'VOYAGERS', an Application for Sharing Tourism Sites Using Collective Intelligence

Hana Nii, Rin Inaba

Incorporated School Ichikawa Gakuen Ichikawa Junior & Senior High School
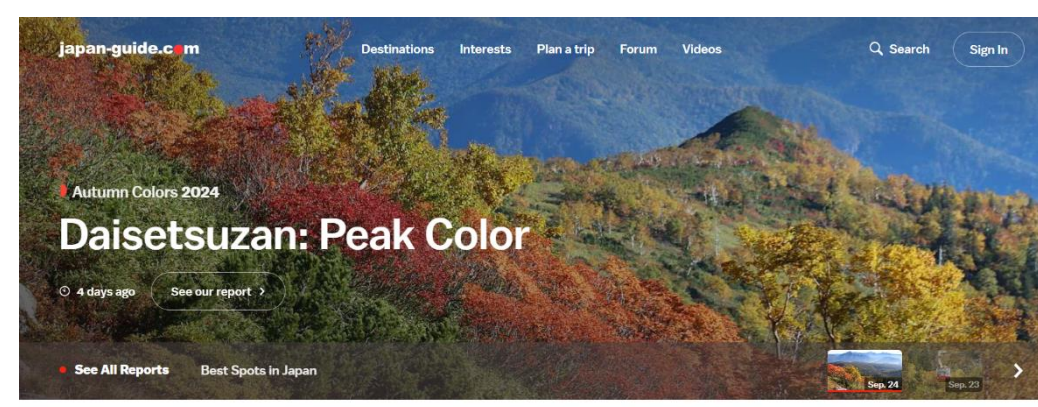
Problem

➢ Current ways to access tourist information

1. Websites used now

- Japanguide.com[1]

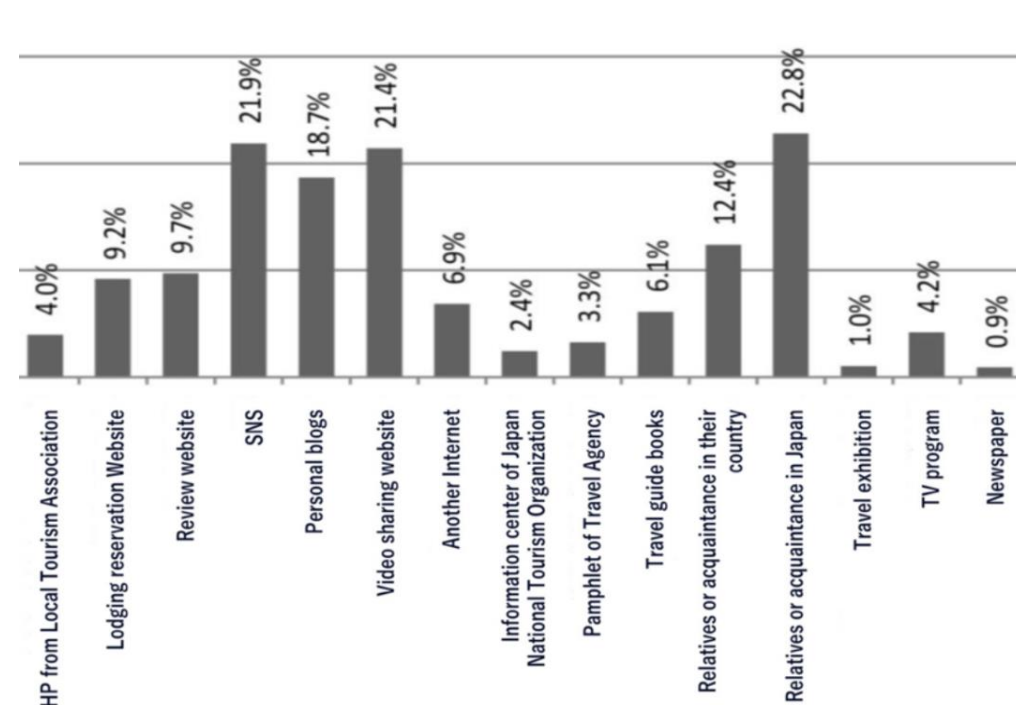Website that introduces Japanese travel locations for foreign travelers

- じゃらん.net[2]

Most popular tourist information website in Japan

➡ **Difficult to share information you know on these websites**

2. Popular ways to get tourist spot information

Information sources tourists access before coming to Japan

According to a report published by the Japanese government, in 2022, 22.8% of travelers from overseas resorted to their families and friends who live in Japan and 21.9% of them consulted to Social Media to get information. These numbers largely exceeded those who used tourist sites.

We can infer that people nowadays tend to look for first hand information rather than information given from one source even if the former was not as reliable.
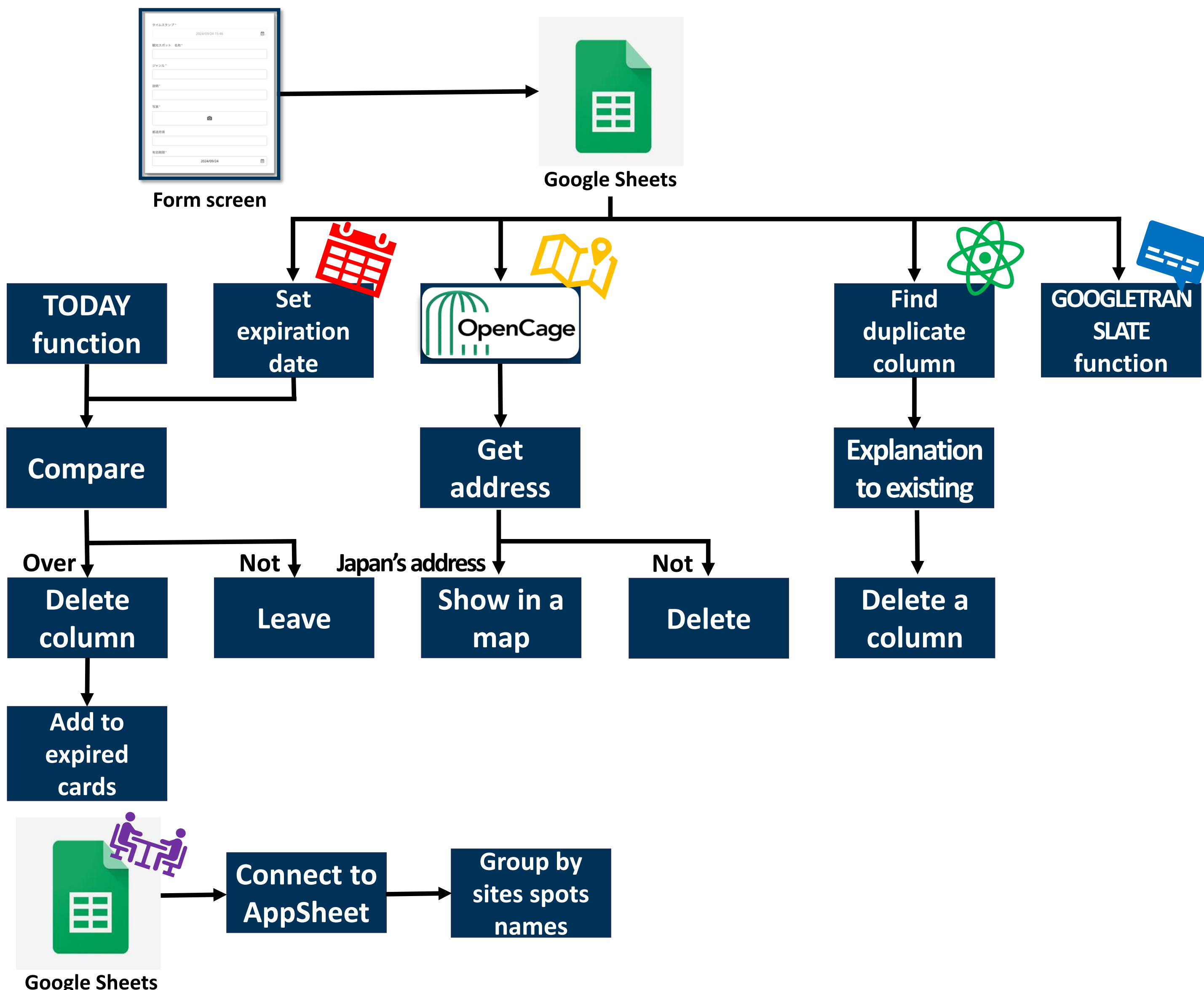
➢ Our apps objectives

An application that uses collective intelligence of users to introduce sightseeing places.

➡
- Leads to reinvigoration of local communities.
- Connect travellers to residents.
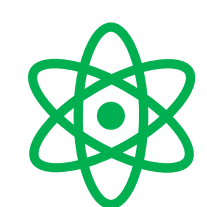- Allows users to share there experiences and thoughts.

Framework

➢ Flowchart

➢ Explanation

1. Combining duplicate column
Delete the new column and combine the explanation when the same sightseeing spot is sent through the form.

2. Translation
Automatically translate information into English using the 'TRANSLATION' function.

3. Deleting out of date columns
Compare the set date and the current date using the 'TODAY' function and then move the card into the expired cards section.

4. Maps
Get the address from names of tourist spot by using API code taken from OpenCage and delete the cards which are not addressed in Japan.

5. Q & A section
Create a Spreadsheet that includes the users' comments and link this to AppSheet.

Findings

➢ Form

Form to add information

A form where users type in the following general information is available on the application.

- ☐ **Name of tourist place**
- ☐ **Prefecture**
- ☐ **Genre**
  - 🌿 Nature, ⛩ Temple & Shrine, 🧍 Interactive 🍎 Facilities Food, 🏛 Culture & History, 🎫 Shopping
- ☐ **Setting a validity period for information that are only temporary true such as facts about an event**
- ☐ **Explanation**
- ☐ **Photos**

➢ Google Sheets

Google Sheets page to store all information

There are several spreadsheets to adjust the information using codes from Google Apps Script and functions in Google Sheets.

- Created a code on Google Apps Script that combines data for the same tourist spot.
- The website can be translated into a different language because of a translating function.
- The address of a place can be automatically derived using an API code.

➢ Application

The application is separated into three sections; 'Q&A', 'Maps' and 'Cards'

◆ Q&A
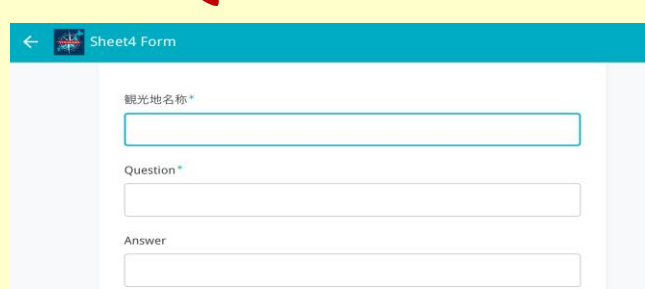
Form page to ask questions and answer it

This area works as a social field where users can share ideas and experiences.

- By grouping the answers to a question using Google AppSheet, Multiple users are able to answer one question.
- Questions and answers are grouped according to the tourist site by creating layers on Google AppSheet.
- Users are able to press the 'Nice!' Button to rate the accuracy of the information.
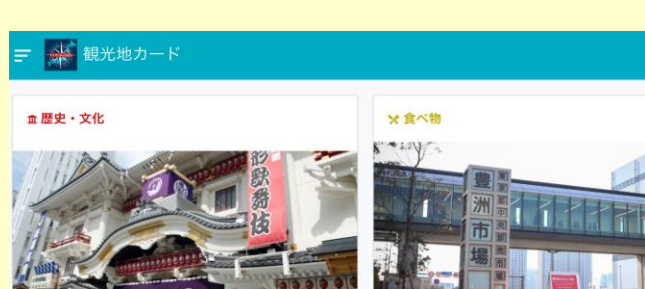
◆ Maps

Map page to show a sightseeing spot

This area automatically shows locations of tourist places on a map.

- The actual address of a tourist location is automatically calculated with an API code on Google Apps Script.
- Uses are able to filter the pins by selecting the genre or typing the name of the tourist site.

◆ Cards

Cards page to show all information from form

This area shows the general information of sightseeing spots which were sent through the form.

- Users are able to filter the cards by selecting certain genres and prefectures.
- Users can add on to the explanation without being permitted to edit it. A code that combines rows with the same name was constructed on Google Apps Script for this.
- Information that is only valid for a period of time is coded on Google Apps Script to move to the out of date section once the validity date passes.

Discussions

Through this project, we created 'Voyagers' an application using the collective intelligence of users to introduce tourist spots. However, there were a few points that we could not solve.

- Because we didn't subscribe for Google AppSheet Pro, we couldn't use the translating feature on Google AppSheet. This interfered us from making a system that could translate without changing the original data stored in the spreadsheets.
- In order to use the collective intelligence, we enabled users to freely add on explanations which made it difficult to seek a balance between the accuracy of the information and the concept of creating a platform where users are free to share their knowledge.
- We were not capable of designing and constructing the app from scratch because we used a non-code app builder.

References

1. Japan Guide. "Japan-Guide.com-Japan Travel and Living Guide." *Japan-Guide.com*, 2019, www.Japan-guide.com/.
2. 宿・ホテル予約-旅行ならじゃらんNet." www.jalan.net/.
3. 国土交通省観光庁 観光戦略課観光統計調査室. 訪日外国人の消費動向 訪日外国人消費動向調査結果及び分析 2022 年 年次報告書. Mar. 2023.