

DATA

data used to implement the same project are:

- Hospital data from foursquare location
- Covid-19 time series data for US given by various health department
- Covid-19 confirmed cases and deaths report of 09-09-2020.
- Number of beds occupied in different hospitals in various cities in US.

Here, we are going to use only one data of confirmed cases and deaths at a single date, in the real time application data would be updated every single day to optimize the solution over time.

First, cities will be ordered with highest rate of infection or total confirmed cases, top 10 cities can be chosen. Then based on number of hospitals and beds occupied, a city will be chosen to distribute the first batch of cure.

Examples of data,

Province_	Country_	Last_Update	Lat	Long_	Confirmed	Deaths	Recovered	Active	FIPS	Incident_	f	People_T	People_H	Mortality_	UID	ISO3	Testing_R
Alabama	US	11-09-2020 04:30	32.3182	-86.9023	135565	2301	54223	79041		1	2764.836	1005738		1.697341	84000001	USA	20511.93
Alaska	US	11-09-2020 04:30	61.3707	-152.404	6012	42	2351	3619		2	821.8223	393077		0.698603	84000002	USA	53732.44
American	US	11-09-2020 04:30	-14.271	-170.132	0	0		0	60	0	1571				16	ASM	2823.458

UID	iso2	iso3	code3	FIPS	Admin2	Province_	Country_	F	Lat	Long_	Combined	1/22/20	1/23/20	1/24/20	1/25/20	1/26/20	1/27/20	1/28/20	1/29/20	1/30/20
84001001	US	USA	840	1001	Autauga	Alabama	US	32.53953	-86.6441	Autauga, A		0	0	0	0	0	0	0	0	0
84001003	US	USA	840	1003	Baldwin	Alabama	US	30.72775	-87.7221	Baldwin, A		0	0	0	0	0	0	0	0	0
84001005	US	USA	840	1005	Barbour	Alabama	US	31.86826	-85.3871	Barbour, A		0	0	0	0	0	0	0	0	0

HRR	Total Hospital Beds	Total ICU Beds	Available Hospital Beds	Potential ly Available Hospital Beds*	Available ICU Beds	Potential ly Available ICU Beds*	Adult Populati on	Populati on 65+	Projecte d Infected Individua ls	Projecte d Hospitali zed Individua ls	Projecte d Individua ls Needing ICU Care	Hospital Beds Needed, Six Months	Percenta ge of Availabl e Beds Needed, Six Months	Percenta ge of Potential ly Availabl e Beds Needed, Six Months	Percenta ge of Total Beds Needed, Six Months	Hospital Beds Needed, Twelve Months	Percenta ge of Availabl e Beds Needed, Twelve Months	Percenta ge of Potential ly Availabl e Beds Needed, Twelve Months	Percenta ge of Total Beds Needed, Twelve Months
*Based on a 50% reduction in occupancy																			
Abilene, TX	980	127	565	772	68	98	2,26,444	50,412	45,289	9,563	2,090	638	113%	83%	65%	319	56%	41%	33%
Akron, OH	1,358	186	518	938	94	140	5,47,990	1,11,042	1,09,598	22,933	4,959	1,529	295%	163%	113%	764	147%	81%	56%
Alameda County, CA	2,695	293	665	1,680	139	216	13,10,189	2,14,991	2,62,038	53,872	11,400	3,591	540%	214%	133%	1,796	270%	107%	67%

Foursquare will only be used to select the best hospital in a selected city.

NOTE: All the columns are not shown in above examples.