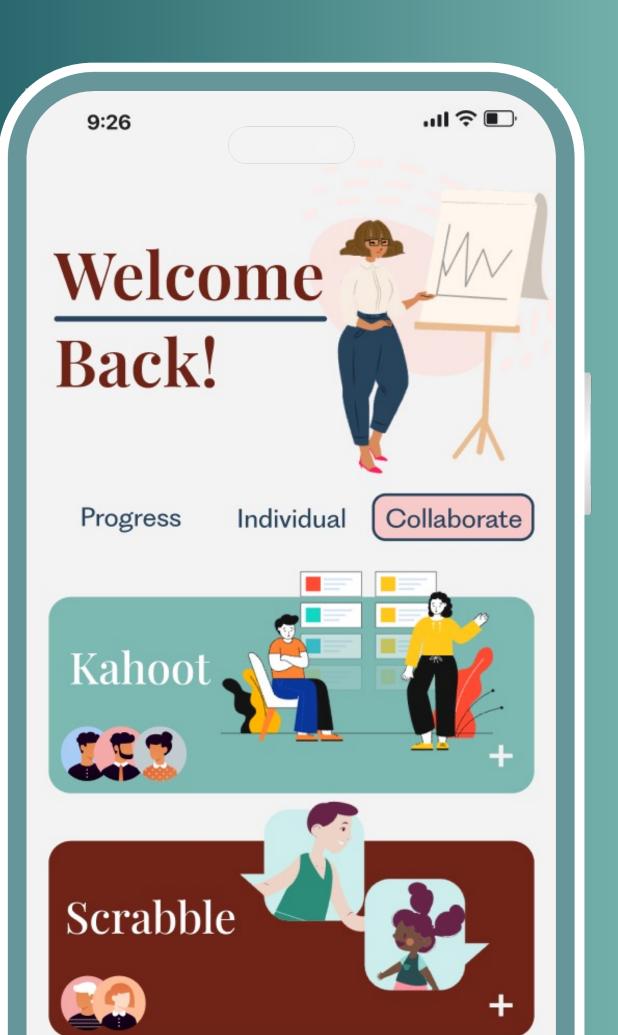
### Team A5: Ctrl, Alt, Elite

**Capstone Final Presentation** 



# lingua-link

Peer-to-Peer Language Learning



## **Meet the Team**



Sanika Gadam UX Designer + Front-End Developer



Trushaa Ramanan UX Designer + UX Researcher



**Militha Madur** Data Scientist + Front-End Developer

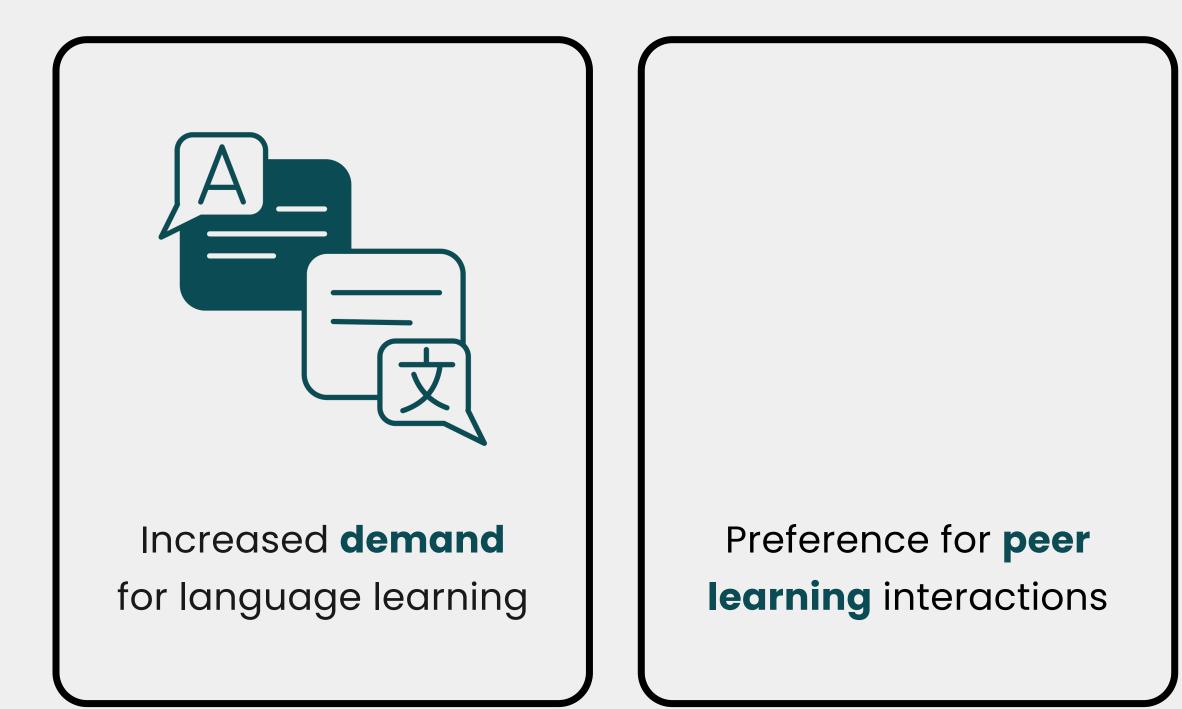




#### Morgan Weber Front-End Developer + UX Researcher

**Caroline Wills** Project Manager + UX Researcher

## **Problem Context**





### Problem Statement

How might we create a peer-to-peer language learning app that fosters connections between users for language practice while prioritizing user security to mitigate unwanted interactions?

## **Research: Surveys + Interviews**

### Understanding users' perceptions, motivations, and attitudes for different language-learning platforms





**Duolingo** was the most popular learning app followed by Bussu & HelloTalk

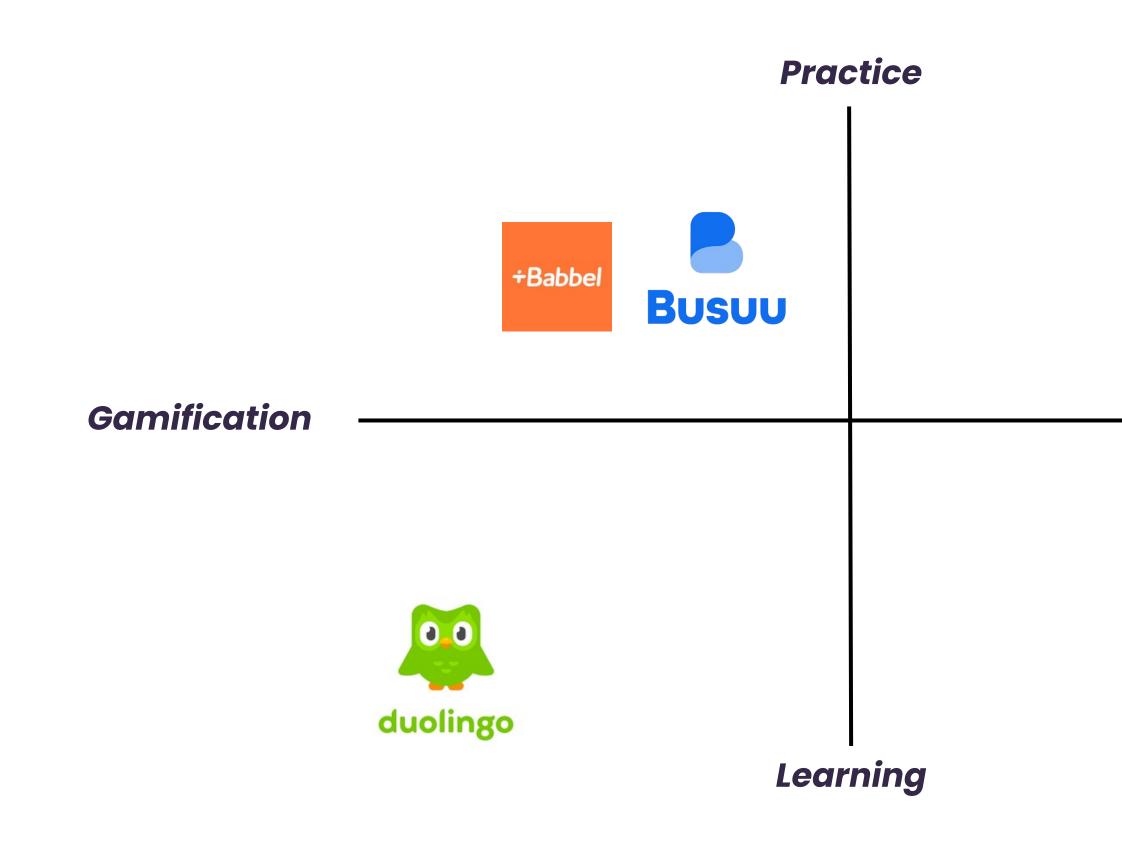
Interactive lessons, gamification, and conversing practice are most important





Many participants stopped due to a **loss of** motivation (61%) or lack **of time** (22%)

## **Competitive Analysis**

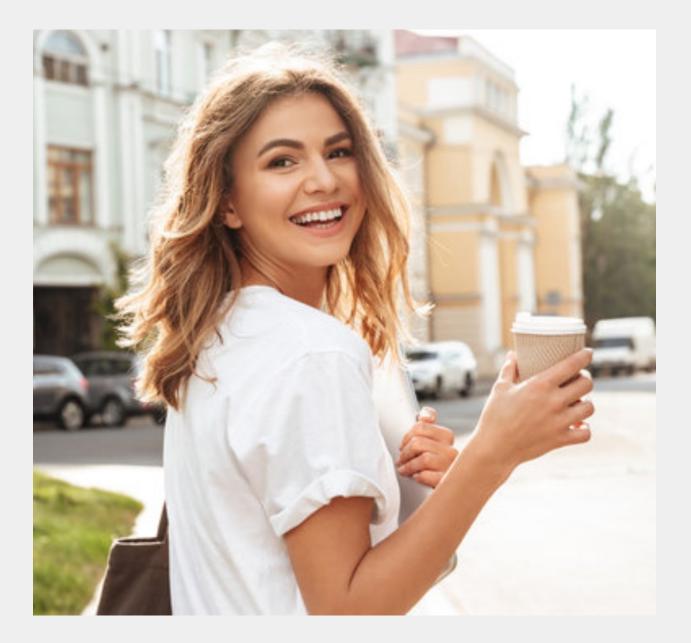




#### Peer Learning

## Meet Michelle

## User Persona



Michelle Summers, College Student Motivator

#### S

- •Build connections with like-minded individuals
- Personal growth and
   Platforms primary focus is on improving grammar and vocabulary

### Want

SA safe, secure, and
Supportive community
Feedback and support

### **Pain Points**

 Limited social interactions with existing language apps

### Needs



## **Key Concepts**

### We are creating a platform where...





Users feel **comfortable** and **safe** using the platform to learn a language

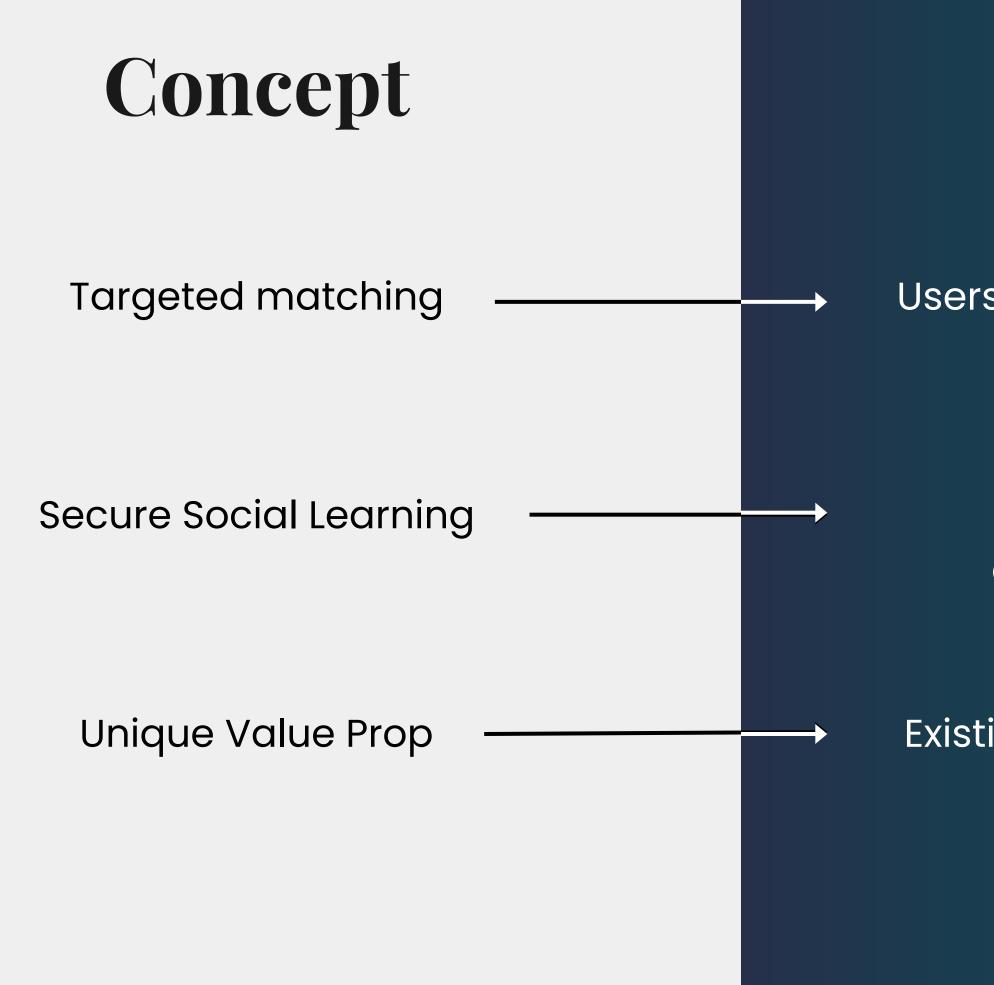
Users are **encouraged**, **engaged**, and **motivated** through peer-to-peer connections



Users are able to have a **personalized** and **meaningful** learning experience

# Usability Testing

Validation and Iterations



### Assumption

### Users have diverse learning goals

Users value privacy for comfortable interaction

Existing apps lack social learning with strong privacy

## **Key Insights**

## We tested our mid-fidelity mockup with 5 users, specifically about the functionality, concept, and design



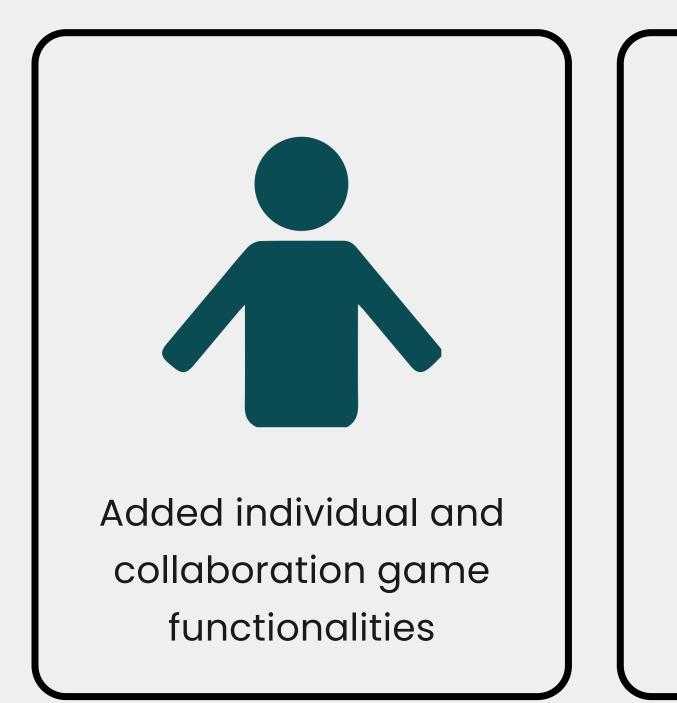


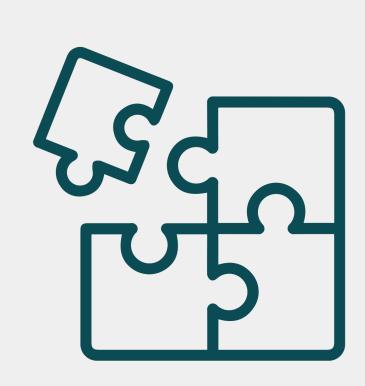
Users want the ability to engage with others AND engage in learning activities alone Users want to see **language learning activities** (like games) beyond the chat feature



Users were concerned about **user verification**, since that option wasn't provided

## **Design Improvements**





Added gamification elements to engage users with learning



### Added two-factor identity verification in onboarding

## Final Solution

**Hi-Fidelity Prototype** 



## **Personalization + Customization**

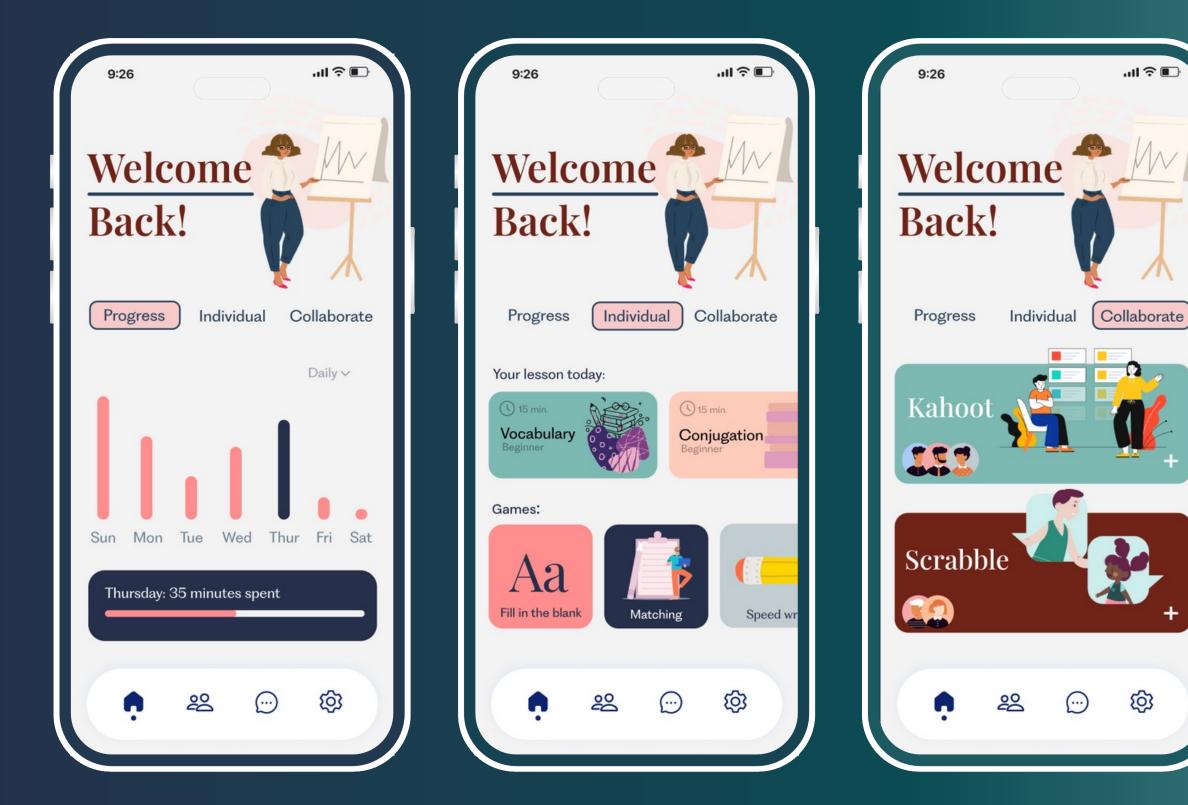
| 9:26 III 🗇 🕞   | 9:26                                      | 9:26   |
|--|---|--|
|  | What language would<br>you like to learn? | <ul> <li>Select your learning goals:</li> </ul>  |
|  | English<br>Spanish<br>French              | Speaking Fluently Writing Proficiency  |
|  | Mandarin<br>Japanese<br>German            | <ul> <li>Listening Comprehension</li> <li>Reading Comprehension</li> <li>Cultural Understanding</li> </ul> |
| Welcome<br>Immerse yourself in language learning<br>through peer-to-peer connections | Italian<br>Arabic<br>Storean              |  |
| Login<br>Don't have an account? Sign up  | Portuguese<br>Next                        | Next   |
|  |   |  |

ng

### **Onboarding + Lesson Plans**

- Personalize your experience through the onboarding questionnaire
- Customized language lessons and content based on selected interest, desired proficiency level, and focus area (grammar, vocab, pronunciation)

## **Collaborative and Individual Learning**



#### Homepage and Dashboard

- Monitor the time you spent learning and engaging
- Practice individual lessons tailored to your preferences
- Play collaborative games and compete against your learning matches

### Gamification

| 9:26                    | 9:26 II TO INAL OF INA | 9:26 ull<br>Categories                |
|-------------------------|--|---------------------------------------|
| Kahoot!                 | 17 words <u>See starred cards &gt;</u>   | Color Names<br>Months                 |
| Start Game<br>Join Game | Orange<br>(aw-ruhnj)   | Numbers from 1-20<br>Days of the week |
|                         | Mastered   | Alphabet a-m                          |
| • <u>*</u> • ø          | • * · • \$   | • <u>22</u> &                         |

### **Collaborative Games**

- Multiple game options for users to learn languages to boost engagement
- Play friendly games against your learning matches

## **Peer Connections**

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|-------------------------|----------------------|--|--|--|--|
| 🖛 Learning              | 🖛 Learning Matches 单 |  |  |  |  |
| Spanish X Beg           | ginner × Individual  |  |  |  |  |
| Morgan         Beginner | Emily<br>Beginner    |  |  |  |  |
| Aliyah<br>Beginner      | Mark<br>Beginner     |  |  |  |  |
|                         |                      |  |  |  |  |
| G #                     | <b>⊡</b> \$          |  |  |  |  |

| 9:26     |               |            | .ıl ≎ II. |  |  |
|----------|---------------|------------|-----------|--|--|
|          | Notifications |            |           |  |  |
|          | All Requ      | ests N     | Messages  |  |  |
| Reque    | ests          |            |           |  |  |
|          | @mandy22      | Confirm    | Delete    |  |  |
| <b>Q</b> | @lilycollins  | Confirm    | Delete    |  |  |
|          | @marktwain    | Confirm    | Delete    |  |  |
|          | @tswiftie13   | Confirm    | Delete    |  |  |
| 6        | @johnny50     | Confirm    | Delete    |  |  |
|          | @sammyp       | Confirm    | Delete    |  |  |
|          | @kandice21    | Confirm    | Delete    |  |  |
|          |               |            |           |  |  |
|          |               |            |           |  |  |
| ନ        |               | $\bigcirc$ | ¢۵        |  |  |
|          |               |            |           |  |  |



#### Connect

- Match and connect with users based on language and learning goals and interests
- Users must mutually approve and consent to matches before learning

## Safety + Chat

| 9:41  |                                  | ııl ≎ ∎                  |   | 9:2<br>Pr |
|---|----------------------------------|--------------------------|---|-----------|
| Verify y<br>numbe<br>We've sent an SMS<br>+39 342 401 97 23 | <b>r</b><br>S with an activation |                          |   | M         |
|   |                                  |                          |   |           |
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| (1)   | 2                                | 3                        |   |           |
| 4   | 5                                | 6                        |   |           |
| 7   | 8                                | 9                        |   |           |
|   | 0                                | $\langle \times \rangle$ |   |           |
|   |                                  |                          | / |           |

|     | 9:26  | · ∎ ≎ III.    |
|-----|---|---------------|
| 1   | Practice Lessons Together   | ^             |
|     |   |               |
|     | Morgan<br>Beginner Emily<br>Beginner  | Ð             |
| < F | 기 😰 @morgweb 🛛 👳  | S 📕           |
|     | Start the conversation with @m  | norgweb       |
|     | Community Guidelines<br>Remember to please ensure a safe and<br>inclusive language learning space by for<br>these rules.<br>Please report any individuals who may lengaging in any of the following prohib<br>behaviors:<br>Harassment<br>Sharing Inappropriate Content<br>Threats and Violence<br>Bullying<br>Illegal Activities | be            |
| C   | Type your message $\[Phi]$  | الالا<br>کورک |
|     | w <i>~</i> 🦊  | \$3           |

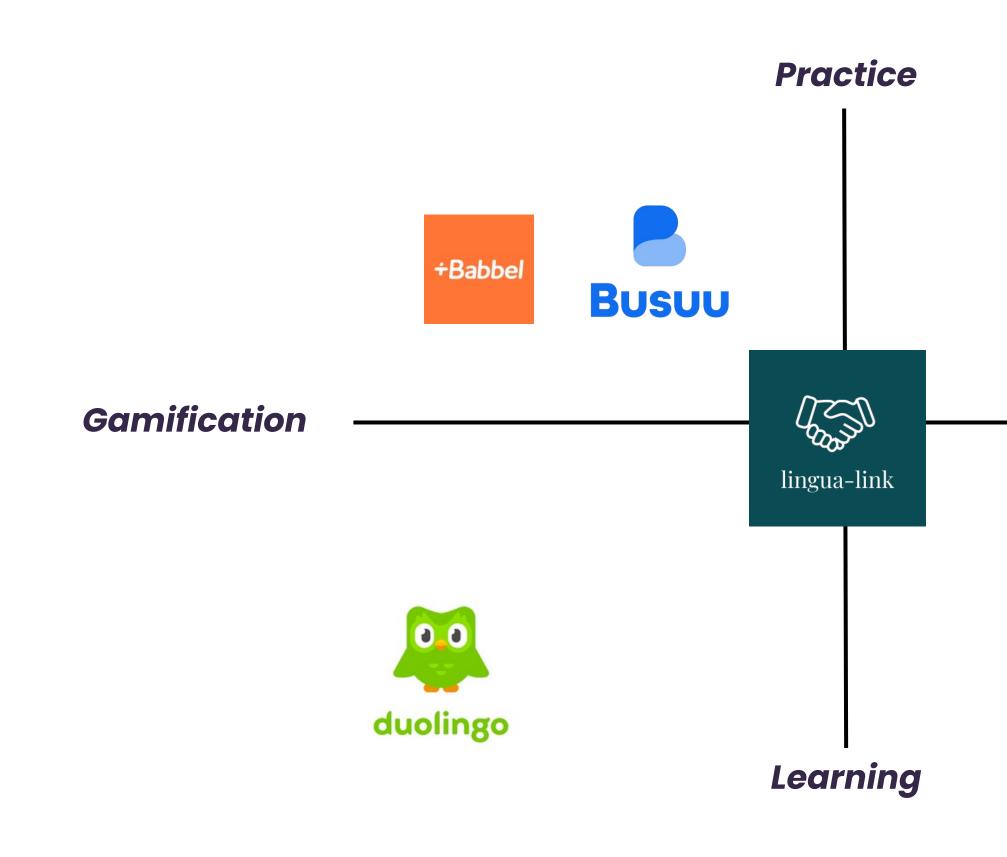
| 9:26                |  |               |       |
|---------------------|--|---------------|-------|
|                     |  |               |       |
| Privacy             | Statem   | ent           |       |
|                     | , we are committe<br>suring the securit  |               |       |
| 1. Informatio       | on We Collect  |               |       |
|                     | on: When you create<br>nation such as your r<br>word.                          |               | we    |
|                     | You may choose to<br>s your language pref<br>s.                                |               |       |
| data related to you | eer Interaction Data:<br>Ir interactions with o<br>facilitate peer-to-pe<br>e. | ther users or | n the |
| 2. How We Us        | se Your Informa  | ation         |       |
| personalize your le | e use the information<br>arning experience a<br>nd language partners           | nd recommer   |       |
| send you importan   | e may use your cont<br>t updates, notificatio<br>lated to our services         | ons, and mark |       |
|                     | analyze user data to<br>ent, and user experie                                  |               | app's |



### Safely Chat with Users

- Two-factor authentication
- Transparent community safety guidelines and privacy policy
- Robust community guidelines before chatting
- Report inappropriate
   behavior or block

## Where does lingua-link fit in?





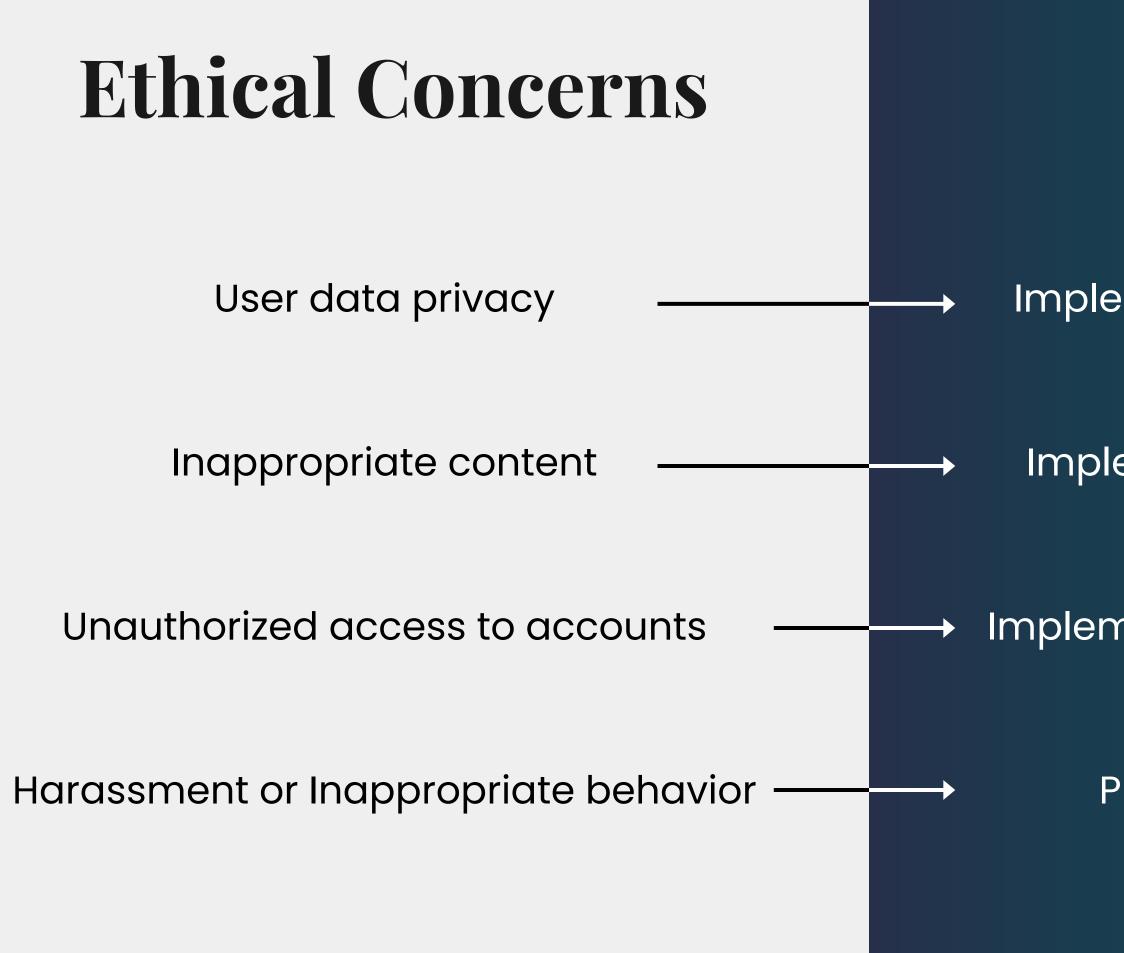
#### **Peer Learning**

### Demo Video

### https://www.youtube.com/watch?v=c1qxlwD6VN

8

## **Ethical Considerations**



### Mitigations

Implement end-to-end encryption

Implement AI content moderation

Implement two-factor authentication

Provide flag/block feature

## Next Steps

**1. Optimize Matching:** Leveraging user feedback, refine the matching system and develop algorithm to ensure compatible connections and aligned learning goals.

**2. Personalized Learning:** Implement customizable flashcards and conversation topics based on user preferences.

**3. Content & Security:** Integrate native language content users crave and refine AI moderation to create a safe learning environment

### Team A5: Ctrl, Alt, Elite

Capstone Final Presentation

## Thank You!

