SATCAP

Setup

Prerequisites

- Have an existing Firebase/Google account
- Have a Firebase project set up
- Have Firebase CLI installed on your workstation
- Have the code on your workstation (this is the downloaded zip)
- Have access to a unix based terminal on your workstation
- Have NPM and NodeJS (nvm recommended) installed on your workstation

Project setup

Firebase Project docs

1. Open this project in VS Code and open the terminal inside VS Code (or open your terminal and `cd` to the project root directory)
2. `firebase login`
3. `firebase use --add`
4. When prompted for which project you want to add, select the project you created in the prequisite step
5. Write your alias (can be anything like e.g. satcap-prod)
6. You are now using your own Firebase project and no longer the **default** (satcap-research)

To switch projects run the following, changing **ALIAS** to a defined alias

```
firebase use ALIAS
```

Please note, if you're on a project that your Google account does not have access to, you won't be able to deploy.

Firestore setup

1. Login to Firebase console
2. Open your project
3. Click on Build -> Firestore Database
4. Click "Create Database"
5. Follow the prompts

Authentication setup

1. Login to Firebase console
2. Open your project
3. Click on Build -> Authentication

4. Go to the "Sign-in method" tab
5. Click "Add new provider"
6. Turn on "Email/Password"

Hosting setup

[Hosting docs](#) **ADMIN_SITE_ID** and **USER_SITE_ID** has to be replaced with a value of your choosing.

This would however need to be unique across the entire Firebase platform so if you use a value that already exists, you will get an error similar to the below:

```
Error: HTTP Error: 400, Invalid name: `admin-satcap-research` is reserved
by another project; try something like `admin-satcap-research-51aa9`
instead
```

1. `firebase hosting:sites:create ADMIN_SITE_ID`
2. `firebase hosting:sites:create USER_SITE_ID`
3. `firebase target:apply hosting admin ADMIN_SITE_ID`
4. `firebase target:apply hosting user USER_SITE_ID`

Functions setup

[Functions docs](#)

1. `cd functions/`
2. `npm i`

Deploy

Because of the admin website requiring a build before deployment, it is **not** adivsed to run the global `firebase deploy` command as this will cause unforeseen problems.

Rules and Indexes (Firestore / Storage)

```
firebase deploy --only firestore:indexes
firebase deploy --only firestore:rules
firebase deploy --only storage
```

Functions

```
firebase deploy --only functions
```

You can [read here](#) for more details about Firebase Functions and deployments

Admin

1. `cd admin/`
2. `npm i && npm run build`
3. `cd ../`
4. `firebase deploy --only hosting:admin`

User (survey links)

```
firebase deploy --only hosting:user
```

Initial data import

To start using the application, you can easily add mines and import packages using cloud functions before accessing the application on the web.

The current version of the application does not support the creation of mines or packages within the application itself.

Add Mine

To create your mine without adding it manually on Firebase console you can run the `addMine` cloud function deployed in the previous step.

Please change the following:

- {LOCATION} = The location in which the project was deployed e.g. us-central1
- PROJECT_ID} = The ID of the Firebase Project e.g. satcap-research
- {NAME} = The name of the mine you're wanting to create

```
https://{LOCATION}-{PROJECT_ID}.cloudfunctions.net/addMine?name={NAME}
```

Please see the data architecture to understand what can be edited/added to the mine information

Add Surveys/Packages

In order for the mine to create survey links, the packages collection needs to have the predefined data in it.

To acheive this, you can run the `importPackages` cloud function deployed in the previous step.

Please change the following:

- {LOCATION} = The location in which the project was deployed e.g. us-central1
- {PROJECT_ID} = The ID of the Firebase Project e.g. satcap-research

```
https://{LOCATION}-{PROJECT_ID}.cloudfunctions.net/importPackages
```

Create Admin User

Initially, you will have to manually add a person to the "backend" to get started.

All subsequent users can be added the traditional way on the "People" tab within the admin application.

Please see Data Architecture for more information before proceeding to the below steps

1. Login to Firebase console
2. Open your project
3. Click on Build -> Authentication
4. Under the "Users" tab, click "Add user"
5. Enter details and "Add User"
6. Copy UID generated
7. Click on Build -> Firestore Database
8. Click on "mines" collection
9. Click on the mine you're wanting to add the person to
10. Click on the Sub-collection "users" (If not there, create it by clicking "Start collection" within the mine document and skip step 11)
11. Click "Add document"
12. Click "Auto-Id" and add the following fields

Email / SMS

You will need to enable the following extensions within Firebase:

Trigger Email

- Link to extension
- Setup with your own SMTP account
- Use **mail** as the collection name

Send Messages with Twilio (optional)

- Link to extension
- Setup with your own Twilio account
- Use **messages** as the collection name

Data Architecture

Packages

Collection Id: **packages**

Structure

Field	Type	Value
docId	string	Redundant copy of actual doc UID
name	string	Name of work package
survey	map	Survey information this package links to

Field	Type	Value
survey.complete	map	Custom messages on completion of a survey
survey.complete[surveyKey].message	string	Custom message
survey.complete[surveyKey].type	string	Custom heading
survey.shortDescription	string	Summary description of survey
survey.description	string	Full description of survey
survey.key	string	Unique key of survey or parent key of surveys
survey.title	string	Title of survey or parent title of surveys
survey.surveys	array[map]	(Optional) list of surveys if package provides more than one
survey.surveys[0].color	string	HEX value of theme colour for survey
survey.surveys[0].description	string	Description of survey
survey.surveys[0].faqUrl	string	URL link to FAQ's for survey
survey.surveys[0].key	string	Unique key of survey
survey.surveys[0].title	string	Title of survey
scopes	array[string]	List of all menu items this package has access to on the user side

Scope
home
survey
information
queries

Mines

Collection Id: **mines**

Structure

Field	Type	Value
address	string	Area of mine
name	string	Name of mine
description	string	Description of mine
featureImageUrl	string	URL link to header image

Field	Type	Value
imageUrl	string	URL link to logo of mine
packages	array[string]	Document ID's of all packages this admin has access to

Users

Sub-collection of mines

Collection Id: **users**

Structure

Field	Type	Value
authUid	string	Value of UID according to authentication user
name	string	Name of user
mobile	string	Mobile number of user
email	string	Email of user (must be contactable - not required to be same as authentication email)
isAdmin	boolean	true if can manage mine (operations / about etc.) and add people to mine
jobTitle	string	Job title of user
mineId	string	Document ID of current mine
locationAdmin	array[string]	Document ID's of all locations (operations) this user can manage (is allowed to be null if isAdmin is true)

Locations

Sub-collection of mines

Collection Id: **locations**

Structure

Field	Type	Value
name	string	Name of location