



# Præū - A Vocabulary Video Smartphone App



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**Abstract:** The development of a smartphone app provides a multimedia resource for listening and speaking students that also serves as a research tool for gathering empirical data about the students vocabulary comprehension

## Background

At Kyushu Sangyo University, students studying vocabulary in the Listening and Speaking courses are provided with a university-published paper dictionary containing definitions, translations, example sentences and worksheet activities.

To supplement this with a digital audio visual resource, Youtube videos and a prototype app were trialled with students. The app proved to be much more popular and user friendly than the Youtube videos.

## Research Questions

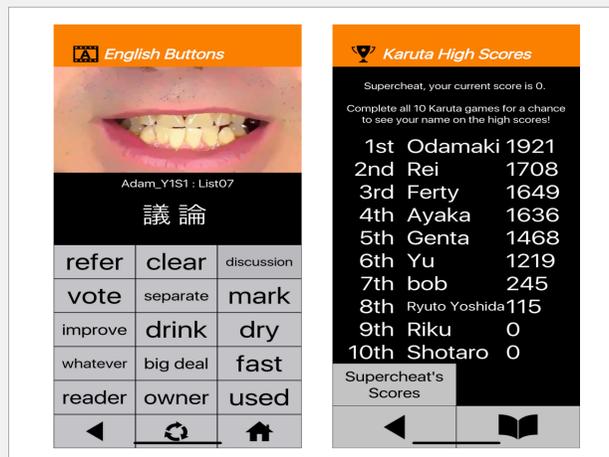
Mobile online learning is becoming increasingly ubiquitous for a variety of reasons. However, not all students embrace or are proficient with digital technologies, and not all have high spec devices. With this in mind, software designs need to be multi-platform and as intuitive and as user friendly as possible.

Measuring students' aptitudes is essential for the evaluation of any teaching resource. Designing a digital platform to deliver content affords an excellent opportunity to gather empirical usage data digitally and in real-time.

1. How to best design a digital resource for EFL vocabulary pronunciation studies.
2. How to utilize this resource as a data gathering tool for empirical analysis



1. Example diagram or photo



2. Example diagram or photo

45854	15/07/2021 03:20:25	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 4	: fast
45855	15/07/2021 03:20:26	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 4	: reader
45856	15/07/2021 03:20:27	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 4	: owner
45857	15/07/2021 03:20:27	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 4	: used
45858	15/07/2021 03:20:29	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 3	: カルタ
45859	15/07/2021 03:20:30	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: スタート
45860	15/07/2021 03:20:30	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Giving Hints = True
45861	15/07/2021 03:20:35	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 付け札を付ける Guess: 付け札
45862	15/07/2021 03:20:37	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: どれでも Guess: どれでも
45863	15/07/2021 03:20:41	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 高連な Guess: 高連な
45864	15/07/2021 03:20:42	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 話し合い Guess: 話し合い
45865	15/07/2021 03:20:44	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 触れる Guess: 触れる
45866	15/07/2021 03:20:53	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 改良する Guess: 改良する
45867	15/07/2021 03:21:00	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 空にする Guess: 空にする
45868	15/07/2021 03:21:01	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 投票 Guess: 投票
45869	15/07/2021 03:21:03	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 飲み物 Guess: 飲み物
45870	15/07/2021 03:21:05	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: たいした物 Guess: たいした物
45871	15/07/2021 03:21:06	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 隔てる Guess: 中古品の
45872	15/07/2021 03:21:09	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 隔てる Guess: 乾燥した
45873	15/07/2021 03:21:14	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 隔てる Guess: 隔てる
45874	15/07/2021 03:21:17	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 読者 Guess: 所有者
45875	15/07/2021 03:21:19	B4D78D54-CE08-4A63-8304-FC63D294EC8A	scene 5	: Answr: 読者 Guess: 読者

3. Google spreadsheet shows timestamp, UDID and data about users' word selections

## App Developments

- Two activities;
  1. Users press a button to see a word being said
  2. A Karuta game. An English word video is played and users must select the Japanese translation as quickly as possible.
- Downloadable videos featuring female and male speakers from five countries.
- A connected shared leaderboard for Karuta scores
- Users' app usage data real-time collection to a Google spreadsheet
- Published on the Apple App Store and the Google Play Store

## Discussion

The design of the user interface (UI) took its inspiration from the simple color and layout of the iPhone calculator app.

Six speakers recorded 3600 very short video clips. In order to minimize the app size, the videos have been made available as in-app downloads.

Most L&S students submitted screenshots of their Karuta scores as homework without any trouble. A very small number had technical difficulties installing to their phone.

While classroom observations of app usage were not possible, the app does collect data about its usage such as device and system specs, buttons clicked and timestamps which can elucidate insights into the students' study habits and aptitudes.

## Implications

The next release will include:

A word search function that will allow users to save their favorite words. This will be expanded to include words that proved difficult in the Karuta game.

A vocabulary test has been developed and will be included in the next release. Users type the Japanese translation for a English word video. These are rated according to a connected database which is continually updated and parsed by an English speaking moderator.