



# Crisis Help

a hackathon app project

## Overview

### About the application

**Crisis Help** is an application designed for the [Hack the Crisis: Tech for Good Hackathon](#) hosted online by DO OK with partnership from Govtech Poland, AWS, Google, Gaaana and Proldea. The code will be Open Source under the MIT license, so if you have any idea how to improve it and help more people, just do it.

**Crisis Help** tackles the problem of isolation - government is asking people to stay home, but the resources we keep in our households aren't limitless. The application allows you to share information that you are missing specific kind of mandatory products in your household and share this information with government specified institutions (for MVP purposes, this is an open list, so that anyone can help).

**Hackathon category:** Isolation

### Meet the team

- **Łukasz Żmudziński** - Team Leader, AWS Backend, iOS app
- **Jacek Bazydło** - AWS Backend
- **Karolina Sala** - UX Design

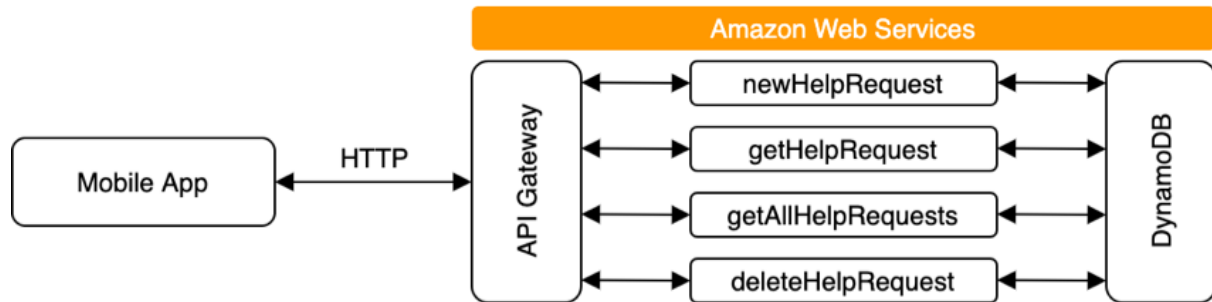
# Technical Details

## Help Request model

This is the core model of our application. It describes a user help request that can be seen by others to provide supplies.

Field	Type	Required	Description
<b>deviceld</b>	String	Yes	The unique mobile device identifier
<b>water</b>	String : [Normal, Bad, Critical]	Yes	What is the user status of water supplies
<b>food</b>	String : [Normal, Bad, Critical]	Yes	What is the user status of food supplies
<b>meds</b>	String : [Normal, Bad, Critical]	Yes	What is the user status of meds supplies
<b>isConv</b>	Bool	Yes	Is the user diagnosed with Coronavirus
<b>latitude</b>	Double	Yes	User latitude geolocation
<b>longitude</b>	Double	Yes	User longitude geolocation
<b>description</b>	String	No	Additional description, if the user has something to add

## Backend documentation



We decided to use cloud services to increase the scalability of our application. Backend services are contacted through HTTP requests from the mobile application. The requests land in the API Gateway and is directed to the requested Lambda function (Python3.7). The function processes the request and makes changes in the NoSQL DynamoDB table containing all HelpRequests.

### Lambda endpoint details

Lambda function	Type	Parameters	Description
newHelpRequest	POST	HelpRequest	Creates a new HelpRequest
deleteHelpRequest	POST	deviceId	Removes user HelpRequest
getHelpRequest	GET	deviceId	Gets user help request
getAllHelpRequests	GET	latitude, longitude, radius	Gets help requests at radius to user location

### AWS endpoint urls

- <https://wxzk3i9otl.execute-api.eu-west-1.amazonaws.com/default/newHelpRequest>
- <https://p8unq6l7bh.execute-api.eu-west-1.amazonaws.com/default/deleteHelpRequest>
- <https://myqof4xeba.execute-api.eu-west-1.amazonaws.com/getHelpRequest>
- <https://ctiif1xdn9.execute-api.eu-west-1.amazonaws.com/default/getAllHelpRequests>

# iOS documentation

- Built using Swift programming language,
- Views are built using SwiftUI,
- No unit/interface testing was performed due to limited hackathon time,
- Code can be previewed in the [iOS directory](#).

## Dependencies

Dependencies are managed by the Swift Package Manager (SPM).

Dependency	Version	Description
Alamofire	5.0.4	Handling external API requests
SwiftyJSON	5.0.0	Processing JSON file format
ObjectMapper	3.5.2	Mapping JSON to HelpRequest objects

## App structure

The application implements the MVVM architecture pattern.

Directory	Description
Model	Holds classes responsible for storing the data model information
View	Contains SwiftUI view building blocks
ViewModel	Contains classes responsible for View-Model communication
Services	Contains device and backend communication classes
Extensions	Contains class extensions making life easier

# Design guidelines








## Resource color schema

Color Hex	Resource
#3E4A59	Food
#0090D8	Water
#F74165	Meds

## Application color schema

Color Hex	Color Name
#F9FBFD	Background
#47C68F	Accent
#E3F7EE	Accept Button Background
#F74165	Destructive Accent
#F8E7EB	Destructive Button Background

## Map icon guideline

Icon	Meaning
	Prioritize water for this user
	Prioritize food for this user
	Prioritize meds for this user
	Prioritize food and water for this user
	Prioritize food and meds for this user
	Prioritize water and meds for this user
	This user needs all resources