

# Cell Tower Placement System



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# Introduction

- The main purpose of Cell Tower Placement System is to find the best location for pointing a new antenna.
- To avoid time consuming and help companies to decrease the cost of surveys

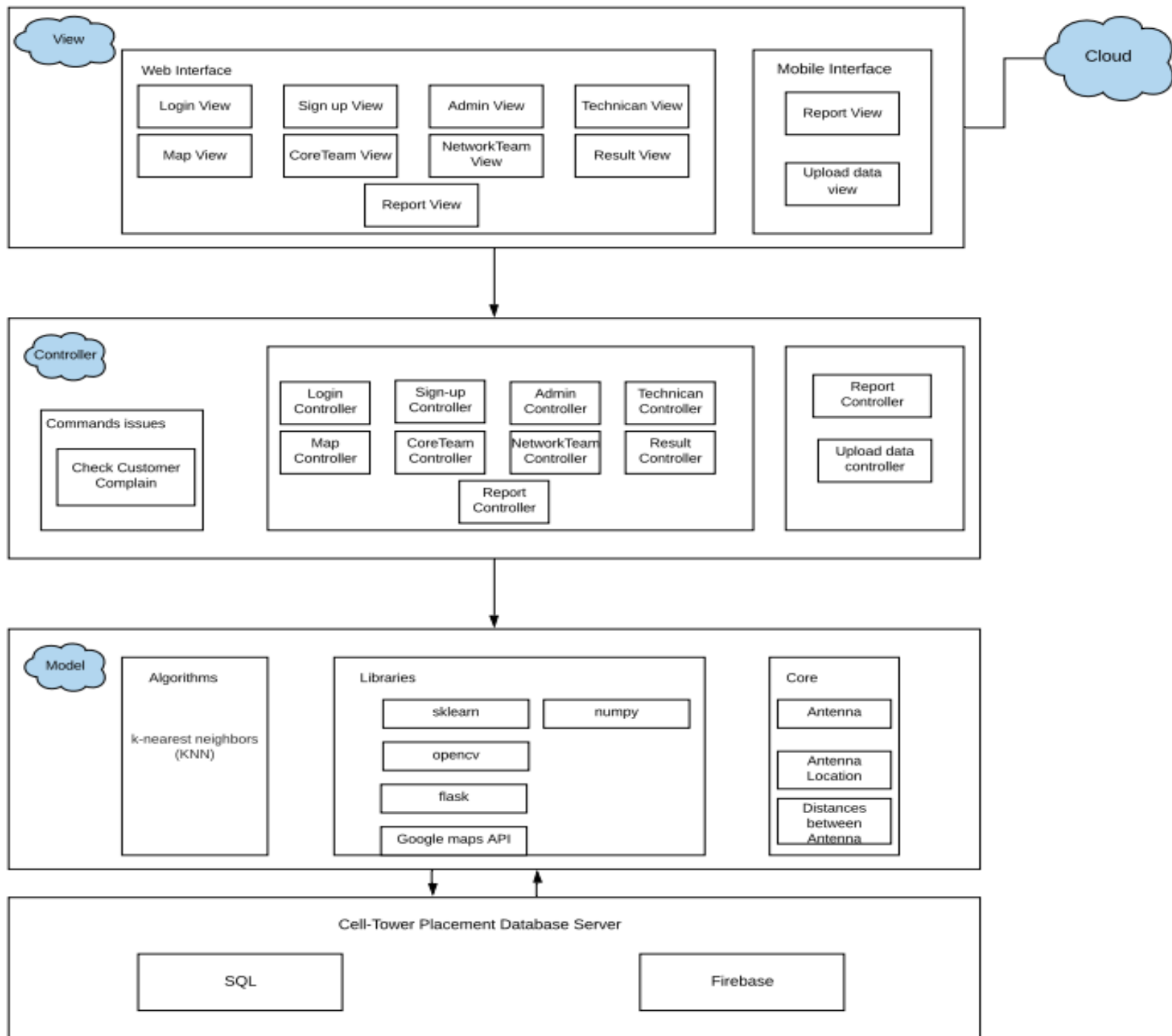


# Problem Statement

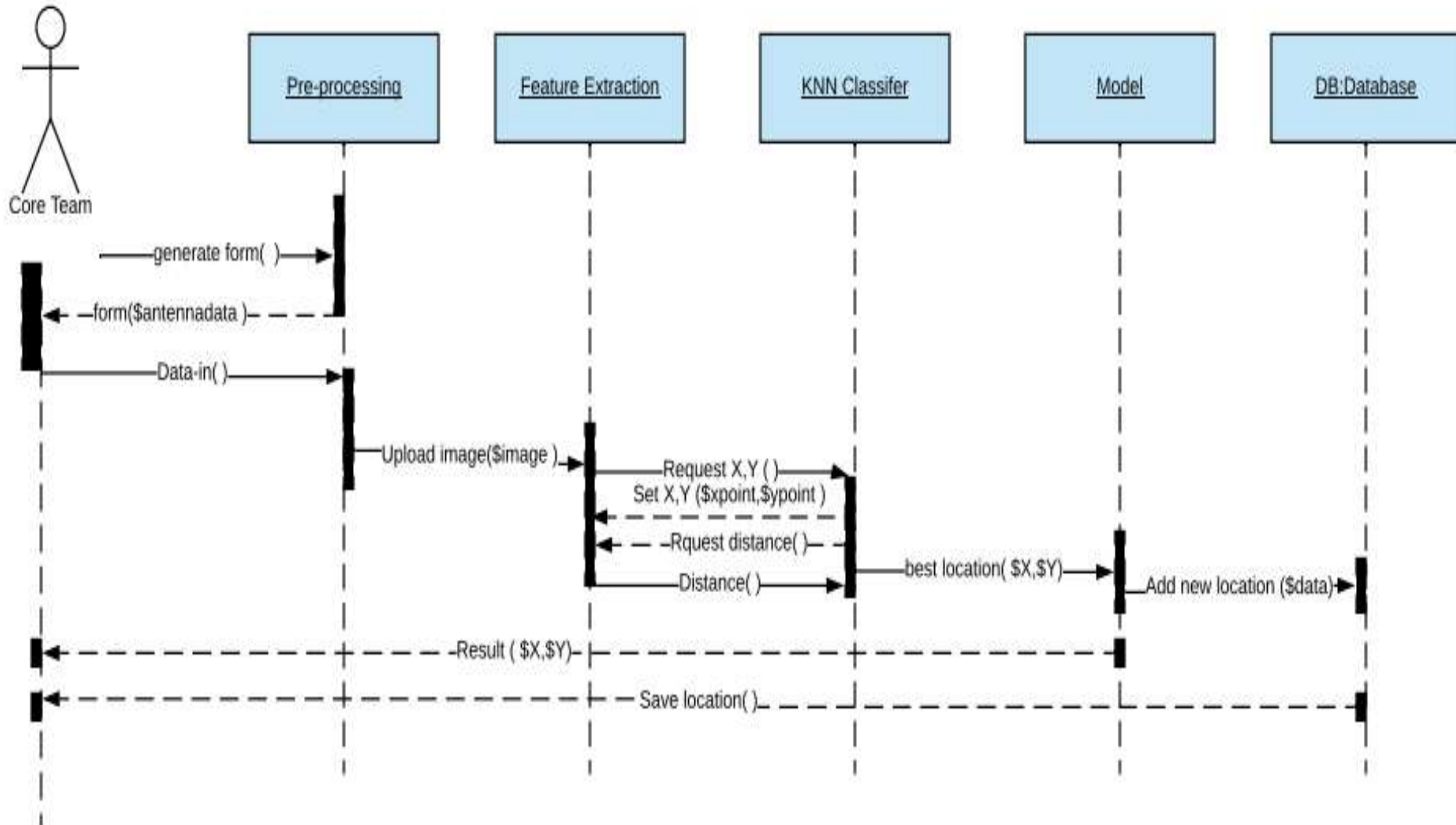
Finding the **accurate** place to fix over cell tower station costs mobile operators big chunks of money. Our target is to provide **automated** cell tower allocate system



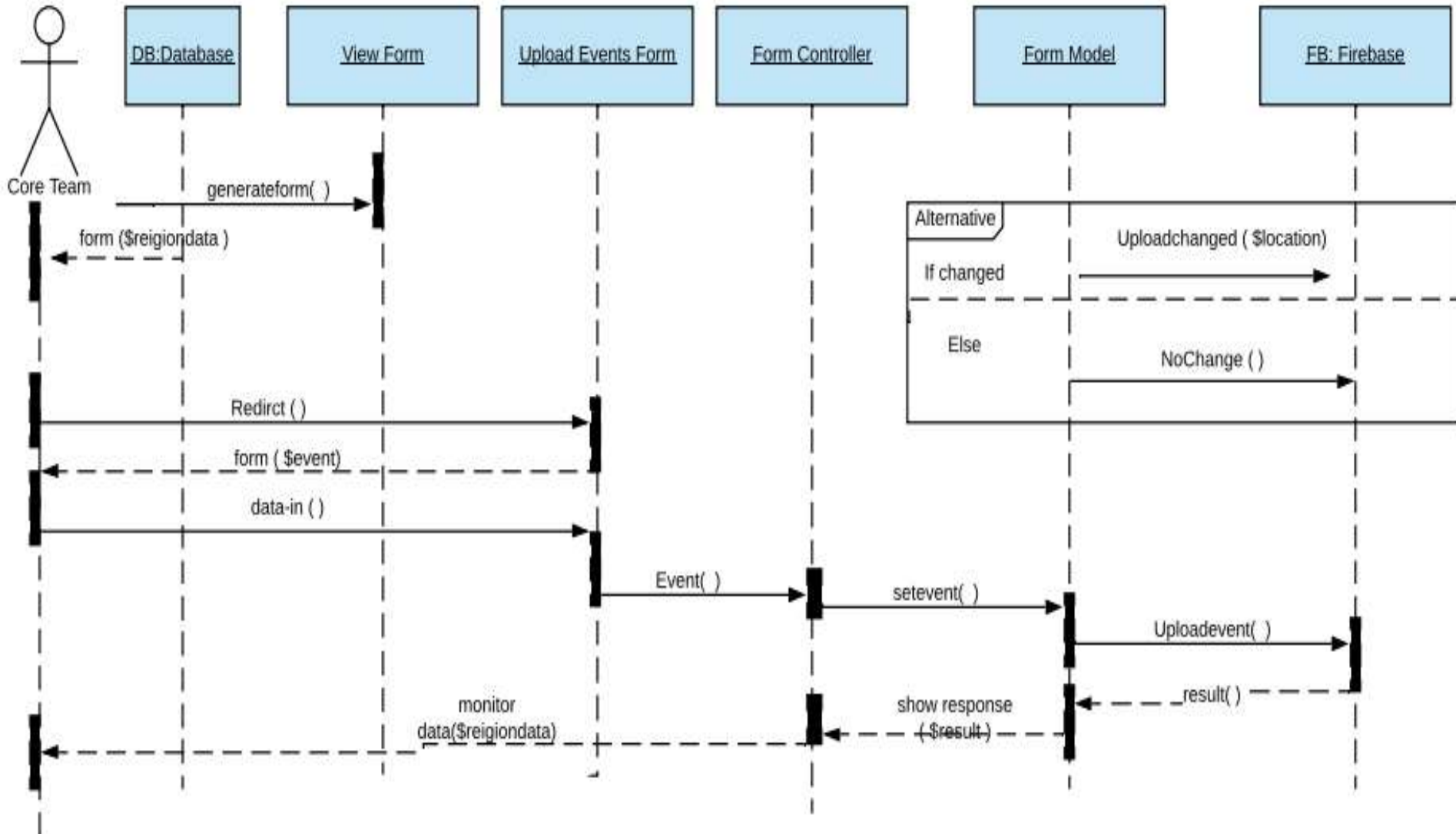
# Architecture Design



# Sequence Diagram (1/3)

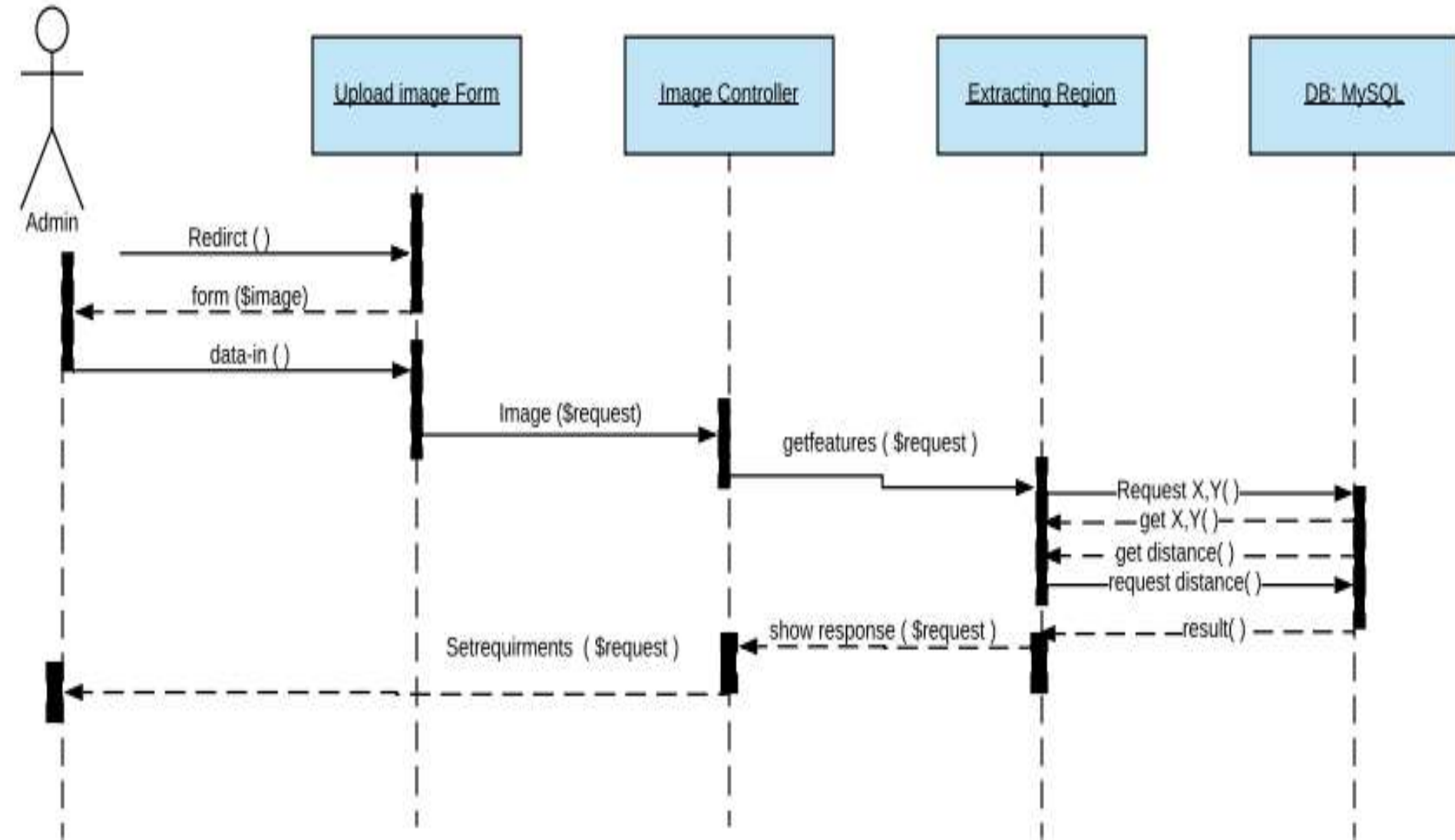


# Sequence Diagram (2/3)



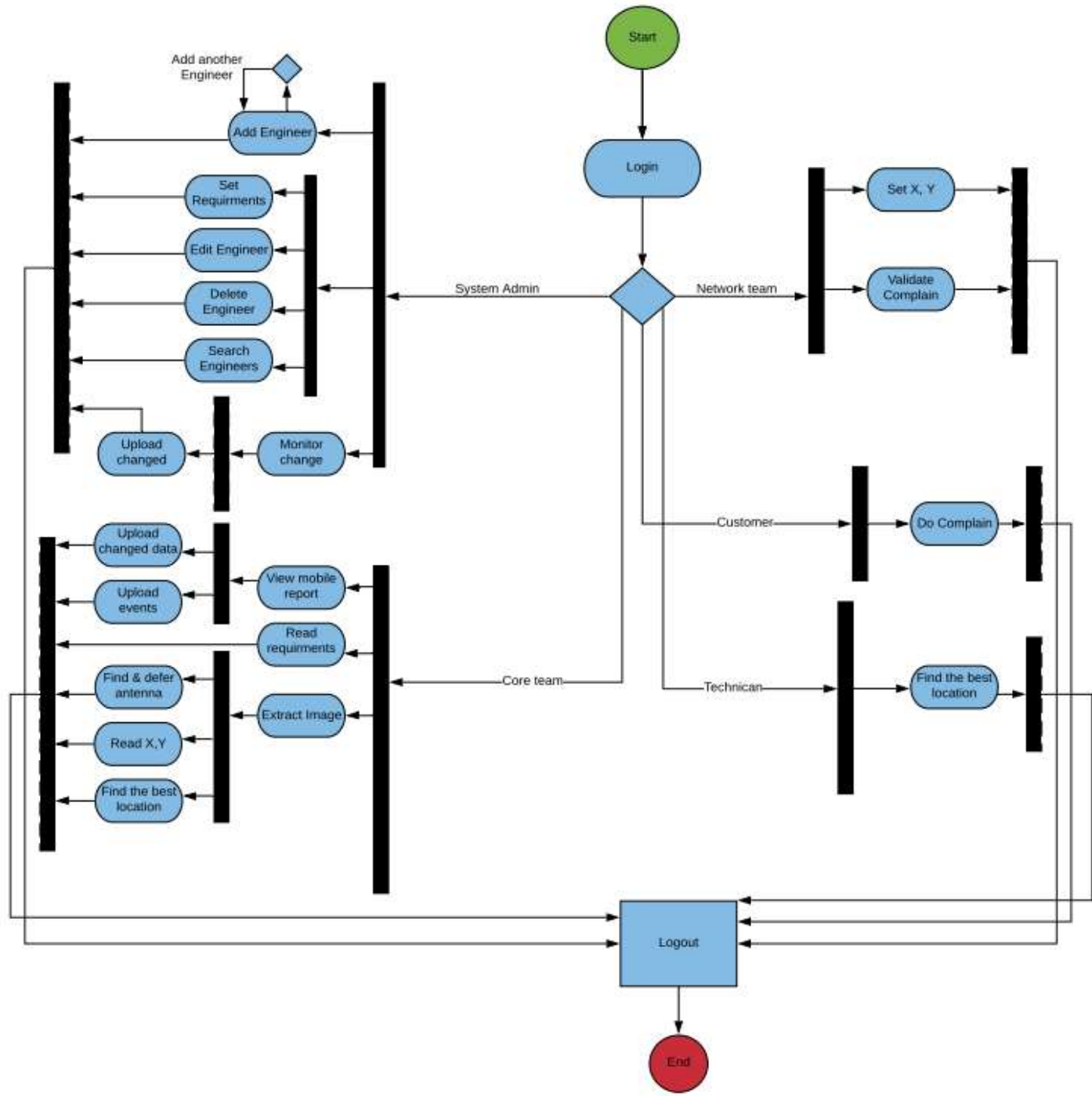


# Sequence Diagram (3/3)

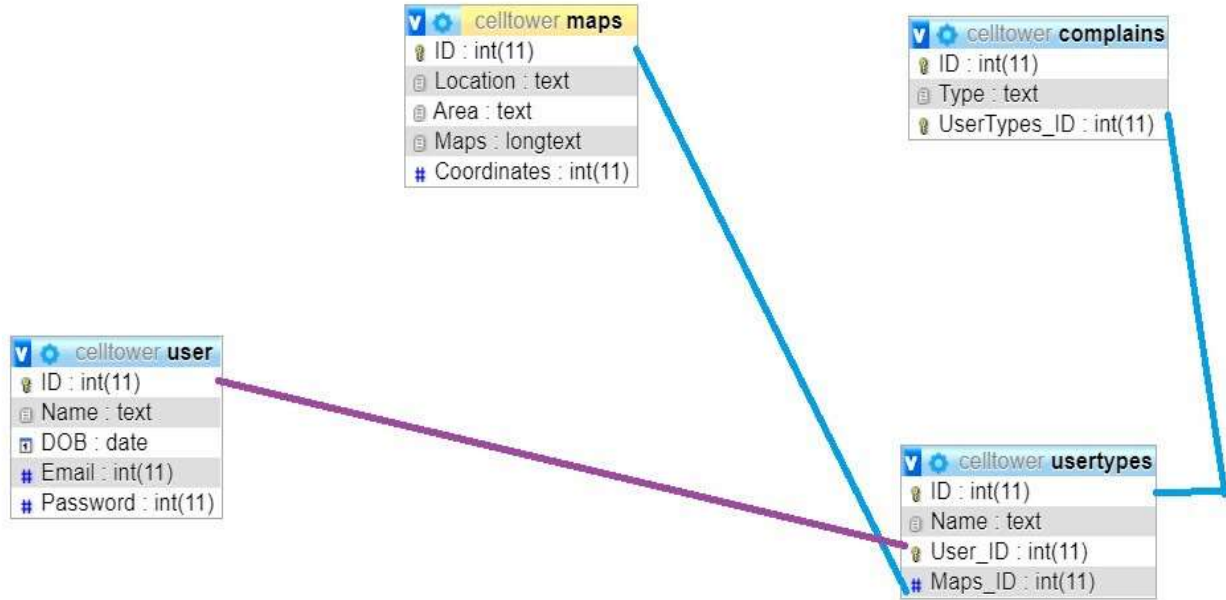




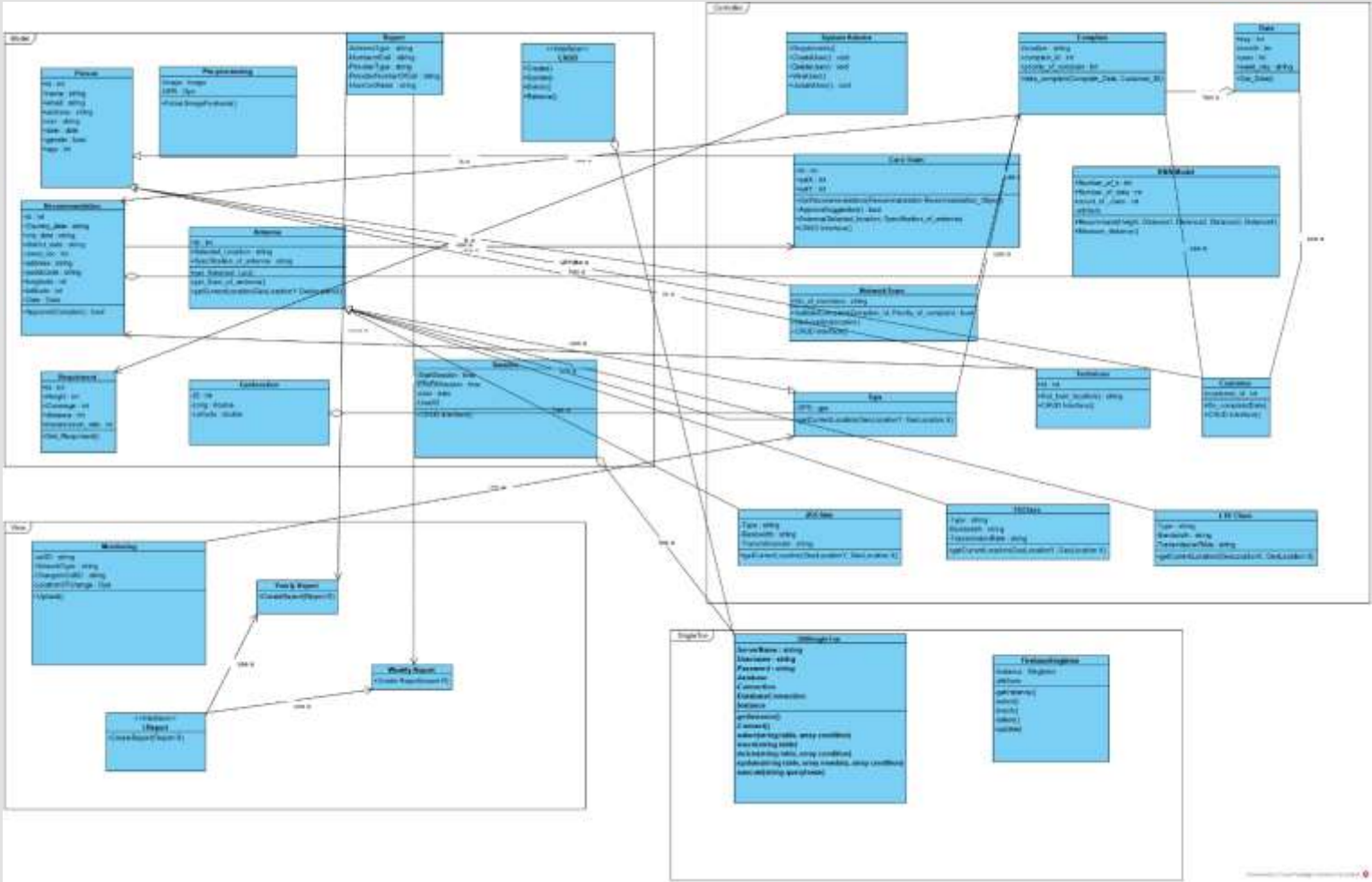
# Activity Diagram



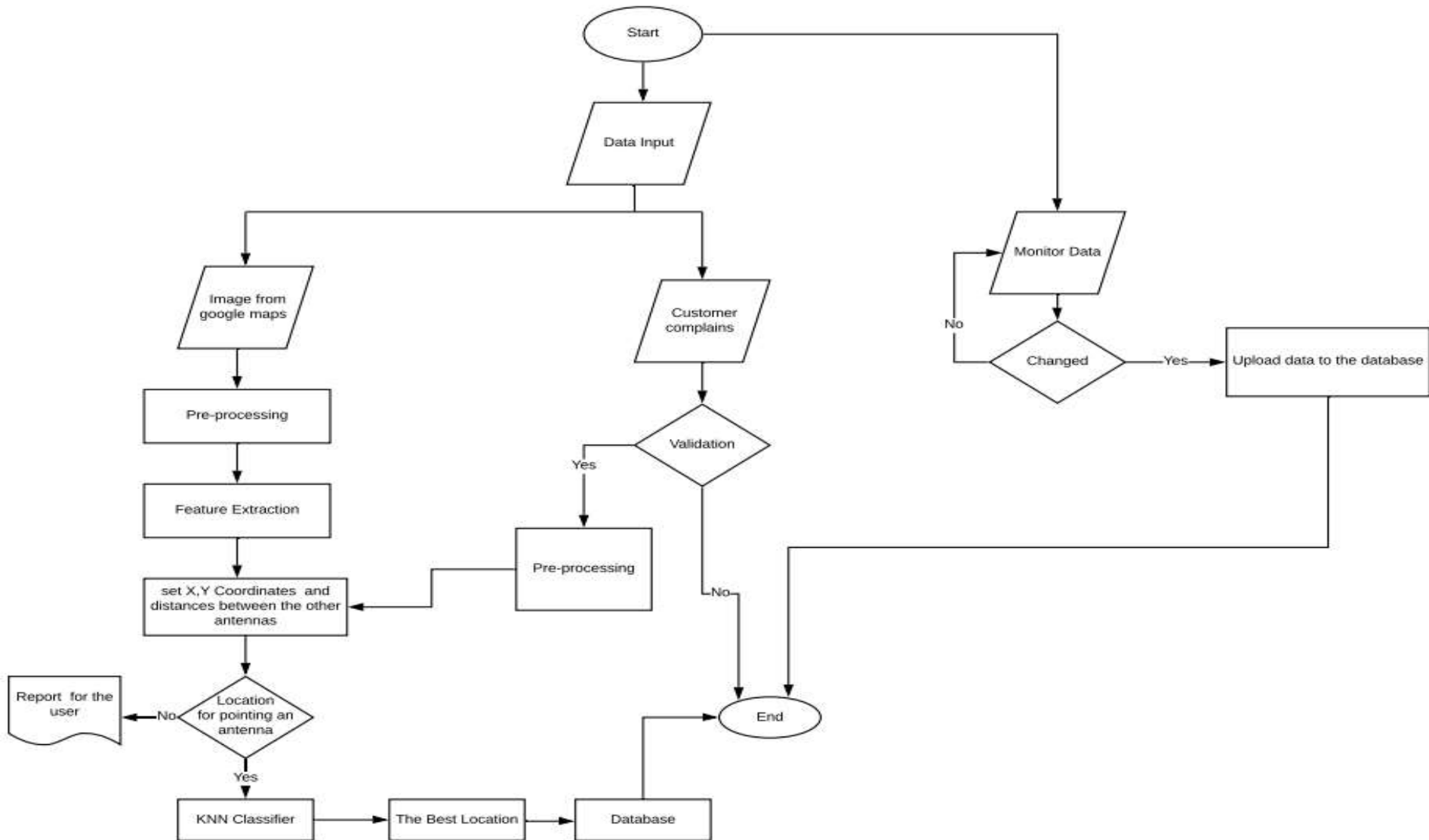
# Database



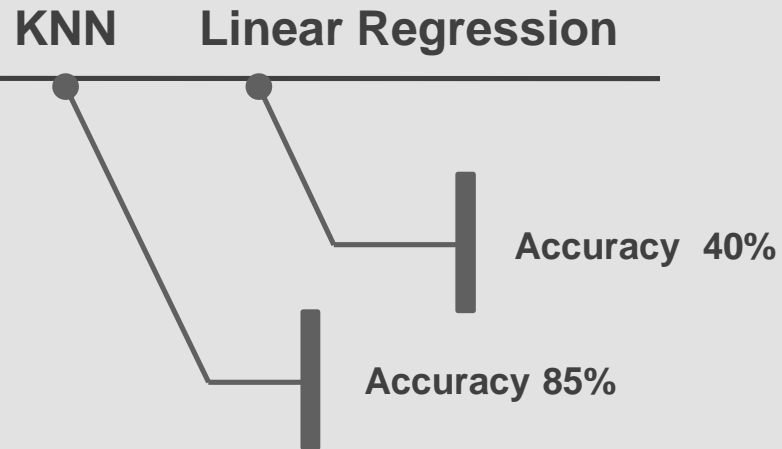
# Class Diagram



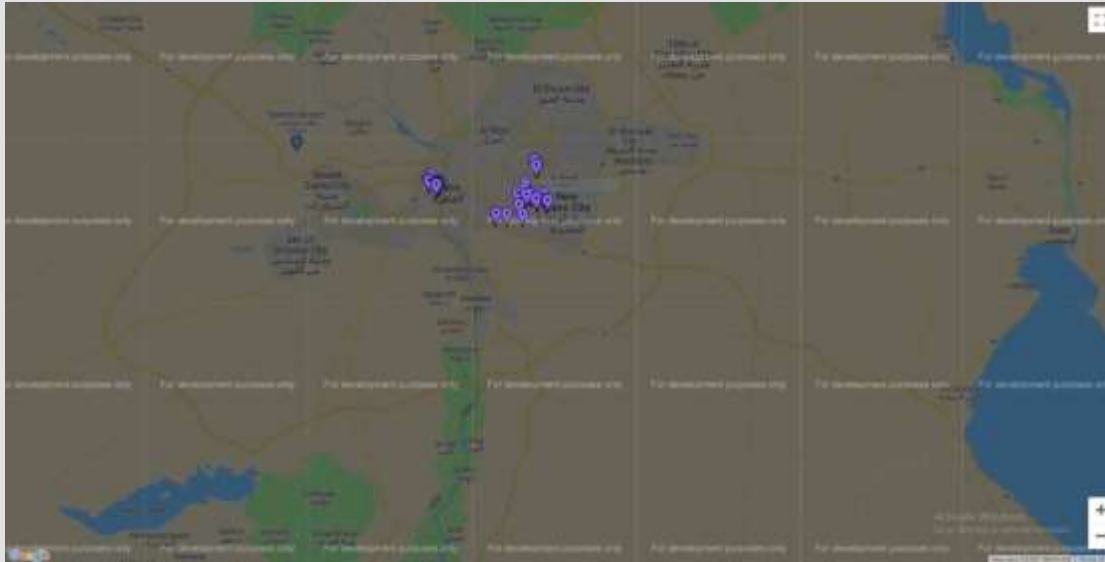
# System Approach



# Algorithm Choice



# GUI Sample



Username

Password

Remember me





# Demo

Username

Password

Remember me

Activate Windows  
Go to Settings to activate Windows.





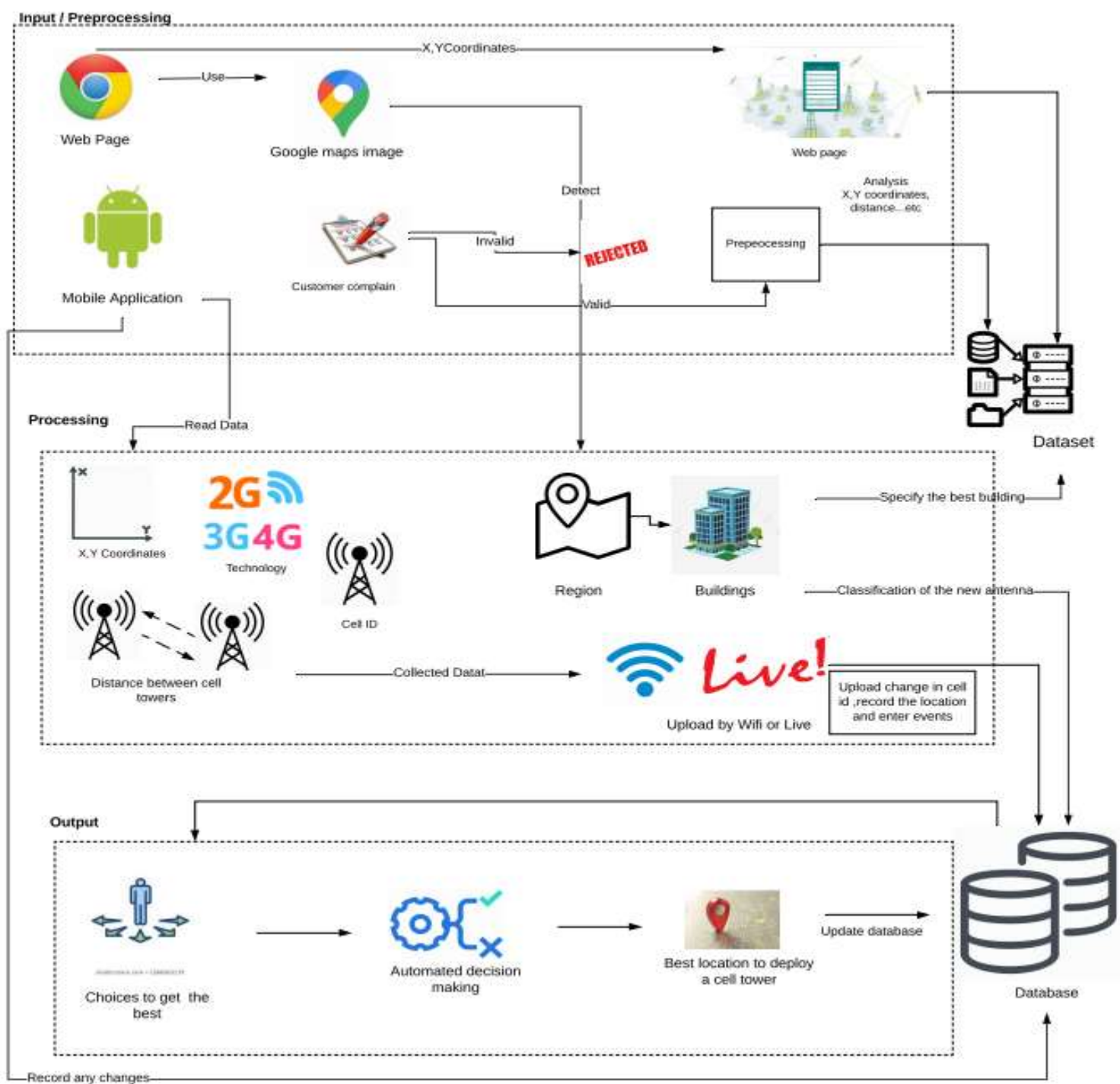
# Dataset:



2056	30.038530	31.169963	Ensalat	4G	El Mohandessen	513.17	492.19	1570	1070	3200	733	Ensalat	4G	513.17	733	26° / 13°	31° / 16°	61,308.53
2	30.058974	31.215508	Vodafone	2G	El Mohandessen	78.27	547.62	1060	1190	8230	210006	Vodafone	4G	78.27	8230	26° / 13°	31° / 16°	61,308.53
4632	30.041707	31.195259	Vodafone	3G	El Mohandessen	27.11	52.72	56.84	213.05	300.43	6404	Vodafone	3G	27.11	6404	26° / 13°	31° / 16°	61,308.53
467	30.032146	31.198953	Vodafone	3G	El Mohandessen	147.83	237.13	960.78	1050	1800	3081	Vodafone	3G	147.83	3081	26° / 13°	31° / 16°	61,308.53
10056	30.029019	31.207263	Orange	4G	El Mohandessen	529.4	864.84	613.07	736.13	681.57	2452	Ensalat	2G	529.4	2452	26° / 13°	31° / 16°	61,308.53
3952	30.043526	31.194472	Vodafone	3G	El Mohandessen	93.83	158.34	163.22	189.66	215.42	6438	Vodafone	3G	93.83	6438	26° / 13°	31° / 16°	61,308.53
10055	30.028321	31.199636	Orange	4G	El Mohandessen	138.99	325.42	736.29	1240	1490	10759	Orange	4G	138.99	10759	26° / 13°	31° / 16°	61,308.53
5661	30.046337	31.218203	Orange	3G	El Mohandessen	46.83	65.91	104.78	103.3	121.33	260134	Vodafone	4G	46.83	260134	26° / 13°	31° / 16°	61,308.53
2159	30.039466	31.217236	Orange	3G	El Mohandessen	533.91	521.59	280.53	285.95	380.31	385	Vodafone	2G	533.91	385	26° / 13°	31° / 16°	61,308.53
6438	30.044358	31.194628	Vodafone	3G	El Mohandessen	93.85	243.47	247.5	276.46	300.82	3952	Vodafone	3G	93.85	3952	26° / 13°	31° / 16°	61,308.53
4722	30.025334	31.213279	Orange	3G	El Mohandessen	71.66	146.93	106.64	155.52	198.37	123	Orange	3G	71.66	123	26° / 13°	31° / 16°	61,308.53
4581	30.047863	31.210338	Orange	3G	El Mohandessen	121.09	158.55	158.36	228	228.34	1371	Ensalat	4G	119.36	1371	26° / 13°	31° / 16°	61,308.53
301	30.060222	31.185667	Ensalat	4G	El Mohandessen	823.24	1510	1580	1680	2160	1761	Ensalat	4G	823.24	1761	26° / 13°	31° / 16°	61,308.53
1761	30.060165	31.18422	Ensalat	4G	El Mohandessen	823.24	830.69	1070	1000	1760	303	Ensalat	4G	823.24	303	26° / 13°	31° / 16°	61,308.53
10179	30.05483	31.219077	Orange	4G	El Mohandessen	168.64	319.89	383.83	449.8	344.8	1410	Orange	3G	168.64	1410	26° / 13°	31° / 16°	61,308.53
2880	30.025986	31.201513	Ensalat	4G	El Mohandessen	235.07	525.2	664.73	1190	1760	10759	Orange	4G	235.07	10759	26° / 13°	31° / 16°	61,308.53
395	30.037897	31.210847	Vodafone	2G	El Mohandessen	69.08	280.04	287.49	378.08	216.46	1359	Ensalat	4G	69.08	1359	26° / 13°	31° / 16°	61,308.53
219006	30.05828	31.215189	Vodafone	4G	El Mohandessen	77.91	471.2	980.11	1080	1300	2	Vodafone	2G	77.91	2	26° / 13°	31° / 16°	61,308.53
33057	31.236529	29.953739	Ensalat	4G	Alexandria	154.89	293.00	330.83	435.14	415.50	4861	Vodafone	3G	154.89	4861	22° / 12°	25° / 15°	24,540.28
33310	31.243103	29.96161	Ensalat	4G	Alexandria	482.00	821.72	871.43	917.39	937.20	3018	Orange	3G	482.00	3018	22° / 12°	25° / 15°	24,540.28
33001	31.252304	29.971408	Ensalat	4G	Alexandria	451.65	562.23	825.80	1080	2350	3063	Ensalat	2G	451.65	3063	22° / 12°	25° / 15°	24,540.28
33065	31.236918	29.97815	Ensalat	4G	Alexandria	828.92	1270	1380	1830	2180	33981	Vodafone	4G	828.92	33981	22° / 12°	25° / 15°	24,540.28
3829	31.184621	29.907171	Orange	3G	Alexandria	1220	344.51	258.82	428.61	1220	3005	Orange	3G	238.82	3005	22° / 12°	25° / 15°	24,540.28
3829	31.197411	29.910634	Orange	3G	Alexandria	335.94	277.25	764.84	630.15	904.22	3005	Orange	3G	277.25	3005	22° / 12°	25° / 15°	24,540.28
3905	31.198732	29.908513	Orange	3G	Alexandria	265.53	258.54	384.01	531.92	532.89	3829	Orange	3G	258.54	3829	22° / 12°	25° / 15°	24,540.28
3903	31.188632	29.924128	Orange	3G	Alexandria	2180	883.99	1610	1840	3390	3744	Vodafone	3G	883.99	3744	22° / 12°	25° / 15°	24,540.28
3812	31.210759	29.937179	Orange	3G	Alexandria	658.58	665.53	957.15	628.13	837.82	1826	Orange	3G	658.58	1826	22° / 12°	25° / 15°	24,540.28
3826	31.216348	29.938492	Orange	3G	Alexandria	263.30	631.29	540.45	784.61	735.31	3229	Vodafone	3G	263.30	3229	22° / 12°	25° / 15°	24,540.28
3825	31.219293	29.927826	Orange	3G	Alexandria	599.79	937.17	1070	751.88	889.31	3818	Orange	3G	599.79	3818	22° / 12°	25° / 15°	24,540.28
3818	31.222915	29.932657	Orange	3G	Alexandria	724.81	498.00	590.88	927.32	1120	4284	Vodafone	3G	498.00	4284	22° / 12°	25° / 15°	24,540.28
3818	31.243408	29.966744	Orange	3G	Alexandria	498.00	343.43	1250	1450	461.42	33318	Ensalat	4G	498.00	33318	22° / 12°	25° / 15°	24,540.28
3874	31.16917	29.934899	Orange	3G	Alexandria	1370	3260	2390	3380	5890	3443	Ensalat	2G	1370	3443	22° / 12°	25° / 15°	24,540.28
3964	31.332234	29.921572	Orange	3G	Alexandria	912.88	2350	3380	4130	5630	3443	Ensalat	2G	912.88	3443	22° / 12°	25° / 15°	24,540.28
3961	31.106614	29.87207	Orange	3G	Alexandria	3290	6760	7650	8950	10090	3136	Ensalat	3G	3290	3136	22° / 12°	25° / 15°	24,540.28
2918	30.030805	31.413413	Orange	3G	New Cairo	620.06	682.88	1040	1110	1180	570	Orange	2G	620.06	570	24° / 12°	32° / 13°	4,393.05
4655	30.010663	31.425736	Orange	3G	New Cairo	521.06	775.91	834.02	742.59	1390	10313	Orange	4G	521.06	10313	24° / 12°	32° / 13°	4,393.05
3501	30.00336	31.397334	Orange	3G	New Cairo	843.33	1550	1790	1940	2830	2470	Orange	3G	843.33	2470	24° / 12°	32° / 13°	4,393.05
2930	30.007355	31.391937	Orange	3G	New Cairo	843.33	2400	2610	2730	3730	3301	Orange	3G	843.33	3301	24° / 12°	32° / 13°	4,393.05



# Overview



Thank You

