Portfolio – Neko Tango

A Japanese Vocabulary Quiz App

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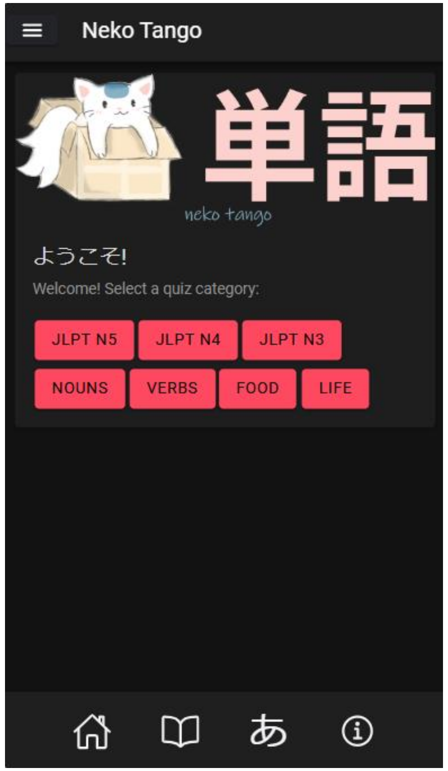
View it here -> https://renshuu-ui.web.app/home

App Overview

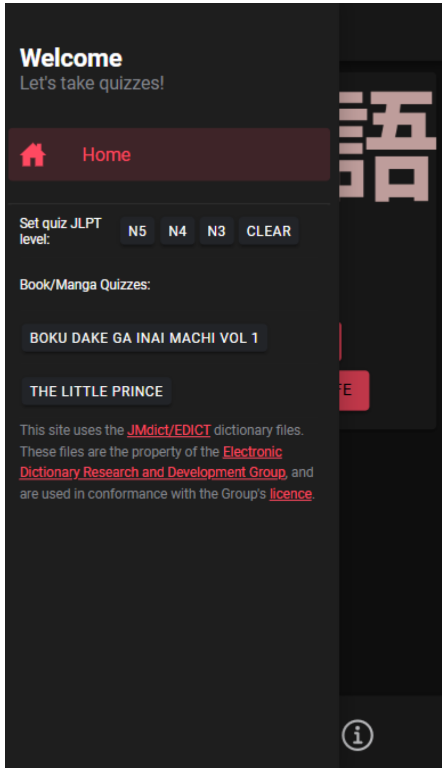
- Angular/Ionic Front-End
- Hosted with Firebase

- From the home screen, the user can select from one of the quiz categories, as well as open the side menu for more categories
- The side menu can also be used to set a filter based on the Japanese proficiency test level (with N5 being the beginner level)
- Each quiz is randomly generated from a call to the back-end service which will return a quiz of up to 10 questions (depending on the category)
- Upon finishing a quiz, a report detailing correct answers and solutions is provided to facilitate learning. The user has the option to take another randomly generated quiz from the same category from this screen, or return to home



ようこそ!

Welcome! Select a quiz category:



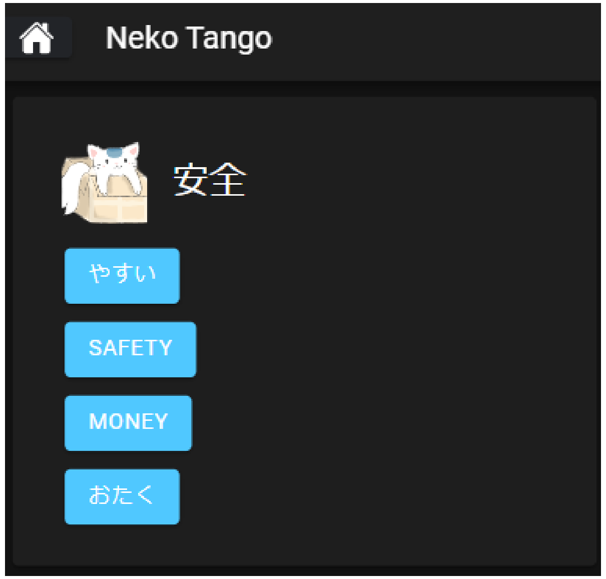
Welcome

Let's take quizzes!

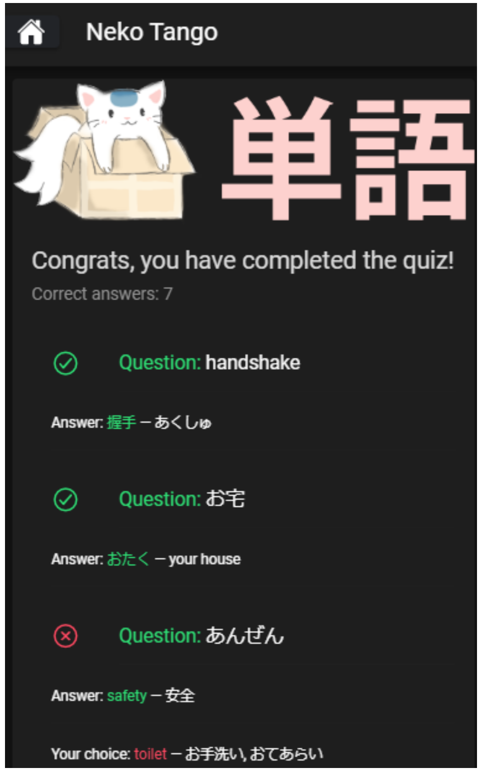
Set quiz JLPT level:

Book/Manga Quizzes:

This site uses the JMdict/EDICT dictionary files. These files are the property of the Electronic Dictionary Research and Development Group, and are used in conformance with the Group's licence.



During the quiz, after each selection the user will be presented with a correct / incorrect answer toast



Congrats, you have completed the quiz!

Correct answers: 7

✓ Question: handshake

Answer: 握手 – あくしゅ

✓ Question: お宅

Answer: おたく – your house

✗ Question: あんぜん

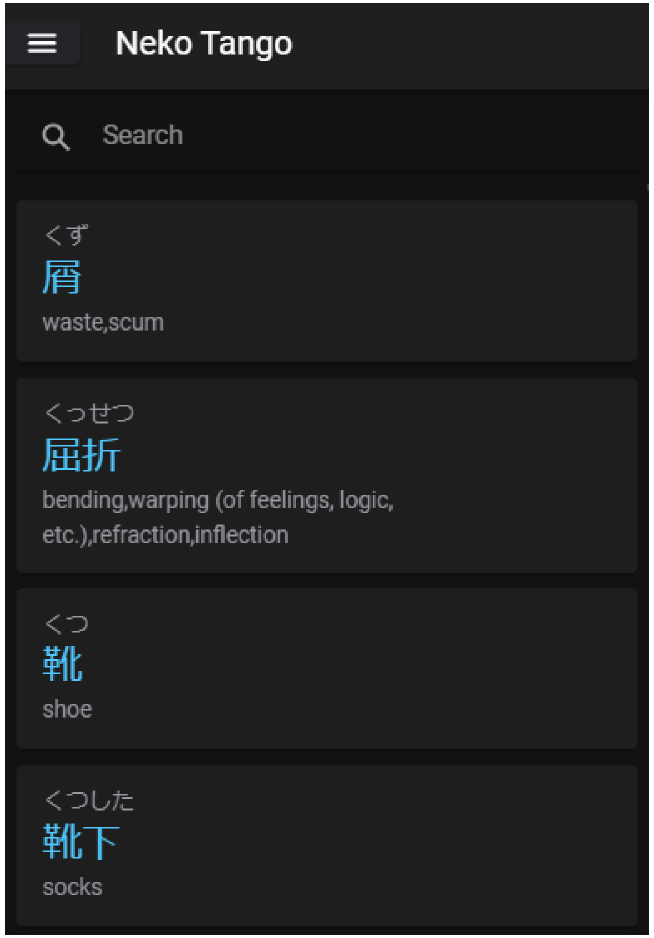
Answer: safety – 安全

Your choice: toilet – お手洗い, おてあらい

*Header also drawn by me (so it's basic)

Supplementary Screens

Searchable dictionary of words from the database with infinite scroll



Neko Tango

Search

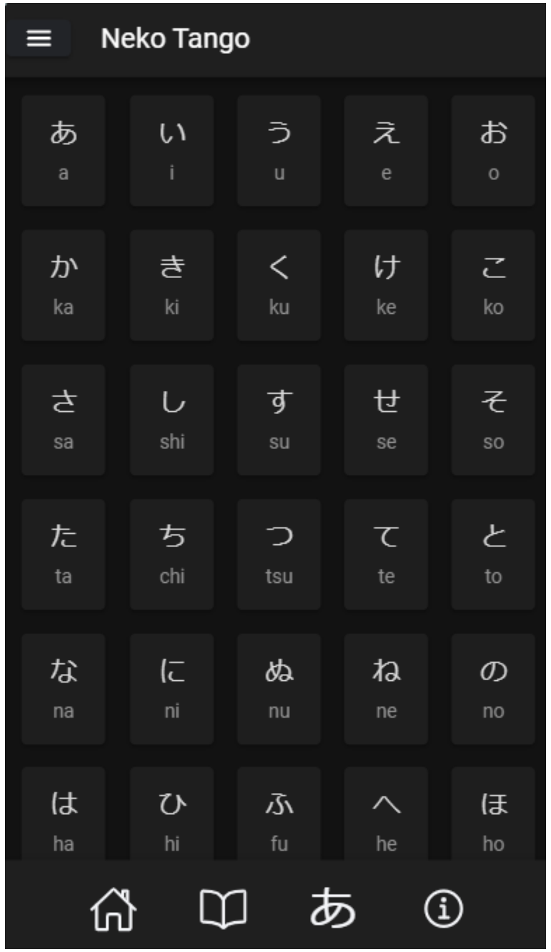
くず
屑
waste,scum

くっせつ
屈折
bending,warping (of feelings, logic, etc.),refraction,inflection

くつ
靴
shoe

くつした
靴下
socks

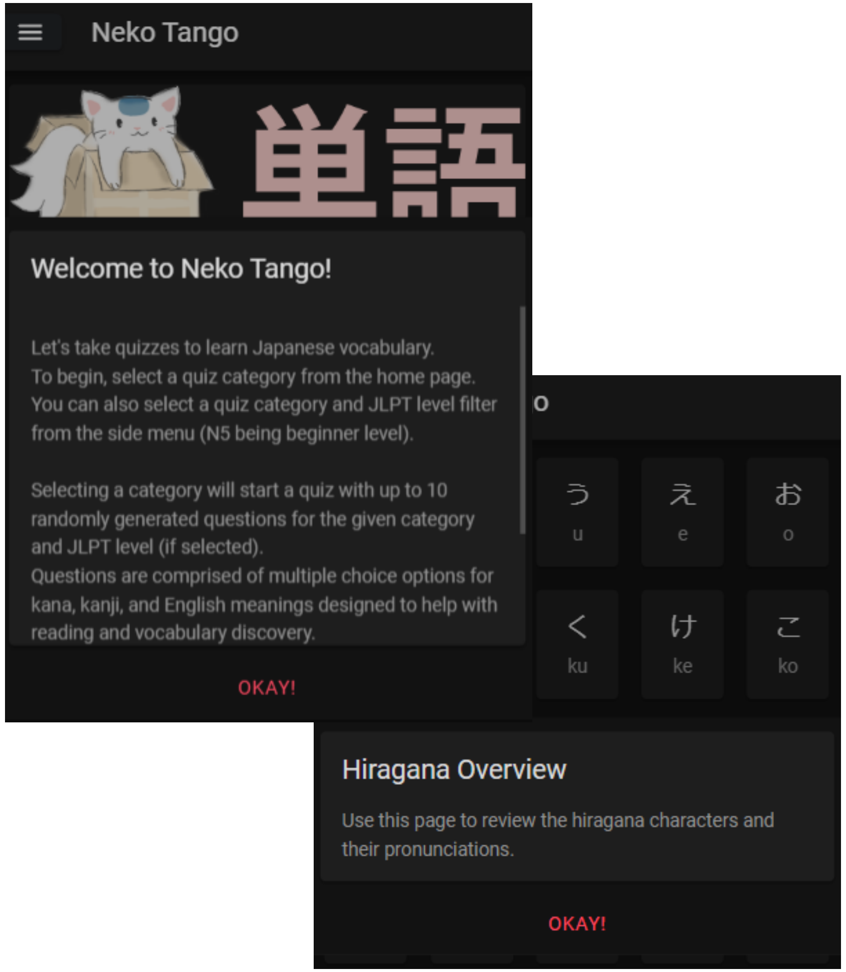
Hiragana characters overview



Neko Tango

あ a	い i	う u	え e	お o
か ka	き ki	く ku	け ke	こ ko
さ sa	し shi	す su	せ se	そ so
た ta	ち chi	つ tsu	て te	と to
な na	に ni	ぬ nu	ね ne	の no
は ha	ひ hi	ふ fu	へ he	ほ ho

Information modals for each page



Neko Tango

Welcome to Neko Tango!

Let's take quizzes to learn Japanese vocabulary.
To begin, select a quiz category from the home page.
You can also select a quiz category and JLPT level filter from the side menu (N5 being beginner level).

Selecting a category will start a quiz with up to 10 randomly generated questions for the given category and JLPT level (if selected).
Questions are comprised of multiple choice options for kana, kanji, and English meanings designed to help with reading and vocabulary discovery.

OKAY!

Hiragana Overview

Use this page to review the hiragana characters and their pronunciations.

OKAY!

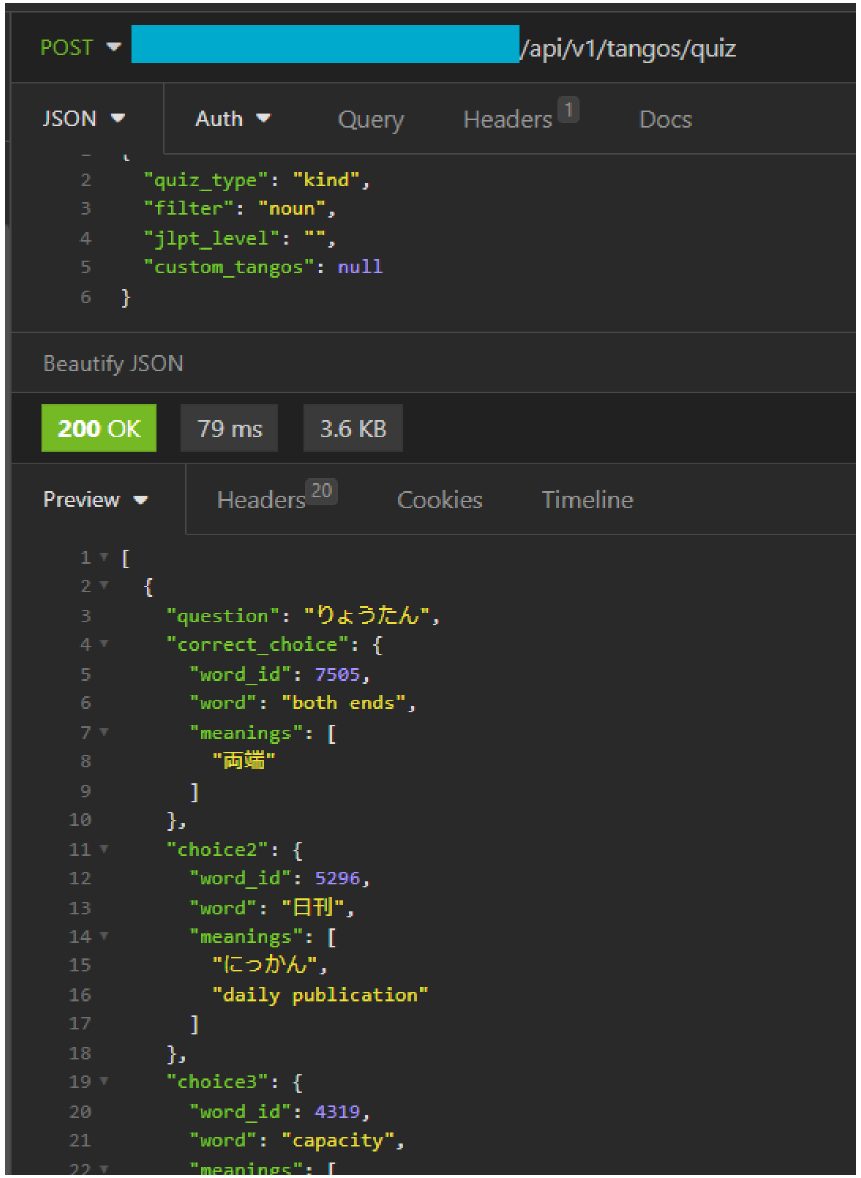
Back-End Service

- PostgreSQL database
- Ruby on Rails API
- API and DB hosted via Heroku

An example request made from the front end to generate the quiz is shown.

- The POST call can contain different properties to specify the type of quiz, in this case taking from the nouns in the database. It can further be refined by level of the Japanese proficiency test.
- The JSON response contains a quiz with up to 10 question words, accompanied with three random choice words per question
- There is also the option here to receive a list of “custom_tangos” (words) for an upcoming feature for custom user defined lists. The functionality already works to map custom lists to a quiz here, with a few preset custom lists available on the front-end side menu created in Firestore DB.

*The /quiz endpoint is the only one the front-end is concerned with for now, there are other CRUD endpoints that are authenticated for my use working with the data.



POST [redacted]/api/v1/tangos/quiz

```
{
  "quiz_type": "kind",
  "filter": "noun",
  "jlpt_level": "",
  "custom_tangos": null
}
```

```
[
  {
    "question": "りょうたん",
    "correct_choice": {
      "word_id": 7505,
      "word": "both ends",
      "meanings": [
        "両端"
      ]
    },
    "choice2": {
      "word_id": 5296,
      "word": "日刊",
      "meanings": [
        "にっかん",
        "daily publication"
      ]
    },
    "choice3": {
      "word_id": 4319,
      "word": "capacity",
      "meanings": [
```

Planned Features

- User profiles on the front-end to enable providing metrics to users on words studied
- Implementation of a spaced repetition algorithm to aid with study
- Ability for users to make custom lists / word dictionaries for their own use
- Further refinement of word database – the open-source dictionary JMDict is used, but adding of categories to words is necessary
- …more!

Thank you - this little project of mine is a passion to aid my studies in Japanese. I appreciate your time to look at it!