding	Add simple onboarding which shows navigation
Very few topics to choose from (some are behind pay wall)	3 (major usability issue)	Selecting a lesson	Personalisation	explore different monetization models

User Interview

Instructions & Guideline
(Bravolol Example)

**Leitfaden Nutzerinterviews:
Version **Bravolol****

Interview Nr.: 2

Datum & Uhrzeit: 18:30h, 16.02.2024

Interviewee: A.K.

Interviewer: Annika Rische

- - Begrüßung, Vorstellung und Danksagung für die Zeit
 - Disclaimer: "Du kannst nichts falsch machen: wir sind hier um die App zu testen und nicht hier. Das heißt wir lernen von dir & du kannst einfach alle deine Gedanken offen mit uns teilen!"
 - Erklärung Interview Verlauf:
 - Zunächst ein paar allgemeine Fragen zu dir
 - Dann bekommst du ein paar kleine Aufgaben von uns, welche du in einer App ausführst
 - Sag dabei gerne immer vorher Bescheid bevor du irgendwas auswählst damit wir deine Gedankengänge und Handlungen nachvollziehen können
 - offene Fragen bis hier her?
 - Dürfen wir das Interview für Auswertungszwecke aufnehmen?

[Aufnahme Start]

1. Aufwärmen & Allgemeine Fragen zu Sprach App Gebrauch

Kurz erzählen: wer bist du und wie sieht dein Alltag idR. so aus?

- Wohin ging deine letzte Reise? Was ist dir beim Reisen wichtig / Als welchen Reisetyp würdest du dich selbst beschreiben?
 - Wie wichtig ist es dir, im Urlaub/ auf Reisen die Landessprache zu können?
 - Inwiefern bereitest du dich darauf vor?
 - Was sind deiner Meinung nach die wichtigsten Wörter & Sätze, die du können möchtest?
- Hast du schon mal Sprach Apps benutzt? (In Vorbereitung auf eine Reise oder Generell)
 - *[wenn ja:]* Welche? In welchem Kontext?
 - Wie zufrieden warst du mit der Erfahrung?
 - [wenn nicht bereits genannt:]* Kennst du Bravolol? Wenn nein, Welche Sprach Apps kennst du?
 - Womit verbindest du die App? Was sind deine oder die Erfahrungen anderer mit der App bisher gewesen?
 - Würdest du Bravolol generell nutzen? Warum/ Warum nicht?

2. Szenario/ Use Case 1 durchgehen: Everyday Situation

Jetzt kommt die am Anfang erwähnte Aufgabe, welche in der eben besprochenen Sprach App Barvolol stattfinden wird.

[Bildschirmübertragung]

[öffnen der App]: Schau dich erstmal etwas um: Was ist dein erster Eindruck & Was siehst du? Was sind deine Gedanken dazu?

[zurück zu Screen1: Homepage]: Basierend auf dem, was du jetzt hier siehst, wie würdest du dein bisheriges Lernlevel einschätzen?

Szenario 1: "Stell dir bitte vor, dass du dich auf einer Backpacking Reise befindest. Dein nächstes Ziel ist Spanien und du hast schon angefangen mit Bravolol die Sprache etwas zu lernen: Du kommst in einem kleinen Strand Ort in Spanien an und willst dir ein wenig die Umgebung anschauen. Außerdem möchtest du nachher in ein hippes Café am Strand & dabei wie die Locals deinen Kaffee auf Spanisch bestellen, um im besten Fall neue Connections zu schließen. Jedoch bist du dir noch nicht ganz sicher, welchen Kaffee du trinken möchtest oder ob du eventuell noch ein Dessert dazu essen willst? Deshalb suchst du zudem nach einer Liste mit den üblichen Vokabeln dafür."

Wie würdest du vorgehen? Was glaubst du, wo würdest du entsprechende Informationen finden und warum?

[zu Section ESSEN]:

- Warum hast du das angeklickt?
- Was siehst du & wie bewertest du den Inhalt?
- Welche Optionen hast du und wie zufrieden bist du mit denen?
 - Was gefällt dir / gefällt dir nicht?
 - Wie bewertest du das von der App gegebene Feedback?
- Inwiefern können dir die Informationen für deinen späteren Besuch im Cafe weiterhelfen? Warum/ nicht?

[Suchfunktion Wörter eingeben]:

- Wie hilfreich findest du die Suchergebnisse?
- Welche Möglichkeiten hast du? Wie findest du diese?
- Inwiefern können dir die Informationen für deinen späteren Besuch im Cafe weiterhelfen? Warum/ nicht?

3. Szenario/ Use Case 3 durchgehen: Do's and Dont's

Szenario 3: “Nun bist du mit deinen neuen spanischen Freunden aus dem Cafe unterwegs und ihr unterhaltet euch über alle möglichen Dinge. Dabei fällt dir auf, dass du eigentlich keine Ahnung hast, was die spanische Kultur so mit sich bringt. Was ist das beliebteste Essen? Wie begrüßt man sich eigentlich wen? Daher entscheidest du dich in deiner Sprach App auf die Suche nach entsprechenden “Do's and Don'ts” Tipps und brauchbaren Sätzen zu begeben.”

- Wie würdest du vorgehen? Was glaubst du, wo würdest du entsprechende Informationen finden und warum? *[gerne nochmal erwähnen, dass sie sich durchklicken können]*

[User wird auffallen, dass es keine entsprechenden Ansichten gibt:]

- Wie zufrieden bist du mit dem Ergebnis der Suche? Warum/ Warum nicht?
- Welche Informationen hättest du dir gewünscht & wo hättest du diese erwartet?

4. Abschluss

- Wie würdest du nun rückblickend auf die Erfahrung in der App blicken? Hat sich ein initialer Eindruck der App bestätigt oder nicht?
- Was war (nicht) anders als erwartet? Was hat dir gefehlt?
- Bezogen auf die Aufgaben, die wir dir mitgegeben haben:
 - Wie wichtig würdest du die damit verbundenen Funktionen der App bewerten? *[als Erinnerung: Vokabellisten, Situationsbezogene Konversationen, Kulturangebote]*
 - Welche Aufgabe konntest du besser und welche schlechter absolvieren? Warum?
- Kannst du mir nochmal kurz zusammenfassen, wie du das Design und das Handling der App generell bewertest?
- Inwieweit trifft für dich “Minimalismus” auf die App zu? Warum?
- Würdest du die App nun nutzen?
- Hast du sonst noch Feedback/ Anmerkungen/ Fragen zur App?
- Danksagung & Verabschiedung

Design Thinking Workshop

Instructions & Guideline

Design Thinking Workshop

•Introduction Lisa (2 minutes):

•Needs:

- Lisa does not only want to interact, she wants to blend in and wants to experience everyday situations.
- For her, traveling is a way of life.
- Her goals are great social interactions and unforgettable memories.

•Pains:

- Lisa does not want to be identified as tourist, therefore she wants to avoid cultural faux pas.
- Lisa is an avid trendsetter, constantly keeping up with the latest trends on TikTok. She really wants to stay en vogue.
- Because it's just a week, she doesn't want to invest too much time beforehand.

•Empathize 1 (4 minutes):

•Imagine you are Lisa and want to learn about the social culture of Spain, because you just arrived and now want to connect to locals for the first time. What do you want to know and why?

•Empathize 2 (4 minutes):

•Imagine you are Lisa in the same szenario (just arrived and now you want to connect to locals for the first time). This time, you want to use a language-learning app. Which content do you expect?

•Define (2 minutes):

•Now sum up the desired cultural content and, associated therewith, wishes, needs, emotions and fear.



Design Thinking Workshop

- If necessary: remind participants to base decisions on persona Lisa.
- Group presentation (10 minutes):
 - Discuss and choose best ideas as a group.
- Present Bravolol-app (5 minutes)
- Ideate 1 (5 minutes):
 - After you have seen the homescreen of the app, think about where the cultural content could be located. Sketch 3-5 radical ways to meet your user's needs.
- Ideate 2 (5 minutes):
 - After you decided, **where** the content should be located, think about **how** you would like to learn the content. Sketch 3-5 radical ways to meet your user's needs.
- Ideate 3 (5 minutes):
 - Think about how you want to be engaged in the process. What would help you to achieve this experience? Sketch 3-5 radical ways to meet your user's needs.
- Group presentation (15 minutes):
 - Discuss and choose best ideas as a group.

Design Thinking Workshop

Feedback (for participants based on group prototyp):

+ What worked	- What could be improved
? Questions	! Ideas

Total workshop time: 60 minutes