YOURCABS

→ 2013 → OLA, Uber

→ Radio Taxi → Website / Phone Call

Desktop Mobile

12PM

2PM → Holiday 4PM
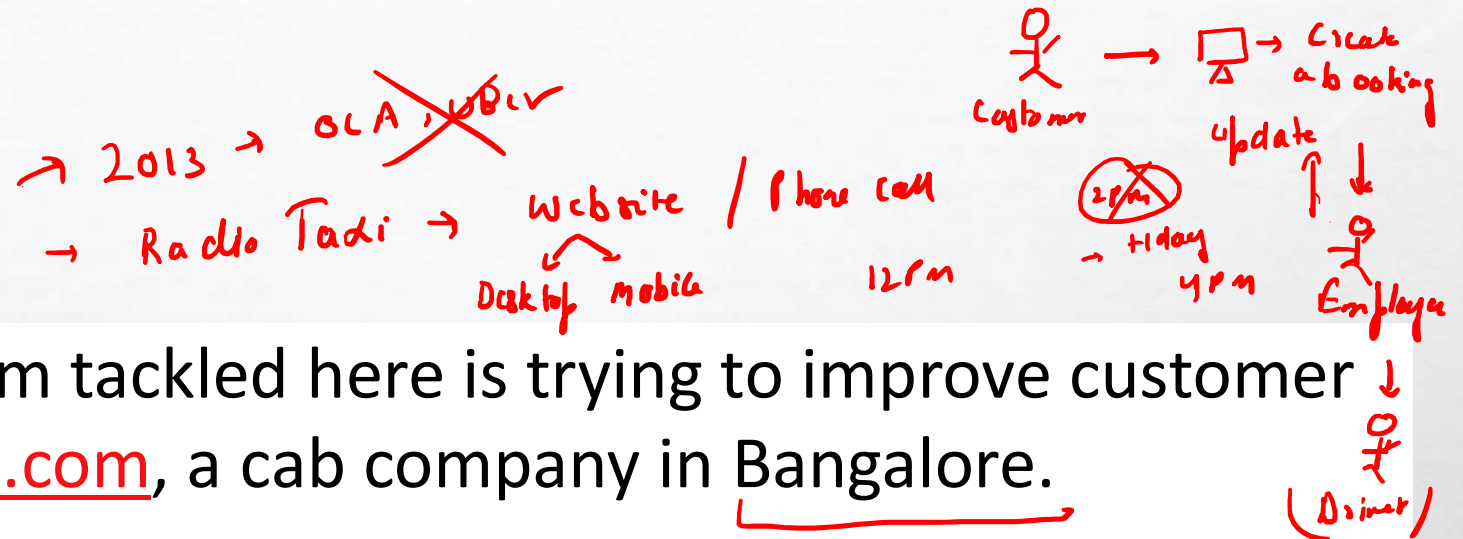
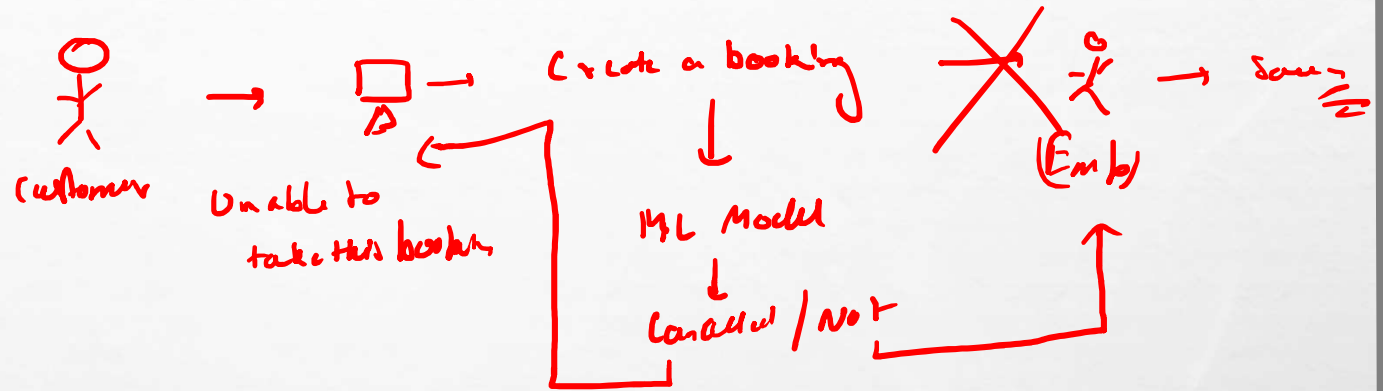Customer → → Create a booking

Update

Employee

(Driver)

The business problem tackled here is trying to improve customer service for YourCabs.com, a cab company in Bangalore.

The problem of interest is booking cancellations by the company due to unavailability of a car. The challenge is that cancellations can occur very close to the trip start time, thereby causing passengers inconvenience.
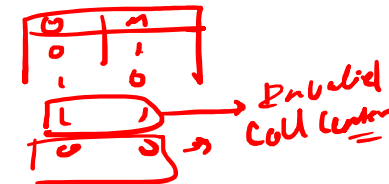
Penalty

YOURCABS

The goal of the competition is to create a predictive model for classifying new bookings as to whether they will eventually gets cancelled due to car unavailability.

YOURCABS

- id - booking ID → Unique
- user_id - the ID of the customer (based on mobile number)
- vehicle_model_id - vehicle model type. — SUV, WagonR, Sedan X
- travel_type_id - type of travel (1=long distance, 2= point to point, 3= hourly rental).
- package_id - type of package (1=4hrs & 40kms, 2=8hrs & 80kms, 3=6hrs & 60kms, 4= 10hrs & 100kms, 5=5hrs & 50kms, 6=3hrs & 30kms, 7=12hrs & 120kms)
- from_area_id - unique identifier of area. Applicable only for point-to-point travel and packages → Pincode
- to_area_id - unique identifier of area. Applicable only for point-to-point travel
- from_city_id - unique identifier of city
- to_city_id - unique identifier of city (only for intercity)
- from_date - time stamp of requested trip start
- online_booking - if booking was done on desktop website → 0s, 1s
- mobile_site_booking - if booking was done on mobile website
- booking_created - time stamp of booking
- from_lat - latitude of from area
- from_long - longitude of from area
- to_lat - latitude of to area
- to_long - longitude of to area
- Car_Cancellation - whether the booking was cancelled (1) or not (0) due to unavailability of a car.

Pre-defined GPS co-related

Invalid
Call Center

id	user	vehicle_model	travel_type	package	from_area	to_area	from_city	to_city	from_date	online_booking	mobile_site_booking	booking_create	from_lat	from_long	to_lat	to_long	Car_Cancellation
132519	22172	12	1	NULL	571	NULL		15	108	01-01-2013 09:45	0	0	01-01-2013 09:21	12.95185	77.69642	NULL	NULL	0
132531	22189	24	1	NULL	183	NULL	NULL	32	01-12-2013 08:00	1	0	01-01-2013 12:17	12.930451	77.685822	NULL	NULL	0
132539	22192	54	1	NULL	515	NULL	15	32	01-05-2013 08:30	0	0	01-01-2013 14:40	12.97896	77.67345	NULL	NULL	0
132697	22275	28	1	NULL	136	NULL	1	152	01-04-2013 09:30	1	0	01-03-2013 12:19	12.90796	77.62418	NULL	NULL	0
132760	22310	87	1	NULL	1118	NULL	NULL	32	01-06-2013 07:30	1	0	01-04-2013 09:32	12.93022	77.56039	NULL	NULL	0
132780	22318	65	1	NULL	293	NULL	15	32	01-05-2013 08:00	0	0	01-04-2013 12:43	12.849482	77.663187	NULL	NULL	0
132781	22319	87	1	NULL	912	NULL	1	32	01-05-2013 06:00	1	0	01-04-2013 12:51	12.92645	77.61206	NULL	NULL	0
132791	22323	65	1	NULL	410	NULL	15	29	01-09-2013 06:00	0	0	01-04-2013 14:40	13.05121	77.54113	NULL	NULL	0
132907	22385	12	1	NULL	393	NULL	15	32	01-05-2013 22:45	0	0	01-05-2013 15:29	13.19956	77.70688	NULL	NULL	0
132911	22387	12	1	NULL	396	NULL	15	32	01-06-2013 06:45	0	0	01-05-2013 16:24	12.92073	77.66482	NULL	NULL	0
132964	22412	12	1	NULL	344	NULL	15	160	01-06-2013 08:00	0	0	01-05-2013 23:51	12.94788	77.67092	NULL	NULL	0
133022	22445	54	1	NULL	1095	NULL	1	32	1/19/2013 7:00	1	0	01-06-2013 14:57	12.92415	77.67229	NULL	NULL	0
133098	22480	12	1	NULL	393	NULL	15	29	01-10-2013 07:30	0	0	01-07-2013 12:25	13.19956	77.70688	NULL	NULL	0
133245	5120	12	1	NULL	871	NULL	15	64	01-09-2013 07:45	1	0	01-08-2013 23:46	12.98712	77.56624	NULL	NULL	0
133311	22589	54	1	NULL	168	NULL	NULL	32	1/13/2013 6:00	1	0	01-09-2013 19:06	12.99313	77.59828	NULL	NULL	0
133312	22591	65	1	NULL	61	NULL	NULL	61	01-12-2013 06:00	1	0	01-09-2013 19:15	12.96298	77.71229	NULL	NULL	0
133355	22617	12	1	NULL	393	NULL	15	146	01-11-2013 16:00	0	0	01-10-2013 08:41	13.19956	77.70688	NULL	NULL	0
133371	22627	87	1	NULL	572	NULL	NULL	13	02-08-2013 01:00	1	0	01-10-2013 12:46	12.91873	77.61494	NULL	NULL	0
133393	18046	12	1	NULL	1136	NULL	1	179	01-12-2013 02:00	1	0	01-10-2013 15:59	12.99049	77.69798	NULL	NULL	0
133445	19390	12	1	NULL	1323	NULL	15	131	01-12-2013 06:00	0	0	01-10-2013 22:24	12.869805	77.653211	NULL	NULL	0
133515	7321	12	1	NULL	1063	NULL	15	146	01-12-2013 12:00	0	0	01-11-2013 13:37	12.934477	77.611284	NULL	NULL	0
133554	22724	28	1	NULL	393	NULL	1	55	1/18/2013 9:00	1	0	01-11-2013 19:22	13.19956	77.70688	NULL	NULL	0
133557	22726	54	1	NULL	1032	NULL	NULL	31	01-12-2013 01:00	1	0	01-11-2013 19:31	12.913301	77.685592	NULL	NULL	0
133598	22754	12	1	NULL	1058	NULL	15	29	01-12-2013 12:00	0	0	01-12-2013 00:36	12.914535	77.631658	NULL	NULL	0
133610	18669	12	1	NULL	466	NULL	15	29	01-12-2013 14:30	0	0	01-12-2013 09:36	13.017436	77.64458	NULL	NULL	0
133622	22765	65	1	NULL	393	NULL	15	55	1/14/2013 10:00	0	0	01-12-2013 10:51	13.19956	77.70688	NULL	NULL	0
133653	8865	12	1	NULL	1391	NULL	15	24	1/13/2013 8:00	0	0	01-12-2013 15:41	12.970926	77.647321	NULL	NULL	0
133686	22791	65	1	NULL	344	NULL	15	108	1/14/2013 7:30	0	0	01-12-2013 18:46	12.94788	77.67092	NULL	NULL	0

id	user_	vehicle_model_	travel_type_	package_	from_area	to_area	from_city	to_city	from_date	online_bookir	mobile_site_bookir	booking_create	from_lat	from_lor	to_lat	to_long	Car_Cancellatio
132512	22177	28	2	NULL	83	448	NULL	NULL	01-01-2013 02:00	0	0	01-01-2013 01:39	12.92415	77.67229	12.92732	77.63575	0
132513	21413	12	2	NULL	1010	540	NULL	NULL	01-01-2013 09:00	0	0	01-01-2013 02:25	12.96691	77.74935	12.92768	77.62664	0
132514	22178	12	2	NULL	1301	1034	NULL	NULL	01-01-2013 03:30	0	0	01-01-2013 03:08	12.937222	77.626915	13.047926	77.597766	0
132515	13034	12	2	NULL	768	398	NULL	NULL	01-01-2013 05:45	0	0	01-01-2013 04:39	12.98999	77.55332	12.97143	77.63914	0
132517	22180	12	2	NULL	1365	849	NULL	NULL	01-01-2013 09:00	0	0	01-01-2013 07:53	12.845653	77.677925	12.95434	77.60072	0
132518	17712	12	2	NULL	1021	1323	NULL	NULL	01-01-2013 22:30	0	0	01-01-2013 08:01	13.02853	77.54625	12.869805	77.653211	0
132520	22181	12	2	NULL	1192	832	NULL	NULL	01-01-2013 11:00	0	0	01-01-2013 09:39	12.97677	77.5727	12.88019	77.64558	0
132522	22184	12	2	NULL	516	376	NULL	NULL	01-01-2013 11:00	0	0	01-01-2013 09:49	13.0056	77.65799	12.90245	77.66081	0
132523	4941	12	2	NULL	150	776	NULL	NULL	01-01-2013 11:00	0	0	01-01-2013 09:55	12.89724	77.61065	13.01508	77.67796	0
132524	17037	12	2	NULL	455	1330	NULL	NULL	01-01-2013 12:45	0	0	01-01-2013 09:59	12.999874	77.67812	12.953434	77.70651	0
132525	22185	12	2	NULL	1166	1328	NULL	NULL	01-01-2013 12:30	0	0	01-01-2013 10:18	12.997198	77.669514	12.958808	77.649047	0
132526	22186	12	2	NULL	793	590	NULL	NULL	01-01-2013 12:45	0	0	01-01-2013 11:17	13.02239	77.59492	13.00826	77.56433	0
132527	16	28	2	NULL	1063	58	NULL	NULL	01-01-2013 15:00	1	0	01-01-2013 11:48	12.934477	77.611284	12.88963	77.60119	0
132528	15097	12	2	NULL	1102	292	NULL	NULL	01-02-2013 02:00	0	0	01-01-2013 11:52	12.93652	77.54481	12.93944	77.62923	0
132530	761	12	2	NULL	814	393	NULL	NULL	01-02-2013 00:30	1	0	01-01-2013 12:14	12.908993	77.6889	13.19956	77.70688	0
132533	17226	12	2	NULL	1353	585	NULL	NULL	01-01-2013 16:00	0	0	01-01-2013 12:28	12.966545	77.711639	12.97677	77.5727	0
132534	868	12	2	NULL	297	212	NULL	NULL	01-01-2013 13:15	0	0	01-01-2013 12:42	12.99789	77.61488	12.99474	77.60797	0
132536	16	28	2	NULL	58	1063	NULL	NULL	01-01-2013 18:30	1	0	01-01-2013 13:40	12.88963	77.60119	12.934477	77.611284	1
132537	21558	12	2	NULL	540	409	NULL	NULL	01-01-2013 16:00	1	0	01-01-2013 13:50	12.92768	77.62664	13.07746	77.60668	0
132540	22193	12	2	NULL	142	393	NULL	NULL	01-01-2013 17:00	1	0	01-01-2013 14:56	12.91281	77.60923	13.19956	77.70688	0
132541	20430	12	2	NULL	393	61	NULL	NULL	01-02-2013 20:00	0	0	01-01-2013 15:02	13.19956	77.70688	12.96298	77.71229	0
132542	22194	12	2	NULL	89	585	NULL	NULL	01-01-2013 20:30	0	0	01-01-2013 15:07	12.96519	77.71932	12.97677	77.5727	0
132543	21716	28	2	NULL	1237	330	NULL	NULL	01-01-2013 16:30	0	0	01-01-2013 15:07	12.92645	77.61206	12.858833	77.589127	0
132544	38966	12	2	NULL	61	393	NULL	NULL	01-01-2013 18:00	0	0	01-01-2013 15:11	12.96298	77.71229	13.19956	77.70688	0
132545	12973	12	2	NULL	137	1068	NULL	NULL	01-02-2013 07:00	0	0	01-01-2013 15:39	12.81575	77.68465	13.044009	77.606805	0
132546	22196	12	2	NULL	409	1194	NULL	NULL	01-01-2013 16:15	0	0	01-01-2013 15:40	13.07746	77.60668	13.00446	77.56923	0
132550	8327	12	2	NULL	1062	1010	NULL	NULL	01-02-2013 08:00	0	0	01-01-2013 17:16	13.059784	77.609219	12.96691	77.74935	0
132551	22200	12	2	NULL	1371	839	NULL	NULL	01-02-2013 10:30	1	0	01-01-2013 17:21	13.000418	77.674835	12.85773	77.78642	0
132553	22202	12	2	NULL	1017	496	NULL	NULL	01-02-2013 05:00	0	0	01-01-2013 17:30	13.11084	77.60074	13.05845	77.64075	0
132555	20340	12	2	NULL	793	393	NULL	NULL	01-02-2013 08:00	0	0	01-01-2013 17:41	13.02239	77.59492	13.19956	77.70688	0
132556	97	12	2	NULL	168	571	NULL	NULL	01-02-2013 05:30	0	0	01-01-2013 17:54	12.99313	77.59828	12.95185	77.69642	0

	id	user	vehicle_model	travel_type	package	from_area	to_area	from_city	to_city	from_date	online_bookir	mobile_site_bookir	booking_create	from_lat	from_lor	to_lat	to_long	Car_Cancellatio
10	132521	22182	65	3	2	448	NULL	NULL	NULL	01-01-2013 16:00	0	0	01-01-2013 09:44	12.92732	77.63575	NULL	NULL	0
22	132535	22190	87	3	2	471	NULL	NULL	NULL	01-01-2013 14:30	0	0	01-01-2013 12:52	13.01854	77.63524	NULL	NULL	0
25	132538	21995	12	3	1	1286	NULL	NULL	NULL	01-01-2013 16:30	0	0	01-01-2013 14:39	12.973448	77.62032	NULL	NULL	0
36	132552	22201	12	3	1	1323	NULL	NULL	NULL	01-01-2013 20:00	1	0	01-01-2013 17:25	12.869805	77.653211	NULL	NULL	0
49	132569	15846	12	3	2	142	NULL	NULL	NULL	01-02-2013 03:00	0	0	01-01-2013 19:37	12.91281	77.60923	NULL	NULL	0
73	132598	21995	28	3	2	87	NULL	NULL	NULL	01-02-2013 12:00	0	0	01-02-2013 08:35	12.97003	77.60658	NULL	NULL	0
76	132602	15529	12	3	2	217	NULL	NULL	NULL	01-02-2013 14:30	0	0	01-02-2013 09:04	13.0011	77.6235	NULL	NULL	0
78	132605	15846	17	3	1	142	NULL	NULL	NULL	01-02-2013 10:30	0	0	01-02-2013 09:18	12.91281	77.60923	NULL	NULL	0
81	132608	22228	12	3	2	590	NULL	NULL	NULL	01-02-2013 11:00	0	0	01-02-2013 10:08	13.00826	77.56433	NULL	NULL	0
82	132609	2005	24	3	1	1086	NULL	NULL	NULL	01-02-2013 12:15	1	0	01-02-2013 10:14	12.907487	77.64729	NULL	NULL	0
83	132610	22229	12	3	2	1053	NULL	NULL	NULL	01-02-2013 11:30	0	0	01-02-2013 10:29	12.912799	77.589784	NULL	NULL	0
92	132620	22236	85	3	2	393	NULL	NULL	NULL	01-02-2013 16:00	1	0	01-02-2013 11:59	13.19956	77.70688	NULL	NULL	0
93	132621	18777	12	3	1	293	NULL	NULL	NULL	01-02-2013 17:00	1	0	01-02-2013 12:15	12.849482	77.663187	NULL	NULL	0
103	132632	694	28	3	2	6	NULL	NULL	NULL	01-02-2013 16:00	1	0	01-02-2013 14:34	12.97739	77.61762	NULL	NULL	0
111	132641	22246	12	3	1	1084	NULL	NULL	NULL	01-02-2013 16:45	0	0	01-02-2013 16:12	12.892657	77.581866	NULL	NULL	0
149	132684	22270	28	3	1	601	NULL	NULL	NULL	01-03-2013 09:15	0	0	01-03-2013 08:24	13.02434	77.56593	NULL	NULL	0
156	132692	1256	12	3	1	58	NULL	NULL	NULL	01-03-2013 12:00	0	0	01-03-2013 10:11	12.88963	77.60119	NULL	NULL	0
157	132693	20432	12	3	1	149	NULL	NULL	NULL	01-03-2013 11:00	0	0	01-03-2013 10:25	12.93022	77.56039	NULL	NULL	0
159	132695	41448	12	3	1	767	NULL	NULL	NULL	01-05-2013 14:30	1	0	01-03-2013 10:32	12.9122	77.51043	NULL	NULL	0
169	132706	868	12	3	1	824	NULL	NULL	NULL	01-03-2013 15:00	0	0	01-03-2013 14:13	13.06557	77.58646	NULL	NULL	0
186	132724	22292	36	3	2	541	NULL	NULL	NULL	01-04-2013 19:30	0	0	01-03-2013 17:44	12.93524	77.61997	NULL	NULL	0
200	132740	4865	12	3	2	1378	NULL	NULL	NULL	01-05-2013 10:00	1	0	01-03-2013 21:15	12.827912	77.679642	NULL	NULL	0
202	132742	21644	65	3	2	1015	NULL	NULL	NULL	01-04-2013 05:15	0	0	01-03-2013 21:34	12.93086	77.57769	NULL	NULL	0
214	132756	25774	12	3	1	571	NULL	NULL	NULL	01-04-2013 13:15	0	0	01-04-2013 08:36	12.95185	77.69642	NULL	NULL	0
217	132759	22308	12	3	1	1058	NULL	NULL	NULL	01-04-2013 10:15	0	0	01-04-2013 09:15	12.914535	77.631658	NULL	NULL	0
231	132775	22316	28	3	1	767	NULL	NULL	NULL	01-04-2013 12:15	0	0	01-04-2013 11:16	12.9122	77.51043	NULL	NULL	0
232	132776	22236	24	3	2	1191	NULL	NULL	NULL	01-04-2013 12:30	0	0	01-04-2013 11:24	13.03017	77.56684	NULL	NULL	0
233	132777	34078	85	3	1	1230	NULL	NULL	NULL	01-05-2013 11:30	0	0	01-04-2013 11:27	13.02239	77.59492	NULL	NULL	0