

Needfinding

Mandarin Trainer!

Team 7

Shiny Yu and Eric Bennett



Team Members



Shiny



Eric

Introduction

Problem Domain: Chinese Language Learning

Current product: 'Mandarin Trainer'

Features:

Multiple Choice/Free Response

Simple SRS Learning Algorithm

Vocab sets with 3 attributes

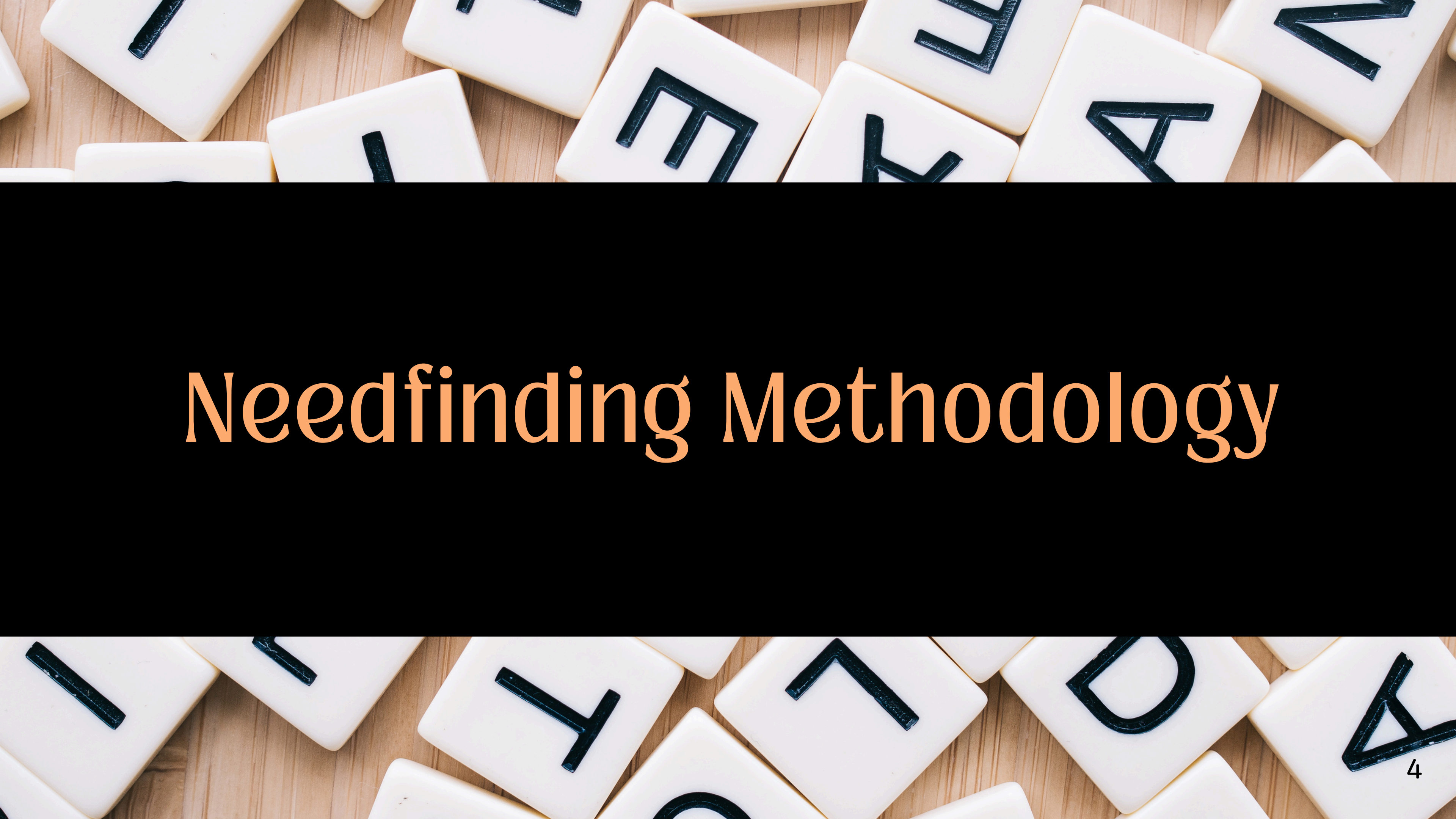
Limitations:

No user profiles

No database of vocab sets

No learning tracking

The screenshot shows the 'Mandarin Trainer BETA' interface. At the top right is a user icon. Below the title is a dropdown menu labeled 'select a set' with a downward arrow. Underneath is a blue button labeled 'Review Set'. Below that are two columns: 'Given' and 'Test for'. Each column has three blue buttons: 'Pinyin', 'Character', and 'Definition'. At the bottom is a green button labeled 'GO!'.

A decorative border at the top and bottom of the slide features white square tiles with black symbols, including the letters 'I', 'T', 'D', and 'A', arranged on a light-colored wooden surface.

Needfinding Methodology

Needfinding Methodology

Questions:

1. Simple introduction (name, age, gender, nationality, native language)
2. Are you actively learning Chinese? For how long have you been learning Chinese?
3. What do you find easy about learning chinese?
4. What do you find hard about learning chinese?
5. What methods do you usually use to study new Chinese vocabulary?
6. What are your favorite parts of these tools?
7. Are there any shortcomings of these tools?
What features would you like to see added?

Focuses:

- Current vocabulary study habits
- Shortcomings of existing tools

Interviewee 1

Rosie

19 years old

Female

American

English

Exchange Student studying Chinese

Focus:

- Represents our “extreme user”
- Taken Chinese classes for 4 years
- Actively taking 10 hours of Chinese a week



Interviewee 2

Kaila

20 years old

Female

American

English

Exchange Student studying Business

Focus:

- Represents a “casual user”
- Taken about 6 years of Chinese
- Not taking a Chinese class currently, but has in the past in the US



Interviewee 3

Kaila

23 years old

Female

France

French & English

Masters Student studying Business

Focus:

- Represents a “potential new user”
- Taken 2 weeks of Chinese
- Currently in her first Chinese class ever



The image features a decorative border at the top and bottom consisting of white square tiles with black geometric patterns, set against a light wood-grain background. The central portion of the image is a solid black rectangle containing the text "Interview Result" in a large, orange, serif font.

Interview Result

Empathy Map -says

Stroke order of characters is particularly difficult to learn

Wasn't tested on tones in earlier Chinese classes

Has been learning Chinese for 6 years, but at a slow pace

Has always found writing difficult because of the complexity of the characters

Writing and reading are difficult because it's so much memorization

Learned first by listening, then moving on to more focused vocabulary

Empathy Map -thinks

Quizlet doesn't
accommodate the unique
aspects of learning
Chinese well

It's tedious to use
multiple tools for
different aspects of
Chinese language
learning

Recognized the issue of
connection with pinyin
and characters, has
considered using the
'test' section of Quizlet
but has issues with it

Hasn't studied specific
vocabulary in class, so
doesn't immediately
consider this type of tool
necessarily

Current used app doesn't
show how the different
words are used in a
sentence

Empathy Map -does

Enjoys a number of the features in Quizlet, especially the 'autofill' when creating new sets

Uses Google Slides as makeshift flashcards

Relies on exposure in an immersive environment to learn new words/vocabulary

Writes characters repeatedly to memorize them

Uses Google Translate to practice pronunciation

Used multiple dedicated Japanese learning tools, but doesn't know any for Chinese

Empathy Map -feels

Frustrated: Finds writing specifically difficult to learn

Intimidated: Finds reading/writing Chinese very difficult

Overwhelmed: Finds writing Chinese, especially Traditional, challenging

Annoyed: Existing tools which seem to support her needs are paid

Unsure: Hasn't decided on a Chinese study tool

Analysis

- No one had one place which perfectly accommodated their needs
 - Confirms Eric's original reason for creating the prototype
- Multiple mentions of listening/speaking being a difficulty by interviewees
 - Consider integrating pronunciation assistance/listening as early as possible
- Multiple mentions of using characters in generating/understanding sentences being valuable
 - Consider integrating a way to incorporate characters in context as early as possible
- No mentions of Zhuyin (planned addition to functionality)
 - Likely a result of our Western user base and the popularity of Pinyin in second language learning of Mandarin- worth still adding?

The image features a decorative border at the top and bottom consisting of white square tiles with black geometric patterns, set against a light wood-grain background. The central area is a solid black rectangle containing the word "Summary" in a large, orange, serif font.

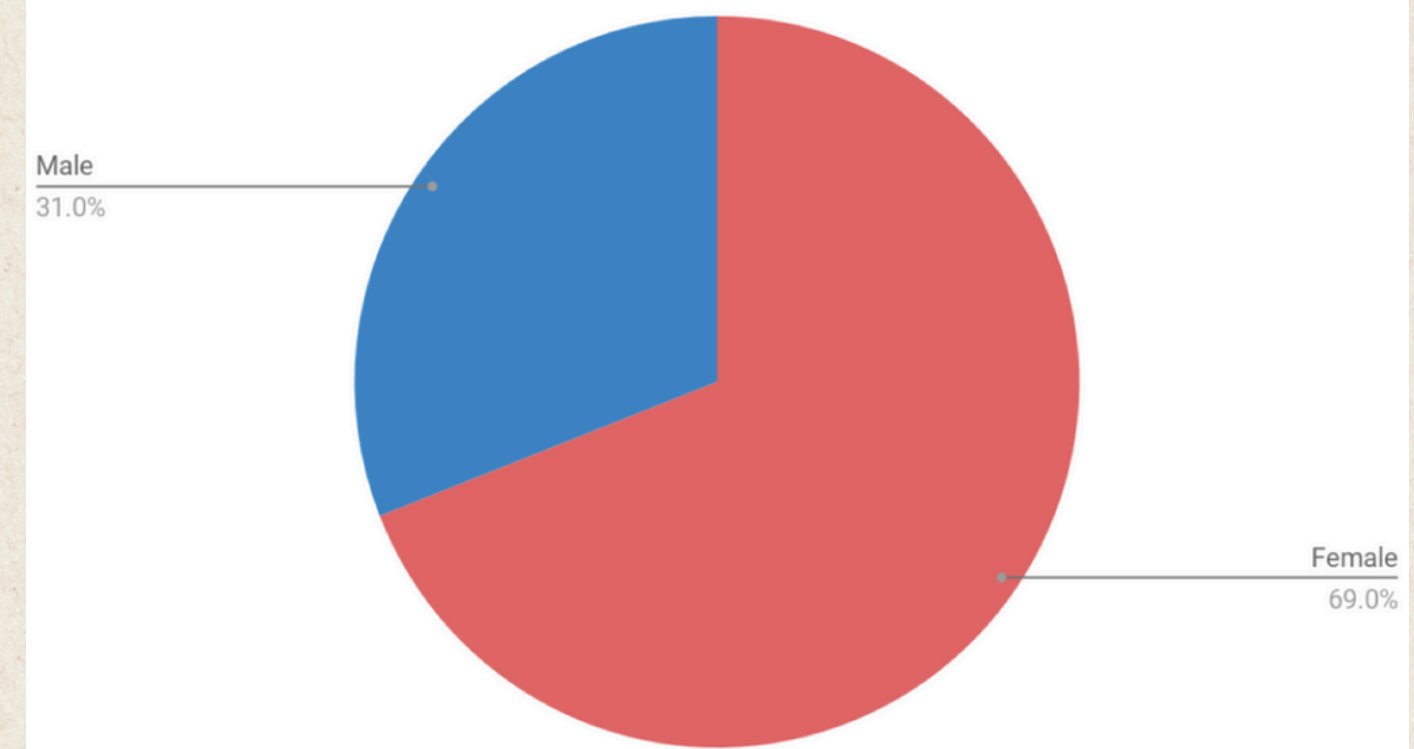
Summary

Summary

Overall takeaways from what we learned

- Adding in more than just a Term-Pinyin-Definition system is sought-after, especially adding in listening and speaking components, and using the characters in context
- However, a simple writing/definition practice website is still useful, so the current plan is to construct the website with basic functionality and then begin adding new features with an established user base.

Male vs Female Language Degrees in NCES Database



https://trace.tennessee.edu/cgi/viewcontent.cgi?article=3411&context=utk_chanhonoproj

The image features a decorative border at the top and bottom consisting of white square tiles with black geometric patterns, set against a light wood-grain background. The central area is a solid black rectangle containing the text "Thank You" in a large, orange, sans-serif font.

Thank You