

2020-Current

Portfolio

Hidemichi Baba →
GIS, Web developer

May 2020 - Current

Re:Earth

Project Manager, WebGIS Developer

Summary (Professional Project)

A no-code WebGIS that allows users to easily visualize various data formats (GeoJSON, 3D Tiles, glTF, MVT, KML, CZML) on the web, available as OSS. In addition, plug-in functionality, like Figma, has also been implemented, allowing users to extend the UI and its functionality on their own.

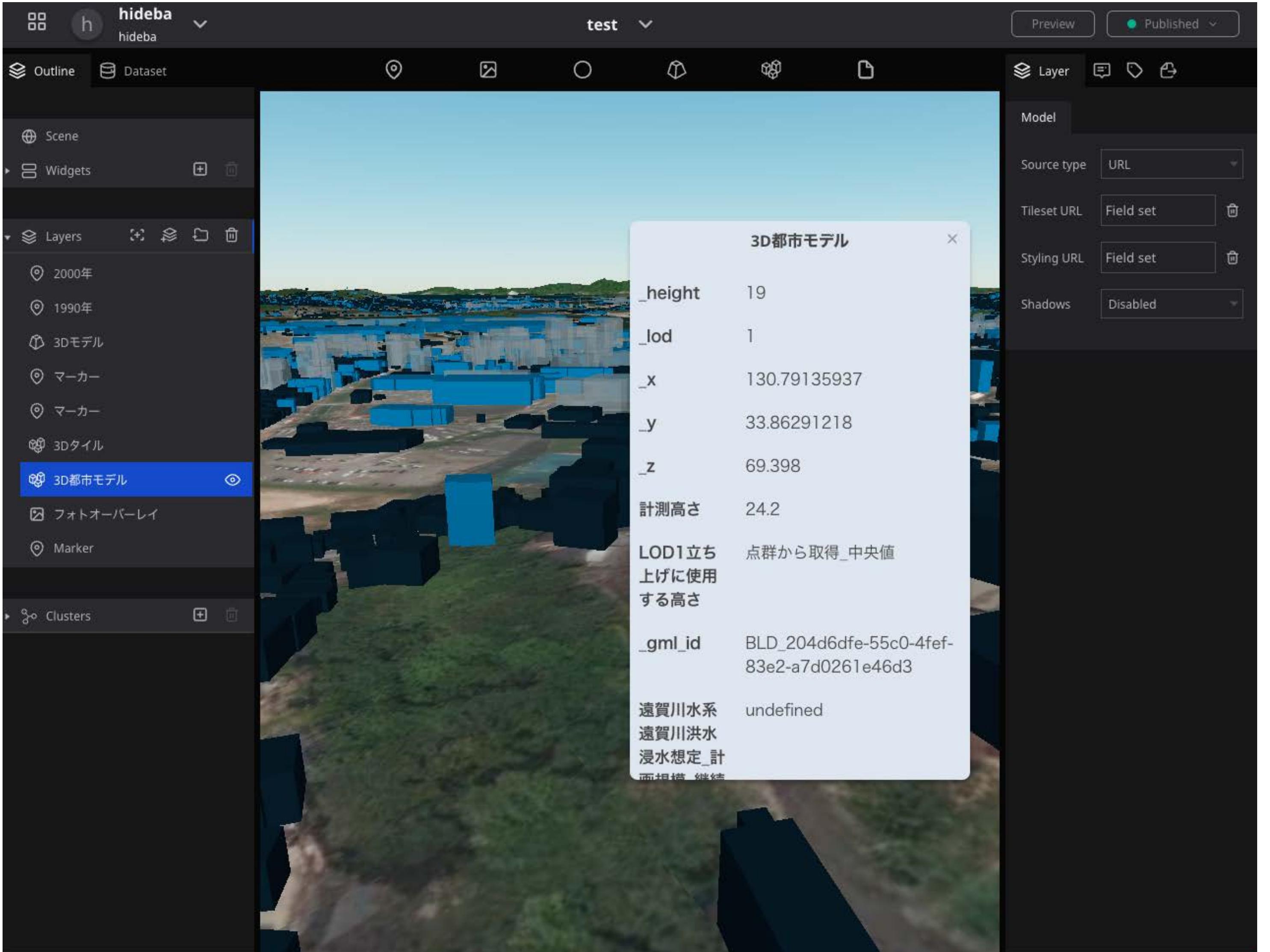
- URL: <https://reearth.io/>
- GitHub: <https://github.com/reearth/reearth>

Team

- 1 project manager (me)
- 2 designers
- 13 developers

Technologies

- TypeScript / JavaScript React Go GraphQL
- Cesium GCP QGIS MongoDB



May 2022 - Current

Re:Earth CMS

Project Manager, WebGIS Developer

Summary (Professional Project)

Content Management System(CMS) for managing GIS data, allowing users to manage various data formats such as CityGML, 3D Tiles and GeoJSON, and distribute them via API with metadata. Combined with Re:Earth, users can manage and visualize GIS data.

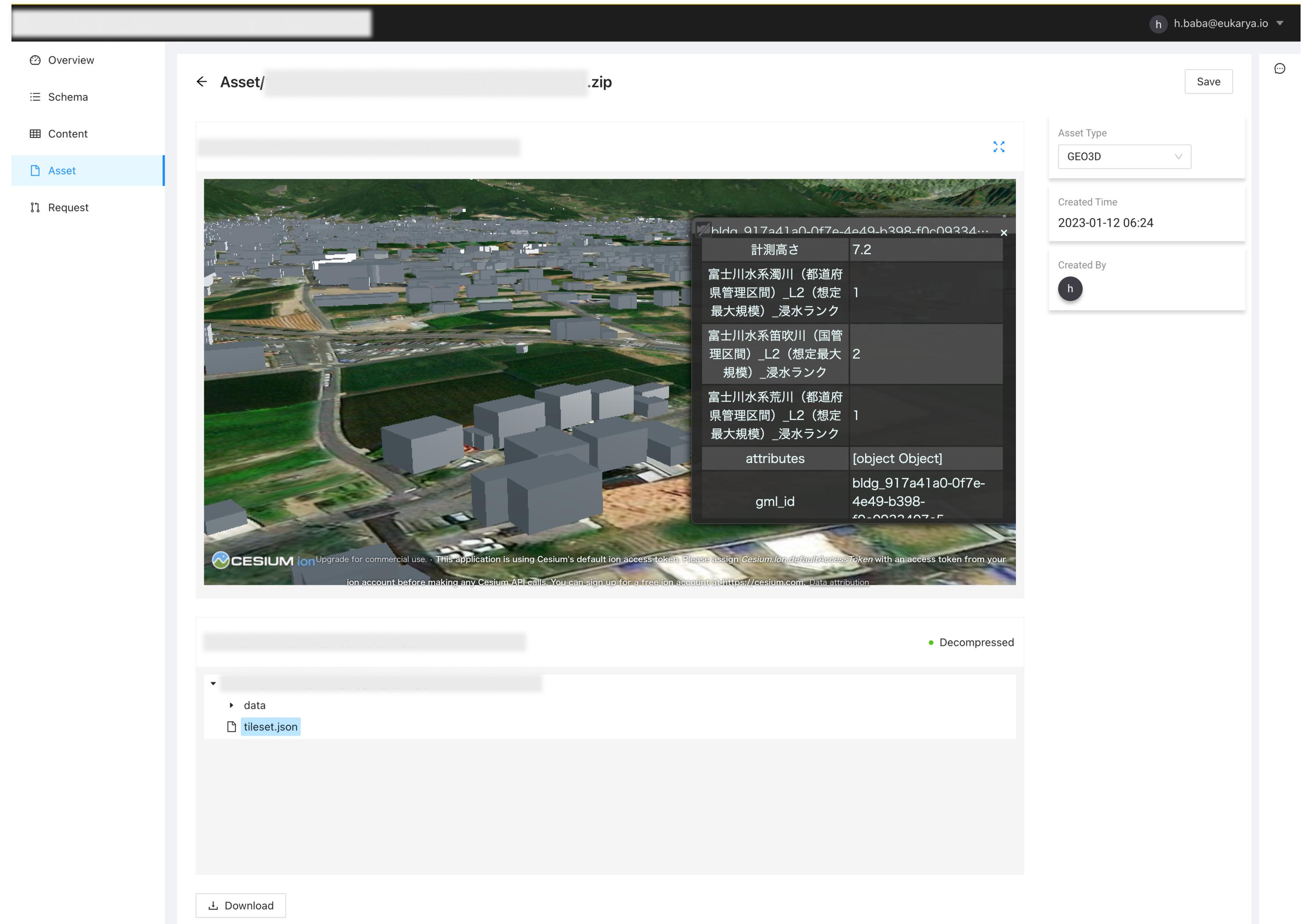
- GitHub: <https://github.com/reearth/reearth-cms>

Team

- 1 project manager (me)
- 1 designers
- 6 developers (including me)

Technologies

- TypeScript / JavaScript
- React
- Go
- GraphQL
- Cesium
- GCP
- QGIS
- MongoDB



Apr 2022 - Current

PLATEAU VIEW 2.0

Project Manager, WebGIS Developer

Summary (Professional Project)

Project in collaboration with the Ministry of Land, Infrastructure, Transport and Tourism, Japan. The project aims to build a system that centrally manages CityGML created by each municipality and allows users to access 3D city model data through APIs.

Team

- 2 project managers (including me)
- 2 designers
- 13 developers

Technologies

TypeScript / JavaScript React Go GraphQL
Cesium GCP QGIS MongoDB



Jan 2022 - Mar 2022

Masuda City Map

WebGIS Developer

Summary (Professional Project)

Project in collaboration with Masuda city municipality aimed at improving the branding of the city by visualizing local points of interests on a map. Users are able to post comments in an effort to promote communication and encourage interaction.

Team

- 1 project manager
- 1 designer
- 2 developers (including me)

Technologies

TypeScript / JavaScript React Go Cesium



Nov 2021 - Feb 2022

Real-Time Evacuation Information Management System

WebGIS Developer

Summary (Professional Project)

Real-time evacuation status management system for municipalities. Data is collected in real time from sensor information at each evacuation site. The system then visualizes gender and age data of locations on a map.

Team

- 1 project manager
- 1 designer
- 2 developers (including me)

Technologies

TypeScript / JavaScript React Cesium



Mar 2020 - Mar 2021

Mapup

Web Developer

Summary (Professional Project)

Learning platform for Japanese high school Geography teachers. Users can utilize forums to discuss exams and class content, watch video content and browse the Wiki to prepare material for classes.

Team

- 1 project manager
- 1 designer
- 4 developers (including me)

Technologies

TypeScript / JavaScript jQuery Ruby Ruby on Rails
PostgreSQL GCP

The screenshot shows the Mapup platform's user interface. At the top, there are navigation links: 'Mapup' (with a red play button icon), 'チャンネル' (Channel, highlighted in red), '用語集' (Vocabulary), 'フォーラム' (Forum), 'イベント' (Events), and 'ログイン' (Login). On the left, a sidebar titled 'フィルター' (Filter) lists categories: '地理学の総説' (General Geography), '地理学の歴史 (1)', '地誌 (1)', '地理学とは (1)', '+全て表示' (Show all); '自然地理' (Natural Geography), '地形の成因 (1)', '大陸移動説 (1)', '断層山地 (1)', '+全て表示'; '人文地理' (Human Geography), '馬産地 (1)', 'モータリゼーション (1)', 'IT産業 (1)', '+全て表示'; and '地名' (Place Names), 'カシミール (1)'. On the right, three course cards are displayed under '新着コンテンツ' (New Content):

- 22.国家**: A thumbnail of many small flags, description: '世界には200近くの国があるとされていますが、国とは一体どういうものを指すのでしょうか。このコースでは、国とは何か、国家の政治的形態についての説明を紹介していきます。', lessons: 4, duration: 36 min.
- 21.行動**: A thumbnail of people walking, description: '人間活動の変化により、生活意識や商売の形態にも変化が見られます。このコースでは、人間の行動の変化とそれを取り巻くモノや場所の変化について時代の流れとともにご紹介します。', lessons: 4, duration: 40 min.
- 20.都市 (構造・都市…)**: A thumbnail of a city skyline, description: '人間活動が発達とともに、都市の内部構造は商業、居住、就業などの機能毎に分類されて行きます。このコースでは、都市の機能を焦点に都市構造の考え方や複合的に関わる都市の事例、また公害な…', lessons: 8, duration: 69 min.

Feb 2020 - Mar 2020

Area Karte

WebGIS Developer

Summary (Professional Project)

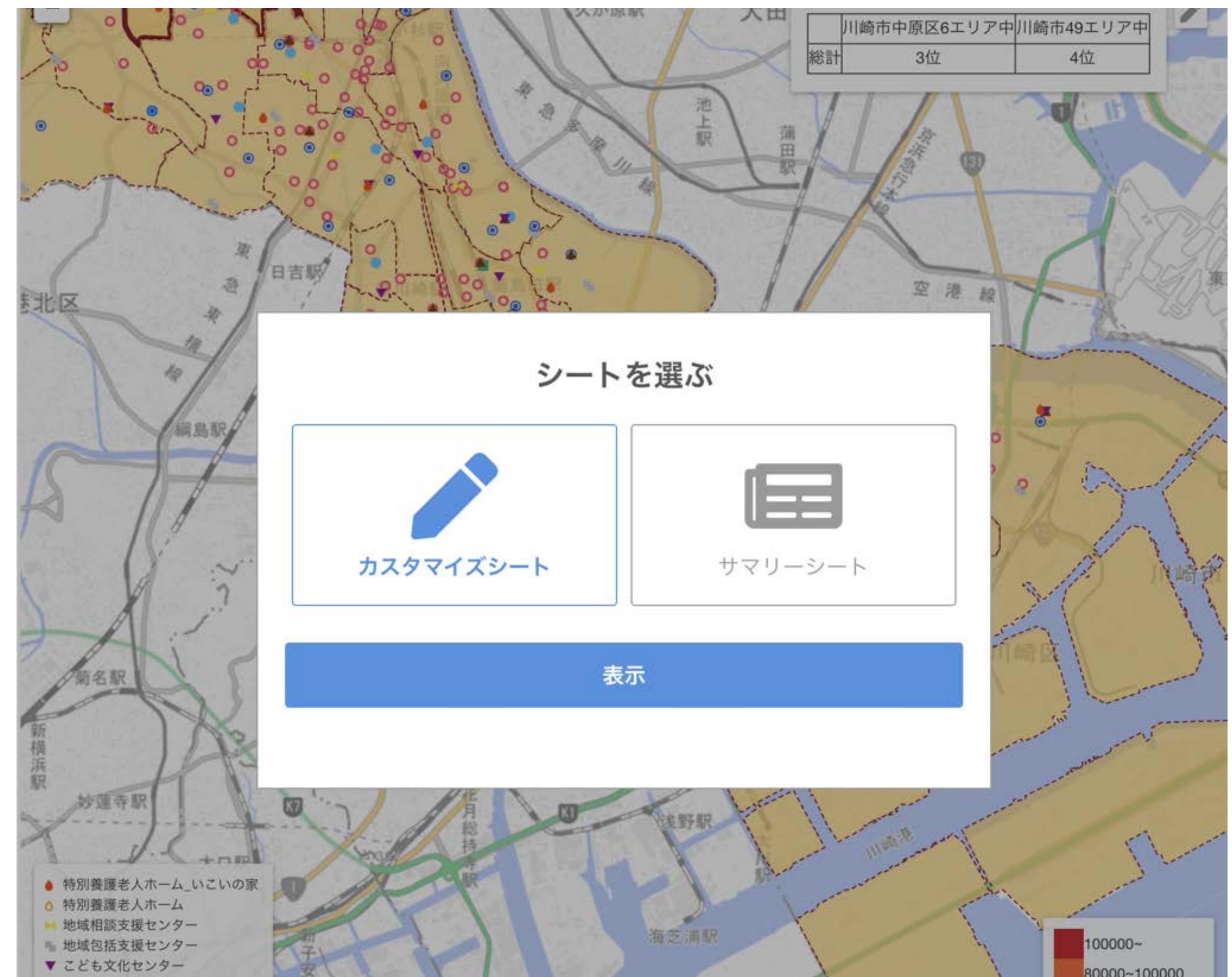
Project in collaboration with Kawasaki city municipality built to visualize statistical information such as population and distribution of public facilities.

Team

- 1 project manager
- 1 designer
- 4 developers (including me)

Technologies

TypeScript / JavaScript React Leaflet Python



Oct 2019 - Feb 2020

CO・OP PEACE MAP

WebGIS Developer

Summary (Professional Project)

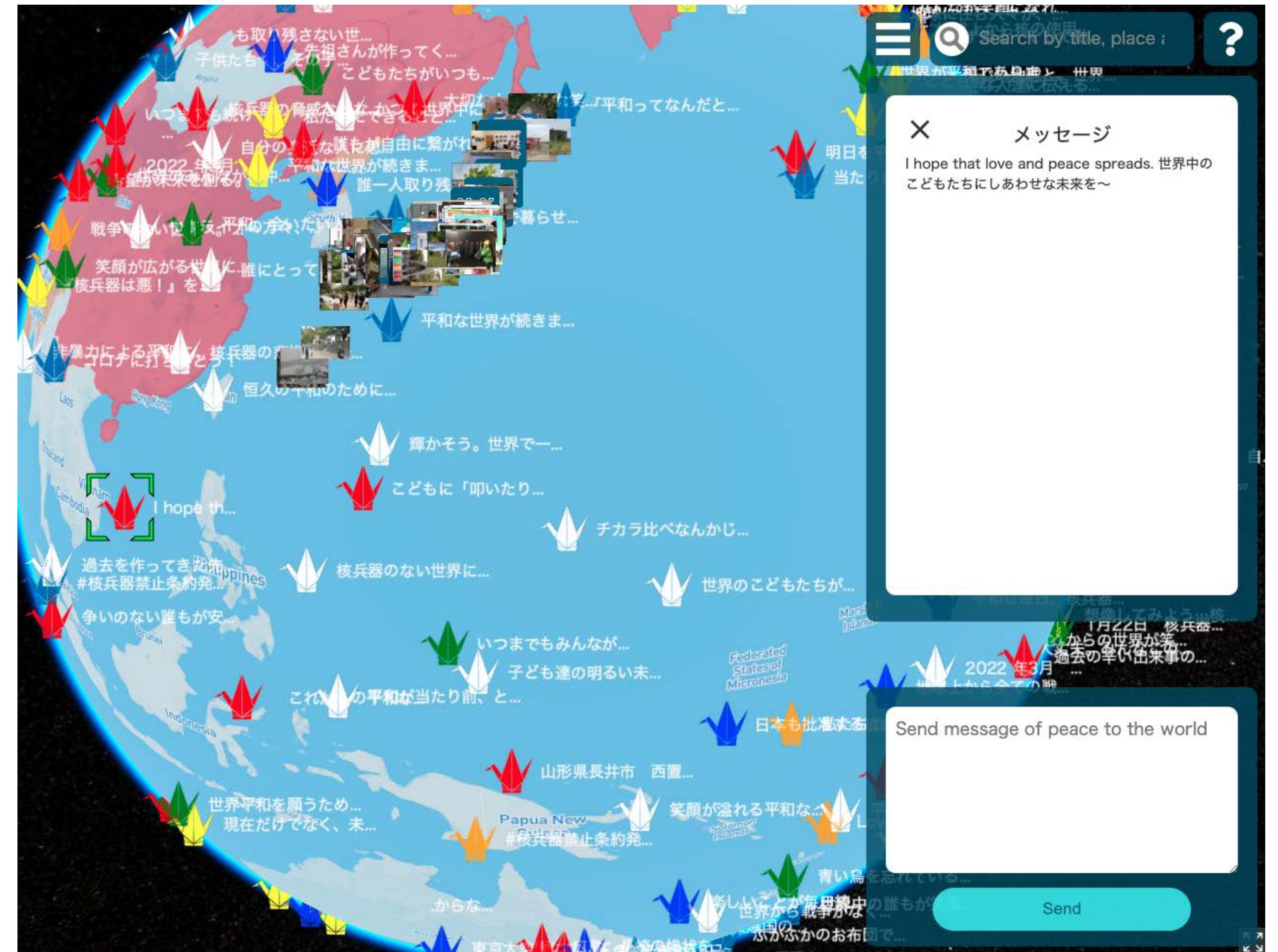
Visualization of COOP's non-proliferation activities on a digitized earth. By allowing users to post their own messages of peace, COOP has managed to increase engagement in it's activities.

Team

- 1 project manager (me)
- 1 designer (me)
- 1 developer (me)

Technologies

TypeScript / JavaScript React Cesium



Others

Cesium DnD

WebGIS Developer

Summary (Professional Project)

NPM library to allow drag and drop of Entities on Cesium

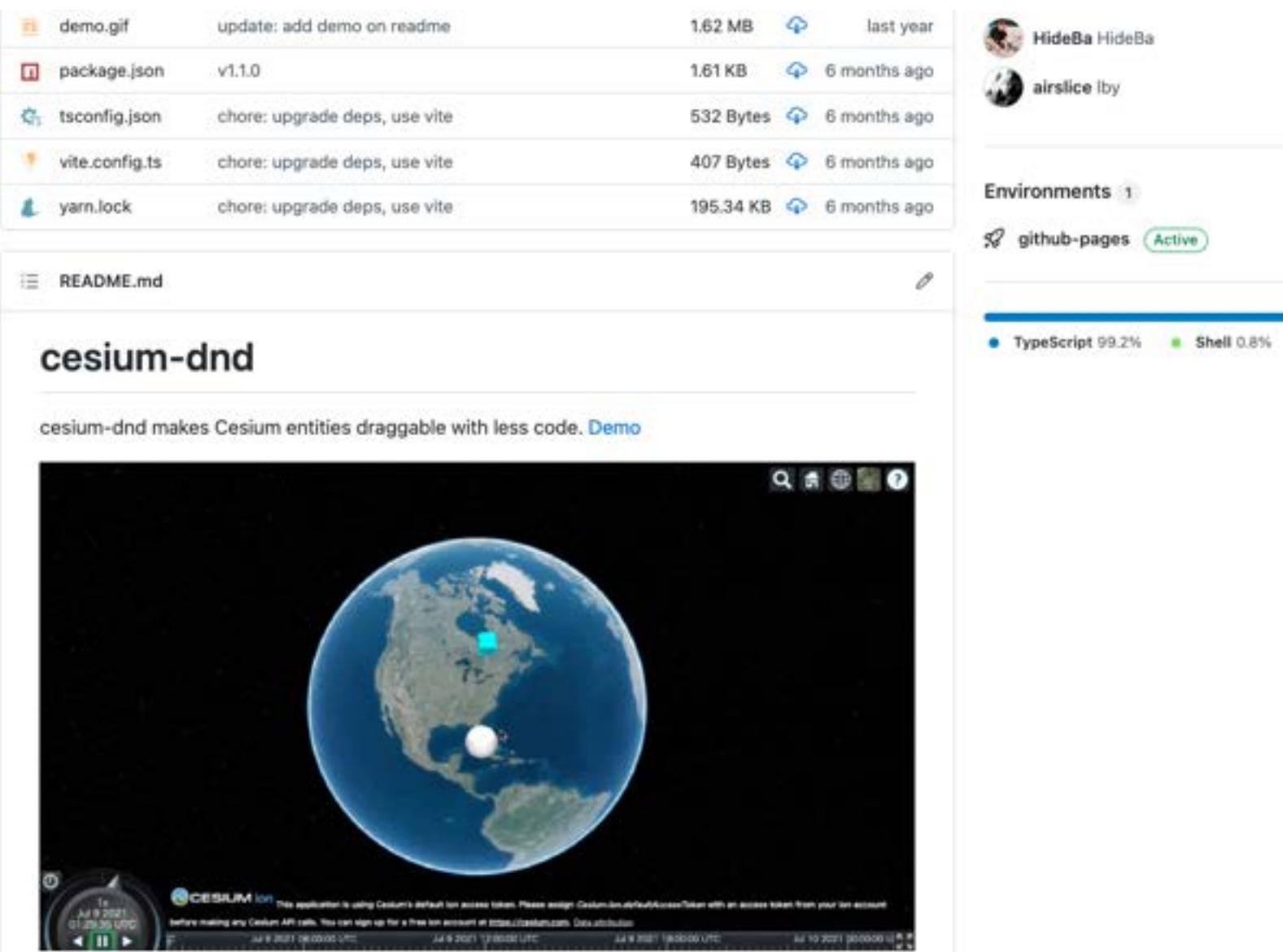
- URL: <https://github.com/reearth/cesium-dnd>

Team

- 2 developers (including me)

Technologies

TypeScript / JavaScript Cesium



React Hooks Geolocation

WebGIS Developer

Summary (Personal Project)

NPM library that allows users to get geolocation information easily with React Hooks

- URL: <https://github.com/HideBa/react-hooks-geolocation>

Technologies

TypeScript / JavaScript React

