School of Information Technology

King Mongkut's University of Technology Thonburi

Project Report

"Talking Datamobile User Demographics"

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This report has been prepared as an assessment requirement for Data Mining(CSC531)

and submitted to Asst. Prof. Dr. Chakarida Nukoolkit.

PART I: Preparing Data

Before we start this project, we have to download file name:

x🗎 Mobile_Apps_Original_CategoryLabels.csv file

x🗎 Mobile_Apps_Usage.csv file

Which Mobile_Apps_Original_CategoryLabels file is contain the data of application types and Mobile_Apps_Usage file composed of application id. Then, we analyze and separate data into 17 categories which are:

1.	Games	10.	Travel
2.	Books	11.	Objects
3.	Education	12.	Technology
4.	Health & Fitness	13.	Places
5.	Family	14.	Entertainment
6.	Food & Drink	15.	Fashion
7.	Utilities	16.	Unknown
8.	Finance	17.	Others
9.	Social Networking		

After we divided the data of application types into 17 categories, we have merged   Mobile_Apps_Original_CategoryLabels file and Mobile_Apps_Usage file by using label_id for matching attribute and Vlookup formular for merging
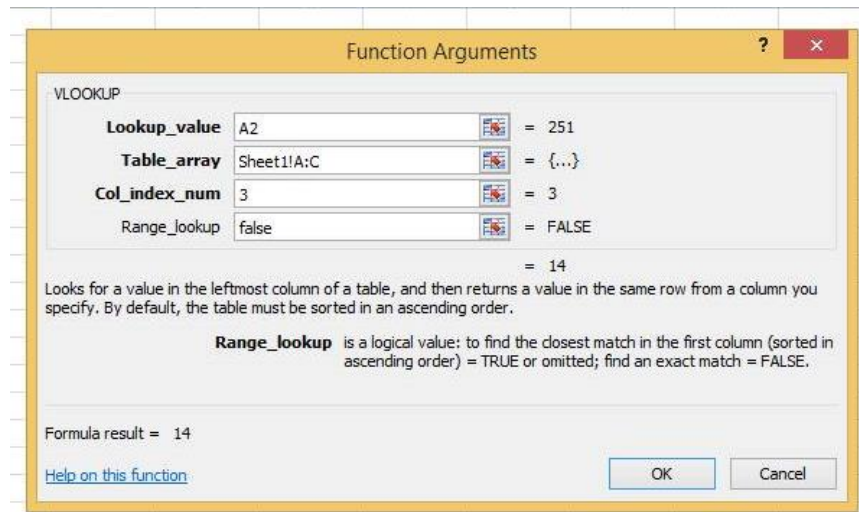
Figure 1: Vlookup Formular Tool

Once we merged these 2 files together, we got the new field in Mobile_Apps_Usage file that contained class which are 16 categories that matches to the application_id.

PART II: Analyze Data

In this part, we use WEKA application to analyze data by assigning a new Mobile_Apps_Usage file into WEKA to generate a two-dimension of histogram:

X-asis represents classes (17 categories)

Y-asis represents the frequency each class

And the WEKA result is:
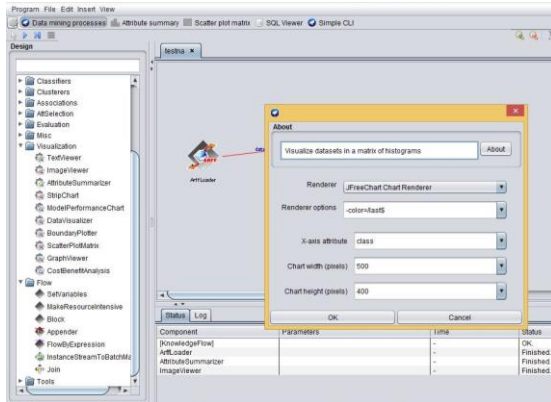
Figure 2.1: Import JFreeChart Chart Renderer Plugin
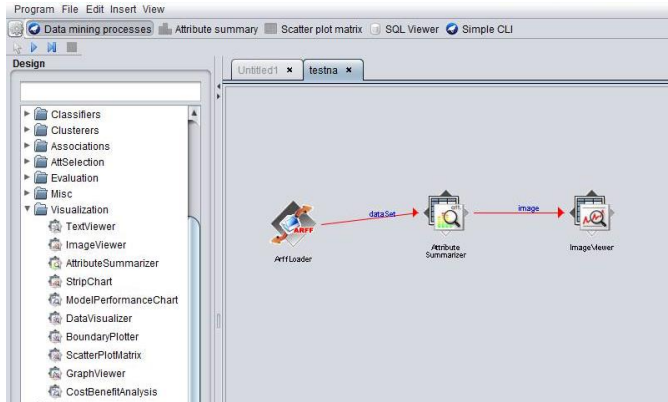
Figure 2.2: Create Histogram.

According to figure 2.1 in Weka application, firstly we downloaded one plug in name JFreeChart Chart Renderer to generate histogram graph.

Figure 2.2 represents the completed path of generating a histogram which are:

1) Arffloader: preparing data set

2) Attribute Summarize: converting data set into histogram (using JFreeChart)

3) Image Viewer: generating histogram into an image

Figure 2.3: Histograms of Mobile_Apps_Usage.

The result will be printed out as Figure 2.3, presenting the frequency of 17 categories of application type that was downloaded.

In conclusion, according to the histogram graph, we can conclude that there is a large amount of application downloaded in categories are Game, Book and Technology.

Appendix

1. Games

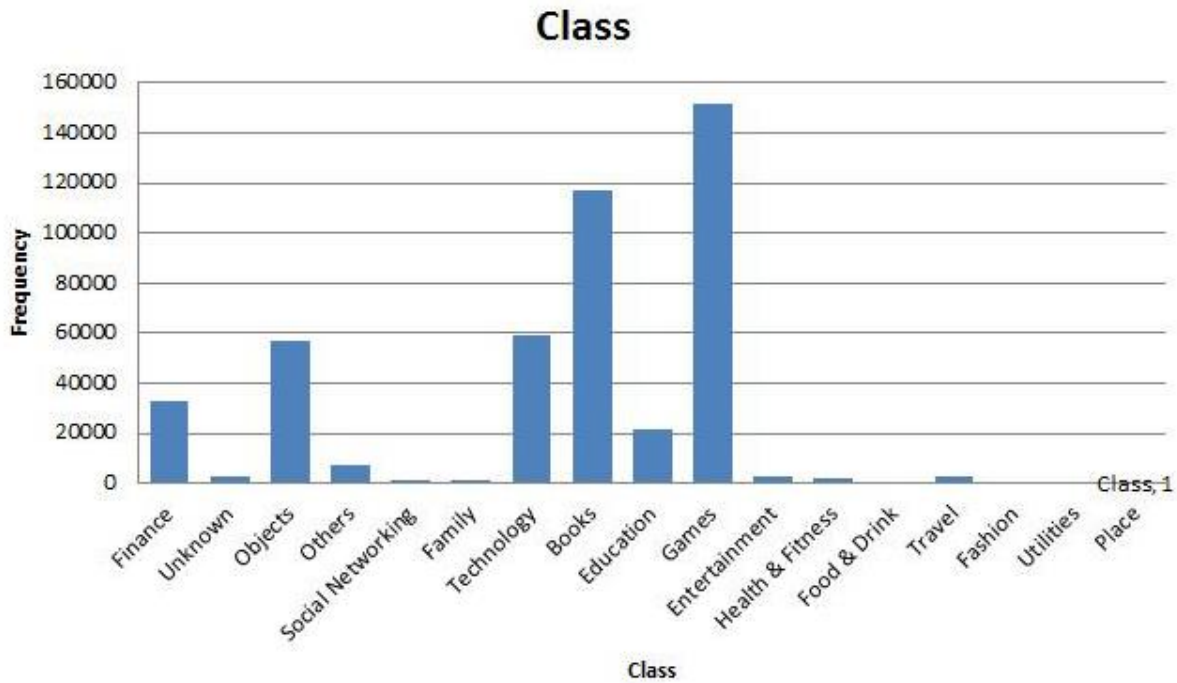| label_id	category	Class
2	Games-Games type	Games
3	Games-Games themes	Games
4	Games-Art Style	Games
5	Games-Leisure time	Games
6	Games-Cutting things	Games
7	Games-Finding fault	Games
8	Games-stress reliever	Games
9	Games-pet	Games
10	Games-Answer	Games
11	Games-Fishing	Games
12	Games-Music and Dance	Games
13	Games-Puzzle	Games
14	Games-Adventure puzzle	Games
15	Games-Parkour Racing	Games
16	Games-Parkour	Games
17	Games-Racing	Games
18	Games-Motorcycle	Games
19	Games-Rowing	Games
20	Games-aircraft	Games
21	Games-Gem Elimination	Games
22	Games-Box	Games
23	Games-gem	Games
24	Games-Lianliankan	Games
25	Games-Zuma	Games
26	Games-Bobble	Games
27	Games-Cartoon	Games
28	Games-Online Games	Games
29	Games-Role -playing Gamess	Games
30	Games-Competitive action	Games
31	Games-Tactics	Games
32	Games-card	Games
33	Games-Business simulation	Games
34	Games-Action Shooting	Games
35	Games-Horizontal version	Games
36	Games-shooting	Games
37	Games-3D	Games
38	Games-flight	Games
39	Games-tank	Games
40	Games-Snipe	Games
41	poker and chess	Games
42	poker Games_doudizhu	Games
43	chess	Games
44	majiang	Games
45	table Games	Games
46	Texas Poker	Games
47	poker	Games
48	Children puzzle Games	Games
49	Puzzle	Games
50	Literacy Gamess	Games
51	Intellectual development Games	Games
53	Guard tower defense Games	Games
54	checkpoints Games	Games
55	Beach landing Games	Games
56	fighting Games	Games
57	old style Games	Games

62	Others ball Games	Games
63	RPG Games	Games
64	Turn based RPG Games	Games
66	ARPG	Games
67	business strategy Games	Games
68	war chess	Games
71	raising up Games	Games
75	puzzel	Games
76	gambling	Games
77	3 kindom Games	Games
78	knight Games	Games
79	Cultivation fantasy Games	Games
80	Journey to the West Games	Games
81	Outlaws of the Marsh Games	Games
90	zombies Games	Games
91	World of Warcraft	Games
92	magic	Games
93	dotal-lol	Games
94	sailing Games	Games
481	Board Gamess and entertainment	Games
482	Gamess	Games
524	Gamess deep tags	Games
525	Games willingness to pay	Games
526	Games amount paid	Games
527	Games Frequency	Games
528	Games Installation	Games
529	Active Gamess	Games
537	Ultra-high frequency (more than seven consecutive days Games behavior)	Games
538	High Frequency (seven consecutive days there are Gamess behavior)	Games
539	IF (there are three consecutive days Games behavior)	Games
540	Low Frequency (only recently have the Games play a day)	Games
541	High installation (over 7 Gamess)	Games
542	The installation (3-7 Gamess)	Games
543	Low installation (only 1-2 Gamess)	Games
544	Active high (nearly 30 days played 7 Gamess)	Games
545	Active in (nearly 30 days played 3-7 Gamess)	Games
546	Low active (nearly 30 days played 1-2 Gamess)	Games
794	Tencent	Games
795	Games	Games
796	Cards RPG	Games
797	MMO	Games
798	round	Games
800	ARPG	Games
801	MOBA	Games
802	SLG (strategy)	Games
803	Racing (RAC)	Games
804	Flight Shooting	Games
805	Shootout Shooting (STG)	Games
808	Tower Defense	Games
809	Business simulation	Games
810	Casual puzzle categories	Games
811	Chess categories	Games
873	Stimulate fun	Games
895	Games	Games
968	Card Games	Games
969	casual Gamess	Games
970	Puzzles	Games

972	Sports Gamess	Games
973	Table Gamess	Games
974	action Gamess	Games
975	strategy Games	Games
976	Simulators	Games
977	Adventure Games	Games
978	Chess Games	Games
979	Dice Games	Games
980	Educational Gamess	Games
981	Family Gamess	Games
982	Music Gamess	Games
983	Racing Gamess	Games
984	Gamess	Games
985	Word Gamess	Games
986	Xian Xia	Games
993	Senki	Games
996	Ninja	Games

2. Books

label_id	category	Class
97	japanese and korean style	Books
98	japanese comic and animation	Books
99	US and Europe animation	Books
100	Cute style comic	Books
101	pixel style comic	Books
102	violence comic	Books
103	US and Europe magic comic	Books
104	realistic style comic	Books
105	chinese comic	Books
140	art and culture	Books
141	library	Books
142	exams	Books
143	dialects	Books
144	class managemetn	Books
145	reading	Books
146	reading for fetus	Books
147	children books	Books
148	novels	Books
149	magazine and journal	Books
150	comics	Books
151	dictionary	Books
152	reading platform	Books
153	poetry	Books
154	joke	Books
155	psychology	Books
156	science	Books
157	Information	Books
158	news	Books
159	Entertainment News	Books

160	Academic Information	Books
161	Sports News	Books
162	Financial Information	Books
163	Technology Information	Books
164	gaming strategy	Books
165	Socially	Books
166	weibo	Books
167	love and marriage	Books
168	community	Books
181	Audiobooks	Books
704	Property Industry 2.0	Books
705	Quality 1	Books
706	Customized 1	Books
707	Trendy / cool 1	Books
708	Simple 1	Books
709	1 reputation	Books
710	Relatives 1	Books
711	Irritation / Fun 1	Books
712	Nature 1	Books
713	Services 1	Books
714	1 free	Books
715	Passion 1	Books
716	Noble 1	Books
717	Science and Technology 1	Books
718	1 vitality	Books
719	Pursuit 1	Books
720	Smart Shopping 1	Books
721	Personal Effectiveness 1	Books
722	Classical 1	Books
723	Cozy 1	Books

724	Total Cost 1	Books
730	And the Church	Books
818	literature	Books
819	Read the operator's	Books
821	Pirated content	Books
822	Listening to books category	Books
823	Others Read	Books
855	noble	Books
865	Science and Technology	Books
879	military	Books
902	Arts	Books
987	effort	Books
997	Romance	Books
998	Shushan	Books
999	Martial arts	Books
1000	Domestic animation	Books
1001	Europe and Fantasy	Books
1002	Harem	Books

3. Education

label_id	category	Class
52	math	Education
82	Chinese Classical Mythology	Education
83	Western Mythology	Education
84	80s Japanese comic	Education
85	90s Japanese comic	Education
89	science fiction	Education
96	Chinese painting	Education
133	education	Education
134	education for babies	Education
135	education outside class	Education
136	study abroad	Education
137	foreign language	Education
138	professional skills	Education
139	management	Education
212	Astrology Horoscope	Education
312	Consumer preferences	Education
313	Consumer Goods	Education
314	Consumer orientation	Education
315	Brand Country	Education
316	Occupational identity	Education
317	College Students	Education
366	Culture and Education	Education
386	Collection process	Education
416	Culture & Education	Education
417	the University	Education
418	High school	Education
452	Education and Training	Education
485	Experience	Education
523	Driving School	Education
587	Early Learning	Education
589	Training institutions	Education
590	Exam training	Education
653	language training	Education
812	Parkour avoid class	Education
813	The elimination of class	Education
815	Animation aggregate class	Education
816	Class animation community	Education
839	Doctors	Education
854	Property Industry new	Education
870	Personal Effectiveness	Education
876	physical education	Education
880	Animation	Education
889	education	Education
900	Science and Technology	Education
901	Documentary	Education
940	Free exercise	Education

4. Health & Fitness

label_id	category	Class
58	basketball	Health & Fitness
59	football	Health & Fitness
60	tennis	Health & Fitness
61	billards	Health & Fitness
65	realtime fighting	Health & Fitness
95	sports	Health & Fitness
202	health	Health & Fitness
203	lose weight	Health & Fitness
204	sports and gym	Health & Fitness
205	health	Health & Fitness
206	Medical	Health & Fitness
207	Health Management	Health & Fitness
281	A beauty care	Health & Fitness
282	Skin care applications	Health & Fitness
283	Beauty Nail	Health & Fitness
284	Make-up application	Health & Fitness
343	Outdoor sport	Health & Fitness
354	Sports Health	Health & Fitness
401	SPA	Health & Fitness
440	Pharmacy / medical devices / Health	Health & Fitness
453	Swim	Health & Fitness
462	SPA / Health Center	Health & Fitness
465	Sports	Health & Fitness
475	Cycling Sport	Health & Fitness
521	Health Products	Health & Fitness
694	Wearable Health	Health & Fitness
807	Sports	Health & Fitness
877	health	Health & Fitness

5. Family

label_id	category	Class
72	pet raising up	Family
73	love raising up	Family
196	Household	Family
210	Man playing favorites	Family
270	MOthers	Family
271	Prepare pregnant pregnancy	Family
272	Parenting	Family
273	Maternal and child supplies	Family
353	Kids	Family
393	Pregnant mOthers supplies	Family
400	Children's entertainment	Family
476	Wedding services	Family
555	Relatives	Family
579	marry	Family
584	Paternity	Family
666	Parenting	Family
672	Parent-child's play	Family
685	family	Family
840	Maternal and child population	Family

label_id	category	Class
841	Prepare baby	Family
842	Families with babies	Family
843	Pregnant baby	Family
844	Parenting stage	Family
845	Families with big baby	Family
846	Families with small babies	Family
847	Sea Amoy	Family
848	He slightly - Family Life Cycle	Family
849	Youth House	Family
850	the little sun	Family
851	Three Generations of children	Family
852	Middle-aged home	Family
853	Empty nesters	Family
885	Children	Family
893	MOthers	Family
897	life	Family

6. Food & Drink

label_id	category	Class
381	FOOD	Food & Drink
382	Fast food meals	Food & Drink
383	Day feed	Food & Drink
396	Western Dinner	Food & Drink
402	Water Coffee Bar	Food & Drink
423	Baby food	Food & Drink
424	Snacks Snacks	Food & Drink
426	Tobacco row	Food & Drink
431	Korean food	Food & Drink
432	Lunch Dinner	Food & Drink
433	Bread dessert	Food & Drink
436	Shabu hot pot	Food & Drink
437	buffet	Food & Drink
457	Coffee water bar / teahouse	Food & Drink
828	Vermicelli	Food & Drink

7. Utilities

label_id	category	Class
218	Clock	Utilities
219	Express	Utilities
220	Calendar	Utilities
221	Accounting	Utilities
228	work	Utilities
229	Jobs	Utilities
230	Scheduling	Utilities
231	notes	Utilities
232	notes	Utilities
233	File Editor	Utilities
235	Contacts	Utilities
247	Utilities	Utilities
249	Editor	Utilities

8. Finance

label_id	category	Class
69	business	Finance
216	Business Office	Finance
223	convenience services	Finance
234	business cards	Finance
251	Finance	Finance
252	Wealth Management	Finance
253	IMF	Finance
254	Direct Bank	Finance
255	Direct Insurance	Finance
256	Securities	Finance
257	futures	Finance
258	Exchange	Finance
259	Precious Metals	Finance
260	Crowdfunding financing	Finance
262	Pay	Finance
263	Debit and credit	Finance
267	Buy	Finance
268	Sellers	Finance
269	Rentals	Finance
280	Sale of cars	Finance
367	Office Supplies	Finance
407	DS_P2P net loan	Finance
470	Financial Planning Services	Finance
487	Real Estate Property	Finance
488	Housing agency	Finance
519	Car Rental	Finance
530	High (had paid behavior)	Finance
531	Low (not over charge behavior)	Finance
532	payment 1	Finance
533	payment 2	Finance
534	payment 3	Finance
535	payment 4	Finance
536	payment 5	Finance
569	Total Cost	Finance
582	financial	Finance
689	safety Insurance	Finance
690	Peace - Search	Finance
691	mobile bank	Finance
692	Insurance	Finance
731	stock	Finance
732	A shares	Finance
733	B Shares	Finance
734	H shares	Finance
735	N shares	Finance
736	Others shares	Finance
737	fund	Finance
738	Monetary Fund	Finance
739	Mixed Fund	Finance
740	Bond Fund	Finance
741	Capital Preservation Fund	Finance
742	QDII fund	Finance
743	Commodity Funds	Finance
744	Equity Fund	Finance
745	Index Fund	Finance
746	Closed-end funds	Finance
747	Insurance	Finance
748	Life Insurance	Finance
749	Insurance	Finance
750	Liability	Finance

751	Bank financing	Finance
752	fixed income	Finance
753	Guaranteed income	Finance
754	Non-guaranteed income	Finance
755	Consumer loans	Finance
756	Internet banking	Finance
757	P2P	Finance
758	Direct Banking	Finance
759	Third party payment	Finance
760	Crowdfunding	Finance
761	Financial Services	Finance
762	Trust	Finance
763	Trust funds	Finance
764	Chattel trust	Finance
765	Real Estate Trust	Finance
766	Property Trust	Finance
767	Intellectual Property Trust	Finance
770	Stock Futures	Finance
771	Commodity Futures	Finance
772	Financial Futures	Finance
773	High Flow	Finance
774	High mobility	Finance
775	Liquid medium	Finance
776	Lower liquidity	Finance
777	Low liquidity	Finance
778	High profitability	Finance
779	Higher income	Finance
780	Moderate profitability	Finance
781	Low profitability	Finance
782	Low income	Finance

783	High risk	Finance
784	Higher risk	Finance
785	Medium risk	Finance
786	Low risk	Finance
787	Low Risk	Finance
788	Financial Supermarket	Finance
790	Financial Information	Finance
792	exchange rate	Finance
830	Pay	Finance
831	Not paid the fee	Finance
832	paid1	Finance
833	paid2	Finance
834	paid3	Finance
835	paid4	Finance
836	paid5	Finance
837	paid6	Finance
838	paid7	Finance
856	Total Cost	Finance
857	free	Finance
858	natural	Finance
859	pursue	Finance
905	Finance and economics	Finance
1004	Finance	Finance
1005	Traditional securities brokerage	Finance
1006	Lottery ticket	Finance
1007	P2P net loan	Finance
1008	Pay	Finance
1009	Crowdfunding	Finance
1010	Accounting	Finance
1011	Third-party card management	Finance

1012	Internet Banking	Finance
1013	Financial Information	Finance
1014	Consumer Finance	Finance
1015	mobile bank	Finance
1016	Traditional Insurance	Finance
1017	Heritage Foundation	Finance
1018	Direct Banking	Finance
1020	Bank Credit Card	Finance
959	financial	Finance
960	P2P	Finance

9. Social Networking

label_id	category	Class
127	online shopping	Social Networking
128	online malls	Social Networking
129	online shopping by group, like groupon	Social Networking
130	online shopping navigation	Social Networking
131	online shopping, price comparing	Social Networking
132	shopping sharing	Social Networking
169	picture sharing	Social Networking
170	blogs	Social Networking
171	communitation	Social Networking
172	IM	Social Networking
173	mesasge	Social Networking
174	email	Social Networking
209	pictures photography	Social Networking
211	takeaway ordering	Social Networking
241	App Store	Social Networking
242	search	Social Networking
334	Women	Social Networking
336	Men's	Social Networking
565	Smart Shopping	Social Networking
827	User Community	Social Networking

10. Travel

label_id	category	Class
399	Leisure and entertainment	Traval
403	Domestic services	Traval
409	Go places	Traval
410	High places	Traval
411	Four five-star hotel	Traval
414	transportation hub	Traval
415	AIRPORT	Traval
419	Tourist attractions	Traval
429	Hotels	Traval
182	Business Travel	Travel
183	map	Travel
184	navigation	Travel
185	Behalf of the drive	Travel
186	Taxi	Travel
187	Car	Travel
188	flight	Travel
189	Bus	Travel
190	train	Travel
191	Hotel application	Travel
192	Travel advisory	Travel
193	tourism product	Travel
194	Share Travels	Travel
195	coach transport	Travel
671	Travel	Travel
890	tourism	Travel
909	Air Travel	Travel
916	Airline type	Travel
917	Full Service Airlines	Travel
918	Low Cost Airlines	Travel
919	Regional Aviation	Travel
920	High-end business aviation	Travel
921	General Aviation	Travel
922	Aviation Integrated Services	Travel
923	Aeronautical Information Service	Travel
924	Airline Alliances	Travel
925	airport	Travel
926	Flight area	Travel
927	Chinese mainland (Airlines)	Travel
928	Southeast Asia (aviation)	Travel
929	Japan and South Korea (Air)	Travel
930	Europe, the United States and Macao (aviation)	Travel
931	Hong Kong, Macao and Taiwan (aviation)	Travel
932	travel	Travel
933	Purpose of travel	Travel
934	Travel Travel	Travel
935	Overseas travel	Travel
936	Domestic travel	Travel
937	Integrated tourism	Travel
938	Tour around	Travel
939	Travel Information	Travel
941	Travel preferences	Travel
942	Share Tour	Travel
943	Destination Region	Travel
944	Southeast Asia (Travel)	Travel
945	Japan and South Korea (Travel)	Travel
946	Europe, the United States and Macao (Travel)	Travel
947	Hong Kong, Macao and Taiwan (Travel)	Travel
949	Integrated ticket reservation	Travel
950	Book hotel complex	Travel

951	High-speed rail train reservation	Travel
952	Coach reservations	Travel
953	Integrated Air Travel Booking	Travel
954	Hotels	Travel
955	Hotel Type	Travel
956	High-end hotel	Travel
957	Hotel Chain	Travel
958	Non-standard accommodation	Travel
988	navigation	Travel
989	Tomb	Travel
994	Journey	Travel

11. Objects

label_id	category	Class
197	Decoration	Objects
198	Appliances	Objects
199	Furniture	Objects
200	household products	Objects
222	Car Owners	Objects
261	Lottery ticket	Objects
278	car	Objects
326	Condition of the vehicles	Objects
327	Car	Objects
328	No Car	Objects
329	Jewelry Watches	Objects
330	branded watch	Objects
347	Volkswagen brand	Objects
349	Accessories	Objects
351	Household utensils	Objects
352	bed linings	Objects
355	outdoor equipment	Objects
362	M package	Objects
363	wallet	Objects
365	camera	Objects
369	Swimming Supplies	Objects
371	Phone	Objects
372	Digital Accessories	Objects
373	computer	Objects
374	Luxury brand	Objects
375	cosmetic	Objects
376	Fragrance oils	Objects
377	Feature Pack	Objects
378	Suitcase	Objects

379	Makeup	Objects
380	Skin Care	Objects
384	Home Decoration	Objects
390	Household appliances	Objects
391	home appliances	Objects
392	Bathroom products	Objects
397	Kitchen Appliances	Objects
405	Custom label	Objects
422	Large household appliances	Objects
427	Decoration materials	Objects
428	Fitness Equipment	Objects
438	groceries	Objects
443	Furniture	Objects
444	Kitchenware	Objects
446	Baby Care	Objects
448	Stereo headphones	Objects
449	Baby bed	Objects
450	kids toys	Objects
454	wig	Objects
455	tableware	Objects
461	Baby Home Textiles	Objects
480	Tea cups	Objects
484	Cleaning Products	Objects
486	Car decoration	Objects
547	car brand	Objects
561	noble	Objects
571	Toiletries	Objects
572	Leather Care	Objects
574	Musical instruments	Objects
588	medical instruments	Objects

609	Phone	Objects
659	General merchandise	Objects
673	Personalized photo	Objects
683	fingerprint	Objects
686	model	Objects
791	Lottery ticket	Objects
793	Antique collection	Objects
863	Smart Shopping	Objects
869	classical	Objects
874	comfortable	Objects
875	Viewing preferences	Objects
894	car	Objects

12. Technology

label_id	category	Class
201	Smart Home	Technology
236	network disk	Technology
237	store management	Technology
238	Engineering Drawing	Technology
239	phone tools	Technology
240	System Tools	Technology
243	Input Method	Technology
244	Browser	Technology
245	Desktop Enhancements	Technology
246	readers	Technology
250	WIFI	Technology
364	Digital	Technology
491	Electric Car	Technology
548	Industry tag	Technology
549	Property Industry 1.0	Technology
591	Device Properties	Technology
611	Smart TV	Technology
612	smart watch	Technology
613	Smart bracelet	Technology
614	Features	Technology
615	Music phone	Technology
616	Beauty phone	Technology
617	Old machine	Technology
618	Photography phone	Technology
619	High-end business phone	Technology
620	Cost-effective mobile	Technology
628	operating system	Technology
629	iOS	Technology
630	WP	Technology
631	Android	Technology
632	Hardware Features	Technology
633	8-core chips	Technology
634	Gyro	Technology
635	NFC chip	Technology
636	Dual SIM	Technology
637	Operators	Technology
638	operatior 1	Technology
639	operator 2	Technology
640	operator 3	Technology
641	The internet	Technology
642	WIFI	Technology
643	4G	Technology
644	3G	Technology
645	2G	Technology
688	Ping	Technology
695	Smart Appliances	Technology
696	Intelligent hardware	Technology
824	Hardware Related	Technology
826	Online booking class	Technology
878	Public class	Technology
887	microfilm	Technology
903	Lenovo Cooperation	Technology
906	Information	Technology
1019	Internet Securities	Technology
1021	Internet Insurance	Technology

13. Places

label_id	category	Class
586	Beauty SPA	Place
265	Estate	Place
332	Switzerland	Place
338	France	Place
339	Hong Kong	Place
340	Japan	Place
342	United States	Place
344	Germany	Place
348	Sweden	Place
350	Italy	Place
356	China Mainland	Place
359	Taiwan	Place
370	Canada	Place
385	United Kingdom	Place
387	Korea	Place
388	Austria	Place
389	Spain	Place
395	Norway	Place
398	Australia	Place
408	Location	Place
412	Golf Club	Place
413	ski facility	Place
420	hospital	Place
421	Portugal	Place
425	Retail stores	Place
430	Singapore	Place
434	Thailand	Place
435	Belgium	Place
439	Convenience Store	Place
441	Denmark	Place
442	Greece	Place
445	Collection shop	Place
447	Netherlands	Place
451	Digital stores	Place
456	Latvia	Place
458	retail	Place
459	Brazil	Place
460	Malaysia	Place
463	Finland	Place
468	Beauty salons	Place
469	Supermarkets	Place
471	car services	Place
472	Auto 4S shop	Place
473	tea shop	Place
478	Appliance stores	Place
479	Philippines	Place
483	Gym	Place
489	Florist / Fruit Shop	Place
493	Swimming pool	Place
496	Billiard room	Place
497	Foot Bath	Place
512	Pet Services	Place
513	Internet cafes	Place
514	bank	Place
516	pharmacy	Place
517	Supermarket	Place
518	teahouse	Place
520	bookstore	Place
522	flower shop	Place
570	Teahouse	Place
573	cinema	Place
575	Indian Express	Place
576	Foot Massage	Place
578	Medical	Place
610	flat	Place
652	shopping center	Place
654	Car Accessories	Place
655	pawn shop	Place
656	Bath	Place
657	Express Inn	Place
658	CAR WASH	Place
660	Real Estate Agents	Place
661	securities company	Place
662	post Office	Place
663	SCHOOL	Place
664	the University	Place
667	Month Center	Place
668	Museum of Traditional Chinese Medicine	Place
670	Telecom company	Place
674	Optical Shop	Place
675	Star Hotels	Place
677	Logistics companies	Place
678	Skills Training	Place
679	Concert hall	Place
680	Food company	Place
681	Insurance company	Place
682	car repair	Place

14. Entertainment

label_id	category	Class
86	movie	Entertainment
87	shows	Entertainment
88	millitary and wars	Entertainment
175	phone	Entertainment
176	movie	Entertainment
177	radio	Entertainment
178	music	Entertainment
179	video	Entertainment
180	show	Entertainment
274	entertainment	Entertainment
275	KTV	Entertainment
276	show	Entertainment
277	the film	Entertainment
279	Automotive News	Entertainment
466	cinema	Entertainment
467	Musical Instruments	Entertainment
477	KTV service	Entertainment
494	Video City	Entertainment
567	classical	Entertainment
665	dance	Entertainment
806	music	Entertainment
814	Animation	Entertainment
825	the film	Entertainment
884	entertainment	Entertainment
888	Funny	Entertainment
891	Fashion Arts	Entertainment
892	fashion	Entertainment
896	Trailer	Entertainment
898	the film	Entertainment
899	TV series	Entertainment
904	Talk show	Entertainment
907	music	Entertainment
948	Booking channels	Entertainment
971	cosplay	Entertainment
990	reality show	Entertainment
992	trickery	Entertainment

15. Fashion

label_id	category	Class
224	fashion outfit	Fashion
331	fashion brand	Fashion
333	Dress shoes	Fashion
335	Shoes	Fashion
337	Men's Shoes	Fashion
341	High-end brand	Fashion
345	underwear	Fashion
346	Home Clothing	Fashion
357	Bags	Fashion
358	Lady bags	Fashion
360	Baby Products	Fashion
361	Baby Clothing	Fashion
368	Jewelry, jewelry	Fashion
394	Shoes	Fashion
404	Nail Tattoos	Fashion
464	Laundry / Leather Care / change clothes	Fashion
580	beauty	Fashion
581	Hairdressing	Fashion
585	Nail	Fashion
1003	fashion	Fashion

16. Unknown

label_id	category	Class
1		Unknown
74	Unknown	Unknown
115	Unknown	Unknown
125	Unknown	Unknown
126	Unknown	Unknown
248		Unknow
264		Unknown
302	Unknown	Unknown
303	Unknown	Unknown
304	Unknown	Unknown
305	Unknown	Unknown
306	Unknown	Unknown
318	Unknown	Unknown
319	Unknown	Unknown
320	Unknown	Unknown
406	Unknown	Unknown

label_id	category	Class
646	Unknown	Unknown
647	Unknown	Unknown
648	Unknown	Unknown
649	Unknown	Unknown
650	Unknown	Unknown
651	Unknown	Unknown
698	Unknown	Unknown
699	Unknown	Unknown
700	Unknown	Unknown
701	Unknown	Unknown
702	Unknown	Unknown
703	Unknown	Unknown
965	Unknown	Unknown

17. Other

label_id	category	Class
70	farm	Others
208	Living	Others
213	coupon	Others
214	Reviews	Others
215	Recipes	Others
217	Weather	Others
225	Points Activities	Others
226	Housekeeping	Others
227	Integrated Living	Others
266	Housing Advice	Others
474	Photographic prints	Others
490	Fishing Tackle	Others
492	Personal Care	Others
495	Aftermarket decoration	Others
511	Wedding photography	Others
515	Parental photography	Others
550	quality	Others
551	Customization	Others
552	Trendy / cool	Others
553	Simple	Others
554	Reputation	Others
556	Irritation / Fun	Others
557	natural	Others
558	service	Others
559	free	Others
560	Enthusiasm	Others
562	Science and Technology	Others
563	vitality	Others
564	pursue	Others
566	Personal Effectiveness	Others
568	comfortable	Others
577	Experience / DIY	Others
583	Slim	Others
592	Brands	Others
608	Equipment category	Others
621	screen size	Others
622	6.0 inches above	Others
623	6.0-5.6 inches	Others
624	5.5-5.1 inches	Others
625	5.0-4.6 inches	Others

label_id	category	Class
626	4.5-3.1 inches	Others
627	3 inches and below	Others
669	Corporate	Others
676	Express	Others
684	City resident	Others
687	Others operators	Others
693	Resolution	Others
789	Others	Others
817	Comics Reading Tools	Others
820	read	Others
829	Buy class	Others
860	quality	Others
861	Cool trendy	Others
862	Relatives	Others
864	Reputation	Others
866	Simple	Others
867	Enthusiasm	Others
868	vitality	Others
871	service	Others
872	Customization	Others
881	Original	Others
882	Wonderful	Others
883	Olympic	Others
886	advertising	Others
908	Others	Others
910	aviation	Others
966	BM	Others
967	NS	Others
991	Jin Yong	Others
995	tribe	Others