

Foreword

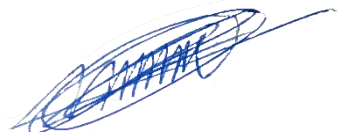
On behalf of One Youth One Heart initiative partners, friends and colleagues, I would like to take this opportunity to thank everyone that has tremendously supported, assisted and guided the initiative in the year 2020.

Well, what a year it has been. From a global pandemic, protests and riots in parts of the world, online learning and remote work, With terms such as quarantine, social distancing, and Zoom parties, it seems like our everyday lexicon will forever be changed by the words and phrases that have permeated our conversations this year. Despite all this, you still morally and financially supported us which led to still diligently and relentlessly meet the needs of our beneficiaries (refugee and host community youth). In 2020, we gladly reached out and directly impacting to over 984 refugees and host community household with a special emphasis on girls and young mother in our programs. Furthermore, One Youth One Heart initiative would like to thank its working partner organizations

First our philanthropists, Office of the Prime Minister (OPM) for the continuous grant of refugee status to several refugees from different nationalities,
Second the United Nations High Commission for Refugees (UNHCR) for the office furniture material support to support our endeavors,
Third the Poema Academy for the provision of the online learning sessions using zoom and financial support that offers a physical space to refugee learners for a smooth learning environment,
Fourth the Refugee-Led Organization Network (RELON) for their advocacy work that promotes refugee-led organizations self-representation in different forums where issues concerning refugees are discussed, Fifth the refugee community leaders for their endless and active participations in issues affecting refugees,
Sixth the local councils and churches for supporting and actively collaborating with the us in different activities carried out this year and also enabling OneYouth OneHeart initiative achieve its milestones set out to achieve in the year 2020.

Our plan is to greatly continue impacting on refugees and host community (Nationals) in all spheres of their lives especially through technology, livelihood, innovation, entrepreneurship and the promotions of their rights. However this plan can only be achieved through establishing strong, mutual, productive, long lasting partnerships with credible technical and funding organizations/agencies that have the same or similar priority areas of focus like OneYouth OneHeart initiative.

We are looking forward to a great 2021 with new innovations, ideas, projections and prospects. I sincerely want to wish you all a great new year full of great accomplishments and achievements.



Executive Director,
OneYouth OneHeart initiative
(OYOH).

Activities undertaken from January 2020 to April 2021

1. Global Refugee Advice Sourcing Platform App (GRASP APP): January 11th to April 24, 2021



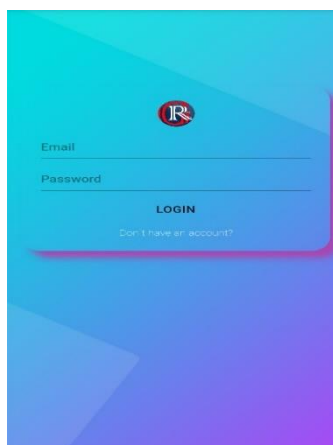
The Global Refugees Advice Sourcing Platform App (GRASP APP) Project is being developed and designed by **OneYouth OneHeart Initiative (OYOH)** in partnership with **International Refugee Rights Initiative (IRRI)** to provide a space for crowdsourcing information to locate trouble spots for refugees and enable them report cases or concerns to authorities.

It also aims to co-create a platform that is designed with and by the refugees to coordinate updated information from refugee support providers to inform refugees (Persons of Concerns (PoC)) on all available services, events, opportunities, and protection information.

The project will create a multilingual web/mobile based system to provide refugees with updated information from respective refugee support organizations. It will build a firm, sustainable and close relationship with the various refugee support organizations to ensure PoC can find timely and reliable information on this platform.

Project Out put

a. Login Page



This section of the application is essential for any user to login the application or get entry access to different pages. This requires users' identification

and authentication, regularly performed by entering a username and password combination.

Similarly, the following page is designed to give entry access to service providers and whose aim is to inform the public on the available services. Only authorized service providers can use this section to login the application.

Grasp Admin

Create your account

	Organisation Name
	Email
	Location
	Enter url to your website
	Password
Services	<input type="checkbox"/> Livelihood <input type="checkbox"/> Protection <input type="checkbox"/> Survival Needs <input type="checkbox"/> Health
Description about your organisation	
Create Account	

b. Chatroom page

Information crowd sourced are posted under this section of the mobile application to locate trouble spots for refugees; and enable refugees to report cases or concerns to authorities. The page will allow users to post photos to support their claim. A functionality to enabled users go far to even post videos will later be added for accurate reporting of their claim.



d. Map sage

This section of the mobile application provides updated information to refugees regarding public health, locating clinics, isolation centers, case treatment, etc. This section will contain information that respond to queries contained in FAQs, instant information on Covid-19 and debunk myths.



c. Service Providers' page

Under this section of the application, the intention of the implemented functionalities enable authorized groups of people to post in the mobile application. This authorized group of people could be health centers, service provider workers, or representative of refugee serving organizations.



1. Covid-19 page

This section displays information related issues partnering with Covid-19. It provides updated information to refugees regarding public health, protection measures against Covid-19, locating clinics, isolation centers, case treatment, etc. It will contain information on Covid-19 and debunk myths.



2. Things To Know About The Global Refugee Advice Sourcing Platform (Grasp App) And The Features Used To Support The Development Process

Overview.

This brief notes describe the development process of Grasp and also the requirements needed to facility its operation. Below are well defined software requirements used. required for further development of the Application.

a. Google Cloud Platform.

Is a suite of [cloud computing](#) services that runs on the same infrastructure that Google uses internally for its end-user products, such as [Google Search](#), [Gmail](#), [file storage](#), and [YouTube](#). Alongside a set of management tools, it provides a series of modular cloud services including computing, [data storage](#), [data analytics](#) and [machine learning](#). Registration requires a [credit card](#) or bank account details.

Google Cloud Platform provides [infrastructure as a service](#), [platform as a service](#), and [serverless computing](#) environments.

The Grasp whole backend relies on the Google Cloud Platform and this is where all its firebase operations are kept. The Images and tests uploaded and read by the users are stored in the buckets of the Google Platform.

At the moment, OYOH uses a lead developer's personal development Google Cloud Platform to carry out all the operations of the Grasp App. However, good things come with a price, Google Cloud gives only 1 year for its trial version for using almost all of its functions. It also gives \$200 credit(This is note real money, take it

like the points that a person can use to pay for Google Cloud Platform in case there are some Application Programming Interfaces (APIs) that need to be paid.) For more information about Google Cloud pricing, please visit <https://cloud.google.com/compute/all-pricing>.

Note: It's not expensive as a person may think, Google Cloud charges only for the function a person wants to use, but not the whole platform. For instance in case a person wants to buy more storage, a person can opt to pay for more storage. Every 1GB of storage is \$0.020 per GB, and that means a person will spend \$1 for 50gb of data, which is cool.

This is the backbone of the app and almost all apps hosted on Play Store or firebase.

b. Maps

As it is explained in the previous note, Maps are part of the Google Cloud Platform, and in order to access all the Map features like Locations, Map Views, Places, Places Search, there is need to be subscribed to their API in the Google Cloud Platform.

Grasp app Maps screen is running on three Google Cloud API i.e. Places API for locating places, Maps Software, Development Kit (SDK) for Android for displaying the maps in the App as well as Geocoding API for converting the location coordinates into real Address. A usage of the Geocoding for implementing the functionality of adding the location of the user is required. When the user presses the

button to add his location, the app will get his or her coordinates (latitude and longitudes) using the location API, and it will reverse it to a real address using the Geocoding API. This all happens seconds though implementation takes time. For more information about Google Cloud APIs, please visit <https://cloud.google.com/apis>

c. Operation of Google Maps.

Taking Safeboda or Uber Apps as an example. These two apps are well known for transporting clients or goodies to their right destination.

SafeBoda is a community of motorcycle taxi (boda boda) drivers bringing safety, trust and convenience to the industry in Africa. Anyone can easily access a SafeBoda by connecting via the mobile application which can be downloaded for free on the Google Play store and the App Store.

How does the app Work?

Open the SafeBoda app, type in your destination and request a boda. With one click a user will be connected to a SafeBoda who will pick him up at his/her location. A user can rate the driver and soon a user will be able to pay via mobile money and credit card.

These apps rely on Google Maps API. Below is a break down on how it interacts with the Maps.

d. Mode of operation.

Safeboda subscribes for the Google Maps API, Places API, Location API, Geocoding API, Navigation API. When the user requests for a ride, the App uses the Location API to get his or her coordinates. It locates him or her by a custom orange marker showing up. The

app submits the user location and their destination to the Geocoding API so as to transform the user coordinates into a formatted address. When the app starts searching for the rider, it actually uses the Location and Places APIs to get the nearby rider around the location. This can also be done why restricting the span area of the search location so as it only searches for only the nearby riders. A notification is sent to the rider app showing a passenger request for a ride and the rider will contact the passenger by call to confirm their location. When the rider starts the trip, the app immediately subscribes to the Navigation API so as to locate the destination of the passenger to the rider. And when the passenger reaches their destination, all the APIs on both the passenger and rider fall back so as to give room for another cycle or order.

Note: However, Safeboda as a company pays the usage of every API involved during the process. It subscribes for the Maps API, Location API, Geocoding API, Navigation API.

Every API has a different pricing rate per request made to it, it uses the pay-as-you-go pricing model. Below is a summary of the prices.

➤ **Stock Keeping Unit (SKU): Dynamic Maps API**

A web page or application that displays a map using the [Maps JavaScript API](#). A map is created with the [google.maps.Map\(\)](#) class.

MONTHLY VOLUME RANGE		
(Price per MAP LOAD)		
0–100,000	100,001– 500,000	500,000+
0.007 USD per each (7.00 USD per 1000)	0.0056 USD per each (5.60 USD per 1000)	Contact Sales for volume pricing

User interactions with the map, such as panning, zooming, or switching map layers, do not generate additional map loads.

With the pay-as-you-go pricing model, the creation of a Street View panorama is no longer charged as a map load. It is charged as a [Dynamic Street View](#) (see below).

➤ **Routes API**

APIs in Routes include: [Directions API](#); [Distance Matrix API](#); and [Roads API](#).

➤ **SKU: Directions**

A request to the [Directions API](#) or the [Maps JavaScript API's Directions Service](#) (excludes requests triggering the [Directions Advanced](#) billing SKU).

MONTHLY VOLUME RANGE		
(Price per QUERY)		
0–100,000	100,001– 500,000	500,000+
0.005 USD per each (5.00 USD per 1000)	0.004 USD per each (4.00 USD per 1000)	Contact Sales for volume pricing

A request to the [Distance Matrix API](#) or the [Maps JavaScript API's Distance Matrix Service](#) (excludes requests triggering the [Distance Matrix Advanced billing SKU](#) billing SKU).

MONTHLY VOLUME RANGE		
(Price per ELEMENT)		
0–100,000	100,001– 500,000	500,000+
0.005 USD per each (5.00 USD per 1000)	0.004 USD per each (4.00 USD per 1000)	Contact Sales for volume pricing

Each query sent to the Distance Matrix API generates elements, where the number of origins times the number of destinations equals the number of elements.

➤ **Places product**

APIs in Places include [Places API](#), [Places SDK for Android](#); [Places SDK for iOS](#); [Places Library](#), [Maps JavaScript API](#); [Geocoding API](#); [Geolocation API](#); [Time Zone API](#); and [Elevation API](#).

➤ **About Autocomplete sessions**

An Autocomplete session includes some Autocomplete requests (to retrieve suggestions on a place as the user types), and at most one Places Details request (to retrieve details about the place selected by the user). The same session token is passed to the Autocomplete and the subsequent Place Detail request. A session starts with the first Autocomplete request (which typically happens when the user starts typing). A Places Details call is made when the user has selected one of the Autocomplete suggestions. If a user does not select a suggestion, no Places Details call is made.

After a user has selected a place (i.e., a Places Details call is made), you must start a new session using a new session token.

Autocomplete sessions can be generated from the following APIs:

The [Places API Place Autocomplete service](#) or the [Maps JavaScript API's Places Autocomplete service](#). There is need to design the application to provide session tokens (it may need to change the existing code).

The [Maps JavaScript API's Autocomplete widget](#). Session-based billing is automatically enabled on those widgets, without any code change required.

A session token is good for one user session and should not be used for more than one user session. If you reuse a session token, the session is considered invalid and the requests are charged as if no session token was provided.

The Autocomplete requests and the Places Details requests using sessions are billed on different SKUs

Note:

1. For every Map request or order request, Safeboda is charged a minimum of 10 dollars per 1k requests. A Single request starts from typing a single character while searching for location. So the more a user types, the more requests sent to the Google Cloud APIs. Every single character typed in the search bar triggers an API responsible for that event to happen.

2. Since the Grasp App so far uses Four(4) APIs i.e. Maps API, Location API, Geocoding API and Google Autocomplete API, there is a more financial support needed for this project to run smoothly.

i. User Interface (UI)/ User Experience (UX) of the App.

The app looks cool already. However there are certain features that are required to be added into the app. Some include user capability of downloading the images, click on the link articles posted in the Covid-19 page to read and explore more

including the above listed features, some other loading features that may make the App look more nice. This requires more time and resources to be implemented successfully

However, the UI/UX can be improved to meet the real expectations incase more time and resources are assigned

e. Google Play Store.

The Grasp App is already deployed on Play Store at the moment, The App was reviewed by the Google Play Store Team and approved.

Note: To deploy successful the Grasp App to play store, it requires privacy policy that was drafted and developed by OYOH in support from IRRI. This is because the app uses features like location, user data that require the development team to explain what the team is going to use the user data for. This is to protect both the users and the App not to be removed or blocked by play store.

f. App maintenance.

Every App needs maintenance, this is in terms of any feature update. Every end of two or one month, some new features should be deployed on play Store. Below is the breakdown of the process

➤ **Play Store Maintenance.**

For every single feature update, Play Store should be updated automatically so as to sync up with the current versions of the app.

➤ **App Feature development.**

Development never ends, a dedicated developer should be in place to work on updates or bug fixes requested by the administrators or users of the app. He should also be responsible for making a signed APK or Bundle to upload to the play store. For every UI updated, there should a design to show the feature in place before it is put into code. It should also be confirmed by the administrator before deployment. This is something Administrators of Grasp App should consider continuing investing in.