

## TravelAdvisor

Use Object-Oriented Analysis and Design (Classes, Objects, Inheritance, Polymorphism, etc.), SQL Server and Java to complete a simulation of the famous website [www.tripadvisor.com](http://www.tripadvisor.com), named as TravelAdvisor. Submit your project completion to BlackBoard.

**TripAdvisor, Inc.** is an American travel and restaurant website company that shows hotel and restaurant reviews, accommodation bookings and other travel-related content. It also includes interactive travel forums. Most contents of the website are user-generated.

Due to the limited time you have, we only implement the website's Things to Do feature.

The requirements of this project are explained as follows.

- In order to use the system, each user needs to register an account and login the account. The account ID is unique (between 3 and 10 characters), and must contain at least one letter and one digit. Also, the password cannot be the same as the login ID. Use other requirements to decide what kind of attributes you will need for a profile of an account.
- There is another account which works as an administrator. For this account, its account id and password are both "admin". It does not need to do a registration to create this account. Just manually insert the account into the database.
- When a user registers an account, he or she needs to enter 1 or more tags for being included in his/her profile. The choices of tags are: History Buff, Shopping Fanatic, Beach Goer, Urban Explorer, Nature Lover and Family Vacationer.

- A user can create an attraction, such as Big Bend National Park, Miami Beach, Johnson Space Center. When each attraction is created, it needs to include a short description of the attraction and its location information including State and City. Also, it needs to create at least one tag for the attraction, including History, Shopping, Beach, Urban, Nature or Family. The attraction becomes available only if it is approved by the administrator account.
- A user can search attractions based on its tag(s) or city. For example, if a user searches “beach”, your program will display all of the attractions with a tag of “Beach”, sorted by their scores (will be defined later). Then, the user can select an attraction to view.
- When a user searches for a city and selects the city to view, your program will also display all of the attractions located in the city, sorted by their scores. Then, the user can select an attraction to view.
- A user can post reviews for an attraction.
- A user can give a score for an attraction based on his/her favorite. A score is ranged between 1 to 5, and 5 is the highest one.
- When an attraction is selected, it will display the average score of the attraction by using a float number with 1 digit after the decimal point, e.g., 4.2. It will also display all of the reviews about the attraction.
- A user can save his/her favorite places or attractions into “My Favorite Destinations”. Then, he/she can go there to get information of the places quickly. A favorite destination can be a city or an attraction.
- For each attraction, there is a Q&A. A user can ask a question over there. The question can be answered by any other users. If the question is answered and the answer is not read by the user asking the question, the system will send a notification to the asking user to remind him/her that his/her question is answered.

After the answer is read by the user, the notification is gone.

- After a user's login, your program will display three highest-scored attractions based on his/her profile tags, labelled as "You May Like". The user can select any one from them to view.
- Design a menu for what a user can do just like the BankSystem project we did.
- In the administrator account, it keeps pending requests for creating an abstraction. The administrator can select one to approve or reject. If the abstraction is approved, it will become available for viewing, comments, voting, Q&A..... If it is rejected, it will become unavailable. The pending request is gone after it is approved or rejected.