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> Databases I, Winter term 2014-2015 Project Description "Advise the Tourist!"

This project builds upon the ongoing success of various recommendation systems. Unlike the old ways of reserving hotels and planning a trip, most people currently use online rating systems to decide on where to go. In addition, social networks are currently also used as a method to know what people with similar interests think about a specific place before visiting it.

# 1 Project Specifications

You are required to implement a robust system based on a well designed database that stores interactions between its different users in addition to the different types of ratings and assessments the users provide about the different places. The system has to satisfy the specifications described below.

#### Members

The network differentiates between different types of members. There are the normal users of te systems. However, a user can also be the manager/administrator of a specific place on our network.

All members join the network by signing up for accounts using their emails. The system keeps track of the first name, last name, phone number(s), nationalty and addresses of its users.

Members could add other members as friends on the system. A friendship is confirmed if and only if the added person accepts the friend request.

That way, they can see which places they have been to. Friends can send a thread of messages to each other.

A user can just like a place he has been to without giving specific ratings.

### Places

To be able to help different tourists all over the world, the system allows its users to rate different types of places including cities, hotels, restaurants, museums, monuments.

The system records the name of the place, it's building date (if known) and **rest of attributes**. Every place has to provide its google maps attributes (longitude and latitude) to be used in the recommendation. For every city, the system has to keep track of its location. In addition, the system also records whether it is a coastal city.

For restaurants, the system should keep track of the cuisine and style.

For every hotel, the price of the different types of room should be recorded (if known) along with the available facilities in the hoteland their description (e.g. beach, pool, activities area).

For museums, the hours of opening and closing should be saved along with the price of the tickets if available.

A short description should be available for all monuments.

The admin/manager(s) of a place should upload professional pictures to try and attract people. In addition, users can upload images for a specific place they have liked or rated.

Each place will have a page on our system. Such page displays the information provided by the place page's manager(s)/administrator(s). In addition, it should also contain the various ratings and comments

given by the users. Through this page, users are able to ask questions regarding the place as discussed later.

In order to add a new place to the system, the manager/admin of the place should contact our system's administrator to invite him/her to the system as an admin to the place. A place admin/manager can invite other admins to the system to manage the place's page.

### Rating

Different types of places are rated according to different criteria. A user can add a rating criteria. People can rate places they have been to in order to advise others to it.

Here are some of the criteria places could be rated through:

- For Hotels: Sleep Quality, Location, Rooms, Service, Value, Cleanliness: Excellent, Very good, Average, Poor, Terrible.
- For Restaurants: Food, Service, Value, Atmosphere

#### Comments

Our system aims at helping its users make a quick decision based on the numbers they see and the recommendations they get. Thus, they are only able to provide small comments about a place. A comment can be a maximum of 100 characters long.

In addition, users can use hashtag comments for the places. Hashtags should contain a maximum of 50 charachters.

## Questions and Answers

Each member of the system can add questions on the different pages. The manager/adminsrator of a specific place can respond to such questions.

The questions and their responses could be viewed on the place page.