



WordBuds Sprint 1



Chase, Nick, Joe, Caitlin, Zimuzo

Github: https://github.com/Baby-Words-Tracker/Baby_Words

Website: https://baby-words-tracker.github.io/Baby_Words/index.html

WordBuds

Project Focus

- Baby Words Tracker is a mobile app that allows parents to track their child's speech through text, audio, and video.
- Simple data visualizations are available to parents, and all data input into the app is available to researchers from the UA's Literacy Education and Cognitive Science Lab



Major Achievements

UI Improvement/Refactoring

Codebase Familiarity / Dev Env Set up

Test Suite & CI Pipeline

Survey Page

TestFlight Preparation



Sponsor Feedback

- Appreciates and respect our dedication the research process and data protection
- Glad with how we've prioritized her needs by using a divide and conquer strategy
- Making updates that weren't anticipated



Project Backlog

ID	Story	Estimated Hours	Status	Priority	Sprint Finished
1	Establish UI theme and make initial improvements	8	Complete	1	1
2	Fix N+1 stats page query	6	Complete	1	1
3	Add survey page	8	Complete	1	1
4	Analyze codebase and set up environment	8	Complete	2	1
5	Add basic test suite	5	Complete	3	1
6	Review TestFlight requirements	5	Complete	1	1
7	Analyze data efficiency issues	4	Complete	1	1
8	Terms and conditions page	4	In Progress	2	
9	Two factor authentication	8	In Progress	1	
10	Further UI Improvements (Stats and Home Page)	5	In Progress	3	
11	Researcher page query efficiency fixes	5	In Progress	2	
12	Review app store requirements	5	In Progress	1	
13	Push notifications	5	In Progress	3	
14	Firebase database cleanup and improvements	10	Not Started	1	
15	Change ages to be stored in smaller increments	2	Not Started	3	
16	Set up Testflight closed beta	5	Not Started	1	
17	Word entry system testing	10	Not Started	2	
18	Add multiple language support	4	Not Started	3	
19	Implement comparative stats with Stanford wordbank	10	Not Started	4	
20	Additional Graphs/Features for Researchers	8	Not Started	4	
21	Additional Graphs/Features for Parents	8	Not Started	3	
22	Implement audio recording and upload feature	10	Not Started	5	
23	Implement video recording and upload feature	10	Not Started	5	
24	Widget for audio recording/adding words	5	Not Started	3	

Reflections

Contributions & Lessons Learned

Team Member Contributions:

- Zimuzo: Built foundational knowledge in flutter, laid groundwork for Widgets and Notifications
- Chase: Test Suite Implementation, CI Pipeline, Database Load Investigation and Fix, 2FA
- Joe: UI - Created overall theme to replace hardcoded values + improved navigation
- Caitlin: Survey page implementation and user flags, user registration process changes
- Nick: Gathered beta test requirements and documentation for iOS/Android publishing

Lessons Learned:

- Inheriting a project is very difficult without the proper context.
- Three platform development comes with significant challenges.
- Importance of testing.

Demo

- New User Account Creation
- Current App Walkthrough
- Theme Changes
- Researcher Portal
- Discussion of Improvements