Project Launch:
Developing a mobile app for remote sociolinguistic research

BETSY SNELLER
MICHIGAN STATE UNIVERSITY
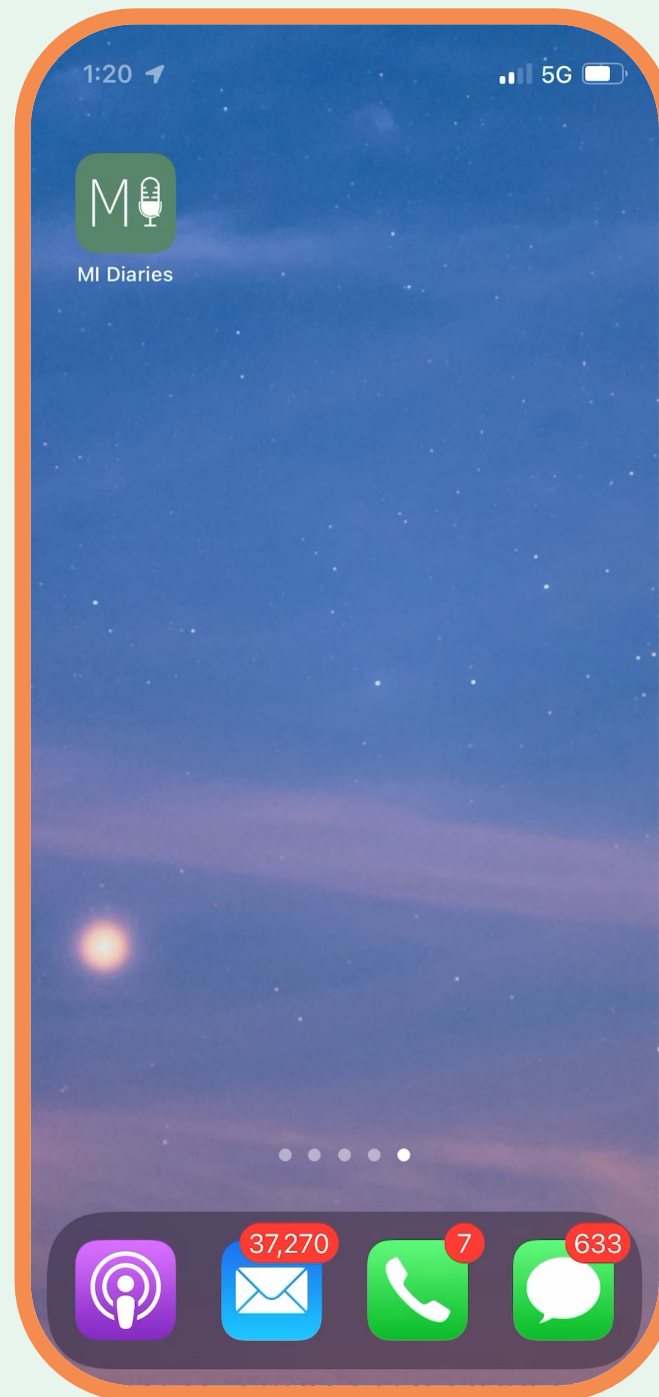
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How would an app help you?

- Background:

  - In 2020 MI Diaries made a very simple mobile app for participants to self-record "audio diaries" (Sneller, Wagner & Ye, 2022)

  - 2021-2023 I received grant funding to make the app code **clean, modular,** and **open source** so other researchers can implement their own versions of the app

  - Working with a team in AY22-23 to redevelop the code

- This Project Launch Talk:

  - Showcase existing app (search "MI Diaries" in the App Store or Google Play)

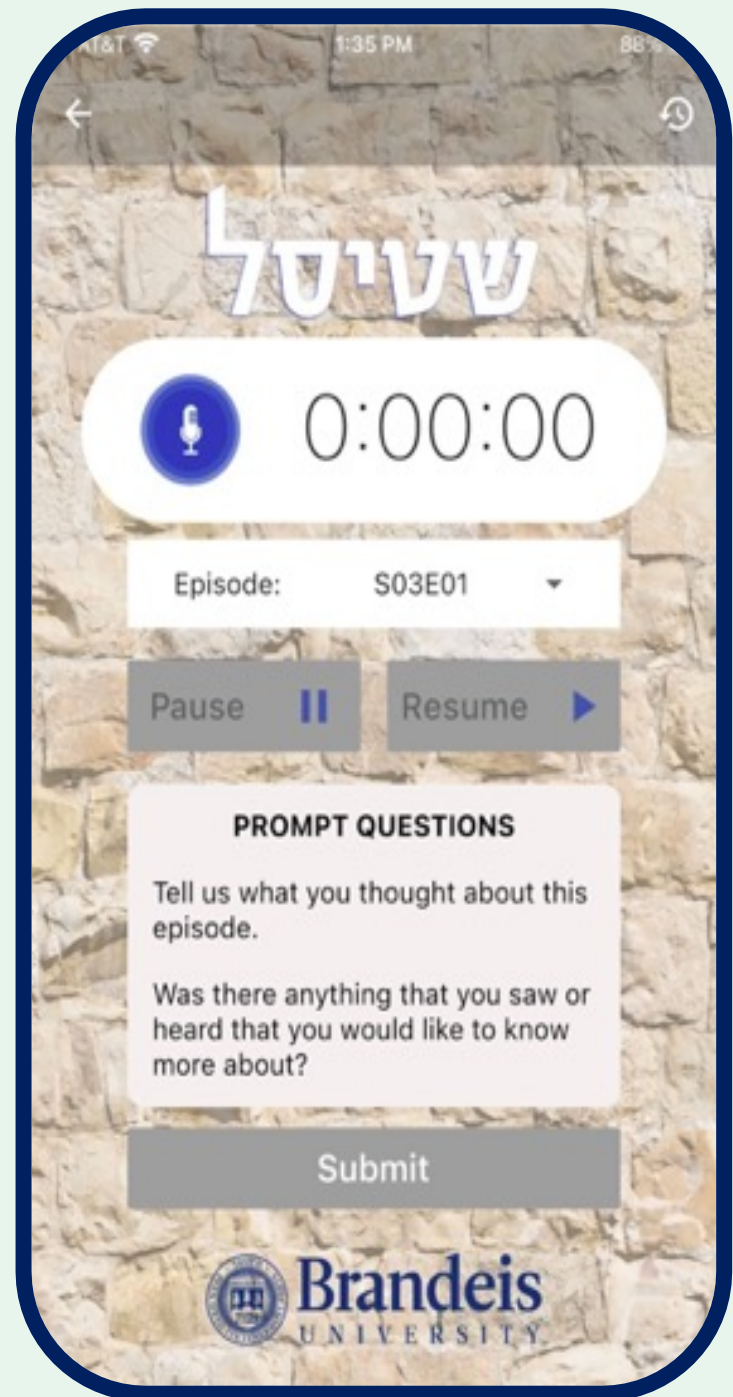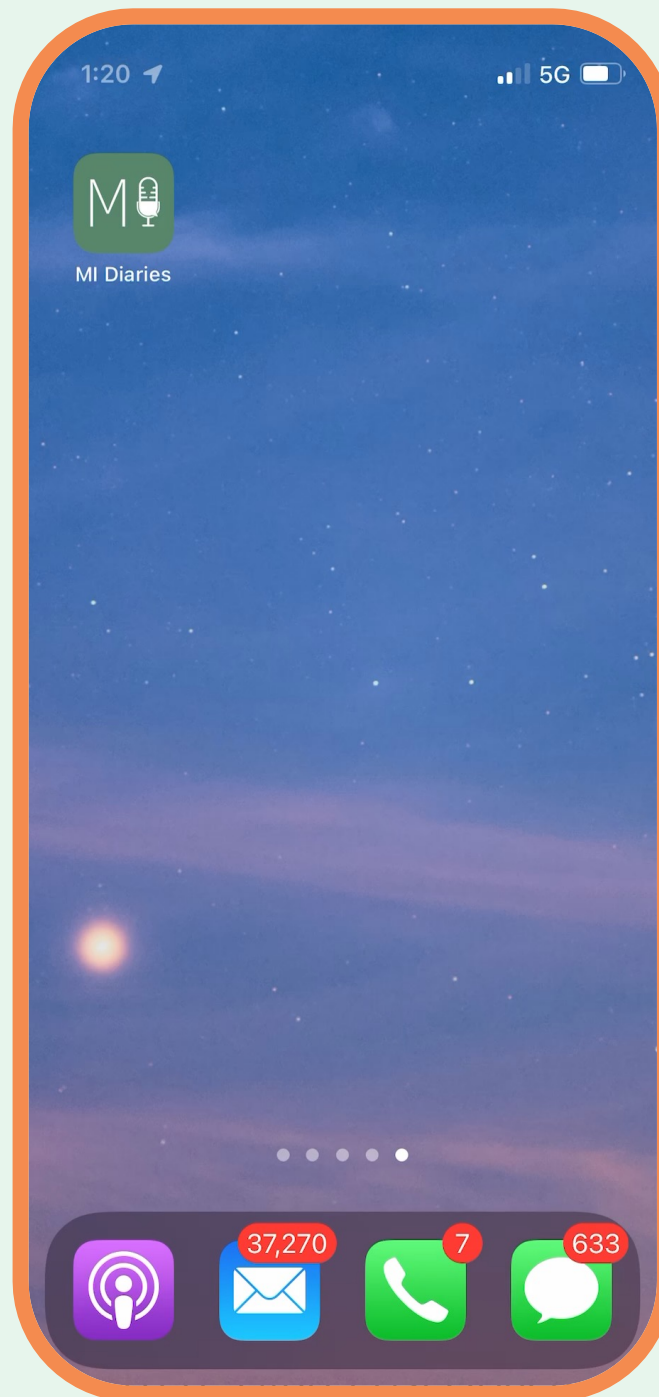 - Brainstorm how a mobile app might benefit your own work

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A brief walkthrough of mobile app
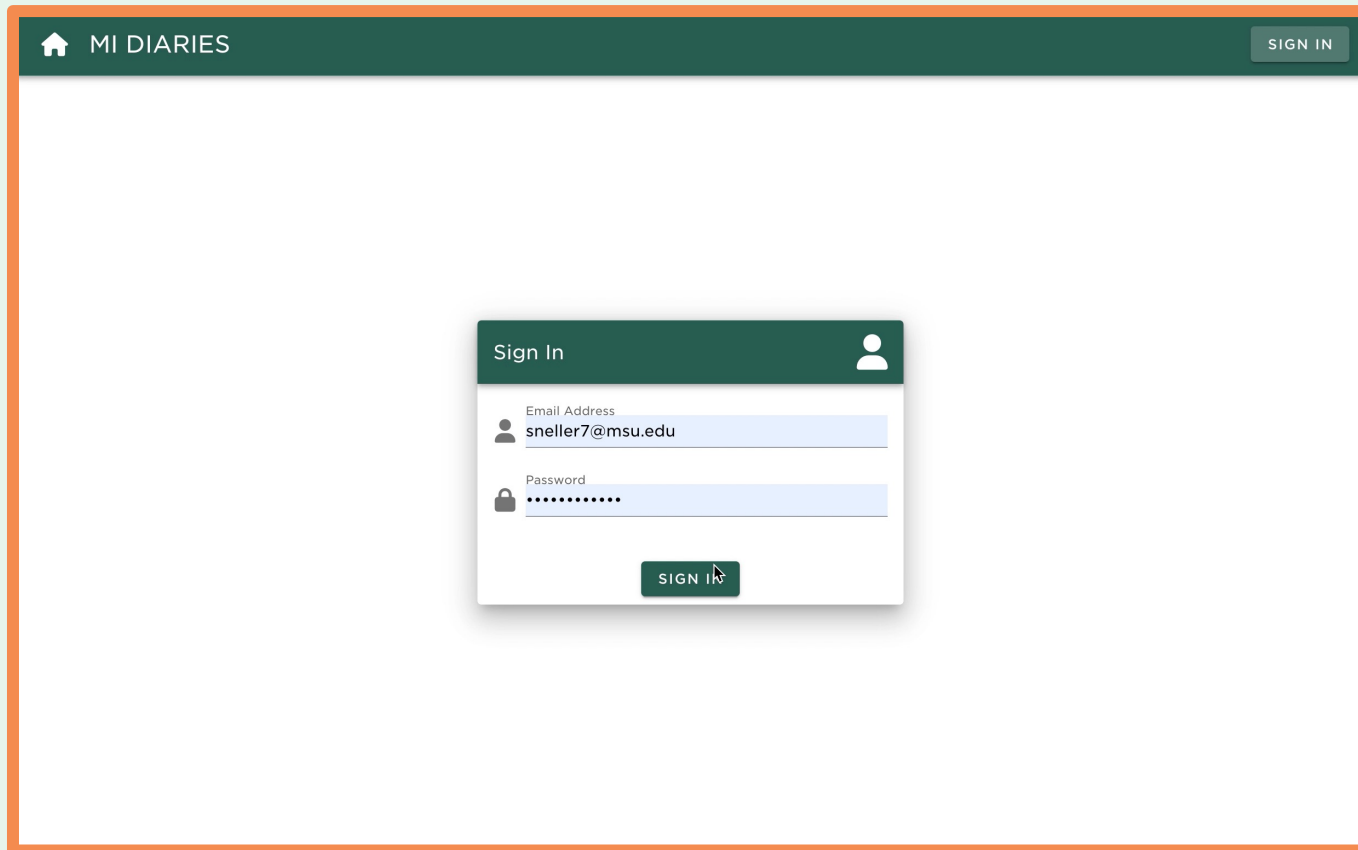
(the user side)

- Profiles allows multiple users per device

- Long form high quality audio (>1 hr)

- Sends recordings to our server

- Options:
  - Add photo
  - Listen back
  - Pause / resume recording

App already adapted to collect data for "Shtisel Diary" research project in Religious Studies at MSU and Brandeis

A brief walkthrough of the server
(the researcher side)

MI DIARIES

SIGN IN

Sign In

Email Address
sneller7@msu.edu

Password
••••••••••••

SIGN IN

- User login (password protected)

- Easy access to recent recordings

- Automated Speech Recognition
  - Google ASR
  - Or other model (e.g., huggingface)

- In-browser playback and transcription correction
  - Saves ~$2.13 per minute of speech compared to manual transcription

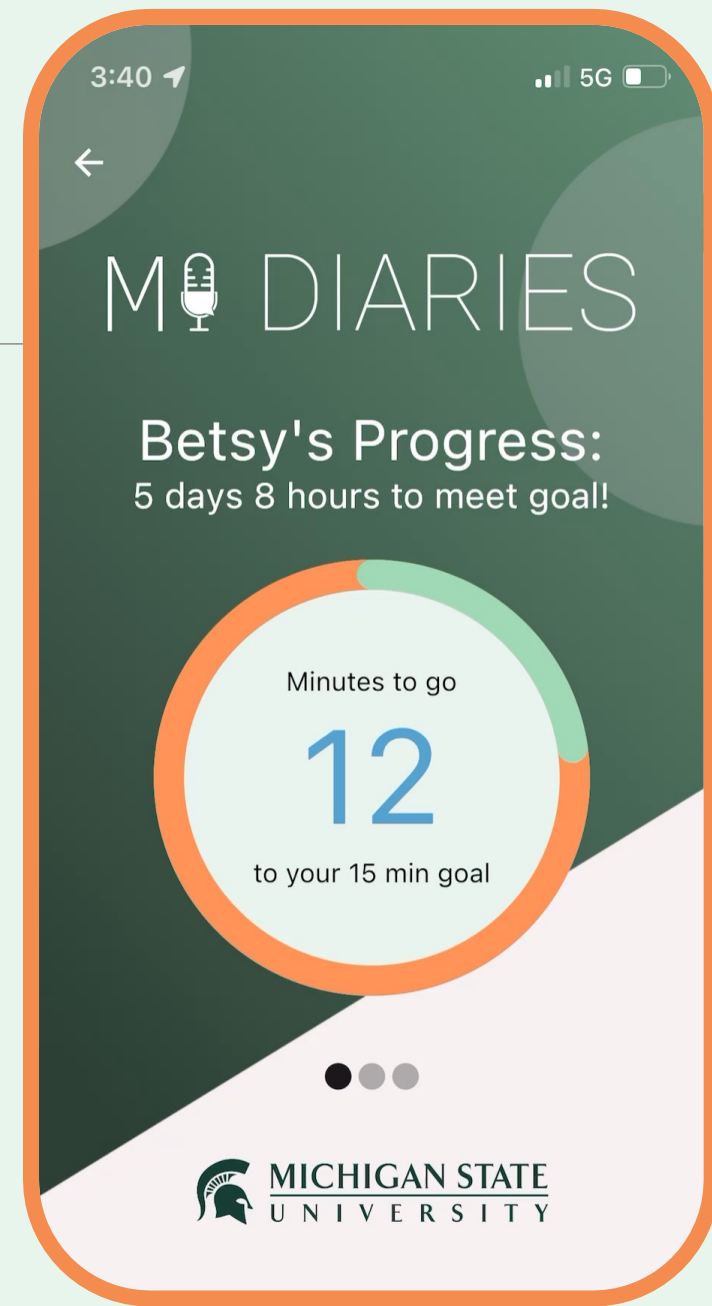- Can download transcripts as .txt or .TextGrid (MFA and FAVE-compatible)

Big Picture Problem

- What is the Research Question of a project you are **currently working on?**

- **MI Diaries:**

  - Ongoing language change in Michigan
    (Wagner et al., 2016; Nesbitt et al., 2019; Rankinen & Albin, 2019; *inter alia*)

  - Participation in ongoing language change by adults
    (Sankoff & Blondeau, 2007; Wagner & Buchstaller, 2018; *inter alia*)

  - **Sociolinguistic development of children and adolescents**
    (Eckert, 2011; Denis et al., 2019; Holmes-Elliott, 2020; *inter alia*)

To track sociolinguistic development, we need:

- Regular, repeat entries
  (keep kids interested)

- Enough speech from kids
  (encourage long recordings)

- Human solution:

  - Pay $5 per week if they submit 15 min of audio

- Design solution:

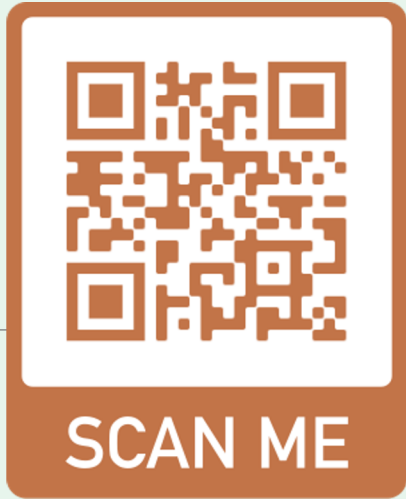 - Gamification with progress bar and stats!

Brainstorm time

- Please fill out the Google Form
  (link below or follow the QR code)

- Even just adding your Research Question is helpful!

- Timeline to a **simple, clean, modular, open-source** app:
  - Development of front end: Fall 2022 – Spring 2023
  - Development of server: Spring 2023
  - Beta version ready for others to try implementing: Summer 2023

- Add your email address to the Google Form to get updates

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Acknowledgements

SCAN ME

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