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Large-scale Analysis of Mobile Trajectories

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This report is submitted in partial fulfilment of the requirement for the degree of BSc
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Declaration

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Abstract

Through the continuous recording of user movement data (e.g. Google Fit, Apple Healthkit), vast amounts of spatial trajectory data is available. This data holds valuable information allowing for insights into a users lifestyle, commitments and habits. Conducting an analysis on such data will help to understand what individual users prioritise in their daily lives and to compare this to a much larger group of users.

This project aims to use relevant and practised techniques from the area of trajectory data mining to be able to analyse large amounts of trajectory data received from users monitoring their daily routines. Trajectories most relevant to a users lifestyle will need to be identified and extracted from all other data. These relevant trajectories can then be used to determine specific insights into the users life. For example, their interests or activities they like to do. Lastly, a model to classify all users will be produced.

So far, extensive research has been performed into the field of trajectory data mining and the areas most relevant to this project will be discussed below. The requirements for this project have also been identified and stated below, along with an analysis of the best methods to use in solving the problems mentioned.

Ethics

The data being used in this project has been collected through the Seta Mobility Mobile app. As a student of the university I have been given access and am permitted to use the data within this project. Access to the database is given only through the university network.

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Chapter 1: Introduction

The mass-availability of sensors within mobile devices enables the continuous quantification of user movement (e.g. Google Fit, Apple Healthkit) as well as the analysis of user behaviour. This analysis on behaviour can be used to support users in the management of their everyday life. For example, the AI-powered virtual assistant: Google Assistant, tells users how long it will take to get home when the phone is accessed at a time when the user generally goes home from work.

The aim of this project is to create a tool able to analyse the spatial trajectory data received from a large set of users, then to extract from the data relevant insights on the routines of particular users and the user base as a whole. One such insight could be the places a user regularly visits, which may correspond to an interest/hobby. The final outcome will be a model to classify all users based on various factors such as their interests, location, or the type of activities they like to do.

The data for this project will be obtained from a mobile app monitoring the location data of its user as they go about their daily routine. In addition to the trajectory data indicating where the user has travelled, the app also provides detailed information such as: the mode of transport used (walking, bicycle, vehicle); the length of time spent in transit; the time of day when the journey began and ended; and the total distance travelled. This additional data allows for a detailed analysis to be conducted on a user's lifestyle. For example one particular user may wake up and go running for an hour every morning at 6am, indicating they have a strong interest in fitness. Another user may display their interests by the type of places they frequent and the length of time spent there, for example an interest in films by a user who often goes to the cinema. These interests can be identified through the analysis of the trajectory data and will be used in the classification process. Data from thousands of users is being received, allowing for a large-scale analysis to be conducted.

The remaining chapters can be detailed as follows: Chapter 2 discusses the research and literature relevant to this project; Chapter 3 details the objectives of the project and how it will be evaluated; and Chapter 4 concludes with a summary of all progress made to date and a plan of work for the remainder of the project.

Chapter 2: Literature Survey

This chapter gathers together the research done in the area of Trajectory Data Mining, which relates closely to this project. It identifies and considers the possible techniques, methods and technologies to be used in performing the various tasks involved with the project. This includes: preparing the data before analysing it, taking into account how it was recorded in the first place; thinking about how best to store the data to aid in the analysis of it; identifying relevant trajectories to a users lifestyle; and dealing with anomalous trajectories.

2.1: Data Preprocessing

GPS tracked movement data is usually not completely reliable or precise, and may have significant noise affecting the data. Due to this, before it can be analysed, the data must first be preprocessed to correct or remove erroneous data and perhaps add additional information to allow the trajectories to possess more meaningful characteristics.

2.1.1: Noise Filtering

Due to the nature of how spatial trajectory data is usually recorded, where data is tracked through an app on a users mobile device, it is subject to produce noisy results. This could occur when travelling through areas which negatively impact positioning signals. Existing methods for noise filtering can be placed within three categories:

Mean/Median Filter

The Mean/Median filter approach involves finding an estimate of the true value for a given point by calculating the mean of all its previous points up to a given limit. The Mean filter proves a good choice when handling individual noise points. However, when multiple, consecutive noise points are preceding a given point, the calculated mean value for said point will have a larger error between it and the points true value. Mean/Median filters tend not to be the best choice when the distance between two consecutive points is greater than several hundred metres. (Zheng 2015)

Kalman and Particle Filters

The Kalman filter takes measurements from the noisy data over a period of time, and then produces variables more accurate than those based on measurements taken at a single point in time. This is done by estimating a joint probability distribution over the produced variables for each time frame. When assuming linear models and Gaussian noise, the Kalman filter efficiency improves. These assumptions are not used in the particle filter however, resulting in a more general and less-efficient algorithm.

Particle filters consist of four main steps. Firstly, the initialisation step generates a set number of particles from the initial distribution. Then a dynamic model is used to probabilistically simulate how the particles change over one time step. Thirdly, importance weights are calculated for all particles, and are normalised. A greater importance weight would indicate that the particle is better supported by the measurement. The final step involves selecting a new set of particles which are proportional to the normalised importance weights. Then a weight sum is computed. (Zheng 2015)

Both the measurement of noise and the dynamics of a trajectory are modelled by Kalman and particle filters. Though it should be noted that their results highly depend on the reliable of the initial location. If the initial location of the trajectory is heavily affected by noise, the effectiveness of both filters decreases significantly. (Zheng 2015)

Heuristics-Based Outlier Detection

Hassan et al. (2011) details a heuristic approach to outlier detection in sensor node measurements in which a combination of the cluster-based, nearest neighbour algorithm and the measurements themselves are used. Their approach begins by specifying a width “w” for the clusters, after which clustering is performed on all sets of temperature readings produced by the sensors. Once the clusters have been obtained, the cluster with the least amount of values will be output as the outlier cluster. Finally, a confidence measure for each sensor is calculated using the knowledge of which sensors produced the readings present in the outlier cluster.

This method of heuristics-based outlier detection could also be used with trajectories, though some the width value should be chosen carefully as points along a trajectory may not be of equal distance apart. The general idea would be the same where each trajectory point could be checked to see if the number of its neighbours within a certain width is smaller than the proportion of points in the whole trajectory. (Zheng 2015)

2.1.2: Stay Point Detection

Li et al. (2008) describes a stay point as a geographic region where the user has stopped for some time. When compared to a raw GPS point, a stay point carries some semantic meaning, such as a users home, workplace, or restaurant they like to frequent.

Figure 2.1 below depicts two categories of stay points. Stay point 1 occurs at P3 where the user has remained stationary for a time period greater than a stay point identifying threshold. This could occur when entering a building and losing satellite signal for period of time before going back outside and continuing the trajectory. The second category of stay point occurs when a user will move around a certain spatial region for some time before continuing the trajectory.

Whilst moving around in the set area, multiple GPS points are recorded (P5, P6, P7, P8). These points can be used to calculate a mean value for the coordinates of the spatial region that the user is moving around. An example of this could be when visiting places like a park or a shopping centre, where the place spans a large area.

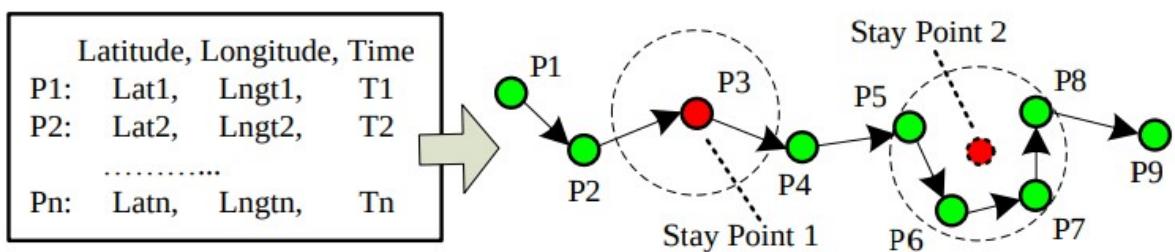


Figure 2.1 GPS Logs and Stay Points (Li et al. 2008)

There exists an algorithm to detect stay points present in a trajectory. The algorithm works by iteratively seeking the spatial region in which a user stays for a period over a threshold. For example, if a user spends more than 30 minutes at a place within a range of 200 metres, the place will be recorded as a stay point. It should be noted that for each extracted stay point, the algorithm also extracts temporal information, such as the arrival and leaving time at the stay point. (Yang 2009)

2.1.3: Trajectory Segmentation

In order to aid in the later processes of trajectory clustering and classification, a trajectory must be broken down into individual segments. The segmentation process will reduce the computational complexity of analysing the trajectories, as well as allowing to mine for deeper knowledge within the overall trajectory. (Zheng 2015)

Yoon and Shahabi (2008) describe three trajectory segmentation algorithms. The first is a top-down approach which takes an unsegmented trajectory as input and selects a characteristic timestamp. This will be the largest time-referenced distance between the observed location sampled at this time and the estimated time-referenced location. The characteristic timestamp is split into two subsequence for which the algorithm is recursively run until no observed location deviates from its estimated time referenced position by more than the given distance threshold. The second algorithm is a bottom-up approach which begins with the finest possible segments of a trajectory and attempts to merge two adjacent segments with minimum merge cost. The third is the sliding window algorithm which fixed the first timestamp of a trajectory as the first characteristic timestamp and attempts to place the next one as far along as possible whilst it still remains spatially and temporally homogeneous. Otherwise, the segment is separated from the trajectory and the process is repeated until the end of the trajectory is reached.

2.1.4: Map Matching

Map matching algorithms make use of inputs generated from positioning technologies and supplement them with data from high resolution spatial road network maps providing improved positioning output. The general purpose of map matching algorithm is to identify the correct road segment on which a user has travelled, and to determine their location along the segment. (Quddus et al. 2007)

Lou et al. (2009) detail three approaches to matching GPS observations on to a digital map. They can be placed into three categories: local/incremental method; global method; and statistical method. Greenfield (2002) implemented an incremental method which uses distance similarity and orientation similarity to evaluate the candidate edges. Adding together the individual scores would produce the combined similarity measure. The global methods in map matching involve matching an entire trajectory to a road network. Yin and Wolfson (2004) developed a snapping method which finds the minimum weight path based on edit distance. There are other methods which instead use Fréchet distance. This distance measure is suitable for trajectory matching as it takes the continuity of curves into account. The third and final method for map matching uses statistical models. Pink and Hummel (2008) implemented such a method based on a Bayesian classifier and incorporates a Hidden Markov Model to model topological constraints on a road network. Lou et al. (2009) notes that statistical approaches are most effective in handling GPS measurement errors.

2.2: Data Management

The process of trajectory pattern mining can be very time consuming when dealing with large amounts of data as different samples of the trajectories and parts of it need to be accessed many times. As a way to combat this problem, effective data management techniques can be used to obtain the parts of the trajectory we need quickly. (Zheng 2015)

2.2.1: Data Model

Chakka et al. (2003) identify that trajectory data is continuously changing between any two successive location updates. Since most existing models for data representation are static in nature, this becomes a problem in representing the users location at all time. A commonly used model represents trajectory data as a straight line between two GPS point readings. A user who is moving has their GPS coordinates sampled at discrete times and a series of straight lines joint these points represents movement.

2.2.2: Query Types

Queries on moving data can be placed into two categories: those querying about future positions and those querying historical positions of moving objects. This project is most concerned with historical based queries so we can identify where users visit most often and patterns in their past trajectories. Pfoser et al. (2000) further divides historical queries into coordinate-based and trajectory-based. Coordinate based queries include queries within a given time interval or point in time, and nearest neighbour queries.

2.3: Trajectory Pattern Mining

There exists four major categories of patterns that can be found within either an individual trajectory or a group of trajectories. These include: moving together patters, trajectory clustering, sequential patterns, and periodic patters. (Zheng 2015)

2.3.1: Moving Together Patterns

Moving Together Patterns are described by Zheng (2015) as groups of objects that move together for a certain time period. Such patterns can have varying group shape/density, different numbers of objects within the group, and varying pattern duration. There are different types of these groups of objects, which are fairly intuitive, such as flocks, convoys, swarms, travelling companions and gatherings. Flocks can be thought of as a group of objects travelling together within a disc-like shape, the size of which can be specified and shape is maintained for a set number of consecutive timestamps. In order to avoid size and shape restrictions, convoys can be used to capture the generic pattern of any shape by using density-based clustering over a set number of consecutive time points. This is in place of using the disc-like shape of flocks. Li et al. (2010) introduced a more general trajectory pattern called swarms. Swarms allow for object clusters lasting for a set number of timestamps that does not necessarily have to be consecutive. Tang et al. (2012) discuss a more memory efficient pattern: the travelling companion, which uses a data structure called the travelling buddy to continuously find convoys/swarms from trajectories. The trajectories would be streamed

into the system rather than being entirely loaded into memory as is the case for convoys and swarms. Lastly, the gathering pattern covers those events when objects (users) join together and then leave frequently. Examples of this would be celebrations or parades. Figure 2.2 below provides a visual representation for these patterns. (Zheng 2015)

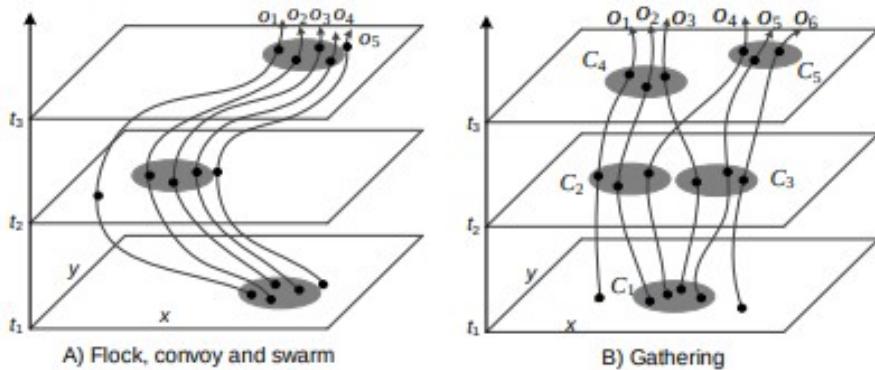


Figure 2.2 Examples of moving together patterns (Zheng 2015)

2.3.2: Trajectory Clustering

The basic principle of trajectory clustering algorithms is to group together similar trajectories as a whole to identify commonalities. However, as observed by Lee et al. (2007), the result of clustering trajectories as a whole could miss common sub-trajectories. These sub-trajectories can prove incredibly useful when conducting an analysis. For this project sub-trajectories would be vital in providing a complete analysis on user lifestyles and behaviour. Lee et al. (2007) proposes a new partition-and-group framework for clustering trajectories. This works by partitioning a trajectory into a set of line segments, and then groups similar line segments together into a cluster. Using this framework, TRACLUS algorithm is developed. While there are many available clustering algorithms, such as k-means, DBSCAN and OPTICS, they mainly deal with the clustering of point data. When dealing with trajectory data the TRACLUS clustering algorithm should prove more useful.

In Figure 2.3 five trajectories are shown with the rectangle identifying the area of commonality within the sub-trajectory. If clustered as a whole, TR1 to TR5 would each be clustered separately as all the trajectories diverge. However, when including the sub-trajectory we can identify common behaviour which is valuable information in analysis.

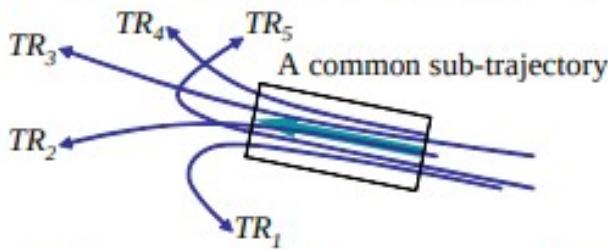


Figure 2.3 An example of a common sub-trajectory (Lee et al. 2007)

Brief outline of the TRACLUS Algorithm

Figure 2.4 below illustrates the overall procedure of trajectory clustering based on the partition-and-group framework. Each trajectory is first partitioned into a set of line segments, then all segments determined to be close to each other are grouped together into a cluster. Lastly, a representative trajectory is generated for each cluster.

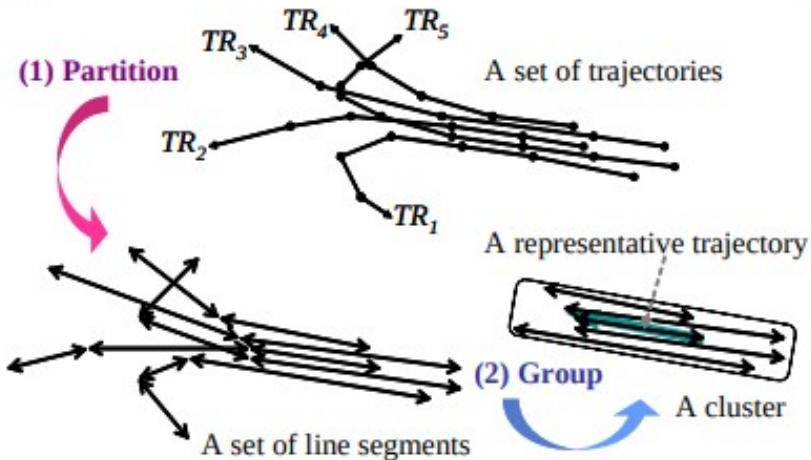


Figure 2.4 An example of trajectory clustering in the partition-and-group framework
(Lee et al. 2007)

The distance function used in determining the closeness of line segments is composed of: the perpendicular distance, parallel distance, and the angle distance. The function can best be understood through an intuitive representation in Figure 2.5.

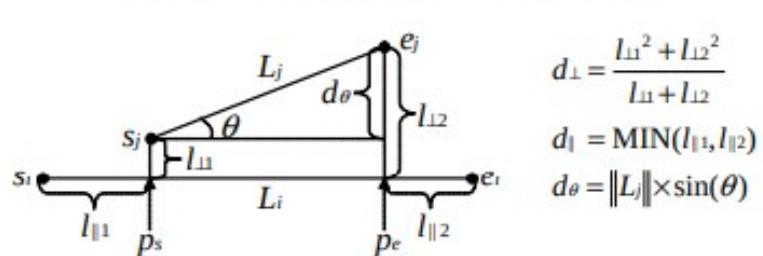


Figure 2.5 Three components of the distance function for line segments
(Lee et al. 2007)

The algorithm takes in a set of trajectories, partitions them into segments, then groups the close segments using the values produced through the distance function. Then generates a representative trajectory based on each cluster. This highlights three main parts of the algorithm: partitioning, grouping, and generating the representative trajectory. Each of these aspects will be briefly discussed.

For the partitioning phase, characteristic points within the trajectory need to be identified. These are points where the behaviour of the trajectory changes rapidly. The trajectory will be partitioned

at each characteristic point and each partition will be represented by a segment between two points. Optimal partitioning of a trajectory should be both: precise and concise. Precise meaning the difference between a trajectory and its partitions is as small as possible. Concise meaning that the number of partitions is as small as it can be. Next to discuss is the line segment clustering/grouping. The density-based clustering algorithm used in this part of the TRACLUS algorithm is quite similar to the well-known DBSCAN algorithm. The main difference being that not all density-connected sets should become clusters. This is to avoid situations where all line segments in a cluster are from the same initial trajectory. Such clusters would not explain the behaviour of a sufficient number of clusters. Lastly, a representative trajectory of a cluster should describe the overall movement of the individual partitions that make up the cluster. The representative trajectory is generated by performing a sweep across the line segments and counting how many are hit. If this number is equal to or greater than the minimum number of lines, then the average coordinates of those line segments are computed and inserted into the representative trajectory. (Lee et al. 2007)

2.4: Outlier Trajectory Detection

Trajectory outliers can either be whole trajectories themselves or segments of a larger trajectory. They would show a significant difference to the other trajectories. This can be identified by calculating a distance/similarity value representing either shape or travel time. If an trajectory/segment cannot be placed within any density-based cluster, it is likely an outlier. An example of this kind of outlier trajectory could be an unexpected detour in a users daily commute due to roadworks. Lee et al. (2008) detailed a partition-and-detect framework to find anomalous segments of trajectories. This is a similar idea to the partition-and-group framework for trajectory clustering discussed in section 2.3.2.

Trajectory outliers could also be events or observations that do not fit into an expected pattern. An example of this would be traffic congestion caused by a car accident. Traffic anomalies, could be detected by using a large number of trajectories. Such traffic anomalies could be caused by accidents, protests, or natural disasters. (Zheng 2015)

Chapter 3: Requirements and Analysis

This chapter highlights the aims and objectives for the project, analysing its individual parts in detail. The problems involved and potential solutions will be discussed, followed by a way of evaluating the completed project and determining if it has been successful.

3.1: Aims and Objectives

As mentioned in Chapter 1, the goal of this project is to create a tool to analyse a users trajectory data, thus discovering their habits and routines from relevant trajectories. As a result of a large-scale analysis over a large set of users, a model will be produced to cluster users based on certain factors. These could be user interests, locations frequented or the types of activity they like to do. This identifies a few of the main problems to solve in this project which will be discussed further below.

3.1.1: Preparing the data

Before beginning the analysis of a users trajectory data some work must be done to ensure we can produce the best results. For this we will need to do some preprocessing using one or some of the techniques detailed earlier in Chapter 2. The most important technique is likely noise filtering. This is due to the high likelihood of the data received being noisy as a result of how it was collected. Users whose trajectory data is being collected will have on their mobile device an app which tracks their movement. When travelling a user may lose phone signal for a certain period of time affecting the data collection process and thus leading to an inaccurate representation of their true trajectory.

3.1.2: Finding relevant trajectories

To find relevant trajectories for a single user would mean such trajectories display signs of a users common routine or habits. To get to this point from beginning with the initial untouched trajectory data we would use some of the pattern mining methods discussed in Chapter 2. The TRACLUS algorithm previously discussed works well for this as it does not just look at the whole trajectory, but also the individual sub-trajectories that make up a whole one. This leads to nuances in the data being detected and more knowledge can be extracted about a users lifestyle. Some outlier detection can also be performed to help improve the accuracy, so it more closely reflects the users habits.

Aside from discovering relevant trajectories, which show common movement patterns, we can also highlight relevant points along a trajectory at which a user spends some time. Such points are of course the stay points detailed in Chapter 2, which can likely prove useful in providing knowledge into a users lifestyle. Stay points could be the users place of work, their home or places they simply like to frequent. These places would be key in providing insights into their lifestyle. For example, do they regularly go to the pub after work or the gym. Do they do their grocery shopping on a weekday or weekend? Such information can be discovered by looking at stay points and extracting meaning from them, which is discussed next.

3.1.3: Extracting meaning from relevant trajectories

Extracting meaning from relevant trajectories will involve the process of converting the GPS trajectory coordinate data into detailed information about the users habits and lifestyle. Since this trajectory data should already contain the most common patterns within a users day-to-day life, it should be fairly simple to determine meaning. The task will involve identifying what exactly the GPS coordinates for trajectories and stay points represent (e.g. a park, or a restaurant). This can be done using one of the available map APIs and correlating these relevant coordinates with places of interest. One such API I looked at that is capable for this task is OpenStreetMap.

Additionally, the data being collected provides extra information aside from the GPS coordinates and time. The data will also display the mode of transport used during the majority of a certain trajectory (e.g. walking, running, bicycle, car/bus). This can be used to aid in the process of determining what a users lifestyle is like.

3.2: Evaluation

Once the project has been completed and user trajectory data can be analysed and then modelled, there remains the question as to whether it is at all accurate. For instance let us say the data for said user is analysed and the analysis determines that the user has an interest in fitness due to a commonality in their data being detected of them running in a park. How can we be completely certain that this person does in fact have an interest in fitness? The only way to do so would be to find this person and ask them directly, but of course that is not possible since the data is anonymised and to do so through other means would be unethical and likely illegal. Instead evaluating the results will have to be done my using my own trajectory data and seeing if the analysis can determine a truly accurate representation of my lifestyle.

Chapter 4: Design

This chapter details the final design used for this project and gives justifications for why certain decisions were made. An overview of the main algorithm is first given, followed by a deeper look into the various aspects of it.

It should be noted that this final design differs from the initial design plan I had intended to implement. The initial design I had in mind was to use the TRACLUS algorithm detailed in Chapter 2. The intention was to use the algorithm to operate over a user's entire trajectory data, cluster the similar trajectory segments and then generate a representative trajectory for that user. However, I found upon implementing the partitioning portion of the algorithm that it was not viable for the amount of data I needed to work with. There are thousands of users, some with hundreds of thousands of data points. The later stages of my initial design involved extracting stay points from the TRACLUS-returned relevant trajectories and then using OpenStreetMap to get semantic meaning. These later stages are still present in my final design along with the addition of stay point clustering and centrepoin detection.

4.1: Overview

The main approach for this design is to, for each user, build a set of trajectories from their location data, then extract all stay points within these trajectories, followed by identifying clusters of these stay points and then finding those stay points nearest to the centre of each cluster. Lastly, the coordinates of these centremost stay points will be used in conjunction with the OpenStreetMap API to get semantic tags describing what these locations represent (pubs, restaurants, cinemas, sport centres etc.). These tags will identify what the users interests are and their lifestyle. The number of trajectories, stay points and clusters will be added to a data file for each user, along with their top five tags. The top five are selected based on the number of unique locations found for each place type (a single unique location represented by a centremost stay point).

Algorithm 1: Main Algorithm

```
1 userIDs ← GetAllUserIDs();
2 foreach userID in userIDs do
3     trajectories ← GetTrajectories(userID);
4     distanceThreshold ← 100, timeThreshold ← 20;
5     stayPoints ← GetStayPoints(trajectories, distanceThreshold, timeThreshold);
6     if stayPoints.length ≠ 0 then
7         clusters ← GetClusters(stayPoints);
8         centremostStayPoints ← GetCentremostStayPoints(clusters);
9         tags ← GetTags(centremostStayPoints);
10        AddToFile(tags);
11    end
12 end
```

Figure 4.1 The Main algorithm used in this design

4.2: Data Handling

Upon initiation, the main algorithm queries the database to obtain a list of all the user ids for those users with more than 10,000 rows of data. The reasoning behind limiting the query to these users will be covered in the next chapter. Then using each user id, the trajectories, stay points, clusters and tags can be obtained.

```
SELECT userID,COUNT(*) FROM locations GROUP BY userID HAVING COUNT(*) > 10000;
```

Figure 4.2.1 The SQL query used to obtain the list of users

Forming trajectories involves querying the database using the current user id. Returned will be all rows of location data for said user. Each row represents a single GPS location reading and will include timestamp, latitude and longitude fields. I decided that it would be best to represent a single trajectory as a single day's worth of readings as a person's routine would reset at the end of each day.

```
SELECT * FROM locations WHERE userID = "*****";
```

Figure 4.2.2 The SQL query used to get all user location data

4.3: Stay Point Extraction

Once all the trajectories had been formed, it would then be possible to begin stay point extraction. At this stage all stay points present within a user's trajectory are returned. In the next stage of clustering, we will identify those stay points which are common across multiple days of a user's life.

The algorithm used here for stay point extraction is proposed by Li et al. (2008) and is listed in Figure 4.3. For each trajectory, the algorithm traverses the list of GPS points calculating the distance between the current point and the one immediately after, as well as the time span between them. If both the distance and time span are above certain threshold values (which are variable), then a stay point is present and the appropriate values are calculated to assign to it. Li et al. (2008) used values of 200m and 30 minutes for the distance and time thresholds respectively. However, I found that using values of 100m and 20 minutes produced more reliable results when testing my own personal GPS data, so these are the values used. Once all trajectories have been traversed, a set of identified stay points will be returned.

It should be noted that the calculated distance between points, was the great-circle distance , calculated using the Haversine formula, rather than the straight-line distance. The great-circle distance is the shortest distance between two points on a sphere given their latitudes and longitudes.

Algorithm 2: GetStayPoints Algorithm

```
1 Function GetStayPoints(trajectories, distanceThreshold, timeThreshold):
2     stayPoints  $\leftarrow \emptyset$ ;
3     foreach trajectory in trajectories do
4         i  $\leftarrow 0$ ;
5         points  $\leftarrow$  trajectory.points;
6         numPoints  $\leftarrow$  points.length;
7         while i < numPoints do
8             j  $\leftarrow$  i + 1;
9             token  $\leftarrow 0$ ;
10            while j < numPoints do
11                distance  $\leftarrow$  CalculateHaversineDistance(points[i], points[j]);
12                if distance > distanceThreshold then
13                    timeDifference  $\leftarrow$  CalculateTimeSpan(points[i], points[j]);
14                    if timeDifference > (timeThreshold * 60) then
15                        arrivalTime, leaveTime  $\leftarrow$  points[i].timestamp, points[j].timestamp;
16                        latitude, longitude  $\leftarrow$  CalculateMeanCoordinates(points[i:j+1]);
17                        stayPoints.add(CreateStayPoint(arrivalTime, leaveTime, latitude,
18                            longitude));
19                        i  $\leftarrow$  j;
20                        token  $\leftarrow 1$ ;
21                    end
22                    break;
23                end
24                j  $\leftarrow$  j + 1;
25            end
26            if token  $\neq 1$  then
27                i  $\leftarrow$  i + 1;
28            end
29        end
30    return stayPoints;
```

Figure 4.3 The algorithm used for Stay Point extraction (Li et al. 2008)

4.4: Clustering and Centremost Detection

Clustering the stay points is a necessary process because it shows which stay points are a common occurrence within a users life and removes those that appear either as a one-off or infrequently below a specified threshold.

The algorithm chosen to perform the clustering of stay points is the DBSCAN algorithm. Boeing (2018) mentions that while the K-means algorithm is the most common clustering algorithm, DBSCAN is far superior when it comes to dealing with geospatial data. The algorithm works by clustering geospatial data based on two supplied parameters: epsilon, the maximum distance points within a cluster can be from each other; and the minimum number of points that must be present to form a cluster. I found that setting values of 2 and 5 for epsilon and the minimum number of points respectively produced reliable results.

Algorithm 3: GetClusters Algorithm

```
1 Function GetClusters(stayPoints):
2     data ← [];
3     foreach stayPoint in stayPoints do
4         | list.append([stayPoint.latitude, stayPoint.longitude]);
5     end
6     clusters ← DBSCAN(epsilon=2, minPoints=5, data);
7     return clusters;
```

Figure 4.4 The algorithm used for Stay Point clustering

The algorithm described in Figure 4.4 is straightforward as it does not show the implementation of the DBSCAN algorithm. For this project, I used the implementation provided by the Scikit-learn library. Scikit-learn is a machine learning library from the Python programming language which I found to be more than suitable for the task of clustering stay points. Figure 4.4 shows the algorithm extracting the latitude and longitude points for each stay point, and then passing this data into the DBSCAN algorithm to receive the clusters.

Once the clusters of stay points have been found, the next step is to identify which stay point is nearest to the centre of the cluster. This is opposed to randomly selecting a stay point within the cluster, as choosing one nearest to the centre will be more spatially-representative of the cluster as a whole. For each cluster this process involves calculating the centre of the cluster, using the latitude and longitude points of each stay point within it. Then for each stay point calculate the great-circle distance between it and the centre of the cluster. The stay point with smallest distance will be returned and represent the cluster.

4.5: Obtaining OpenStreetMap Tags

Up until now the design has been focussing on identifying those areas along a user's trajectory that have meaning and trying to narrow these locations down as much as possible. At this stage in the design, we will begin to add semantic meaning to those locations most frequent in a user's life.

The OpenStreetMap list of tags is divided up into multiple categories. In order to select those tags most relevant to the task and to reduce unnecessary computation, I selected nine categories from which tags would be selected, as I felt these categories would work best in the identification of a user's interests and lifestyle. The categories I selected are: *amenity*, *craft*, *historic*, *leisure*, *natural*, *office*, *shop*, *sport*, and *tourism*. For each of these categories, I further narrowed down the list of their tags to only the most relevant. The reason for this being that I noticed many users had tags being returned for *amenity-parking*. It is unlikely that any user has a great interest in parking, but it is more likely that users would spend at least 20 minutes (the time threshold for the stay point algorithm) in an area denoted by a parking tag. So, as mentioned, only the most relevant tags will be returned and output to the data file.

Algorithm 4: GetTags Algorithm

```
1 Function GetTags(centremostStayPoints):
2     relevantTags ← ;
3     foreach stayPoint in stayPoints do
4         radius ← 50;
5         query ← GenerateOSMQuery(staypoint.latitude, staypoint.longitude);
6         result ← GetOSMData(query);
7         foreach way in result.ways do
8             | SetRelevantTags(relevantTags, way.tags);
9         end
10        foreach relation in result.relations do
11            | SetRelevantTags(relevantTags, relation.tags);
12        end
13        foreach node in result.nodes do
14            | SetRelevantTags(relevantTags, node.tags);
15        end
16    end
17    return relevantTags;
```

Figure 4.5.1 The algorithm to get tags from OSM

The algorithm listed in Figure 4.5.1 is used to get all relevant tags for the set of centremost stay points. Each stay point is iterated over in-turn and its latitude and longitude values are used to query the OpenStreetMap API. Additionally, a radius value of 50m is also used in the query. I have left out the details of these queries from the pseudocode, however they will be discussed in the next Chapter. The query can return up to three types of OpenStreetMap elements: ways, nodes, and relations. Nodes represent a specific point on the Earth's surface; Ways are an ordered list of nodes and can represent the boundaries of areas such as buildings or forests; lastly, Relations represent a relationship between two or more data elements (nodes, ways, and/or other relations). An example of a relation could be a multi polygon, which describes the boundary of any area with holes in the middle (the holes being ways). As seen in the algorithm a case for each of these element types is handled with an individual for loop iterating over all the elements and extracting the tags.

In Figure 4.5.2, the algorithm for selecting only the most relevant tags is shown. A preset list of the approved categories mentioned previously is iterated over and checks if each category is present within the received tags dictionary. If so, another check to see if the actual tag itself is present on a approved list of names, and if it is a tag sting in generated. The string is made up of the category name (amenity, craft etc.) and the tag name (sports centre, pottery etc.). The tag string is added to the relevantTags dictionary along with a count of all its occurrences.

Algorithm 5: SetRelevantTags Algorithm

```
1 Function SetRelevantTags (relevantTags, tags):
2   approvedCategories ← ["amenity", "craft", "historic", "leisure", "natural", "office",
    "shop", "sport", "tourism"];
3   approvedTagNames ← GetApprovedTagNamesFromFile();
4   foreach category in approvedCategories do
5     if category in tags then
6       if tags[category] in approvedTagNames then
7         tagString ← category + "-" + tags[category];
8         if tagString in relevantTags then
9           | relevantTags[tagString] += 1;
10        else
11          | relevantTags[tagString] = 1;
12        end
13      end
14    end
15  end
```

Figure 4.5.2 The algorithm to select only the most relevant tags

The tags are returned from the GetTags function and as can be seen from the Main algorithm in Figure 4.1, the tags for a single user are output to a data file. The process continues until all users have been checked and their results also added to the data file. In the next chapter I will discuss the implementation process of this design, as well as how testing was carried out and results were verified.

Chapter 5: Implementation and Testing

This chapter details the process of implementing and testing the design from the previous chapter. Much of the testing involved using my own location data, of which I had about one to two months worth, as inputs to the various algorithms and then manually verifying that the produced output was accurate.

5.1: Data Handling

The data used in this project was stored on a remote MySQL server. There was data available for around 6500 users and in total this added up to around 50 million rows of data. As some users appeared to have more data readings than others, it was decided to reduce the data to users who had at least 10,000 rows of data, which would provide at least about a weeks worth of activity, and give us a better chance at detecting lifestyle habits. This reduced the number of users down to 1053. There was still a huge number of rows to search through as these users had the most data readings (some over 100,000), but now computation time would only be spent processing those users' data which could provide the most accurate insights. Fewer calls to the OpenStreetMap API would also be made, making it easier to deal with strict usage allowances.

5.2: Stay Point Extraction

The stay point extraction algorithm implemented in this project was first proposed by Li et al. (2008). The algorithm has been proven to produce reliable results, however though it is not computationally demanding, the algorithm is sensitive to the accuracy of the location data.

The output of the stay point extraction algorithm is a set of stay points detected from all provided user trajectories. In order to check the output being provided was accurate I generated the stay points for my own personal trajectory data, and then plot each individual stay point using its latitude and longitude coordinates. The result can be seen in Figure 5.2.

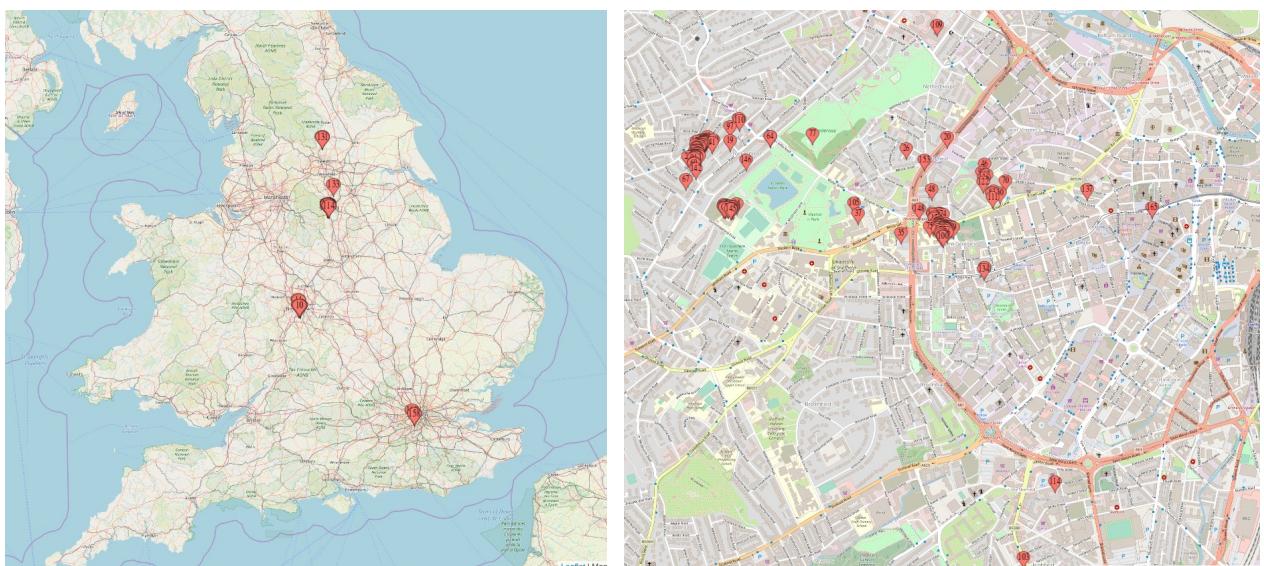


Figure 5.2 Map plots of my stay point data
(Left: UK-wide), (Right: Sheffield)

In Figure 5.2 the left map displays all stay points across the country. As the algorithm has been set with parameters to detect a stay point with threshold of 100m and 20 minutes. That is if I have remained at a location within a radius of 100m for more than 20 minutes, then that location would be classed as a stay point. As can be seen from map stay points have been detected in locations such as Leeds and London, both places I stayed for at most a day, but stay points were detected at all the appropriate locations. 20 minutes was selected as the time threshold as it is reasonable to assume that if someone stays at place for 20 minutes or more, it has some importance to them and/or their lifestyle. 100m was selected as the distance threshold as I found it produced more accurate stay points when testing with my location data. Though for some users perhaps a higher distance threshold such as 200m could be better. That being said, the same parameters were used for all users.

The right map plot in Figure 5.2 presents a better look at the stay point detection as Sheffield is the city where most of my location data was present. We can see various stay points dotted around the city, however the locations which would prove most significant in finding a lifestyle insight would be those with multiple stay points in close-proximity with one another. In the next section we will discuss these further.

As for the stay point extraction, when testing with my own data it proved to be quite effective in detecting locations at which I have spent an extended period of time. It should be noted however there were some locations that were detected as stay points that I had not been to. This is likely due to some noise and anomalous readings in the location data, of which the stay point detection algorithm is sensitive. These anomalous stay points should not prove to be too much of an issue however, as the next section will discuss.

5.3: Clustering and Centremost Detection

This step of clustering stay points and then detecting the centremost stay point from clusters was added at a later stage in the project. Initially the process was to extract the stay points, and then for each one semantic tags would be generated. That is a call to the OpenStreetMap API would be made for each stay point coordinate. For reference, my personal location data of around one to two months of readings produced about 150 stay points. 150 calls to the OpenStreetMap API for a single user proved to be quite inefficient. Especially since some users have over a years worth of location readings. When running my program I soon ran into issues with rate limiting from the API. The solution I came up with was to reduce the size of the spatial data I was using by decreasing the number of stay points to only those that are most relevant to a user's lifestyle i.e. those that are visited most frequently. This resulted in the clustering and centremost detection that will now be discussed.

The clustering of stay points involved using the DBSCAN algorithm which has been proven to work well when dealing with geospatial points. I did not find it necessary to implement the DBSCAN algorithm from scratch as the Python-based Scikit-learn machine learning library provided a suitable implementation.

The clustering process involved passing in a set of stay points after which their latitude and longitude coordinates were obtained to cluster. I set the distance measure to be calculated, in the clustering algorithm, using the Haversine formula, which as mentioned previously calculates the

great-circle distance between two points on a sphere. As a result the passed in parameter for epsilon (the maximum distance between two points in a cluster) was converted to radians. The other selected parameter was the minimum number of points that should be grouped together to form a cluster. I set this value to 5 as it is reasonable to assume that if a user visits the same location at least five times it is of some significance to their lifestyle.

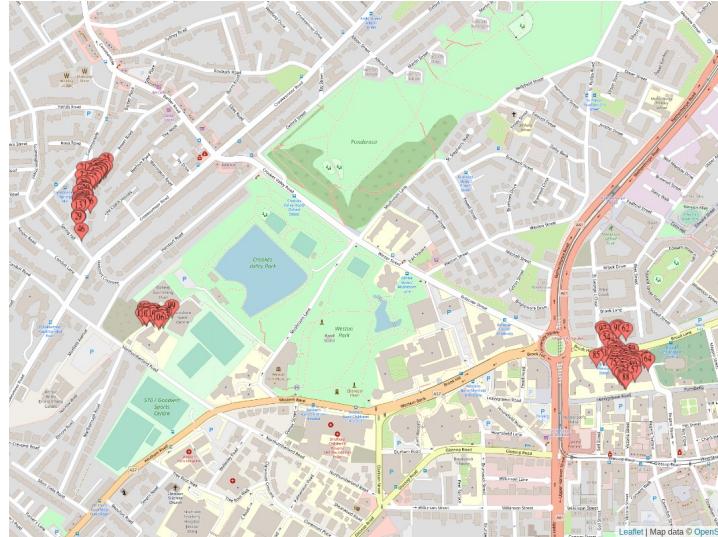


Figure 5.3.1 My stay point clusters in Sheffield

Figure 5.3.1 above shows three clusters of my most frequented stay points. When compared to Figure 5.2 it is clear to see that there has been a significant reduction in spatial data size as all of the one-off locations that I had visited during that time period have been removed. What remains are the locations that I have repeatedly visited multiple times a week. This reduction in the number of stay points would require far fewer calls to the OpenStreetMap API, however there is further reductions that can be made. For a single cluster there are multiple points, which denote the same geographic location data, and will also have the same semantic tags. As a result each cluster could be reduced to just one stay point without a loss of useful data.

The final stage here is to detect the stay points nearest to a clusters centre position. This consists of calculating the centre of the cluster using the coordinates of all its points, and then finding the stay point with minimum distance value. The distance used will be the great-circle distance. As can be seen in Figure 5.3.2, there is now only as many stay points as there are clusters. This is the furthest reduction that can be achieved without losing any useful information. The position of these stay points are as close to the centre of their respective clusters though it may not be easy to see from the Figures. What the locations represent will be discussed in the next section along with the process of obtaining tags from the OpenStreetMap API.



Figure 5.3.2 My centremost stay points in Sheffield

5.4: Obtaining OpenStreetMap Tags

The process of obtaining semantic meaning from the the centremost stay points involved querying the OpenStreetMap API. The coordinates of these stay points were used in the query along with a radius value of 50m, so that all tags within the area are received. This was done as I found in some instances the appropriate tag was not received due to some large buildings being split into different areas. Additionally, only the top five most frequent tags will be returned for a single user. This is more useful in cases where users have many months of data stored in the database and multiple clusters are formed. Frequency in this cases refers to the number of unique locations representing the same tag type that a user has visited.

In the case of my data and Figure 5.3.2, three centremost stay points were located and used in the call to the API. Being that this is my data, I can say that the three points represent: my place of residence; Sport Sheffield, a sports facility/gym; and the Diamond, my main university building. The question now is to see if the OpenStreetMap can detect these locations accurately and return the relevant tags associated with them. From Figure 5.4 we can see that tag_1, tag_2 and tag_4 all correlate with the locations described in the previous paragraph. The addition of tag_3 and tag_5 is due to these places being close proximity to one of the stay points. The assumption was made that a user who frequents a certain area multiple times will also visit surrounding locations, which has shown true in the case of my data.

```
{ 'tag_1': 'leisure-sports_centre: 2',
  'tag_2': 'amenity-university: 2',
  'tag_3': 'amenity-restaurant: 2',
  'tag_4': 'amenity-swimming_pool: 1',
  'tag_5': 'shop-convenience: 1'}
```

Figure 5.4 Returned tag data from OpenStreetMap

It should be noted that I have been referring to the OpenStreetMap API, when in fact the service which allows me to query the OSM data is the Overpass API, and I have been using a Python wrapper for this called OverPy.

Chapter 6: Results and Discussion

This chapter discusses and analyses the results obtained from this project, as well as any shortcomings, areas of improvement and future work that could be done.

In the previous chapter some examples of what different stages of the algorithm produce as output using my own personal location data. However, the main aim of this project is to conduct a large-scale analysis on mobile trajectories. In the same way I have shown the algorithm working for a single users data, it will do for all users. The result of which is a data file showing the output tags for each user (in Appendices). There is no way to identify which tag's belong to which user as each user has been given a generic name (e.g. *user_123*). This is to protect the privacy of users and in addition is not needed for what we want to achieve. Most important to this project is looking at the dataset as a whole.

6.1: Data Statistics

We can generate some insights from the final data file output using the numbers of trajectories, stay points and clusters for each user. This is detailed in Figure 6.1.

Total number of Users:	1093
Total number of Users with no Tags Found:	51
Total number of Trajectories:	103784
Average number of Trajectories per user:	94.9533394327539
Total number of Stay Points:	546004
Average number of Stay Points per user:	499.546203110705
Total number of Clusters:	8213
Average number of Clusters per user:	7.51418115279049

Figure 6.1 Some statistics generated from the final data file

From Figure 6.1 we can see that of the initial 1093 users, 51 could not be assigned any tags. This could be due to no clusters being detected within the stay points, or even no stay points detected at all. Some further tuning could be done using the stay point and DBSCAN algorithm parameters. This could also be due to a lack of OpenStreetMap data not recognising any relevant tags as they do not exist in the database. Since OpenStreetMap data is labelled by the public, there could be some areas which have fewer or no labelling.

The total number of trajectories is shown to be 103,784 and averages out to around 95 per user. Being that I have formed trajectories so that each one represents a single, full day of location data, these numbers could also be interpreted as the total number and average number of days of data. An average of 95 days would be around 3 months worth of location data, which would be more than enough data to get insights on a users typical lifestyle and their interests. Though it should be noted that some users would have data over a shorter time period than this.

The total number of stay points 546,000 across all users, averaging out to around 500 per user. These numbers again emphasise the importance of the clustering and centremost point detection parts of this project. It would have been much more difficult to conduct a large-scale analysis without first reducing this large amount of data, as the number of calls to the OpenStreetMap/Overpass API would surely have lead to being rate limited for an extended period due to load on their servers. We can see that from the number of trajectories and stay points, there are almost 5 times as many stay points.

Looking at the total number of clusters of 8213, and an average per user of around 8, we can see the effects of our geospatial data reduction. This number represents the number of calls that were made to the OpenStreetMap API to obtain the tags.

6.2: Tag Insights

Tag Name	Tag Frequency
leisure-park	359
amenity-school	326
amenity-fast_food	286
amenity-restaurant	275
shop-supermarket	245
amenity-place_of_worship	229
amenity-cafe	222
shop-hairdresser	187
leisure-garden	145
amenity-pub	141
leisure-pitch	134
shop-convenience	122
amenity-bank	110
tourism-artwork	100
amenity-university	93
amenity-pharmacy	92
amenity-bar	91
leisure-sports_centre	88
shop-car_repair	79
natural-wood	71

Figure 6.2 Table showing the top 20 most frequent tags

The table in Figure 6.2 lists the top 20 most frequent tags observed throughout the dataset. Frequency here refers to the number of users in whose tag list it appears. As we can see 359 users frequented locations tagged with *leisure-park*, this being the most popular tag. One interesting observation is that within the top 10 most frequented destinations, five are places that deal with food/drink those being: *amenity-fast_food*, *amenity-restaurant*, *shop-supermarket*, *amenity-cafe*, and *amenity-pub*. Many of these tags are what you would expect to be most present within most daily peoples' lives.

Chapter 7: Conclusion

The aim of this project was to conduct a large-scale analysis of mobile trajectories using various techniques to gain insights from the large amount of Seta data available. When starting the project I aimed to build a system which would effectively and accurately determine what interests a user may have by way of studying their past location data. In this aspect of the project I would say that I have succeeded as a system is now in place to read in large amounts of data, form trajectories, extract stay points from these trajectories, then cluster and find a centremost stay point for each cluster. Lastly using an external service like OpenStreetMap allowed semantic meaning to be gathered from this reduced location data.

As for the effectiveness of the system, it has been quite difficult to test for as checking if the results are accurate would require speaking directly with the user whose location data is being analysed. As all testing has been done by checking my own data and verifying its accuracy with knowledge of my own lifestyle, there could be some bias in the parameter tuning to the being more accurate to those with a similar lifestyle to my own. For example, the system may not work as well for someone who travels frequently. Additionally, all user data has come from those located in cities within Europe. If user data were received from places such as Africa or South America, the system would struggle, as OpenStreetMap is not as well documented for those areas. Also, lifestyle patterns may be different in other place around the world.

Future work in this project may consist of using other techniques to detect trajectory similarity such as the trajectory clustering algorithm, TRACLUS, mentioned in Chapter 2. Different services other than OpenStreetMap could be used, such as Google Maps to see if there are any changes in location labelling that affect determining user's interests. Additionally, more work could be done in the analysing portion of the project. Deeper insights could be gathered and clustering of users based on their top location interests. This would have been the next step in this project, however time constraints did not permit it.

Overall, the project has accomplished the goal of identifying user interests based on their location data. It was conducted in a fairly efficient manner to minimise computational and network overhead and has produced working, reliable results. Albeit this cannot be guaranteed due to the testing limitations mentioned.

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Appendices

The data file produced from running the main algorithm in Figure 4.1:

user_id	tag_1	tag_2	tag_3	tag_4	tag_5
user_1	leisure-swimming_pool: 4	amenity-hospital: 2	amenity-community_centre: 1		
user_2					
user_3	shop-supermarket: 1	amenity-hospital: 1	amenity-fast_food: 1	leisure-park: 1	amenity-school: 1
user_4					
user_5	amenity-university: 2	historic-monument: 2	amenity-cafe: 2	amenity-restaurant: 2	tourism-museum: 2
user_6	amenity-hospital: 2	amenity-community_centre: 1			
user_7	office-university: 3	amenity-university: 1	amenity-school: 1		
user_8	natural-wood: 1				
user_9	leisure-park: 1				
user_10	office-university: 12	amenity-fast_food: 7	amenity-pub: 6	shop-hairdresser: 6	amenity-university: 5
user_11	tourism-artwork: 5	historic-memorial: 2	amenity-restaurant: 1		
user_12	tourism-museum: 2	amenity-cafe: 2	amenity-townhall: 1	historic-memorial: 1	tourism-artwork: 1
user_13	amenity-hospital: 2				
user_14	amenity-place_of_worship: 2	amenity-hospital: 2	office-bank: 1	natural-wood: 1	
user_15	amenity-fast_food: 5	office-university: 4	amenity-pub: 4	shop-hairdresser: 2	amenity-restaurant: 2
user_16	amenity-university: 1	amenity-kindergarten: 1	leisure-pitch: 1		
user_17	amenity-place_of_worship: 1				
user_18	natural-wood: 1				

user_19	amenity-fast_food: 1	amenity-university: 1			
user_20	amenity-hospital: 1				
user_21	leisure-park: 2				
user_22	leisure-park: 1	leisure-playground: 1			
user_23	amenity-cafe: 6	leisure-park: 2	amenity-pub: 2	amenity-embassy: 1	amenity-community_centre: 1
user_24	shop-hairdresser: 3	leisure-garden: 1	natural-wood: 1	leisure-park: 1	leisure-sports_centre: 1
user_25	shop-supermarket: 1	amenity-school: 1			
user_26					
user_27	amenity-school: 2	leisure-garden: 2	amenity-university: 2	leisure-park: 1	leisure-playground: 1
user_28	leisure-park: 4	leisure-playground: 1	amenity-pharmacy: 1	amenity-pub: 1	amenity-university: 1
user_29	amenity-restaurant: 8	amenity-university: 7	amenity-pub: 6	leisure-park: 5	amenity-cafe: 5
user_30	leisure-sports_centre: 2				
user_31	amenity-cafe: 3	shop-supermarket: 2	tourism-museum: 2	amenity-bar: 2	amenity-fast_food: 2
user_32	office-university: 15	amenity-theatre: 3	amenity-university: 2	amenity-pub: 2	amenity-place_of_worship: 2
user_33	office-university: 2	amenity-university: 1			
user_34	tourism-artwork: 14	leisure-sports_centre: 5	tourism-museum: 3	amenity-fast_food: 3	amenity-pub: 2
user_35	historic-monument: 3	amenity-arts_centre: 2	leisure-swimming_pool: 1	leisure-playground: 1	leisure-pitch: 1
user_36	leisure-swimming_pool: 2				
user_37					

user_38	leisure-sports_centre: 3	shop-furniture: 1	amenity-pub: 1	amenity-restaurant: 1	amenity-cafe: 1
user_39	amenity-university: 3	historic-monument: 2	amenity-cafe: 2	leisure-garden: 1	amenity-arts_centre: 1
user_40	amenity-school: 1	amenity-restaurant: 1			
user_41	leisure-pitch: 3	leisure-park: 2	leisure-garden: 2	historic-monument: 2	amenity-university: 1
user_42	amenity-marketplace: 6	shop-bakery: 5	amenity-restaurant: 4	shop-convenience: 4	shop-confectionery: 2
user_43	leisure-park: 3	amenity-restaurant: 3	amenity-bar: 2	amenity-cafe: 2	amenity-embassy: 1
user_44	leisure-garden: 3	leisure-park: 2	amenity-bar: 2	amenity-restaurant: 2	amenity-university: 1
user_45	leisure-park: 1	leisure-playground: 1			
user_46	tourism-artwork: 3	tourism-museum: 2	leisure-marina: 1	amenity-park: 1	leisure-park: 1
user_47	amenity-marketplace: 6	shop-convenience: 5	shop-bakery: 4	shop-hardware: 3	shop-hairdresser: 3
user_48	amenity-restaurant: 10	amenity-cafe: 6	amenity-bank: 3	amenity-ice_cream: 3	amenity-pharmacy: 3
user_49	office-university: 3	amenity-university: 1	leisure-sports_centre: 1		
user_50	leisure-park: 2	tourism-attraction: 1	amenity-cafe: 1	amenity-theatre: 1	amenity-restaurant: 1
user_51	amenity-restaurant: 15	amenity-cafe: 2	amenity-fast_food: 2	leisure-sports_centre: 2	amenity-nightclub: 2
user_52	leisure-pitch: 2	leisure-swimming_pool: 1	amenity-bar: 1	amenity-cafe: 1	shop-beauty: 1
user_53	amenity-pub: 1				
user_54	amenity-bar: 5	amenity-cafe: 5	amenity-university: 5	leisure-garden: 5	amenity-fast_food: 3
user_55	amenity-cafe: 7	amenity-university: 5	amenity-restaurant: 5	amenity-fast_food: 4	amenity-bar: 3
user_56	amenity-cafe: 2	leisure-pitch: 1	amenity-bank: 1	amenity-pharmacy: 1	

user_57	leisure-park: 5	shop-confectionery: 4	amenity-cafe: 4	amenity-restaurant: 3	amenity-pharmacy: 3
user_58	shop-supermarket: 1	leisure-park: 1			
user_59	historic-memorial: 2	leisure-park: 1	leisure-pitch: 1	amenity-place_of_wors hip: 1	amenity-kindergarten: 1
user_60	amenity-university: 6	leisure-garden: 5	amenity-bar: 5	leisure-park: 4	amenity-cafe: 4
user_61					
user_62	leisure-park: 2	amenity-community_centre: 1			
user_63	shop-supermarket: 2	leisure-park: 1	leisure-pitch: 1	natural-wood: 1	tourism-attraction: 1
user_64	amenity-fast_food: 2	leisure-sports_centre: 1	leisure-swimming_pool: 1	amenity-cafe: 1	amenity-college: 1
user_65	amenity-restaurant: 1	amenity-hospital: 1	historic-castle: 1	leisure-park: 1	amenity-police: 1
user_66	amenity-marketplace: 5	shop-hairdresser: 3	amenity-bar: 3	amenity-place_of_wors hip: 2	amenity-restaurant: 2
user_67	shop-supermarket: 3	natural-wood: 1	amenity-hospital: 1	leisure-sports_centre: 1	leisure-pitch: 1
user_68	amenity-restaurant: 11	amenity-cafe: 9	leisure-garden: 4	historic-memorial: 3	amenity-place_of_wors hip: 3
user_69	office-university: 10	amenity-restaurant: 8	shop-hairdresser: 6	amenity-university: 5	amenity-fast_food: 3
user_70	amenity-fast_food: 16	shop-supermarket: 11	amenity-place_of_wors hip: 8	amenity-cafe: 8	amenity-restaurant: 7
user_71	amenity-fast_food: 5	amenity-kindergarten: 2	shop-convenience: 2	shop-hairdresser: 2	amenity-school: 1
user_72	amenity-bar: 4	office-university: 3	amenity-university: 2	amenity-fast_food: 2	amenity-bank: 1
user_73	amenity-restaurant: 3	amenity-cafe: 3	historic-memorial: 3	amenity-fast_food: 3	shop-supermarket: 2
user_74	amenity-	amenity-cafe:	shop-	historic-	historic-

	restaurant: 6	3	convenience: 2	archaeological_site: 2	monument: 1
user_75					
user_76	amenity-fast_food: 4	amenity-school: 2	shop-convenience: 2	tourism-artwork: 2	amenity-college: 1
user_77	amenity-bank: 2	shop-hairdresser: 1	amenity-bar: 1	amenity-restaurant: 1	amenity-pub: 1
user_78	leisure-park: 1	leisure-pitch: 1	leisure-sports_centre: 1	amenity-place_of_worship: 1	amenity-kindergarten: 1
user_79	tourism-artwork: 13	amenity-cafe: 10	amenity-restaurant: 8	amenity-pub: 5	shop-beauty: 5
user_80	natural-wood: 2	amenity-university: 2	leisure-pitch: 1	tourism-museum: 1	shop-furniture: 1
user_81	amenity-cafe: 1				
user_82	leisure-park: 1	leisure-garden: 1			
user_83	amenity-school: 3	leisure-park: 2	amenity-cafe: 1	amenity-restaurant: 1	leisure-stadium: 1
user_84	amenity-school: 6	amenity-hospital: 4	leisure-swimming_pool: 2	shop-supermarket: 2	amenity-place_of_worship: 1
user_85	amenity-school: 11	leisure-garden: 10	amenity-restaurant: 9	leisure-pitch: 7	leisure-park: 7
user_86	shop-supermarket: 4	amenity-cafe: 3	amenity-bar: 2	amenity-pharmacy: 2	leisure-park: 2
user_87	amenity-restaurant: 23	amenity-fast_food: 10	amenity-cafe: 8	amenity-bank: 3	shop-beauty: 3
user_88	amenity-university: 6	leisure-sports_centre: 3	leisure-park: 1	amenity-bank: 1	amenity-food_court: 1
user_89	amenity-restaurant: 14	amenity-cafe: 6	amenity-fast_food: 5	tourism-artwork: 3	amenity-pub: 2
user_90	leisure-park: 3	leisure-playground: 2	shop-supermarket: 1	amenity-place_of_worship: 1	amenity-kindergarten: 1
user_91					
user_92	amenity-fast_food: 14	amenity-cafe: 13	tourism-artwork: 12	amenity-restaurant: 8	shop-beauty: 5
user_93	amenity-restaurant: 3	amenity-school: 2	amenity-bar: 2	shop-supermarket: 1	leisure-park: 1

user_94	amenity-school: 1	amenity-place_of_wors hip: 1	amenity-police: 1		
user_95	leisure-park: 3	amenity- ice_cream: 1	amenity- restaurant: 1	amenity- fast_food: 1	leisure- playground: 1
user_96	leisure-pitch: 1	leisure- sports_centre: 1	amenity- place_of_wors hip: 1	amenity- theatre: 1	
user_97	leisure-garden: 5	leisure-park: 4	leisure- sports_centre: 3	tourism- artwork: 3	amenity-cafe: 2
user_98	historic- memorial: 1				
user_99	amenity- restaurant: 9	amenity-cafe: 8	shop- hairdresser: 3	leisure-park: 2	amenity-bar: 2
user_100	office- university: 3	amenity- school: 2	amenity-pub: 1	amenity- university: 1	leisure- fitness_centre: 1
user_101	amenity-bank: 2	shop- supermarket: 1	leisure-park: 1	amenity- townhall: 1	amenity-pub: 1
user_102	leisure-pitch: 6	leisure-garden: 2	amenity-bank: 1	tourism- museum: 1	leisure-park: 1
user_103	amenity-cafe: 2	amenity- place_of_wors hip: 1	amenity- restaurant: 1		
user_104	leisure-park: 2	leisure- playground: 2	shop- convenience: 2	amenity- place_of_wors hip: 1	tourism- attraction: 1
user_105	amenity- marketplace: 5	amenity- university: 1			
user_106	leisure-garden: 85	shop- hairdresser: 4	amenity- school: 3	shop- convenience: 2	amenity- restaurant: 2
user_107	amenity- restaurant: 9	shop-bakery: 6	shop- hairdresser: 6	amenity- marketplace: 5	amenity-bar: 4
user_108	leisure-park: 3	leisure- playground: 2	natural-wood: 2	office- university: 2	shop- supermarket: 1
user_109	amenity- place_of_wors hip: 1	amenity-pub: 1			
user_110	amenity- place_of_wors hip: 2	amenity- pharmacy: 2	amenity- school: 1	amenity-park: 1	leisure-park: 1

user_111	amenity-fast_food: 7	shop-supermarket: 5	amenity-pharmacy: 3	amenity-place_of_wors hip: 2	leisure-playground: 1
user_112	leisure-nature_reserve : 1	leisure-park: 1	amenity-school: 1		
user_113	shop-supermarket: 3	amenity-place_of_wors hip: 3	amenity-fast_food: 2	amenity-school: 2	shop-bakery: 1
user_114	amenity-hospital: 5	amenity-school: 3	amenity-courthouse: 1	shop-hairdresser: 1	historic-memorial: 1
user_115	leisure-park: 5	shop-supermarket: 4	amenity-school: 4	amenity-place_of_wors hip: 3	tourism-artwork: 1
user_116	amenity-restaurant: 14	amenity-bank: 11	amenity-fast_food: 10	amenity-cafe: 8	amenity-pub: 7
user_117	office-university: 4	amenity-restaurant: 2	amenity-university: 2	leisure-park: 2	leisure-fitness_centre: 1
user_118	office-university: 4	leisure-park: 4	amenity-university: 2	amenity-theatre: 2	natural-wood: 2
user_119	amenity-school: 5	amenity-place_of_wors hip: 1	leisure-park: 1	amenity-kindergarten: 1	amenity-nightclub: 1
user_120	shop-furniture: 1	amenity-place_of_wors hip: 1	shop-convenience: 1		
user_121	amenity-cafe: 5	amenity-restaurant: 4	amenity-fast_food: 4	amenity-school: 2	shop-supermarket: 1
user_122	amenity-fast_food: 9	shop-supermarket: 3	shop-confectionery: 3	shop-convenience: 3	amenity-pharmacy: 3
user_123	amenity-fast_food: 5	amenity-place_of_wors hip: 3	amenity-restaurant: 3	shop-convenience: 3	shop-supermarket: 3
user_124	amenity-place_of_wors hip: 2	shop-supermarket: 1	amenity-college: 1	shop-car_repair: 1	
user_125	amenity-place_of_wors hip: 3	leisure-playground: 2	amenity-casino: 1	leisure-fitness_centre: 1	amenity-bar: 1
user_126					

user_127	leisure-garden: 18	amenity-school: 2	amenity-pub: 1	leisure-playground: 1	leisure-park: 1
user_128	amenity-school: 3	leisure-park: 3	natural-wood: 1	shop-supermarket: 1	amenity-fast_food: 1
user_129	amenity-restaurant: 11	amenity-cafe: 11	amenity-fast_food: 9	amenity-embassy: 7	shop-beauty: 5
user_130	leisure-garden: 9	amenity-school: 1	amenity-cafe: 1	shop-convenience: 1	
user_131	amenity-restaurant: 15	amenity-fast_food: 8	amenity-place_of_worship: 6	amenity-school: 5	amenity-pub: 4
user_132	amenity-restaurant: 29	amenity-cafe: 9	shop-beauty: 8	amenity-pub: 7	shop-hairdresser: 6
user_133	amenity-school: 3	leisure-park: 2	leisure-pitch: 1	leisure-sports_centre: 1	amenity-kindergarten: 1
user_134	amenity-school: 1	amenity-place_of_worship: 1	amenity-hospital: 1	amenity-doctors: 1	
user_135	leisure-pitch: 4	amenity-hospital: 3	amenity-fast_food: 3	amenity-school: 2	amenity-cafe: 1
user_136	amenity-fast_food: 7	amenity-pharmacy: 4	shop-convenience: 3	shop-hairdresser: 2	amenity-ice_cream: 2
user_137	leisure-park: 3	amenity-fast_food: 2	amenity-school: 1	leisure-pitch: 1	amenity-place_of_worship: 1
user_138	amenity-fast_food: 3	amenity-park: 2	leisure-park: 2	shop-hairdresser: 2	shop-convenience: 2
user_139	amenity-pub: 7	amenity-cafe: 4	amenity-place_of_worship: 3	amenity-bank: 2	amenity-nightclub: 2
user_140	amenity-restaurant: 17	amenity-fast_food: 10	shop-supermarket: 4	shop-hairdresser: 4	amenity-place_of_worship: 4
user_141	amenity-place_of_worship: 3	leisure-park: 1			
user_142	amenity-university: 3	leisure-garden: 3	leisure-park: 3	leisure-pitch: 3	amenity-college: 3
user_143	shop-supermarket: 4	amenity-cafe: 3	amenity-fast_food: 3	amenity-pharmacy: 2	leisure-playground: 2
user_144	amenity-	shop-	leisure-park: 2	shop-	tourism-

	fast_food: 4	supermarket: 3		car_repair: 1	artwork: 1
user_145	amenity-pharmacy: 4	amenity-fast_food: 3	amenity-doctors: 2	shop-supermarket: 2	amenity-hospital: 2
user_146	leisure-park: 3	leisure-playground: 1	amenity-kindergarten: 1	leisure-pitch: 1	leisure-sports_centre: 1
user_147	tourism-artwork: 7	leisure-park: 5	amenity-bar: 3	amenity-nightclub: 3	amenity-pub: 2
user_148	leisure-park: 2	amenity-school: 1	leisure-playground: 1		
user_149	shop-car_repair: 2	amenity-place_of_wors hip: 2	amenity-restaurant: 1	amenity-school: 1	amenity-pharmacy: 1
user_150	amenity-fast_food: 9	amenity-cafe: 7	shop-supermarket: 4	amenity-bank: 4	amenity-restaurant: 3
user_151	leisure-park: 1				
user_152	leisure-garden: 14	leisure-park: 3	shop-supermarket: 3	amenity-theatre: 2	historic-memorial: 2
user_153	leisure-swimming_poo l: 5	natural-wood: 1	leisure-garden: 1	leisure-park: 1	
user_154	amenity-restaurant: 3	amenity-cafe: 3	leisure-garden: 3	amenity-university: 2	leisure-park: 2
user_155	amenity-fast_food: 7	natural-wood: 3	amenity-bank: 3	shop-hairdresser: 3	shop-supermarket: 2
user_156	leisure-garden: 29	amenity-place_of_wors hip: 2	amenity-school: 1	leisure-escape_game: 1	
user_157	amenity-school: 1	amenity-hospital: 1	amenity-clinic: 1	amenity-pharmacy: 1	
user_158	tourism-artwork: 20	amenity-cinema: 2	amenity-restaurant: 1	shop-hairdresser: 1	amenity-school: 1
user_159	amenity-school: 1	amenity-police: 1			
user_160	leisure-pitch: 1				
user_161	amenity-fast_food: 5	amenity-pharmacy: 4	amenity-doctors: 2	tourism-artwork: 2	amenity-place_of_wors hip: 1
user_162	amenity-place_of_wors hip: 1	shop-car_repair: 1	amenity-school: 1		
user_163	amenity-pub: 2	amenity-bank:	leisure-garden:	shop-	amenity-

		2	1	department_store: 1	fast_food: 1
user_164	natural-wood: 3	shop-supermarket: 1	leisure-park: 1	leisure-sports_centre: 1	leisure-playground: 1
user_165	amenity-restaurant: 3	amenity-cafe: 2	leisure-water_park: 2	shop-beauty: 1	
user_166	amenity-school: 4	shop-convenience: 2	natural-wood: 2	shop-supermarket: 1	amenity-community_centre: 1
user_167	tourism-artwork: 17	amenity-restaurant: 8	leisure-garden: 7	amenity-pub: 6	amenity-cafe: 5
user_168	shop-supermarket: 5	amenity-college: 2	amenity-pub: 2	amenity-cafe: 2	amenity-school: 2
user_169	shop-car_repair: 5	natural-wood: 2			
user_170	amenity-school: 5	amenity-pharmacy: 4	amenity-fast_food: 4	shop-convenience: 2	tourism-artwork: 2
user_171	shop-hairdresser: 5	shop-car_repair: 4	amenity-cafe: 4	amenity-restaurant: 4	natural-wood: 4
user_172	leisure-park: 2	shop-supermarket: 1	amenity-place_of_worship: 1	amenity-doctors: 1	amenity-pub: 1
user_173	tourism-artwork: 8	amenity-restaurant: 3	historic-memorial: 3	amenity-pub: 2	leisure-garden: 2
user_174	amenity-fast_food: 6	amenity-bar: 4	shop-hairdresser: 3	shop-car_repair: 3	leisure-park: 2
user_175	amenity-fast_food: 6	historic-memorial: 5	shop-confectionery: 3	amenity-school: 2	shop-car_repair: 2
user_176	leisure-park: 4	shop-supermarket: 4	shop-hairdresser: 4	amenity-cafe: 4	shop-beauty: 3
user_177	leisure-garden: 13	amenity-school: 4	leisure-pitch: 2	natural-wood: 2	historic-memorial: 1
user_178	shop-confectionery: 5	shop-supermarket: 4	shop-hairdresser: 4	amenity-fast_food: 4	shop-convenience: 3
user_179	amenity-place_of_worship: 3	amenity-school: 2	leisure-park: 2	amenity-fast_food: 2	natural-wood: 1
user_180	amenity-doctors: 6	leisure-park: 3	amenity-school: 3	shop-supermarket: 2	amenity-restaurant: 2

user_181	shop-supermarket: 5	amenity-pharmacy: 4	amenity-fast_food: 3	shop-furniture: 2	amenity-school: 1
user_182	amenity-hospital: 2	amenity-cafe: 1			
user_183	shop-supermarket: 5	leisure-park: 3	amenity-school: 3	amenity-fast_food: 3	natural-wood: 2
user_184	shop-car_repair: 8	amenity-fast_food: 6	amenity-pub: 4	amenity-school: 4	shop-supermarket: 2
user_185	amenity-fast_food: 4	amenity-school: 3	shop-supermarket: 3	amenity-doctors: 2	leisure-garden: 1
user_186	leisure-garden: 1	amenity-school: 1			
user_187	amenity-cafe: 3	amenity-fast_food: 3	shop-furniture: 2	shop-hairdresser: 1	shop-convenience: 1
user_188	amenity-fast_food: 6	shop-convenience: 3	amenity-pharmacy: 1	amenity-dentist: 1	amenity-bank: 1
user_189	amenity-school: 1	shop-convenience: 1	amenity-kindergarten: 1	amenity-pub: 1	shop-supermarket: 1
user_190	shop-supermarket: 4	amenity-fast_food: 3	historic-memorial: 2	amenity-pub: 1	amenity-restaurant: 1
user_191	amenity-fast_food: 3	amenity-school: 2	amenity-place_of_worse_hip: 2	leisure-park: 2	natural-wood: 1
user_192	tourism-attraction: 10	shop-hairdresser: 3	shop-supermarket: 3	leisure-pitch: 2	amenity-college: 1
user_193	amenity-restaurant: 11	amenity-fast_food: 9	shop-hairdresser: 8	amenity-cafe: 5	shop-confectionery: 5
user_194	shop-supermarket: 2	amenity-place_of_worse_hip: 1	shop-convenience: 1	leisure-adult_gaming_centre: 1	amenity-fast_food: 1
user_195	amenity-pub: 2	amenity-place_of_worse_hip: 1	leisure-park: 1	leisure-stadium: 1	leisure-pitch: 1
user_196	amenity-restaurant: 7	amenity-pub: 4	amenity-fast_food: 4	shop-convenience: 2	shop-supermarket: 2
user_197	amenity-restaurant: 9	leisure-pitch: 5	amenity-pub: 5	amenity-school: 4	shop-supermarket: 3
user_198	amenity-fast_food: 14	amenity-school: 4	leisure-park: 4	amenity-place_of_worse_hip: 4	shop-supermarket: 3
user_199	office-	amenity-			

	university: 3	university: 1			
user_200					
user_201	amenity-fast_food: 16	amenity-cafe: 5	shop-bakery: 5	amenity-restaurant: 3	leisure-swimming_pool: 3
user_202	leisure-garden: 7				
user_203	amenity-school: 1	leisure-park: 1	amenity-university: 1	amenity-theatre: 1	amenity-townhall: 1
user_204	leisure-garden: 46	amenity-school: 3	natural-wood: 2	amenity-university: 1	
user_205	amenity-school: 3	amenity-bank: 3	leisure-pitch: 2	amenity-pharmacy: 2	shop-supermarket: 2
user_206	amenity-fast_food: 4	amenity-bank: 2	amenity-restaurant: 2	shop-supermarket: 1	shop-car_repair: 1
user_207	amenity-fast_food: 1	amenity-restaurant: 1	amenity-school: 1	amenity-place_of_worship: 1	amenity-pub: 1
user_208	leisure-park: 2	shop-supermarket: 1	amenity-pub: 1	shop-car_repair: 1	amenity-fast_food: 1
user_209	office-university: 3	amenity-university: 1			
user_210	amenity-school: 3	amenity-cafe: 2	amenity-fast_food: 2	leisure-pitch: 2	shop-supermarket: 2
user_211	amenity-restaurant: 10	amenity-place_of_worship: 5	amenity-fast_food: 5	shop-hairdresser: 5	shop-confectionery: 4
user_212	amenity-restaurant: 2	shop-supermarket: 1	craft-brewery: 1	shop-bakery: 1	amenity-pharmacy: 1
user_213	leisure-garden: 20	amenity-college: 2	leisure-park: 2	amenity-pub: 1	leisure-stadium: 1
user_214	leisure-garden: 9	amenity-fast_food: 7	amenity-restaurant: 7	amenity-cafe: 6	shop-department_store: 4
user_215	amenity-restaurant: 10	leisure-park: 4	tourism-artwork: 3	amenity-cafe: 2	amenity-fast_food: 2
user_216	amenity-school: 4	amenity-place_of_worship: 3	amenity-doctors: 2	amenity-pharmacy: 2	shop-supermarket: 2
user_217	leisure-garden: 220	shop-supermarket: 2	amenity-pharmacy: 1	amenity-school: 1	
user_218	tourism-	leisure-park: 2	amenity-cafe:	amenity-	leisure-

	artwork: 16		2	fast_food: 2	sports_centre: 1
user_219	shop-supermarket: 5	amenity-pharmacy: 2	leisure-sports_centre: 2	amenity-fast_food: 2	shop-hairdresser: 2
user_220	leisure-garden: 35	amenity-restaurant: 6	amenity-cafe: 4	shop-hairdresser: 3	amenity-place_of_wors hip: 2
user_221	amenity-school: 2	amenity-place_of_wors hip: 1	shop-convenience: 1	leisure-park: 1	natural-wood: 1
user_222	amenity-fast_food: 8	shop-supermarket: 2	shop-beauty: 2	amenity-bank: 2	shop-confectionery: 1
user_223	leisure-garden: 85	amenity-fast_food: 4	shop-hairdresser: 2	shop-car_repair: 1	shop-convenience: 1
user_224	shop-hairdresser: 6	shop-convenience: 4	amenity-fast_food: 3	amenity-cafe: 2	amenity-restaurant: 2
user_225					
user_226	amenity-park: 1	leisure-park: 1	amenity-bank: 1	shop-supermarket: 1	amenity-cafe: 1
user_227	amenity-pub: 1	amenity-cafe: 1	amenity-place_of_wors hip: 1	leisure-stadium: 1	leisure-track: 1
user_228	amenity-nightclub: 5	shop-car_repair: 2	shop-convenience: 2	leisure-park: 2	leisure-playground: 2
user_229	leisure-pitch: 2	leisure-park: 2	amenity-restaurant: 2	amenity-doctors: 1	amenity-school: 1
user_230	shop-car_repair: 7	amenity-fast_food: 3	amenity-place_of_wors hip: 2	shop-supermarket: 1	leisure-park: 1
user_231	amenity-bank: 3	amenity-bar: 3	amenity-cafe: 2	amenity-townhall: 1	amenity-pub: 1
user_232					
user_233	amenity-fast_food: 14	amenity-restaurant: 10	shop-hairdresser: 10	amenity-cafe: 9	amenity-pharmacy: 5
user_234	shop-convenience: 3	shop-confectionery: 2	amenity-cafe: 2	amenity-nightclub: 1	amenity-kindergarten: 1
user_235	amenity-pharmacy: 1	shop-supermarket: 1	shop-hairdresser: 1		
user_236					

user_237	leisure-sports_centre: 3	amenity-school: 2	amenity-place_of_wors hip: 1	leisure-park: 1	tourism-artwork: 1
user_238	amenity-place_of_wors hip: 2	leisure-sports_centre: 1	tourism-artwork: 1		
user_239	amenity-courthouse: 4	shop-convenience: 2	shop-hairdresser: 1	leisure-garden: 1	amenity-pub: 1
user_240	shop-hairdresser: 3	amenity-fast_food: 2	amenity-cafe: 2	shop-supermarket: 2	leisure-stadium: 1
user_241	amenity-school: 2				
user_242	natural-wood: 2	leisure-park: 1	leisure-garden: 1		
user_243	amenity-fast_food: 12	amenity-cafe: 9	amenity-school: 7	shop-hairdresser: 6	amenity-place_of_wors hip: 5
user_244	leisure-pitch: 11	leisure-swimming_pool: 2	shop-supermarket: 1	leisure-fitness_centre: 1	
user_245	leisure-park: 1	amenity-cafe: 1	tourism-artwork: 1	amenity-place_of_wors hip: 1	
user_246	amenity-cafe: 2	shop-supermarket: 2	amenity-college: 2	shop-convenience: 1	shop-hairdresser: 1
user_247	amenity-school: 3	amenity-place_of_wors hip: 3	leisure-park: 3	shop-car_repair: 2	amenity-pub: 1
user_248	leisure-garden: 10	amenity-community_centre: 3	leisure-park: 2	leisure-swimming_pool: 1	tourism-artwork: 1
user_249	leisure-garden: 7	amenity-place_of_wors hip: 3	amenity-school: 2	shop-car_repair: 1	shop-supermarket: 1
user_250	leisure-park: 1				
user_251	amenity-school: 3	amenity-place_of_wors hip: 2	leisure-pitch: 2	amenity-restaurant: 2	amenity-pharmacy: 2
user_252	amenity-place_of_wors hip: 5	leisure-park: 5	amenity-school: 3	shop-convenience: 2	natural-wood: 2
user_253	shop-	amenity-	amenity-	amenity-cafe:	

	supermarket: 2	fast_food: 2	place_of_wors hip: 2	1	
user_254	amenity-college: 3	tourism-artwork: 2	amenity-university: 1	amenity-cinema: 1	amenity-hospital: 1
user_255	leisure-park: 7	natural-wood: 5	amenity-school: 3	shop-convenience: 1	
user_256	amenity-fast_food: 12	amenity-restaurant: 8	amenity-bank: 6	amenity-cafe: 5	amenity-school: 4
user_257	amenity-cafe: 6	tourism-artwork: 5	amenity-restaurant: 4	amenity-fast_food: 4	shop-hairdresser: 3
user_258	amenity-school: 1				
user_259					
user_260	amenity-school: 4	amenity-place_of_wors hip: 2	leisure-sports_centre: 2	shop-car_repair: 1	leisure-park: 1
user_261	leisure-park: 6	leisure-pitch: 5	office-university: 2	amenity-school: 2	amenity-place_of_wors hip: 1
user_262	office-university: 7	amenity-university: 4	amenity-school: 2	amenity-cafe: 2	amenity-restaurant: 2
user_263	leisure-park: 4	shop-convenience: 2	natural-wood: 2	amenity-bank: 2	amenity-pub: 1
user_264	leisure-pitch: 1	natural-grassland: 1			
user_265	amenity-fast_food: 10	amenity-place_of_wors hip: 4	amenity-pharmacy: 2	amenity-bank: 2	amenity-restaurant: 2
user_266	amenity-school: 2	leisure-sports_centre: 2			
user_267	amenity-school: 2	amenity-doctors: 1	shop-supermarket: 1		
user_268	amenity-fast_food: 2	leisure-park: 1	shop-hairdresser: 1		
user_269	amenity-school: 2	amenity-college: 1	amenity-police: 1	amenity-university: 1	amenity-pub: 1
user_270	amenity-cafe: 4	amenity-university: 3	amenity-bar: 2	office-university: 1	amenity-college: 1
user_271	shop-supermarket: 1	amenity-pub: 1			
user_272	amenity-	leisure-park: 5	shop-	amenity-bank:	amenity-

	fast_food: 12		supermarket: 5	3	place_of_worship: 3
user_273	amenity-school: 6	leisure-pitch: 2	leisure-sports_centre: 1		
user_274	leisure-garden: 27	tourism-artwork: 4	amenity-restaurant: 3	shop-convenience: 2	historic-memorial: 2
user_275	amenity-theatre: 5	tourism-artwork: 3	leisure-park: 2	leisure-garden: 2	shop-hairdresser: 2
user_276	historic-archaeological_site: 2	natural-wood: 2	leisure-park: 1	leisure-playground: 1	leisure-pitch: 1
user_277	amenity-doctors: 1	amenity-cafe: 1			
user_278	amenity-school: 1	amenity-place_of_worship: 1			
user_279	amenity-restaurant: 1	leisure-park: 1			
user_280	amenity-college: 3	amenity-place_of_worship: 3	amenity-school: 2	amenity-university: 2	shop-car_repair: 1
user_281					
user_282	leisure-garden: 13	amenity-fast_food: 2	amenity-bank: 2	shop-supermarket: 1	leisure-park: 1
user_283	leisure-park: 2	shop-convenience: 1			
user_284	amenity-fast_food: 3	leisure-park: 2	amenity-university: 2	shop-convenience: 2	amenity-cafe: 1
user_285					
user_286	amenity-fast_food: 6	amenity-restaurant: 4	shop-convenience: 4	shop-confectionery: 4	amenity-cafe: 3
user_287	leisure-garden: 50	amenity-fast_food: 13	shop-supermarket: 5	shop-department_store: 4	amenity-cafe: 4
user_288	amenity-fast_food: 1	leisure-park: 1			
user_289	shop-car_repair: 3	shop-supermarket: 3	amenity-school: 1	leisure-playground: 1	amenity-pub: 1
user_290	leisure-park: 4	natural-wood: 3	amenity-cafe: 2	amenity-restaurant: 2	amenity-bar: 2

user_291	leisure-park: 1	leisure-sports_centre: 1	leisure-swimming_pool: 1	amenity-restaurant: 1	amenity-college: 1
user_292	amenity-pub: 6	amenity-fast_food: 6	leisure-park: 4	amenity-restaurant: 3	shop-car_repair: 2
user_293	leisure-garden: 11	amenity-cafe: 6	amenity-restaurant: 6	shop-supermarket: 3	shop-hairdresser: 3
user_294	leisure-garden: 20	amenity-restaurant: 2	shop-supermarket: 2	amenity-fast_food: 2	leisure-park: 2
user_295	leisure-sports_centre: 4	amenity-university: 1			
user_296	leisure-park: 5	amenity-place_of_worship: 4	shop-supermarket: 3	leisure-garden: 3	leisure-stadium: 2
user_297	leisure-park: 2	tourism-attraction: 1	amenity-university: 1	natural-grassland: 1	leisure-nature_reserve: 1
user_298	amenity-fast_food: 10	amenity-cafe: 6	leisure-park: 4	amenity-restaurant: 4	shop-department_store: 4
user_299	leisure-garden: 13	amenity-restaurant: 5	amenity-place_of_worship: 3	leisure-pitch: 3	shop-supermarket: 2
user_300	leisure-swimming_pool: 3	shop-supermarket: 2	amenity-school: 1	natural-wood: 1	
user_301	amenity-place_of_worship: 3	shop-supermarket: 2	amenity-fast_food: 2	leisure-garden: 2	amenity-pub: 1
user_302	amenity-hospital: 2	amenity-school: 1			
user_303	amenity-fast_food: 5	shop-hairdresser: 3	amenity-school: 2	shop-convenience: 2	amenity-place_of_worship: 1
user_304	amenity-fast_food: 7	amenity-restaurant: 6	amenity-pub: 5	leisure-park: 4	shop-supermarket: 4
user_305	amenity-place_of_worship: 1	amenity-pub: 1			
user_306	historic-memorial: 6	tourism-artwork: 4	leisure-pitch: 2	historic-monument: 2	leisure-garden: 2

user_307	leisure-park: 4	amenity-nightclub: 2	amenity-fast_food: 1	shop-convenience: 1	shop-hairdresser: 1
user_308	amenity-restaurant: 3	shop-hairdresser: 3	amenity-cafe: 2	tourism-artwork: 2	amenity-fast_food: 2
user_309	amenity-fast_food: 2	amenity-pub: 1	shop-supermarket: 1	shop-convenience: 1	amenity-restaurant: 1
user_310	amenity-bank: 4	leisure-pitch: 2	amenity-restaurant: 2	leisure-park: 1	amenity-pub: 1
user_311	leisure-park: 8	amenity-school: 2	leisure-sports_centre: 2	leisure-pitch: 2	amenity-place_of_worship: 2
user_312	leisure-playground: 6	amenity-fast_food: 4	amenity-school: 3	shop-bakery: 3	shop-supermarket: 3
user_313	amenity-restaurant: 6	shop-hairdresser: 2	shop-beauty: 2	amenity-pub: 1	amenity-bar: 1
user_314	shop-convenience: 5	amenity-restaurant: 4	amenity-fast_food: 3	amenity-pharmacy: 3	shop-confectionery: 3
user_315	amenity-fast_food: 9	amenity-cafe: 6	shop-supermarket: 4	shop-hairdresser: 3	amenity-bank: 2
user_316	amenity-fast_food: 5	amenity-doctors: 4	shop-bakery: 2	leisure-park: 2	shop-supermarket: 2
user_317	amenity-restaurant: 6	shop-supermarket: 3	amenity-place_of_worship: 3	amenity-pub: 3	amenity-cafe: 3
user_318	amenity-school: 2	amenity-fast_food: 2	shop-convenience: 1	amenity-cafe: 1	shop-hairdresser: 1
user_319	shop-car_repair: 4	amenity-fast_food: 4	amenity-hospital: 2	leisure-sports_centre: 1	amenity-restaurant: 1
user_320	leisure-park: 5	amenity-cafe: 4	shop-supermarket: 4	amenity-school: 3	amenity-place_of_worship: 3
user_321	amenity-restaurant: 5	amenity-fast_food: 4	shop-supermarket: 3	leisure-park: 3	amenity-place_of_worship: 2
user_322	shop-hairdresser: 2	amenity-cafe: 2	leisure-pitch: 2	amenity-pharmacy: 1	amenity-restaurant: 1
user_323	leisure-park: 4	amenity-school: 1	amenity-embassy: 1	leisure-playground: 1	amenity-restaurant: 1
user_324	amenity-bar: 2	amenity-university: 2	shop-bakery: 1	amenity-pub: 1	leisure-garden: 1

user_325	leisure-park: 2	amenity-pub: 2	shop-convenience: 2	natural-wood: 2	shop-supermarket: 1
user_326					
user_327	amenity-university: 1	amenity-place_of_wors hip: 1			
user_328	amenity-place_of_wors hip: 2	amenity-school: 1			
user_329	office-university: 3	amenity-university: 1	shop-hairdresser: 1	leisure-park: 1	shop-supermarket: 1
user_330	leisure-playground: 6	leisure-park: 4	amenity-fast_food: 3	amenity-bank: 3	tourism-gallery: 2
user_331	amenity-university: 3	amenity-fast_food: 3	shop-convenience: 2	historic-memorial: 2	shop-hairdresser: 1
user_332	amenity-hospital: 2	amenity-place_of_wors hip: 2	amenity-doctors: 2	amenity-pharmacy: 2	amenity-fast_food: 1
user_333	leisure-garden: 5	leisure-pitch: 1	amenity-pub: 1	shop-convenience: 1	amenity-school: 1
user_334	leisure-park: 1	amenity-place_of_wors hip: 1	leisure-sports_centre: 1	leisure-pitch: 1	leisure-garden: 1
user_335	amenity-school: 2	amenity-place_of_wors hip: 1	amenity-university: 1		
user_336	amenity-restaurant: 14	amenity-fast_food: 7	amenity-pub: 5	shop-hairdresser: 4	amenity-school: 3
user_337	amenity-university: 3	amenity-school: 1	amenity-fast_food: 1	shop-car_repair: 1	leisure-stadium: 1
user_338	amenity-cafe: 9	amenity-restaurant: 8	amenity-school: 5	amenity-fast_food: 5	amenity-bank: 5
user_339	leisure-pitch: 4	amenity-pub: 1	amenity-bar: 1	leisure-sports_centre: 1	
user_340	amenity-cafe: 5	shop-hairdresser: 5	amenity-restaurant: 4	amenity-fast_food: 4	leisure-park: 3
user_341	amenity-place_of_wors hip: 2	leisure-park: 1	amenity-college: 1		
user_342					
user_343	leisure-pitch: 2	amenity-	leisure-	tourism-	amenity-

		school: 2	playground: 1	attraction: 1	university: 1
user_344	shop-convenience: 1				
user_345	tourism-artwork: 6	amenity-school: 3	amenity-courthouse: 2	leisure-park: 2	amenity-hospital: 1
user_346	natural-wood: 4	amenity-pub: 3	amenity-school: 1	amenity-nightclub: 1	amenity-place_of_worship: 1
user_347	leisure-park: 2	natural-grassland: 2	natural-wood: 1	amenity-restaurant: 1	
user_348	shop-car_repair: 3	leisure-park: 1			
user_349	shop-hairdresser: 5	amenity-fast_food: 3	amenity-pharmacy: 3	shop-convenience: 3	shop-supermarket: 2
user_350	amenity-restaurant: 2	shop-car_repair: 2	amenity-arts_centre: 1	amenity-pub: 1	amenity-cinema: 1
user_351	amenity-restaurant: 5	leisure-park: 3	amenity-place_of_worship: 3	shop-confectionery: 3	shop-car_repair: 2
user_352	amenity-restaurant: 3	amenity-fast_food: 3	shop-convenience: 3	shop-hairdresser: 3	amenity-pharmacy: 2
user_353	leisure-garden: 32	leisure-park: 4	shop-supermarket: 3	amenity-pub: 3	amenity-fast_food: 2
user_354					
user_355	amenity-cafe: 5	shop-car_repair: 3	amenity-fast_food: 3	tourism-artwork: 2	amenity-dentist: 2
user_356	amenity-cafe: 1				
user_357	amenity-fast_food: 5	shop-car_repair: 3	shop-department_store: 2	amenity-cafe: 2	amenity-bank: 1
user_358	leisure-swimming_pool: 1	leisure-garden: 1	historic-monument: 1		
user_359	amenity-place_of_worship: 1	amenity-kindergarten: 1	amenity-school: 1		
user_360	amenity-courthouse: 5	amenity-bank: 3	amenity-cafe: 3	leisure-park: 3	historic-memorial: 2
user_361	leisure-park: 1	leisure-playground: 1			
user_362	leisure-garden:	natural-wood:	amenity-	amenity-cafe:	leisure-pitch: 2

	54	11	place_of_wors hip: 2	2	
user_363	amenity-school: 2	amenity-pub: 1	amenity-university: 1	amenity-place_of_wors hip: 1	amenity-restaurant: 1
user_364	leisure-park: 2	amenity-place_of_wors hip: 2	shop-car_repair: 1	amenity-pub: 1	amenity-fast_food: 1
user_365	amenity-fast_food: 10	shop-supermarket: 7	amenity-cafe: 7	amenity-restaurant: 6	tourism-artwork: 5
user_366	leisure-garden: 7	amenity-cafe: 2	amenity-cinema: 1	amenity-bank: 1	shop-beauty: 1
user_367	amenity-school: 2	amenity-place_of_wors hip: 2	amenity-doctors: 1	shop-supermarket: 1	
user_368	amenity-restaurant: 15	amenity-school: 7	amenity-fast_food: 6	amenity-pharmacy: 4	shop-hairdresser: 4
user_369	amenity-university: 1				
user_370	shop-supermarket: 2	amenity-place_of_wors hip: 2	shop-hardware: 1	amenity-pharmacy: 1	amenity-school: 1
user_371	amenity-fast_food: 14	shop-hairdresser: 6	shop-supermarket: 6	amenity-school: 5	amenity-cafe: 5
user_372	natural-wood: 1				
user_373	amenity-restaurant: 3	amenity-cafe: 3	amenity-school: 3	shop-supermarket: 2	leisure-sports_centre: 2
user_374	amenity-fast_food: 5	shop-supermarket: 4	amenity-pub: 4	amenity-school: 3	amenity-place_of_wors hip: 3
user_375	leisure-park: 3	amenity-pub: 2	amenity-cafe: 2	natural-wood: 1	leisure-playground: 1
user_376	leisure-park: 1	natural-wood: 1	amenity-school: 1	leisure-garden: 1	
user_377	leisure-park: 1	leisure-sports_centre: 1	leisure-swimming_poo l: 1		
user_378	amenity-fast_food: 9	amenity-restaurant: 7	shop-convenience: 4	amenity-pharmacy: 4	amenity-cafe: 3
user_379	amenity-	leisure-park: 3	amenity-	amenity-park:	amenity-

	school: 5		college: 2	2	place_of_wors hip: 1
user_380	shop-department_store: 5	leisure-pitch: 4	amenity-restaurant: 4	shop-confectionery: 4	leisure-park: 3
user_381	tourism-artwork: 13	amenity-fast_food: 2	leisure-pitch: 1	leisure-track: 1	amenity-school: 1
user_382	amenity-hospital: 1	amenity-school: 1			
user_383	historic-memorial: 12	tourism-artwork: 6	leisure-garden: 3	historic-monument: 2	leisure-park: 2
user_384	amenity-school: 2				
user_385	amenity-fast_food: 12	amenity-restaurant: 7	shop-hairdresser: 4	shop-department_store: 4	leisure-park: 3
user_386	amenity-cafe: 6	amenity-restaurant: 3	shop-supermarket: 2	shop-hairdresser: 2	shop-confectionery: 2
user_387	leisure-park: 5	shop-car_repair: 4	amenity-place_of_wors hip: 3	amenity-school: 2	amenity-restaurant: 2
user_388	amenity-school: 4	tourism-artwork: 4	amenity-place_of_wors hip: 3	leisure-pitch: 2	shop-car_repair: 1
user_389	amenity-community_centre: 1	amenity-fast_food: 1	shop-convenience: 1	shop-hardware: 1	leisure-park: 1
user_390	amenity-school: 3	amenity-place_of_wors hip: 2			
user_391					
user_392	amenity-fast_food: 2	amenity-school: 1	amenity-pub: 1	shop-supermarket: 1	shop-convenience: 1
user_393	leisure-park: 4	amenity-kindergarten: 3	amenity-school: 2	historic-ruins: 1	leisure-pitch: 1
user_394	office-university: 3	amenity-fast_food: 2	shop-supermarket: 2	amenity-pub: 1	amenity-cafe: 1
user_395	leisure-park: 2	amenity-school: 2	shop-supermarket: 1	amenity-pharmacy: 1	
user_396	leisure-garden: 21	leisure-park: 4	amenity-park: 2	amenity-community_ce	amenity-school: 1

				ntre: 1	
user_397	leisure-garden: 37	leisure-pitch: 2	amenity-place_of_wors hip: 1	amenity-restaurant: 1	amenity-school: 1
user_398	amenity-fast_food: 14	shop-hairdresser: 9	shop-convenience: 9	leisure-park: 6	amenity-cafe: 5
user_399	amenity-fast_food: 11	shop-hairdresser: 5	shop-convenience: 5	shop-supermarket: 3	amenity-bank: 2
user_400	tourism-artwork: 13	amenity-restaurant: 7	amenity-fast_food: 6	shop-beauty: 5	amenity-cafe: 4
user_401	leisure-swimming_pool: 3	leisure-park: 1	amenity-police: 1	shop-supermarket: 1	amenity-cafe: 1
user_402	leisure-park: 4	amenity-place_of_wors hip: 3	tourism-attraction: 1	natural-wood: 1	amenity-school: 1
user_403	leisure-sports_centre: 1	amenity-kindergarten: 1			
user_404	amenity-school: 3	amenity-place_of_wors hip: 2	leisure-sports_centre: 1	leisure-park: 1	leisure-playground: 1
user_405	amenity-fast_food: 4	amenity-place_of_wors hip: 4	shop-hairdresser: 2	shop-convenience: 2	tourism-artwork: 2
user_406	amenity-restaurant: 2	amenity-fast_food: 2	shop-confectionery: 2	amenity-hospital: 1	shop-supermarket: 1
user_407	leisure-park: 2	shop-supermarket: 2	amenity-fast_food: 2	amenity-place_of_wors hip: 1	amenity-school: 1
user_408					
user_409	amenity-restaurant: 3	leisure-pitch: 2	amenity-school: 2	leisure-sports_centre: 1	leisure-swimming_pool: 1
user_410	amenity-fast_food: 10	shop-car_repair: 5	amenity-restaurant: 4	shop-supermarket: 4	shop-hairdresser: 3
user_411	amenity-place_of_wors hip: 6	amenity-fast_food: 6	amenity-school: 5	shop-car_repair: 4	shop-hairdresser: 3
user_412	amenity-school: 4	amenity-place_of_wors	shop-confectionery:	leisure-park: 1	shop-supermarket: 1

		hip: 4	3		
user_413	amenity-place_of_wors hip: 3	amenity-hospital: 1	amenity-cinema: 1		
user_414	amenity-school: 4	leisure-park: 4	leisure-pitch: 4	historic-memorial: 2	amenity-cafe: 2
user_415	amenity-school: 4	amenity-restaurant: 2	historic-memorial: 1	amenity-bank: 1	amenity-bar: 1
user_416	shop-supermarket: 2	amenity-school: 2	leisure-park: 1	leisure-pitch: 1	natural-wood: 1
user_417	leisure-park: 3	amenity-place_of_wors hip: 2	amenity-hospital: 2	shop-supermarket: 2	historic-memorial: 1
user_418	amenity-fast_food: 8	shop-hairdresser: 4	leisure-park: 3	amenity-restaurant: 3	shop-supermarket: 3
user_419	leisure-garden: 9	amenity-fast_food: 5	shop-hairdresser: 3	amenity-bank: 2	tourism-artwork: 1
user_420	amenity-place_of_wors hip: 3	amenity-fast_food: 2	amenity-bank: 1	amenity-school: 1	
user_421	amenity-place_of_wors hip: 1	amenity-hospital: 1			
user_422	leisure-park: 2	amenity-community_centre: 1	shop-supermarket: 1	amenity-school: 1	
user_423	office-university: 2	amenity-university: 1			
user_424	amenity-pub: 2	natural-wood: 2	leisure-stadium: 1	leisure-park: 1	leisure-pitch: 1
user_425	shop-supermarket: 2	amenity-pub: 1	amenity-place_of_wors hip: 1		
user_426					
user_427	tourism-artwork: 7	amenity-fast_food: 5	amenity-cafe: 4	leisure-park: 4	amenity-school: 3
user_428	amenity-fast_food: 3	amenity-college: 2	amenity-school: 2	shop-convenience: 2	tourism-artwork: 2
user_429					
user_430	shop-supermarket: 1	amenity-place_of_wors hip: 1	amenity-fast_food: 1	amenity-bar: 1	tourism-artwork: 1

user_431	historic-ruins: 17	leisure-garden: 17	amenity-fast_food: 7	leisure-park: 5	amenity-place_of_wors hip: 5
user_432	leisure-park: 3	amenity-school: 3	historic-memorial: 1	amenity-doctors: 1	
user_433	amenity-school: 4	shop-supermarket: 4	shop-hairdresser: 2	amenity-pharmacy: 2	leisure-garden: 1
user_434	leisure-park: 9	amenity-school: 8	leisure-pitch: 5	amenity-bar: 4	tourism-artwork: 4
user_435	shop-supermarket: 2	amenity-restaurant: 2	leisure-park: 1	tourism-artwork: 1	amenity-school: 1
user_436	leisure-pitch: 3	amenity-university: 2	shop-car_repair: 2	amenity-cafe: 2	amenity-kindergarten: 1
user_437	leisure-garden: 5	leisure-park: 5	amenity-fast_food: 3	historic-ruins: 3	amenity-cafe: 2
user_438	leisure-park: 2	amenity-school: 1	leisure-swimming_pool: 1		
user_439	shop-car_repair: 1				
user_440	amenity-fast_food: 8	shop-supermarket: 7	amenity-school: 5	shop-hairdresser: 3	amenity-pharmacy: 3
user_441	amenity-fast_food: 1				
user_442	leisure-park: 3	amenity-university: 3	amenity-place_of_wors hip: 2	amenity-college: 2	amenity-fast_food: 2
user_443	amenity-bank: 1	leisure-park: 1	shop-hairdresser: 1	amenity-restaurant: 1	shop-supermarket: 1
user_444	leisure-park: 3	amenity-place_of_wors hip: 2	natural-grassland: 2	shop-supermarket: 2	amenity-university: 1
user_445	amenity-restaurant: 5	amenity-fast_food: 5	amenity-bank: 4	amenity-pub: 3	shop-convenience: 3
user_446	amenity-pub: 1	amenity-fast_food: 1	shop-hairdresser: 1		
user_447	leisure-park: 2	natural-wood: 1	amenity-nightclub: 1		
user_448	leisure-garden: 48	amenity-fast_food: 8	natural-wood: 3	shop-convenience: 3	shop-hairdresser: 3
user_449	amenity-place_of_wors	amenity-fast_food: 3	leisure-park: 2	amenity-school: 2	amenity-community_ce

	hip: 3				ntre: 2
user_450	amenity-restaurant: 2	amenity-cafe: 1	amenity-pharmacy: 1	shop-convenience: 1	
user_451	amenity-school: 2				
user_452	tourism-artwork: 6	leisure-park: 3	amenity-fast_food: 2	amenity-hospital: 2	amenity-place_of_wors hip: 2
user_453	amenity-school: 3	amenity-place_of_wors hip: 3	amenity-fast_food: 3	amenity-restaurant: 2	shop-car_repair: 2
user_454	amenity-place_of_wors hip: 4	amenity-school: 4	amenity-cafe: 3	shop-supermarket: 2	shop-beauty: 2
user_455	leisure-garden: 6	amenity-restaurant: 6	amenity-university: 5	leisure-park: 3	amenity-kindergarten: 2
user_456	amenity-doctors: 3	shop-car_repair: 1	amenity-restaurant: 1	amenity-pharmacy: 1	leisure-park: 1
user_457	amenity-pub: 2	shop-supermarket: 2	shop-car_repair: 1	shop-convenience: 1	amenity-bar: 1
user_458	leisure-pitch: 1	amenity-doctors: 1	amenity-cafe: 1	amenity-fast_food: 1	amenity-restaurant: 1
user_459	shop-car_repair: 4	leisure-garden: 3	amenity-nightclub: 3	tourism-artwork: 3	amenity-doctors: 2
user_460					
user_461	natural-wood: 5	leisure-park: 3	leisure-pitch: 3	amenity-school: 2	amenity-nightclub: 1
user_462	shop-car_repair: 1				
user_463	amenity-fast_food: 6	amenity-university: 3	shop-supermarket: 2	tourism-artwork: 2	leisure-park: 1
user_464	shop-supermarket: 1	amenity-school: 1			
user_465	leisure-pitch: 6	amenity-school: 1	leisure-park: 1	leisure-sports_centre: 1	
user_466	amenity-school: 1	amenity-park: 1	leisure-park: 1	amenity-place_of_wors hip: 1	shop-supermarket: 1
user_467	leisure-garden: 7	leisure-park: 1	amenity-place_of_wors hip: 1		

user_468	amenity-restaurant: 1	amenity-bank: 1			
user_469	tourism-artwork: 2	amenity-fast_food: 2	amenity-school: 1	leisure-garden: 1	amenity-bar: 1
user_470	amenity-bank: 3	amenity-pharmacy: 1	amenity-hospital: 1	amenity-cafe: 1	amenity-marketplace: 1
user_471	amenity-school: 3	leisure-pitch: 3	amenity-fast_food: 2	amenity-place_of_wors hip: 1	tourism-artwork: 1
user_472	office-university: 3	amenity-university: 1			
user_473	leisure-park: 2	amenity-pharmacy: 1	amenity-doctors: 1	amenity-pub: 1	amenity-place_of_wors hip: 1
user_474	leisure-pitch: 2	leisure-garden: 2	shop-supermarket: 1	amenity-school: 1	shop-convenience: 1
user_475	amenity-school: 1				
user_476	tourism-artwork: 3	amenity-place_of_wors hip: 3	amenity-hospital: 1	amenity-cafe: 1	shop-supermarket: 1
user_477	amenity-fast_food: 7	shop-supermarket: 6	shop-confectionery: 6	amenity-restaurant: 6	amenity-cafe: 5
user_478	shop-supermarket: 2	shop-hairdresser: 2	leisure-garden: 2	amenity-restaurant: 1	amenity-bank: 1
user_479	amenity-cafe: 3	amenity-restaurant: 2	amenity-fast_food: 2	historic-memorial: 1	shop-hairdresser: 1
user_480	leisure-garden: 13	leisure-park: 4	tourism-artwork: 3	amenity-hospital: 2	amenity-university: 2
user_481	amenity-fast_food: 11	shop-hairdresser: 5	amenity-school: 4	amenity-cafe: 3	amenity-restaurant: 3
user_482	shop-supermarket: 1				
user_483	amenity-fast_food: 7	natural-wood: 3	shop-convenience: 3	amenity-restaurant: 3	amenity-pharmacy: 2
user_484	amenity-school: 5	amenity-pharmacy: 3	leisure-pitch: 2	amenity-hospital: 1	amenity-place_of_wors hip: 1
user_485	tourism-artwork: 11	amenity-cafe: 10	amenity-restaurant: 9	amenity-fast_food: 4	historic-memorial: 4
user_486	amenity-cafe:	amenity-	amenity-bank:	shop-	shop-

	4	fast_food: 3	3	confectionery: 2	supermarket: 1
user_487	leisure-park: 2	shop-supermarket: 2	amenity-place_of_wors hip: 1	amenity-pub: 1	amenity-fast_food: 1
user_488	leisure-garden: 11	leisure-park: 4	shop-supermarket: 3	amenity-school: 2	amenity-park: 2
user_489	amenity-place_of_wors hip: 4	amenity-school: 3	shop-supermarket: 1	shop-convenience: 1	amenity-bank: 1
user_490	amenity-place_of_wors hip: 1	leisure-sports_centre: 1	tourism-artwork: 1	amenity-community_centre: 1	amenity-school: 1
user_491	leisure-garden: 13	amenity-school: 1	leisure-park: 1	leisure-playground: 1	
user_492	amenity-cinema: 1	amenity-casino: 1	leisure-fitness_centre: 1	amenity-bar: 1	amenity-place_of_wors hip: 1
user_493	amenity-fast_food: 12	amenity-cafe: 10	amenity-restaurant: 6	tourism-artwork: 6	shop-car_repair: 4
user_494	leisure-park: 1	shop-tattoo: 1	leisure-sports_centre: 1	amenity-bar: 1	amenity-restaurant: 1
user_495	leisure-park: 5	natural-wood: 2	shop-car_repair: 1	leisure-sports_centre: 1	tourism-artwork: 1
user_496	amenity-bank: 3	amenity-restaurant: 2	shop-supermarket: 1	amenity-cinema: 1	historic-memorial: 1
user_497					
user_498	amenity-pharmacy: 1	amenity-doctors: 1			
user_499	amenity-school: 1	amenity-pub: 1	amenity-restaurant: 1		
user_500	leisure-pitch: 2	leisure-park: 1	amenity-school: 1		
user_501	amenity-university: 1	amenity-dentist: 1	amenity-kindergarten: 1	leisure-park: 1	
user_502	amenity-school: 2	leisure-playground: 1	leisure-park: 1	amenity-pub: 1	
user_503	leisure-park: 4	amenity-fast_food: 4	shop-car_repair: 4	shop-convenience: 3	leisure-sports_centre: 2

user_504	amenity-school: 2	leisure-garden: 1	amenity-university: 1	historic-memorial: 1	leisure-park: 1
user_505	leisure-garden: 100	amenity-fast_food: 2	amenity-bank: 2	amenity-community_centre: 1	historic-memorial: 1
user_506	amenity-fast_food: 2	amenity-place_of_worship: 1	amenity-restaurant: 1	amenity-pharmacy: 1	shop-beauty: 1
user_507	leisure-park: 6	shop-convenience: 4	amenity-restaurant: 4	amenity-school: 3	shop-supermarket: 3
user_508	leisure-garden: 21	natural-wood: 1	amenity-school: 1	amenity-place_of_worship: 1	amenity-kindergarten: 1
user_509					
user_510	amenity-fast_food: 5	amenity-restaurant: 2	shop-car_repair: 2	amenity-place_of_worship: 1	amenity-school: 1
user_511	amenity-university: 2				
user_512	shop-supermarket: 9	leisure-stadium: 2	leisure-park: 1	amenity-place_of_worship: 1	amenity-fast_food: 1
user_513					
user_514	amenity-school: 1				
user_515	amenity-school: 2	amenity-doctors: 2	amenity-university: 1	amenity-cafe: 1	amenity-brothel: 1
user_516	amenity-police: 1	amenity-restaurant: 1	shop-supermarket: 1		
user_517	amenity-fast_food: 10	amenity-cafe: 9	shop-hairdresser: 5	tourism-artwork: 4	amenity-university: 3
user_518	amenity-restaurant: 3	tourism-artwork: 3	amenity-bar: 2	leisure-garden: 2	amenity-cafe: 1
user_519	amenity-place_of_worship: 2	shop-supermarket: 2	leisure-pitch: 2	leisure-park: 1	amenity-hospital: 1
user_520	shop-car_repair: 2	amenity-school: 2	natural-grassland: 1	amenity-kindergarten: 1	
user_521	shop-hairdresser: 7	amenity-fast_food: 6	amenity-pharmacy: 3	shop-convenience: 3	amenity-school: 2
user_522	amenity-fast_food: 15	amenity-restaurant: 6	amenity-cafe: 5	shop-confectionery:	shop-supermarket: 3

				3	
user_523					
user_524	amenity-hospital: 4	amenity-school: 4	leisure-pitch: 3	historic-memorial: 2	amenity-clinic: 2
user_525	leisure-pitch: 3	leisure-park: 2	leisure-sports_centre: 1	amenity-kindergarten: 1	leisure-track: 1
user_526	amenity-pub: 1	amenity-school: 1	shop-supermarket: 1		
user_527	amenity-fast_food: 1	amenity-school: 1	amenity-place_of_wors hip: 1	leisure-garden: 1	
user_528	amenity-place_of_wors hip: 2	shop-supermarket: 2	leisure-park: 1	shop-car_repair: 1	amenity-dentist: 1
user_529	shop-convenience: 1	leisure-park: 1	natural-wood: 1		
user_530	leisure-garden: 1	tourism-artwork: 1			
user_531	amenity-fast_food: 3	shop-department_store: 1	amenity-pharmacy: 1	shop-supermarket: 1	shop-hairdresser: 1
user_532	amenity-fast_food: 11	tourism-artwork: 5	historic-memorial: 5	amenity-restaurant: 5	amenity-cafe: 4
user_533	shop-car_repair: 2	amenity-place_of_wors hip: 2	amenity-school: 1	amenity-pharmacy: 1	amenity-fast_food: 1
user_534	office-university: 3	amenity-university: 1			
user_535	amenity-kindergarten: 3	amenity-university: 3	leisure-garden: 3	leisure-park: 2	leisure-pitch: 1
user_536	amenity-fast_food: 3	shop-supermarket: 2	amenity-bar: 1	amenity-restaurant: 1	shop-convenience: 1
user_537	amenity-fast_food: 6	amenity-cafe: 4	shop-confectionery: 3	shop-convenience: 3	shop-hairdresser: 3
user_538	leisure-pitch: 1				
user_539	office-university: 3	amenity-university: 1			
user_540	amenity-pub: 1				
user_541	amenity-fast_food: 3	amenity-place_of_wors	shop-supermarket: 1	amenity-bank: 1	shop-hairdresser: 1

		hip: 2			
user_542	natural-wood: 2	amenity-community_centre: 1	amenity-pharmacy: 1	amenity-doctors: 1	amenity-pub: 1
user_543	amenity-school: 3	amenity-community_centre: 1	leisure-park: 1	amenity-place_of_worship: 1	historic-memorial: 1
user_544	shop-car_repair: 1	amenity-nightclub: 1	historic-memorial: 1	leisure-track: 1	amenity-pub: 1
user_545	amenity-fast_food: 2	amenity-school: 2	shop-supermarket: 1	amenity-bank: 1	shop-hairdresser: 1
user_546	amenity-fast_food: 2	leisure-park: 1	shop-tattoo: 1	amenity-pub: 1	
user_547	amenity-place_of_worship: 2	amenity-clinic: 1	natural-wood: 1	leisure-park: 1	amenity-college: 1
user_548	amenity-fast_food: 7	shop-supermarket: 4	shop-hairdresser: 3	amenity-school: 2	shop-furniture: 2
user_549	shop-supermarket: 1	shop-convenience: 1	amenity-school: 1	amenity-casino: 1	leisure-fitness_centre: 1
user_550	shop-supermarket: 3	shop-convenience: 2	amenity-place_of_worship: 2	amenity-kindergarten: 1	shop-car_repair: 1
user_551	leisure-park: 5	amenity-place_of_worship: 2	shop-bakery: 2	tourism-artwork: 2	shop-hairdresser: 1
user_552	amenity-university: 2	amenity-pub: 2	amenity-bar: 2	tourism-museum: 1	shop-convenience: 1
user_553	amenity-school: 5	amenity-fast_food: 5	shop-supermarket: 4	natural-wood: 3	amenity-cinema: 1
user_554	amenity-restaurant: 7	shop-car_repair: 6	shop-supermarket: 4	tourism-artwork: 4	amenity-place_of_worship: 3
user_555	amenity-fast_food: 10	amenity-restaurant: 7	amenity-pub: 5	amenity-university: 4	amenity-nightclub: 4
user_556	shop-hairdresser: 2	amenity-kindergarten: 2	leisure-park: 1	amenity-school: 1	amenity-dentist: 1
user_557	amenity-fast_food: 10	shop-car_repair: 3	shop-convenience: 2	tourism-artwork: 2	amenity-restaurant: 2
user_558	leisure-park: 4	natural-wood: 4	leisure-nature_reserve	amenity-pub: 1	amenity-school: 1

			: 2		
user_559	amenity-pharmacy: 3	amenity-doctors: 2	leisure-park: 1	shop-convenience: 1	amenity-fast_food: 1
user_560	amenity-fast_food: 4	leisure-park: 3	amenity-cinema: 1	amenity-restaurant: 1	natural-wood: 1
user_561	amenity-place_of_worship: 1				
user_562	amenity-restaurant: 11	amenity-fast_food: 5	amenity-cafe: 5	leisure-park: 4	amenity-place_of_worship: 3
user_563	tourism-artwork: 15	leisure-park: 2	amenity-cafe: 2	amenity-community_centre: 1	amenity-school: 1
user_564	leisure-pitch: 9	amenity-fast_food: 3	tourism-artwork: 2	shop-convenience: 2	amenity-place_of_worship: 1
user_565	amenity-restaurant: 3	natural-wood: 3	amenity-school: 2	amenity-place_of_worship: 1	historic-memorial: 1
user_566	amenity-pub: 2	amenity-restaurant: 2	amenity-hospital: 2	amenity-cafe: 2	amenity-fast_food: 2
user_567	tourism-artwork: 14	amenity-cinema: 1	amenity-fast_food: 1	amenity-studio: 1	
user_568	amenity-restaurant: 2	amenity-fast_food: 2	leisure-park: 1	amenity-pharmacy: 1	shop-hairdresser: 1
user_569	amenity-place_of_worship: 1	amenity-nightclub: 1			
user_570	amenity-restaurant: 2	amenity-place_of_worship: 2	shop-hairdresser: 2	shop-car_repair: 1	amenity-school: 1
user_571	leisure-park: 1	shop-furniture: 1			
user_572	shop-car_repair: 4	leisure-swimming_pool: 2	leisure-park: 1	natural-wood: 1	amenity-kindergarten: 1
user_573	shop-car_repair: 3	amenity-school: 1	amenity-place_of_worship: 1	amenity-hospital: 1	amenity-pharmacy: 1
user_574	amenity-cafe: 6	shop-confectionery:	amenity-restaurant: 4	amenity-fast_food: 4	amenity-place_of_worship

		5			hip: 3
user_575	leisure-garden: 37	shop-supermarket: 1	natural-wood: 1		
user_576	amenity-marketplace: 6	shop-confectionery: 2	amenity-bank: 1	amenity-cinema: 1	shop-hairdresser: 1
user_577	shop-supermarket: 1	tourism-museum: 1	amenity-place_of_wors hip: 1		
user_578	amenity-marketplace: 6	amenity-hospital: 4	amenity-restaurant: 3	shop-hairdresser: 3	amenity-casino: 2
user_579	leisure-garden: 72	amenity-school: 4	amenity-place_of_wors hip: 2	leisure-pitch: 2	amenity-nightclub: 1
user_580	amenity-pub: 2	shop-hairdresser: 2	amenity-fast_food: 1	shop-bakery: 1	amenity-pharmacy: 1
user_581	amenity-pub: 2	amenity-bank: 2	leisure-park: 1	amenity-place_of_wors hip: 1	
user_582	leisure-garden: 130	amenity-fast_food: 7	shop-supermarket: 5	shop-hairdresser: 5	shop-convenience: 5
user_583	leisure-garden: 23	amenity-cafe: 3	amenity-restaurant: 2	historic-memorial: 2	amenity-fast_food: 1
user_584	amenity-college: 2	amenity-school: 1	amenity-kindergarten: 1	leisure-park: 1	
user_585	leisure-garden: 15	amenity-place_of_wors hip: 1			
user_586	amenity-bank: 3	shop-bakery: 2	amenity-fast_food: 1	amenity-pharmacy: 1	shop-beauty: 1
user_587	amenity-fast_food: 8	shop-car_repair: 5	shop-hairdresser: 3	amenity-restaurant: 3	shop-supermarket: 2
user_588	amenity-restaurant: 1	amenity-fast_food: 1	amenity-place_of_wors hip: 1		
user_589	amenity-place_of_wors hip: 2	leisure-sports_centre: 1	tourism-artwork: 1	amenity-restaurant: 1	amenity-pharmacy: 1
user_590	leisure-pitch: 3	historic-memorial: 2	amenity-hospital: 1	amenity-clinic: 1	leisure-fitness_centre: 1
user_591					

user_592	shop-supermarket: 1	shop-department_store: 1	leisure-park: 1	leisure-sports_centre: 1	leisure-swimming_pool: 1
user_593	leisure-garden: 37	natural-grassland: 2	historic-ruins: 1	amenity-nightclub: 1	
user_594	leisure-garden: 14	amenity-hospital: 1			
user_595	amenity-school: 3	amenity-place_of_worship: 2	shop-supermarket: 1	amenity-cafe: 1	amenity-fast_food: 1
user_596	amenity-fast_food: 6	shop-hairdresser: 2	shop-confectionery: 1	shop-convenience: 1	amenity-place_of_worship: 1
user_597	shop-supermarket: 3	amenity-place_of_worship: 2	amenity-fast_food: 1		
user_598	leisure-garden: 33	amenity-restaurant: 6	historic-memorial: 4	tourism-artwork: 4	leisure-park: 3
user_599	leisure-garden: 144	amenity-fast_food: 2	amenity-park: 2	leisure-park: 2	shop-hairdresser: 1
user_600	amenity-school: 4	amenity-fast_food: 4	amenity-place_of_worship: 3	amenity-restaurant: 2	leisure-sports_centre: 2
user_601	shop-supermarket: 3	amenity-school: 2	leisure-playground: 1	amenity-hospital: 1	amenity-doctors: 1
user_602					
user_603	leisure-garden: 29	amenity-bank: 3	leisure-pitch: 3	amenity-fast_food: 2	leisure-fitness_centre: 2
user_604	amenity-school: 1				
user_605	amenity-fast_food: 5	shop-hairdresser: 2	shop-beauty: 1	amenity-hospital: 1	amenity-school: 1
user_606	amenity-fast_food: 7	amenity-cafe: 7	shop-hairdresser: 5	tourism-artwork: 5	shop-supermarket: 4
user_607	leisure-park: 5	leisure-pitch: 3	leisure-playground: 1	shop-confectionery: 1	shop-convenience: 1
user_608	natural-grassland: 6	amenity-place_of_worship: 2	amenity-school: 2	amenity-police: 1	amenity-community_centre: 1
user_609	historic-	tourism-	amenity-pub: 1	amenity-cafe:	amenity-

	memorial: 2	artwork: 2		1	place_of_wors hip: 1
user_610	leisure-garden: 18	shop-hairdresser: 2	amenity-fast_food: 2	amenity-pub: 1	amenity-cafe: 1
user_611	leisure-garden: 40	shop-hairdresser: 5	amenity-fast_food: 5	shop-convenience: 3	leisure-park: 3
user_612	amenity-place_of_wors hip: 1	amenity-school: 1	shop-supermarket: 1		
user_613	leisure-park: 3	shop-supermarket: 2	amenity-fast_food: 2	natural-wood: 1	
user_614	amenity-school: 2	amenity-place_of_wors hip: 2	amenity-marketplace: 1	shop-department_st ore: 1	shop-supermarket: 1
user_615	leisure-park: 4	office-university: 3	shop-supermarket: 2	leisure-pitch: 1	shop-convenience: 1
user_616	amenity-school: 1				
user_617	amenity-restaurant: 7	amenity-fast_food: 5	shop-beauty: 5	tourism-artwork: 2	amenity-pharmacy: 2
user_618	leisure-garden: 5	amenity-cafe: 4	shop-supermarket: 3	amenity-fast_food: 2	shop-confectionery: 2
user_619	amenity-pub: 5	tourism-artwork: 4	amenity-bar: 3	amenity-restaurant: 3	amenity-place_of_wors hip: 2
user_620	leisure-park: 2	leisure-sports_centre: 2	amenity-place_of_wors hip: 2	amenity-pub: 2	amenity-nightclub: 2
user_621	shop-supermarket: 4	shop-furniture: 3	leisure-park: 2	amenity-school: 2	natural-wood: 2
user_622	leisure-playground: 1				
user_623	shop-car_repair: 1	shop-hardware: 1			
user_624	leisure-park: 3	amenity-school: 2	amenity-university: 2	historic-memorial: 1	leisure-pitch: 1
user_625	amenity-cinema: 1	amenity-restaurant: 1	amenity-cafe: 1	amenity-doctors: 1	amenity-hospital: 1
user_626	leisure-swimming_poo l: 2	amenity-school: 2	amenity-pharmacy: 2	amenity-restaurant: 2	leisure-park: 1

user_627	leisure-park: 1	amenity-place_of_wors hip: 1	natural-wood: 1		
user_628	leisure-park: 2	amenity-courthouse: 1	amenity-school: 1	shop-bakery: 1	amenity-pub: 1
user_629	amenity-fast_food: 7	shop-hairdresser: 4	amenity-school: 3	shop-convenience: 3	shop-confectionery: 3
user_630	leisure-park: 3	amenity-school: 1	amenity-cafe: 1		
user_631	leisure-swimming_poo l: 1	amenity-police: 1	amenity-pub: 1	tourism-artwork: 1	amenity-place_of_wors hip: 1
user_632	amenity-fast_food: 6	shop-convenience: 2	leisure-park: 1	leisure-sports_centre: 1	shop-car_repair: 1
user_633	shop-confectionery: 4	amenity-place_of_wors hip: 2	amenity-school: 1	shop-supermarket: 1	shop-convenience: 1
user_634	amenity-pub: 1				
user_635	amenity-fast_food: 5	amenity-bank: 4	amenity-cafe: 2	shop-hairdresser: 2	shop-bakery: 2
user_636	amenity-pub: 1	amenity-nightclub: 1			
user_637	amenity-cafe: 1	shop-supermarket: 1	amenity-place_of_wors hip: 1	amenity-hospital: 1	
user_638	amenity-fast_food: 3	leisure-park: 2	shop-car_repair: 2	amenity-cafe: 1	amenity-restaurant: 1
user_639	leisure-playground: 2	leisure-park: 1	leisure-pitch: 1	amenity-fast_food: 1	amenity-dentist: 1
user_640	amenity-school: 4	shop-convenience: 3	shop-hairdresser: 2	leisure-park: 2	amenity-pharmacy: 2
user_641	leisure-park: 2	leisure-pitch: 2	shop-supermarket: 1	amenity-park: 1	natural-wood: 1
user_642	leisure-park: 3	amenity-school: 2	amenity-place_of_wors hip: 1	shop-supermarket: 1	shop-confectionery: 1
user_643	leisure-park: 1	amenity-school: 1			
user_644	amenity-restaurant: 1				

user_645	amenity-pub: 1				
user_646	leisure-park: 1	shop-car_repair: 1	amenity-place_of_wors hip: 1	amenity-dentist: 1	amenity-college: 1
user_647					
user_648	amenity-pharmacy: 3	amenity-doctors: 2	amenity-school: 1		
user_649	tourism-artwork: 5	leisure-sports_centre: 2	leisure-pitch: 2	amenity-university: 1	leisure-park: 1
user_650	amenity-bank: 3	historic-memorial: 2			
user_651	amenity-restaurant: 2	amenity-school: 2	leisure-fitness_centre: 1	shop-car_repair: 1	amenity-fast_food: 1
user_652	tourism-artwork: 3	shop-hairdresser: 2	leisure-park: 2	shop-supermarket: 1	shop-convenience: 1
user_653	shop-supermarket: 2	amenity-restaurant: 2	amenity-college: 1	leisure-garden: 1	amenity-pub: 1
user_654	amenity-school: 2	amenity-place_of_wors hip: 1	amenity-restaurant: 1	leisure-fitness_centre: 1	amenity-fast_food: 1
user_655	leisure-garden: 14	amenity-cafe: 3	leisure-park: 2	amenity-hospital: 2	amenity-theatre: 2
user_656					
user_657	shop-car_repair: 2	amenity-doctors: 1	leisure-garden: 1	natural-wood: 1	shop-supermarket: 1
user_658	amenity-fast_food: 4	amenity-school: 3	shop-supermarket: 3	amenity-place_of_wors hip: 3	amenity-pharmacy: 2
user_659	leisure-garden: 25	shop-supermarket: 5	leisure-pitch: 4	amenity-pharmacy: 2	leisure-sports_centre: 2
user_660	amenity-place_of_wors hip: 1				
user_661	amenity-cafe: 4	shop-department_st ore: 2	amenity-fast_food: 2	shop-confectionery: 2	leisure-park: 1
user_662	amenity-pub: 1	leisure-garden: 1	amenity-cafe: 1		
user_663	amenity-cafe:	amenity-	shop-	shop-	amenity-bank:

	6	fast_food: 5	confectionery: 4	supermarket: 3	2
user_664	amenity-fast_food: 8	amenity-pub: 3	amenity-restaurant: 3	amenity-cafe: 3	shop-supermarket: 2
user_665	amenity-fast_food: 6	amenity-bar: 3	leisure-swimming_pool: 2	amenity-university: 1	leisure-park: 1
user_666	amenity-place_of_wors hip: 1	shop-supermarket: 1	amenity-pharmacy: 1	shop-furniture: 1	
user_667	amenity-place_of_wors hip: 2	amenity-school: 2	amenity-pharmacy: 2	shop-hairdresser: 2	amenity-hospital: 1
user_668	amenity-pub: 2	amenity-school: 1	amenity-college: 1	amenity-police: 1	amenity-restaurant: 1
user_669					
user_670	amenity-restaurant: 2	tourism-artwork: 2	amenity-kindergarten: 1	amenity-community_centre: 1	amenity-fast_food: 1
user_671	amenity-fast_food: 5	shop-confectionery: 4	amenity-bank: 2	amenity-school: 2	shop-supermarket: 2
user_672	amenity-fast_food: 6	shop-confectionery: 5	amenity-school: 2	amenity-place_of_wors hip: 2	shop-hairdresser: 2
user_673	amenity-fast_food: 3	amenity-restaurant: 3	amenity-college: 3	shop-supermarket: 2	amenity-place_of_wors hip: 2
user_674	amenity-school: 2	amenity-cafe: 2	leisure-park: 1	amenity-fast_food: 1	amenity-restaurant: 1
user_675	leisure-pitch: 2	leisure-garden: 1	leisure-park: 1	leisure-sports_centre: 1	leisure-swimming_pool: 1
user_676	tourism-artwork: 2	amenity-place_of_wors hip: 2	amenity-pharmacy: 2	amenity-university: 1	amenity-pub: 1
user_677	tourism-artwork: 2	amenity-hospital: 1	amenity-cafe: 1	amenity-place_of_wors hip: 1	
user_678	amenity-cafe: 1	amenity-pub: 1	shop-supermarket: 1	amenity-school: 1	
user_679	amenity-pub: 2	leisure-park: 2	shop-		

			supermarket: 1		
user_680	amenity-school: 3	amenity-bank: 2	leisure-park: 2	shop-confectionery: 1	shop-hairdresser: 1
user_681	shop-hairdresser: 4	amenity-fast_food: 4	shop-supermarket: 3	shop-furniture: 3	amenity-place_of_worship: 2
user_682	leisure-pitch: 1	leisure-sports_centre: 1	leisure-swimming_pool: 1	amenity-school: 1	
user_683	amenity-fast_food: 4	tourism-artwork: 3	shop-hairdresser: 2	amenity-pub: 1	amenity-courthouse: 1
user_684	leisure-pitch: 3	leisure-sports_centre: 2	leisure-park: 2	amenity-cafe: 2	leisure-playground: 1
user_685	tourism-artwork: 2	amenity-fast_food: 2	shop-hairdresser: 2	natural-wood: 1	amenity-courthouse: 1
user_686	amenity-school: 1	shop-car_repair: 1	shop-hairdresser: 1	shop-supermarket: 1	amenity-college: 1
user_687	amenity-doctors: 1	leisure-park: 1	amenity-school: 1		
user_688	leisure-pitch: 2	amenity-community_centre: 1	leisure-stadium: 1		
user_689	leisure-park: 1	leisure-pitch: 1	amenity-bank: 1	leisure-sports_centre: 1	amenity-kindergarten: 1
user_690	shop-bakery: 5	leisure-sports_centre: 3	amenity-fast_food: 3	amenity-bank: 2	amenity-restaurant: 2
user_691	amenity-school: 2	leisure-garden: 2	amenity-restaurant: 2	amenity-cafe: 1	leisure-park: 1
user_692	amenity-school: 1				
user_693	amenity-restaurant: 3	leisure-swimming_pool: 2	leisure-sports_centre: 1	shop-car_repair: 1	shop-hardware: 1
user_694	amenity-cafe: 4	amenity-school: 1	shop-supermarket: 1	shop-hairdresser: 1	amenity-doctors: 1
user_695	amenity-school: 3	shop-supermarket: 2	shop-bakery: 2	amenity-ice_cream: 2	leisure-swimming_pool: 2

user_696	leisure-pitch: 3	leisure-park: 3	historic-monument: 3	leisure-swimming_pool: 2	amenity-restaurant: 2
user_697	amenity-pub: 4	amenity-fast_food: 4	amenity-bar: 3	amenity-nightclub: 2	shop-supermarket: 2
user_698	amenity-restaurant: 3	historic-memorial: 2	shop-convenience: 2	shop-hairdresser: 2	amenity-cafe: 2
user_699	amenity-cafe: 2	amenity-fast_food: 2	leisure-garden: 1	leisure-park: 1	historic-memorial: 1
user_700	shop-hairdresser: 2	leisure-sports_centre: 1	leisure-swimming_pool: 1	amenity-school: 1	leisure-park: 1
user_701	leisure-park: 3	leisure-pitch: 2	amenity-place_of_worship: 1	leisure-playground: 1	
user_702	leisure-park: 3	leisure-garden: 2	amenity-bank: 1	leisure-stadium: 1	amenity-courthouse: 1
user_703	leisure-pitch: 3	leisure-swimming_pool: 2	shop-supermarket: 2	leisure-garden: 2	leisure-sports_centre: 1
user_704	leisure-park: 2	amenity-community_centre: 1	amenity-school: 1	leisure-nature_reserve: 1	shop-supermarket: 1
user_705	amenity-fast_food: 3	amenity-school: 2	shop-supermarket: 1	amenity-pharmacy: 1	amenity-dentist: 1
user_706	office-university: 2	amenity-university: 1			
user_707	amenity-pub: 16	amenity-restaurant: 11	amenity-bank: 5	shop-hairdresser: 4	shop-supermarket: 3
user_708	shop-furniture: 2	shop-hairdresser: 2	amenity-school: 2	leisure-park: 1	amenity-cafe: 1
user_709	amenity-restaurant: 3	amenity-cafe: 2	leisure-playground: 2	amenity-bar: 2	amenity-brothel: 1
user_710	leisure-pitch: 3	shop-confectionery: 2	leisure-sports_centre: 2	leisure-swimming_pool: 1	amenity-school: 1
user_711	amenity-fast_food: 3	shop-supermarket: 2	shop-convenience: 2	amenity-college: 1	amenity-school: 1
user_712	amenity-pharmacy: 2	shop-convenience: 2	amenity-doctors: 1	amenity-bar: 1	shop-furniture: 1
user_713	amenity-restaurant: 6	amenity-school: 4	shop-hairdresser: 4	amenity-kindergarten: 3	amenity-doctors: 1

user_714	leisure-fitness_centre: 1	shop-car_repair: 1	amenity-place_of_wors hip: 1	amenity-fast_food: 1	
user_715	amenity-fast_food: 4	shop-convenience: 2	shop-hairdresser: 2	historic-memorial: 2	amenity-place_of_wors hip: 2
user_716	leisure-park: 2	amenity-university: 1	amenity-place_of_wors hip: 1	amenity-restaurant: 1	
user_717	shop-bakery: 4	amenity-restaurant: 3	shop-hairdresser: 2	amenity-marketplace: 1	craft-locksmith: 1
user_718	amenity-place_of_wors hip: 2	amenity-pub: 2	shop-supermarket: 2	amenity-cafe: 2	shop-hairdresser: 1
user_719	amenity-place_of_wors hip: 2	amenity-school: 2	shop-supermarket: 1		
user_720	shop-hairdresser: 5	shop-bakery: 5	amenity-restaurant: 4	amenity-cafe: 3	shop-confectionery: 2
user_721	shop-supermarket: 2	tourism-artwork: 1	amenity-school: 1	leisure-sports_centre: 1	amenity-place_of_wors hip: 1
user_722					
user_723	amenity-marketplace: 2	shop-supermarket: 1	shop-hairdresser: 1	amenity-townhall: 1	amenity-bank: 1
user_724	historic-monument: 2	shop-supermarket: 1	amenity-cafe: 1	shop-confectionery: 1	leisure-garden: 1
user_725	amenity-fast_food: 5	amenity-restaurant: 3	shop-supermarket: 3	amenity-place_of_wors hip: 3	shop-hairdresser: 3
user_726	shop-hairdresser: 2	amenity-fast_food: 1	shop-convenience: 1	shop-hardware: 1	amenity-school: 1
user_727	leisure-park: 3	natural-wood: 3	leisure-garden: 1	amenity-hospital: 1	amenity-place_of_wors hip: 1
user_728					
user_729	amenity-fast_food: 10	amenity-restaurant: 6	amenity-school: 3	shop-beauty: 3	amenity-bank: 2
user_730	amenity-college: 2	amenity-place_of_wors	amenity-school: 1		

		hip: 2			
user_731	leisure-pitch: 2	leisure-stadium: 2	amenity-college: 2	tourism-artwork: 1	shop-hairdresser: 1
user_732	leisure-park: 3	amenity-hospital: 2			
user_733	amenity-fast_food: 13	amenity-restaurant: 7	amenity-pharmacy: 4	amenity-cafe: 4	shop-hairdresser: 4
user_734	amenity-pub: 5	amenity-restaurant: 5	amenity-place_of_wors hip: 3	amenity-cafe: 3	tourism-artwork: 3
user_735	leisure-pitch: 2	leisure-park: 2	amenity-courthouse: 2	leisure-sports_centre: 1	amenity-school: 1
user_736	shop-supermarket: 4	historic-memorial: 2	historic-archaeological _site: 1	amenity-university: 1	amenity-hospital: 1
user_737	leisure-park: 1				
user_738	amenity-cafe: 2	amenity-bar: 2	leisure-sports_centre: 1	leisure-garden: 1	amenity-townhall: 1
user_739					
user_740	amenity-restaurant: 5	amenity-fast_food: 5	shop-department_st ore: 4	amenity-place_of_wors hip: 2	leisure-garden: 2
user_741	leisure-garden: 31	amenity-fast_food: 4	shop-supermarket: 3	shop-hairdresser: 2	natural-wood: 1
user_742	amenity-fast_food: 2	shop-convenience: 2	shop-supermarket: 2	amenity-park: 1	leisure-park: 1
user_743	amenity-restaurant: 4	amenity-pharmacy: 4	amenity-place_of_wors hip: 4	shop-hairdresser: 2	amenity-dentist: 1
user_744	shop-supermarket: 2	amenity-hospital: 2	leisure-fitness_centre: 1	amenity-bank: 1	amenity-fast_food: 1
user_745	leisure-garden: 17	shop-supermarket: 3	amenity-place_of_wors hip: 3	amenity-fast_food: 1	amenity-cafe: 1
user_746	amenity-place_of_wors hip: 2	amenity-school: 2	amenity-pub: 2	leisure-garden: 1	shop-car_repair: 1
user_747	amenity-place_of_wors	leisure-fitness_centre:			

	hip: 1	1			
user_748					
user_749	amenity-school: 4	amenity-fast_food: 3	leisure-pitch: 2	amenity-doctors: 1	shop-hairdresser: 1
user_750	amenity-restaurant: 7	amenity-pub: 4	leisure-park: 3	shop-hairdresser: 3	amenity-bar: 2
user_751	shop-hairdresser: 3	amenity-fast_food: 2	amenity-restaurant: 2	shop-supermarket: 1	shop-convenience: 1
user_752	office-university: 3	natural-wood: 1	amenity-restaurant: 1	amenity-university: 1	
user_753	amenity-restaurant: 9	amenity-bar: 4	amenity-cafe: 3	amenity-fast_food: 1	shop-bakery: 1
user_754					
user_755	leisure-park: 1	amenity-university: 1	historic-memorial: 1		
user_756	amenity-fast_food: 4	amenity-pharmacy: 4	shop-convenience: 3	shop-car_repair: 2	amenity-dentist: 2
user_757	leisure-garden: 7	amenity-school: 3	leisure-park: 2	leisure-playground: 1	amenity-park: 1
user_758	shop-supermarket: 2	shop-hairdresser: 2	shop-confectionery: 1	amenity-pharmacy: 1	shop-convenience: 1
user_759	leisure-garden: 1	leisure-pitch: 1	historic-memorial: 1		
user_760					
user_761	amenity-cafe: 2	tourism-artwork: 1	historic-memorial: 1	amenity-fast_food: 1	
user_762	leisure-garden: 99	amenity-school: 3	natural-wood: 2		
user_763	leisure-park: 3	amenity-cafe: 2	amenity-hospital: 1	historic-memorial: 1	amenity-school: 1
user_764	shop-hairdresser: 2	shop-department_store: 1	shop-supermarket: 1	leisure-park: 1	amenity-theatre: 1
user_765					
user_766					
user_767	leisure-park: 2	amenity-fast_food: 2	shop-hairdresser: 2	shop-supermarket: 1	natural-wood: 1
user_768	amenity-fast_food: 3	amenity-place_of_worship: 2	shop-supermarket: 2	shop-convenience: 1	shop-car_repair: 1

user_769					
user_770	shop-supermarket: 2	amenity-school: 1	shop-convenience: 1		
user_771	shop-convenience: 3	amenity-cafe: 2	leisure-playground: 1	amenity-college: 1	leisure-adult_gaming_centre: 1
user_772	leisure-pitch: 2	shop-car_repair: 1	shop-beauty: 1	leisure-sports_centre: 1	
user_773	amenity-restaurant: 3	amenity-cafe: 2	shop-hairdresser: 2	shop-convenience: 1	tourism-attraction: 1
user_774	tourism-artwork: 9	amenity-bar: 2	amenity-pub: 1	amenity-restaurant: 1	amenity-place_of_worship: 1
user_775	leisure-park: 2	amenity-hospital: 1	shop-supermarket: 1		
user_776	amenity-school: 1				
user_777	amenity-cafe: 4	shop-supermarket: 4	amenity-bank: 3	amenity-place_of_worship: 1	leisure-garden: 1
user_778	amenity-marketplace: 7	shop-convenience: 4	leisure-garden: 3	shop-bakery: 3	amenity-bar: 3
user_779	leisure-park: 3	amenity-fast_food: 3	leisure-playground: 2	leisure-pitch: 1	amenity-school: 1
user_780	shop-furniture: 2	amenity-cafe: 2	leisure-park: 1	shop-bakery: 1	shop-hairdresser: 1
user_781	shop-bakery: 2	shop-furniture: 2	shop-hairdresser: 2	shop-car_repair: 1	shop-beauty: 1
user_782	amenity-courthouse: 1	shop-supermarket: 1	shop-confectionery: 1	leisure-stadium: 1	leisure-park: 1
user_783	shop-furniture: 3	amenity-school: 2	shop-beauty: 1		
user_784	tourism-museum: 4	shop-convenience: 2	amenity-restaurant: 2	leisure-garden: 2	shop-beauty: 1
user_785	amenity-school: 2	leisure-garden: 2	amenity-place_of_worship: 1	amenity-townhall: 1	shop-bakery: 1
user_786	shop-hardware: 1	shop-furniture: 1	amenity-restaurant: 1	leisure-swimming_pool: 1	

user_787	leisure-pitch: 1	leisure-park: 1	amenity-school: 1	amenity-bank: 1	amenity-pharmacy: 1
user_788	leisure-playground: 5	amenity-restaurant: 3	amenity-fast_food: 2	amenity-kindergarten: 1	leisure-park: 1
user_789	amenity-fast_food: 6	tourism-artwork: 3	shop-hairdresser: 2	shop-supermarket: 2	amenity-pub: 1
user_790	leisure-swimming_pool: 2	leisure-playground: 1	leisure-sports_centre: 1		
user_791	shop-hairdresser: 4	shop-bakery: 1	shop-furniture: 1	leisure-swimming_pool: 1	leisure-playground: 1
user_792	shop-hairdresser: 2	shop-beauty: 2	amenity-cafe: 1	amenity-pub: 1	shop-confectionery: 1
user_793	amenity-bank: 2	amenity-school: 1	amenity-university: 1		
user_794	shop-hairdresser: 5	amenity-bank: 4	shop-bakery: 4	amenity-cafe: 3	amenity-bar: 3
user_795	amenity-bar: 3	shop-hairdresser: 3	shop-beauty: 1	leisure-park: 1	amenity-bank: 1
user_796	shop-locksmith: 1				
user_797	amenity-restaurant: 14	amenity-nightclub: 4	amenity-place_of_worship: 2	amenity-bar: 2	amenity-hospital: 2
user_798	amenity-school: 3	shop-hairdresser: 2	leisure-sports_centre: 1	amenity-bar: 1	amenity-pharmacy: 1
user_799	leisure-pitch: 6	leisure-stadium: 1	leisure-sports_centre: 1	leisure-garden: 1	amenity-bar: 1
user_800	amenity-bank: 4	amenity-courthouse: 2	leisure-park: 2	shop-confectionery: 2	amenity-cafe: 2
user_801	leisure-playground: 6	amenity-restaurant: 5	amenity-bank: 3	amenity-pub: 2	shop-bakery: 2
user_802	leisure-park: 3	amenity-university: 2	leisure-garden: 2	leisure-swimming_pool: 1	shop-confectionery: 1
user_803	amenity-bar: 4	amenity-restaurant: 3	shop-beauty: 2	shop-hairdresser: 2	shop-furniture: 2

user_804	amenity-bank: 6	leisure-garden: 4	historic-monument: 3	leisure-park: 2	leisure-sports_centre: 1
user_805	amenity-restaurant: 3	amenity-hospital: 3	amenity-school: 1	amenity-clinic: 1	shop-bakery: 1
user_806	amenity-restaurant: 3	amenity-university: 2	leisure-park: 2	shop-bakery: 1	shop-hardware: 1
user_807	shop-confectionery: 2	shop-furniture: 1	amenity-school: 1	amenity-bank: 1	amenity-pub: 1
user_808	amenity-school: 4	leisure-pitch: 2	leisure-sports_centre: 2	leisure-playground: 1	amenity-pharmacy: 1
user_809	amenity-restaurant: 4	amenity-bar: 2	amenity-bank: 2	amenity-pub: 2	amenity-cafe: 2
user_810	leisure-park: 2	amenity-restaurant: 2	amenity-place_of_worship: 1	tourism-attraction: 1	amenity-bank: 1
user_811	amenity-bar: 7	amenity-restaurant: 6	leisure-park: 2	amenity-bank: 2	leisure-playground: 1
user_812	leisure-sports_centre: 3	leisure-playground: 2	leisure-park: 1	shop-hardware: 1	amenity-townhall: 1
user_813	shop-furniture: 6	shop-hairdresser: 4	shop-beauty: 3	shop-bakery: 3	leisure-park: 2
user_814	amenity-school: 2	leisure-swimming_pool: 2			
user_815	amenity-restaurant: 1	amenity-cafe: 1			
user_816	leisure-pitch: 4	leisure-playground: 2	leisure-park: 1	amenity-school: 1	leisure-fitness_centre: 1
user_817	amenity-doctors: 2	amenity-college: 2	amenity-place_of_worship: 1	amenity-pharmacy: 1	tourism-artwork: 1
user_818	amenity-restaurant: 5	amenity-bank: 4	amenity-bar: 4	leisure-pitch: 4	amenity-cafe: 3
user_819	leisure-swimming_pool: 2	leisure-playground: 1	leisure-sports_centre: 1		
user_820	leisure-park: 1	amenity-bank:	amenity-	amenity-	amenity-

		1	veterinary: 1	restaurant: 1	university: 1
user_821	leisure-garden: 3	tourism-attraction: 2	amenity-restaurant: 2	amenity-cafe: 2	amenity-kindergarten: 2
user_822	leisure-park: 2				
user_823	amenity-kindergarten: 1	amenity-arts_centre: 1	amenity-clinic: 1	leisure-park: 1	leisure-sports_centre: 1
user_824	amenity-kindergarten: 2	amenity-restaurant: 2	leisure-park: 2	shop-confectionery: 1	shop-supermarket: 1
user_825	amenity-kindergarten: 1				
user_826	leisure-pitch: 2	amenity-school: 1	leisure-playground: 1	leisure-park: 1	
user_827	amenity-school: 4	leisure-park: 1	leisure-sports_centre: 1	shop-supermarket: 1	
user_828	leisure-park: 2	leisure-playground: 1	shop-bakery: 1	amenity-cafe: 1	leisure-pitch: 1
user_829	amenity-university: 6	leisure-park: 6	leisure-garden: 3	leisure-pitch: 3	historic-monument: 2
user_830	leisure-park: 1	shop-supermarket: 1			
user_831	amenity-bank: 3	leisure-garden: 1	shop-hairdresser: 1		
user_832	amenity-restaurant: 9	amenity-bar: 5	amenity-pub: 4	shop-furniture: 3	amenity-school: 2
user_833	amenity-school: 3	shop-hairdresser: 3	amenity-dentist: 1	amenity-veterinary: 1	leisure-pitch: 1
user_834	shop-supermarket: 4	shop-confectionery: 1	shop-hairdresser: 1	amenity-clinic: 1	leisure-park: 1
user_835	amenity-kindergarten: 1	shop-supermarket: 1	leisure-sports_centre: 1	leisure-playground: 1	leisure-park: 1
user_836	amenity-restaurant: 2	shop-supermarket: 1	amenity-clinic: 1	leisure-park: 1	leisure-sports_centre: 1
user_837	amenity-clinic: 1	leisure-pitch: 1	leisure-park: 1	leisure-sports_centre: 1	
user_838	leisure-park: 2	amenity-	shop-	shop-beauty: 1	shop-furniture:

		school: 1	confectionery: 1		1
user_839	amenity-school: 3	amenity-hospital: 2	leisure-park: 2	leisure-pitch: 2	shop-convenience: 2
user_840	amenity-university: 2	leisure-park: 2	leisure-garden: 1	amenity-bank: 1	leisure-swimming_pool: 1
user_841	amenity-marketplace: 5	amenity-school: 1	amenity-place_of_worship: 1	shop-supermarket: 1	amenity-cafe: 1
user_842	leisure-park: 5	amenity-cafe: 3	amenity-pharmacy: 3	amenity-school: 2	leisure-sports_centre: 2
user_843	amenity-university: 3	amenity-restaurant: 2	leisure-park: 2	amenity-pub: 1	leisure-garden: 1
user_844	amenity-bank: 3	amenity-bar: 2	shop-beauty: 2	leisure-park: 1	leisure-playground: 1
user_845	amenity-hospital: 1				
user_846	leisure-swimming_pool: 1	leisure-playground: 1	leisure-pitch: 1	leisure-sports_centre: 1	
user_847	leisure-park: 1	tourism-museum: 1	historic-memorial: 1	amenity-ice_cream: 1	leisure-sports_centre: 1
user_848	amenity-place_of_worship: 4	shop-confectionery: 4	amenity-school: 3	shop-car_repair: 3	shop-supermarket: 3
user_849	leisure-park: 1				
user_850	shop-hairdresser: 3	amenity-school: 2	shop-supermarket: 2	amenity-ice_cream: 2	amenity-place_of_worship: 2
user_851	shop-car_repair: 2	amenity-place_of_worship: 1	amenity-pub: 1	amenity-cafe: 1	amenity-nightclub: 1
user_852	shop-supermarket: 2	leisure-pitch: 1	amenity-restaurant: 1	leisure-park: 1	
user_853	amenity-fast_food: 4	amenity-place_of_worship: 3	amenity-bank: 2	amenity-restaurant: 2	amenity-cafe: 2
user_854	amenity-restaurant: 4	shop-department_st	amenity-fast_food: 4	amenity-pub: 2	amenity-school: 1

		ore: 4			
user_855	shop-bakery: 4	amenity-restaurant: 3	shop-furniture: 3	shop-convenience: 3	shop-hairdresser: 2
user_856	leisure-swimming_pool: 1	leisure-playground: 1	leisure-sports_centre: 1		
user_857	leisure-park: 4	amenity-bank: 2	amenity-cafe: 2	shop-hairdresser: 2	shop-hardware: 1
user_858					
user_859	amenity-restaurant: 1				
user_860	amenity-bar: 1				
user_861	amenity-school: 3	leisure-park: 2	shop-car_repair: 2		
user_862	amenity-school: 1	amenity-place_of_worship: 1	amenity-restaurant: 1	leisure-park: 1	amenity-doctors: 1
user_863	amenity-bank: 2	shop-hairdresser: 2	shop-confectionery: 2	historic-monument: 2	amenity-cafe: 2
user_864	amenity-bar: 2	amenity-cafe: 2	amenity-school: 1	leisure-pitch: 1	amenity-clinic: 1
user_865	shop-supermarket: 2	amenity-ice_cream: 2	leisure-park: 1	amenity-pharmacy: 1	leisure-swimming_pool: 1
user_866	amenity-restaurant: 1	shop-car_repair: 1	amenity-place_of_worship: 1		
user_867	amenity-hospital: 1	leisure-playground: 1	amenity-school: 1		
user_868	shop-hairdresser: 5	shop-beauty: 4	amenity-bar: 3	amenity-fast_food: 2	leisure-pitch: 2
user_869	amenity-cafe: 1	amenity-restaurant: 1	shop-confectionery: 1	amenity-bar: 1	
user_870	leisure-park: 6	shop-beauty: 2	amenity-clinic: 1	amenity-cafe: 1	leisure-pitch: 1
user_871	amenity-school: 1	leisure-park: 1			
user_872	amenity-clinic: 1	leisure-park: 1	leisure-sports_centre: 1	amenity-school: 1	

user_873					
user_874	amenity-bank: 8	amenity-bar: 3	shop-bakery: 3	amenity-restaurant: 3	shop-hairdresser: 2
user_875	amenity-cafe: 2	amenity-school: 1	leisure-sports_centre: 1	amenity-college: 1	amenity-bar: 1
user_876	amenity-restaurant: 7	amenity-bar: 7	leisure-park: 5	amenity-school: 5	shop-hairdresser: 5
user_877	amenity-bank: 1				
user_878	leisure-garden: 4	amenity-restaurant: 4	amenity-bar: 3	shop-hairdresser: 3	shop-hardware: 2
user_879	leisure-pitch: 4	amenity-kindergarten: 1	shop-car_repair: 1	amenity-school: 1	
user_880	amenity-university: 2	historic-monument: 2	leisure-garden: 1	amenity-cafe: 1	
user_881	amenity-school: 3	leisure-swimming_pool: 2	amenity-nightclub: 1		
user_882	amenity-bar: 8	amenity-restaurant: 7	amenity-pub: 5	shop-furniture: 3	shop-hairdresser: 3
user_883	shop-hairdresser: 6	leisure-pitch: 5	amenity-bank: 4	amenity-school: 3	amenity-cafe: 3
user_884	leisure-park: 4	leisure-pitch: 3	shop-confectionery: 2	shop-hairdresser: 2	amenity-school: 2
user_885	tourism-attraction: 5	tourism-gallery: 2	amenity-hospital: 2	amenity-kindergarten: 1	amenity-bar: 1
user_886	amenity-restaurant: 5	shop-supermarket: 2	amenity-cafe: 2	shop-confectionery: 1	shop-beauty: 1
user_887	amenity-bar: 4	shop-hairdresser: 3	amenity-restaurant: 2	amenity-cinema: 1	shop-furniture: 1
user_888	leisure-park: 4	shop-hairdresser: 2	amenity-bar: 2	shop-car_repair: 1	shop-bakery: 1
user_889	leisure-sports_centre: 2	leisure-park: 2	leisure-pitch: 1	leisure-swimming_pool: 1	shop-hairdresser: 1
user_890	amenity-school: 5	leisure-pitch: 4	leisure-playground: 3	amenity-cafe: 3	leisure-park: 2
user_891	amenity-school: 4	shop-hairdresser: 3	leisure-pitch: 3	shop-supermarket: 2	amenity-pharmacy: 2

user_892	amenity-fast_food: 8	amenity-pharmacy: 2	amenity-bank: 2	shop-hairdresser: 2	amenity-place_of_wors hip: 2
user_893	shop-hairdresser: 4	amenity-bar: 3	shop-furniture: 3	amenity-school: 1	amenity-cafe: 1
user_894	amenity-restaurant: 4	leisure-park: 2	leisure-playground: 1	amenity-bank: 1	shop-beauty: 1
user_895	shop-hairdresser: 5	shop-confectionery: 2	shop-convenience: 2	amenity-place_of_wors hip: 1	shop-supermarket: 1
user_896	leisure-park: 3	shop-hairdresser: 2	amenity-bar: 2	amenity-townhall: 2	amenity-cafe: 2
user_897	leisure-swimming_pool: 2	amenity-school: 1	leisure-pitch: 1	amenity-hospital: 1	
user_898					
user_899	shop-supermarket: 2	tourism-artwork: 1	amenity-pharmacy: 1		
user_900	leisure-park: 5	leisure-garden: 3	shop-beauty: 2	amenity-university: 1	amenity-restaurant: 1
user_901	amenity-restaurant: 4	amenity-bar: 1	amenity-pub: 1	amenity-pharmacy: 1	amenity-college: 1
user_902	shop-hardware: 3	amenity-restaurant: 3	shop-furniture: 3	shop-hairdresser: 2	leisure-park: 2
user_903	leisure-garden: 40	amenity-restaurant: 2	shop-furniture: 1	shop-supermarket: 1	amenity-pub: 1
user_904	amenity-bar: 8	amenity-restaurant: 2	amenity-pub: 2	amenity-hospital: 1	amenity-bank: 1
user_905	shop-hairdresser: 7	shop-bakery: 6	shop-confectionery: 5	shop-convenience: 4	amenity-bank: 3
user_906	leisure-fitness_centre: 1	amenity-cafe: 1	amenity-pharmacy: 1	amenity-restaurant: 1	shop-convenience: 1
user_907	amenity-restaurant: 7	amenity-bar: 6	amenity-bank: 4	shop-furniture: 3	amenity-place_of_wors hip: 2
user_908	amenity-fast_food: 5	shop-hairdresser: 4	shop-department_store: 3	amenity-bank: 2	shop-supermarket: 2
user_909	amenity-restaurant: 1				

user_910	amenity-pharmacy: 1	tourism-artwork: 1			
user_911	shop-supermarket: 2	leisure-garden: 1	amenity-place_of_worship: 1	shop-beauty: 1	shop-bakery: 1
user_912	amenity-school: 2	tourism-artwork: 1	leisure-park: 1	amenity-place_of_worship: 1	shop-convenience: 1
user_913	shop-confectionery: 5	shop-furniture: 5	shop-hairdresser: 4	amenity-marketplace: 4	amenity-restaurant: 3
user_914	amenity-restaurant: 6	shop-hairdresser: 3	amenity-fast_food: 3	amenity-pharmacy: 3	amenity-school: 2
user_915	amenity-courthouse: 1	leisure-garden: 1	shop-bakery: 1		
user_916	amenity-marketplace: 6	shop-convenience: 3	shop-bakery: 3	leisure-stadium: 2	leisure-playground: 1
user_917	amenity-hospital: 2	leisure-park: 2	amenity-fast_food: 1		
user_918	amenity-school: 1	leisure-pitch: 1			
user_919	leisure-sports_centre: 2	amenity-kindergarten: 1	amenity-restaurant: 1	amenity-clinic: 1	leisure-park: 1
user_920	amenity-cafe: 2	shop-confectionery: 2	leisure-garden: 1	amenity-bar: 1	amenity-townhall: 1
user_921	leisure-swimming_pool: 1	leisure-playground: 1	leisure-pitch: 1	leisure-sports_centre: 1	
user_922	amenity-bar: 3	leisure-sports_centre: 1	leisure-swimming_pool: 1	amenity-school: 1	leisure-garden: 1
user_923	amenity-school: 1	leisure-pitch: 1			
user_924	amenity-bar: 6	shop-hairdresser: 4	amenity-bank: 4	shop-bakery: 3	shop-confectionery: 3
user_925	amenity-restaurant: 4	amenity-bank: 3	shop-bakery: 3	amenity-cafe: 2	historic-monument: 2
user_926	amenity-school: 2	amenity-kindergarten: 1	leisure-track: 1	leisure-swimming_poo	leisure-playground: 1

				I: 1	
user_927					
user_928	shop-bakery: 4	shop-hairdresser: 4	amenity-bar: 3	amenity-school: 2	shop-hardware: 1
user_929	amenity-bar: 5	amenity-bank: 3	amenity-pharmacy: 2	amenity-pub: 2	shop-bakery: 2
user_930					
user_931	shop-furniture: 3	amenity-bank: 2	shop-beauty: 2	amenity-casino: 1	amenity-cafe: 1
user_932	leisure-garden: 1	amenity-bank: 1			
user_933	leisure-fitness_centre: 2	amenity-hospital: 2	amenity-courthouse: 1	amenity-cafe: 1	leisure-pitch: 1
user_934	amenity-bar: 5	amenity-restaurant: 5	amenity-pub: 4	shop-bakery: 3	shop-supermarket: 1
user_935	leisure-pitch: 4	amenity-school: 3	leisure-park: 2	shop-confectionery: 1	amenity-theatre: 1
user_936	leisure-garden: 7	amenity-school: 1	shop-supermarket: 1	shop-convenience: 1	amenity-cafe: 1
user_937	amenity-school: 1	leisure-park: 1	amenity-theatre: 1	leisure-pitch: 1	shop-confectionery: 1
user_938	shop-hairdresser: 3	shop-confectionery: 2	shop-convenience: 2	shop-hardware: 1	amenity-bar: 1
user_939	shop-hairdresser: 5	leisure-park: 4	amenity-cafe: 4	amenity-bank: 3	shop-supermarket: 2
user_940	amenity-restaurant: 10	amenity-pub: 3	amenity-nightclub: 2	historic-memorial: 1	tourism-attraction: 1
user_941	amenity-cafe: 7	amenity-restaurant: 7	leisure-pitch: 6	amenity-bar: 5	shop-hairdresser: 5
user_942	shop-hairdresser: 6	amenity-restaurant: 5	leisure-park: 4	shop-confectionery: 4	shop-convenience: 3
user_943	shop-furniture: 3	leisure-pitch: 3	shop-bakery: 2	shop-hairdresser: 2	amenity-restaurant: 1
user_944	leisure-pitch: 4	shop-hairdresser: 4	amenity-bank: 3	amenity-school: 2	amenity-pharmacy: 2
user_945	leisure-park: 5	leisure-pitch: 3	leisure-sports_centre:	amenity-school: 2	amenity-bank: 2

			2		
user_946	leisure-pitch: 3	leisure-swimming_pool: 1	amenity-school: 1	amenity-theatre: 1	amenity-pharmacy: 1
user_947	leisure-pitch: 3	amenity-school: 2	amenity-bar: 2	amenity-cafe: 1	shop-bakery: 1
user_948	amenity-restaurant: 4	leisure-park: 1	amenity-cafe: 1	natural-wood: 1	
user_949	leisure-park: 2	shop-hairdresser: 2	shop-furniture: 2	amenity-bar: 1	amenity-restaurant: 1
user_950					
user_951	amenity-fast_food: 1				
user_952	leisure-park: 1				
user_953	amenity-restaurant: 2	amenity-bar: 1			
user_954	leisure-pitch: 3	leisure-swimming_pool: 1	leisure-park: 1	amenity-school: 1	amenity-bar: 1
user_955	amenity-school: 1				
user_956	amenity-bank: 2	amenity-townhall: 1	amenity-cinema: 1	shop-beauty: 1	
user_957	amenity-cafe: 3	amenity-fast_food: 2	natural-wood: 1	amenity-pub: 1	
user_958	amenity-cafe: 6	amenity-pub: 4	shop-convenience: 2	amenity-restaurant: 2	amenity-bank: 2
user_959	amenity-restaurant: 4	tourism-artwork: 4	amenity-pub: 3	amenity-cafe: 3	shop-convenience: 3
user_960	amenity-fast_food: 10	amenity-university: 6	amenity-cafe: 5	leisure-park: 3	amenity-pub: 3
user_961	amenity-fast_food: 5	amenity-school: 3	leisure-park: 1	leisure-playground: 1	tourism-artwork: 1
user_962	leisure-pitch: 2	leisure-park: 2	amenity-bar: 2	leisure-playground: 2	natural-wood: 1
user_963	natural-wood: 3	amenity-restaurant: 2	amenity-school: 1		
user_964	amenity-restaurant: 7	amenity-fast_food: 6	shop-beauty: 6	amenity-cafe: 5	amenity-pharmacy: 2
user_965	amenity-fast_food: 5	shop-convenience: 3	amenity-restaurant: 2	amenity-pharmacy: 2	amenity-doctors: 1

user_966	amenity-restaurant: 2	amenity-cafe: 2	leisure-park: 1	leisure-playground: 1	
user_967	amenity-pub: 2	amenity-cafe: 1	amenity-restaurant: 1	shop-beauty: 1	shop-confectionery: 1
user_968	amenity-cafe: 6	historic-monument: 2	shop-hairdresser: 2	leisure-park: 2	leisure-playground: 1
user_969	amenity-restaurant: 7	amenity-cafe: 5	amenity-bar: 4	shop-bakery: 2	amenity-marketplace: 1
user_970	amenity-school: 3	leisure-park: 2	leisure-swimming_pool: 1	leisure-playground: 1	leisure-pitch: 1
user_971	leisure-pitch: 3	shop-hairdresser: 1	amenity-school: 1	amenity-theatre: 1	shop-furniture: 1
user_972					
user_973	amenity-school: 2	leisure-playground: 1	shop-car_repair: 1	shop-confectionery: 1	leisure-pitch: 1
user_974	office-university: 4	amenity-university: 1			
user_975	amenity-pub: 2	leisure-park: 1	shop-supermarket: 1	amenity-university: 1	amenity-place_of_worship: 1
user_976	amenity-restaurant: 7	amenity-bar: 5	shop-hairdresser: 4	amenity-bank: 3	amenity-cafe: 3
user_977	shop-bakery: 2	amenity-clinic: 1	shop-hairdresser: 1	amenity-bar: 1	
user_978	amenity-restaurant: 2	shop-furniture: 1	amenity-community_centre: 1	amenity-school: 1	amenity-college: 1
user_979	amenity-school: 2	leisure-park: 2	amenity-place_of_worship: 2	amenity-pharmacy: 2	tourism-artwork: 2
user_980	shop-supermarket: 1	amenity-restaurant: 1	leisure-swimming_pool: 1		
user_981	amenity-school: 3	amenity-bank: 3	amenity-pharmacy: 2	shop-beauty: 2	amenity-cafe: 2
user_982	leisure-garden: 2	amenity-school: 2	leisure-park: 1	shop-hardware: 1	shop-bakery: 1
user_983	amenity-place_of_wors	amenity-school: 3	leisure-park: 2	shop-supermarket: 1	amenity-cafe: 1

	hip: 4				
user_984	leisure-pitch: 4	amenity-school: 2	leisure-park: 1	amenity-theatre: 1	shop-confectionery: 1
user_985	office-university: 2	leisure-park: 2	amenity-university: 1	leisure-pitch: 1	
user_986	amenity-fast_food: 11	amenity-cafe: 7	shop-confectionery: 4	amenity-restaurant: 4	shop-department_store: 3
user_987	amenity-fast_food: 6	amenity-bank: 4	shop-car_repair: 3	amenity-restaurant: 3	shop-convenience: 3
user_988	leisure-park: 3	amenity-university: 2	amenity-pub: 2	amenity-clinic: 1	amenity-place_of_worse_hip: 1
user_989	amenity-fast_food: 8	amenity-place_of_worse_hip: 3	shop-hairdresser: 3	amenity-restaurant: 2	shop-supermarket: 2
user_990	amenity-school: 2	leisure-park: 1	leisure-sports_centre: 1	leisure-track: 1	
user_991	amenity-school: 3	amenity-place_of_worse_hip: 1	shop-supermarket: 1		
user_992	leisure-park: 2	amenity-hospital: 1	amenity-park: 1	amenity-nightclub: 1	shop-convenience: 1
user_993	leisure-sports_centre: 2	leisure-park: 1	amenity-place_of_worse_hip: 1	amenity-dentist: 1	amenity-cinema: 1
user_994	leisure-garden: 45	tourism-artwork: 3	amenity-restaurant: 3	amenity-place_of_worse_hip: 2	leisure-park: 1
user_995	amenity-school: 7	leisure-park: 1	natural-wood: 1	amenity-place_of_worse_hip: 1	
user_996	amenity-fast_food: 5	amenity-cafe: 4	shop-convenience: 3	amenity-restaurant: 3	shop-confectionery: 2
user_997	leisure-park: 3	amenity-university: 2	leisure-sports_centre: 1	leisure-garden: 1	
user_998	amenity-fast_food: 5	amenity-pub: 2	shop-furniture: 2	tourism-artwork: 1	amenity-college: 1

user_999	amenity-school: 1				
user_1000	tourism-artwork: 2	shop-supermarket: 1	leisure-garden: 1	amenity-bar: 1	
user_1001	amenity-dentist: 1	amenity-doctors: 1	leisure-playground: 1	craft-brewery: 1	amenity-pub: 1
user_1002	amenity-doctors: 1				
user_1003	amenity-restaurant: 3	tourism-artwork: 2	shop-hairdresser: 1	shop-convenience: 1	leisure-park: 1
user_1004	amenity-restaurant: 2	amenity-college: 1	shop-supermarket: 1	amenity-place_of_worship: 1	tourism-artwork: 1
user_1005	leisure-swimming_pool: 3	shop-supermarket: 1			
user_1006	leisure-park: 1	shop-tattoo: 1	leisure-sports_centre: 1		
user_1007	amenity-place_of_worship: 4	amenity-pub: 2	shop-car_repair: 2	shop-convenience: 1	
user_1008	leisure-garden: 1	amenity-school: 1	leisure-park: 1		
user_1009	amenity-place_of_worship: 1				
user_1010	amenity-fast_food: 4	shop-convenience: 3	amenity-place_of_worship: 2	shop-confectionery: 2	amenity-bank: 2
user_1011	amenity-fast_food: 3	shop-hairdresser: 2	amenity-school: 2	leisure-park: 1	leisure-playground: 1
user_1012	shop-supermarket: 1	leisure-park: 1			
user_1013	shop-supermarket: 4	amenity-fast_food: 3	amenity-restaurant: 2	amenity-school: 1	amenity-pub: 1
user_1014	amenity-pub: 1	shop-supermarket: 1	amenity-cafe: 1		
user_1015	leisure-garden: 7	amenity-kindergarten: 1	amenity-fast_food: 1		
user_1016	leisure-garden: 43	amenity-school: 1	amenity-cafe: 1		

user_1017	amenity-place_of_wors hip: 2	amenity- restaurant: 2	shop-furniture: 1	amenity- school: 1	shop- convenience: 1
user_1018	amenity- restaurant: 2	leisure-garden: 1	amenity- cinema: 1	leisure- sports_centre: 1	amenity- dentist: 1
user_1019	leisure-park: 1	amenity- college: 1	amenity- restaurant: 1		
user_1020	shop- hairdresser: 2	amenity- pharmacy: 2	shop- convenience: 2	shop- supermarket: 1	amenity-cafe: 1
user_1021	shop- supermarket: 1				
user_1022	leisure-park: 1				
user_1023	leisure-park: 1	amenity-bank: 1	amenity-cafe: 1	shop- hardware: 1	amenity- school: 1
user_1024	amenity- dentist: 2	amenity- school: 1	amenity- doctors: 1		
user_1025	amenity- college: 2	amenity- university: 2	shop- car_repair: 1		
user_1026	amenity- school: 1	amenity-pub: 1			
user_1027	leisure-park: 2	leisure-garden: 1			
user_1028	leisure-garden: 16	amenity- fast_food: 3	amenity- pharmacy: 2	amenity- college: 1	amenity-bank: 1
user_1029	amenity-police: 1				
user_1030					
user_1031	leisure- sports_centre: 1	leisure- swimming_poo l: 1	amenity- place_of_wors hip: 1	amenity- school: 1	
user_1032	amenity- fast_food: 8	shop- hairdresser: 3	amenity-bank: 2	leisure- fitness_centre: 1	amenity-bar: 1
user_1033					
user_1034	amenity- fast_food: 4	shop- supermarket: 2	shop- hairdresser: 2	shop- convenience: 2	amenity- school: 1
user_1035	tourism- artwork: 13	amenity- cinema: 1	amenity- fast_food: 1	amenity-studio: 1	
user_1036	amenity- restaurant: 1				

user_1037	amenity-school: 3	amenity-place_of_wors hip: 1	shop-hairdresser: 1	leisure-park: 1	
user_1038	amenity-fast_food: 2	amenity-school: 1	amenity-college: 1	amenity-pub: 1	shop-hairdresser: 1
user_1039	leisure-park: 1	amenity-hospital: 1			
user_1040	leisure-park: 1	shop-supermarket: 1	natural-wood: 1		
user_1041	office-university: 3	amenity-university: 1			
user_1042	shop-car_repair: 2	amenity-place_of_wors hip: 1	shop-convenience: 1	amenity-kindergarten: 1	
user_1043					
user_1044	amenity-restaurant: 3	amenity-school: 1	amenity-bar: 1	amenity-bank: 1	shop-hardware: 1
user_1045	amenity-school: 1				
user_1046	tourism-artwork: 12	amenity-cafe: 2	amenity-fast_food: 2	shop-confectionery: 1	shop-convenience: 1
user_1047	amenity-university: 1	amenity-kindergarten: 1	leisure-pitch: 1		
user_1048	tourism-artwork: 5	amenity-pub: 2	amenity-bank: 2	amenity-cafe: 2	leisure-park: 1
user_1049	amenity-place_of_wors hip: 2	leisure-park: 1	amenity-pub: 1	shop-convenience: 1	amenity-school: 1
user_1050	tourism-artwork: 5	amenity-fast_food: 1	amenity-veterinary: 1		
user_1051	amenity-place_of_wors hip: 1				
user_1052	leisure-garden: 1	leisure-park: 1	amenity-place_of_wors hip: 1	amenity-school: 1	shop-supermarket: 1
user_1053	amenity-restaurant: 3	amenity-fast_food: 3	amenity-cafe: 2	amenity-food_court: 1	amenity-bar: 1