

DATABASE MANAGEMENT SYSTEMS

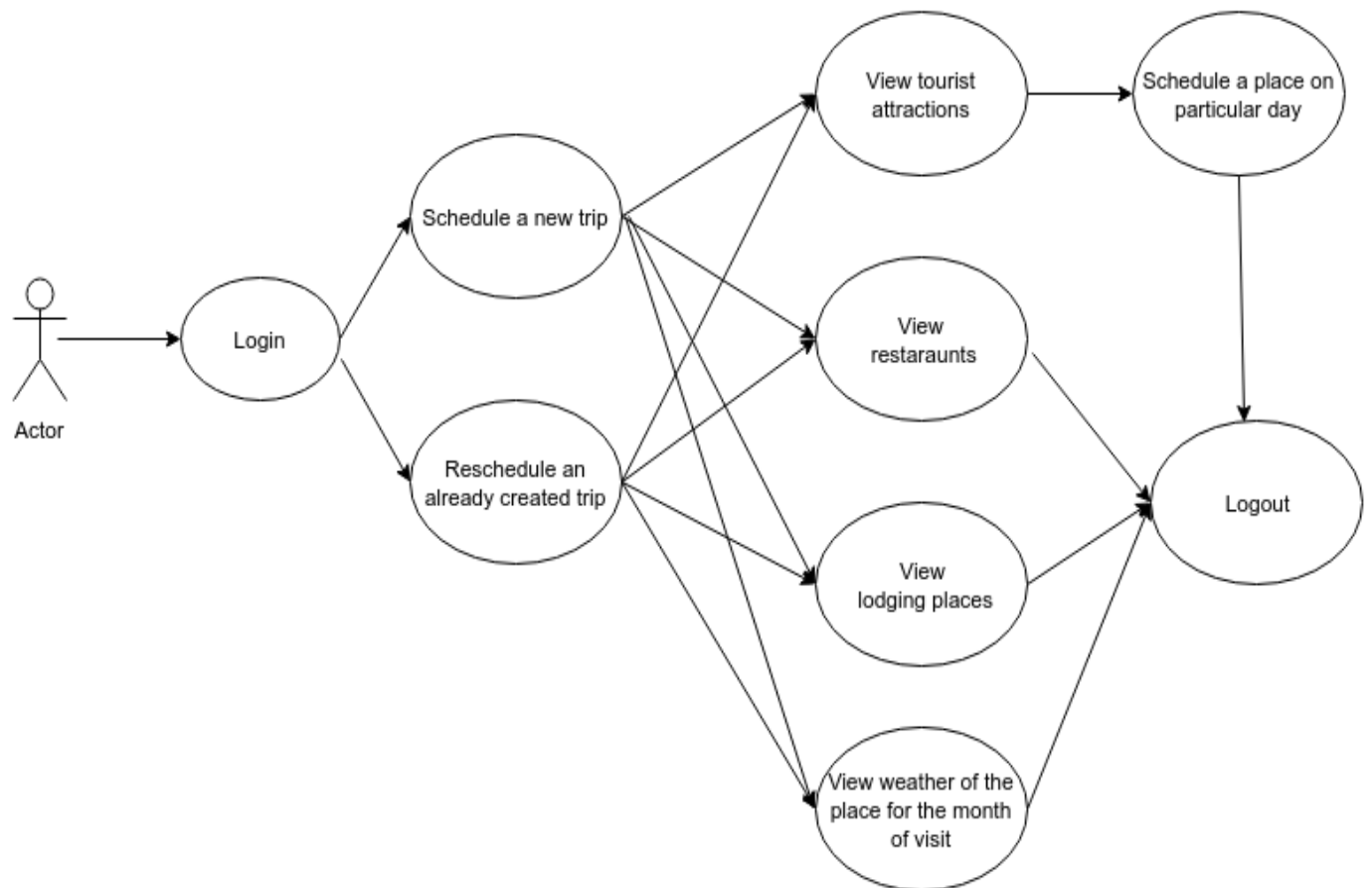
Assignment 4

Trip Planner (Web-mashup)

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Workflow Diagram:-



Motivation:

- Various aspects have to be taken into account while planning a better trip such as:-
 - Where to stay?
 - What places to visit?
 - Where to eat?
- To get a high level view of these things while planning a trip, it should not be necessary to visit the different websites to search for locations to visit, hotels to stay in and restaurants to eat. It will be quite helpful if we have an integrated system providing all these facilities under one umbrella.
- We can create a common platform where the user can focus on planning a convenient trip and the user can fix the different aspects of his trip at a single place without visiting different websites.

API's used:-

- [Foursquare API](#)
- [Wikipedia API](#)
- [Flickr API](#)
- [World Weather Online API](#)
- [AJAX Live Search API](#)
- [Google Services](#)
 - Autocomplete API
 - Maps API
 - Places API

Software Requirements:-

- PhP 5.2 or above
- Mysql server
- HTML/PHP web hosting server

Features:-

- Single login per username
- Each user has an option to plan a new Trip. The user needs to provide the place name, number of days of trip and the expected month of the trip to start planning a new trip.
- Each user also has the facility to view and reschedule an already saved trip of him/her.
- User can view different places to visit at the trip, different restaurants available for him/her, different hotels available, weather of the place in the month of trip, photos clicked by other people of the place and also the historical facts about the place.
- User can schedule a place to visit on a particular day. An option to reschedule the trip has also been provided.
- Option has been provided for the user to view the whole trip planned till now at one place.

Methodology:-

In this project, we have used several web based APIs to build our website.

Initially user can search for a place to start a trip, google autocomplete for places is used for searching places, and along with the place user can enter number of days he want to be there and the starting date of his trip. After selecting the places the trip is created and tourist places, hotels, restaurants, weather, photo gallery, and wikipedia info of that place is retrieved.

The tourist locations are retrieved using the foursquare api call and then using the place-id returned for each place we retrieve the photo corresponding to that place using another api call.

For eg(Place is set to New Delhi):-

[API call used for retrieving tourist places](#)

[API call used for retrieving photos](#)

According to the places retrieved, markers are placed at their location on the map. Whenever you click on a specific place the marker corresponding to that place gets animated so that you get to know the location of that place. Also if you click on a marker a sliding window appears on the left showing which place that marker corresponds to

Similarly hotels and places were retrieved using similar api calls of foursquare. For hotels additional information is displayed when you click on specific hotel, its Address, Rating, Contact No. and Website URL is displayed.

When user clicks on the different tabs the markers on the map gets changed accordingly.

Gallery is constructed using the Flickr photos of that place.

[Flickr api call for retrieving Flickr photos](#) -

When you click on the city name a sliding window appears showing the details about that place. Wikipedia API is used that. Generally this is contained in the first paragraph of a wikipedia article. We extract the first paragraph of the wikipedia page using wikipedia's api call.

For eg:- [Wiki extract for New Delhi](#)

WorldWeatherOnline API is used for extracting the past weather of a place. We fetched past weather data for the past 12 months using the api.

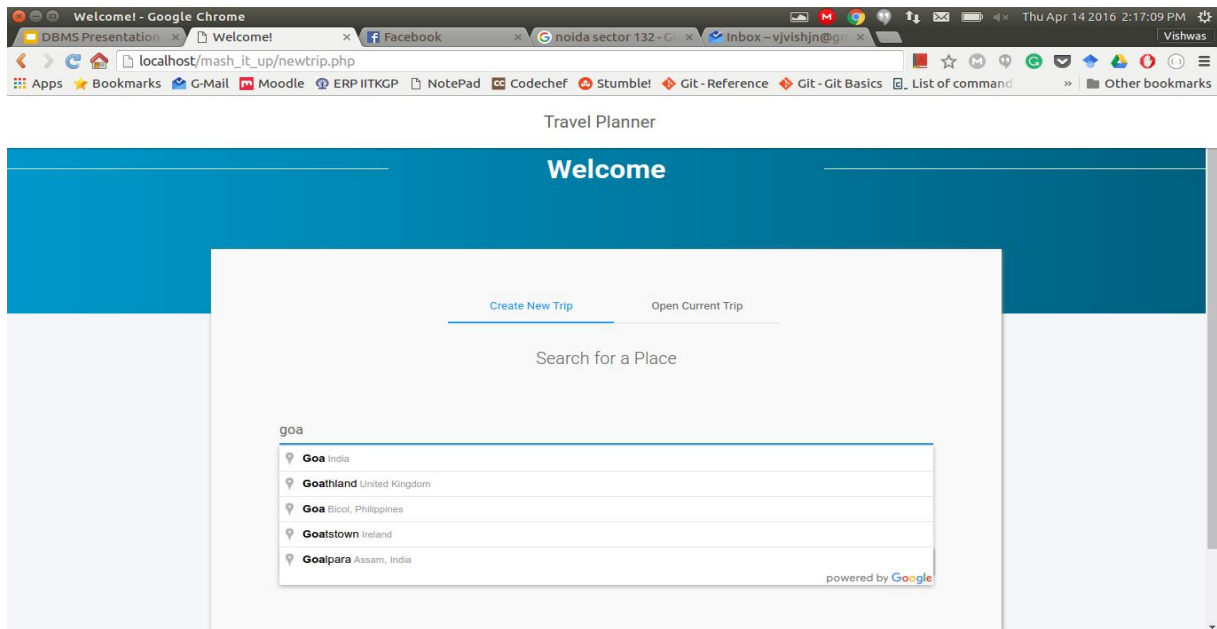
For eg:- [Weather of Mumbai for last 12 months API call](#)

The api returns data for each month. We then took the average, maximum and minimum of all the data returned month wise and store it in a database of around 250 places in India.

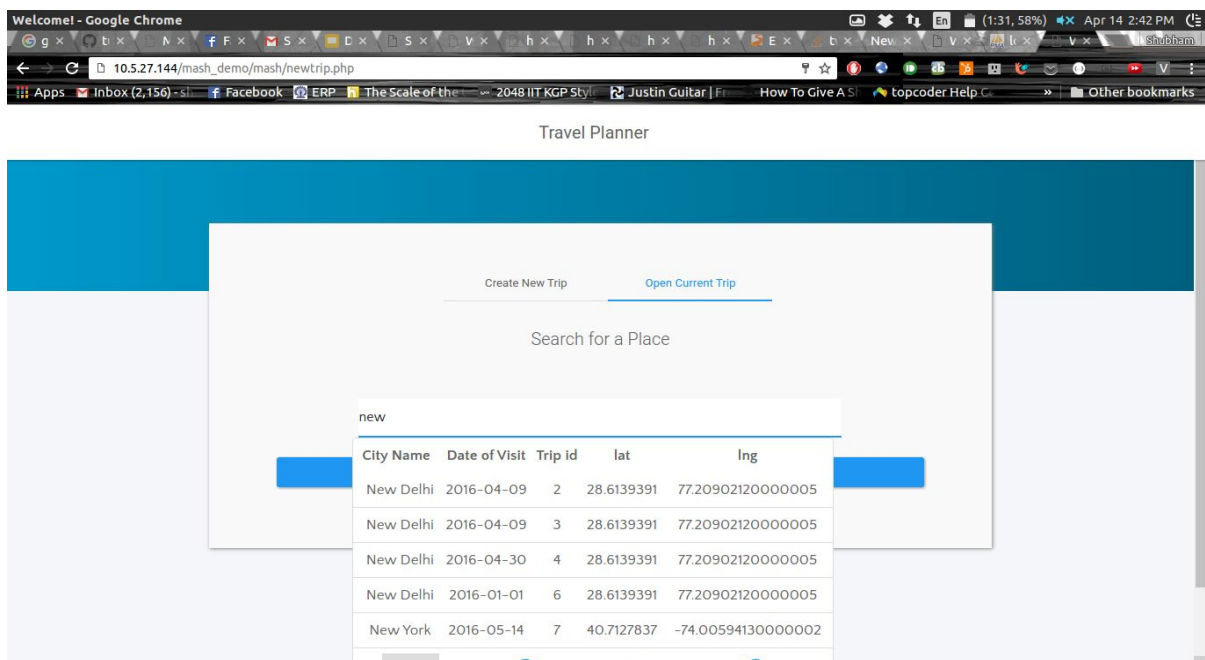
We maintain the user's scheduled trip in a database and fetch it from the database whenever it is needed. We are using AJAX Live search API to query our database. AJAX live search API provides us with autocomplete feature on a local database. Then the user's trip gets loaded onto the page and user can view what places were scheduled on which day. The user can also view the complete trip scheduled by clicking on "View Trip" button and then he can see what places are scheduled on which day and also their corresponding markers on the map.

Screenshots :

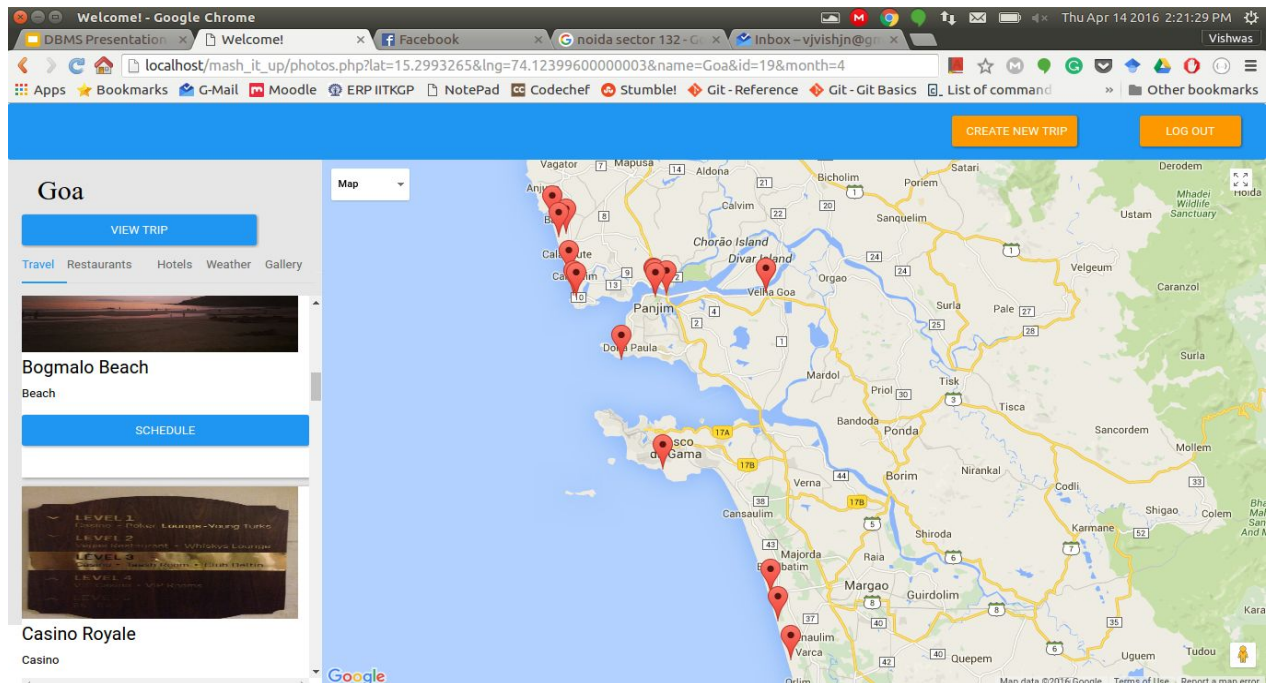
Google Place Search Autocomplete :



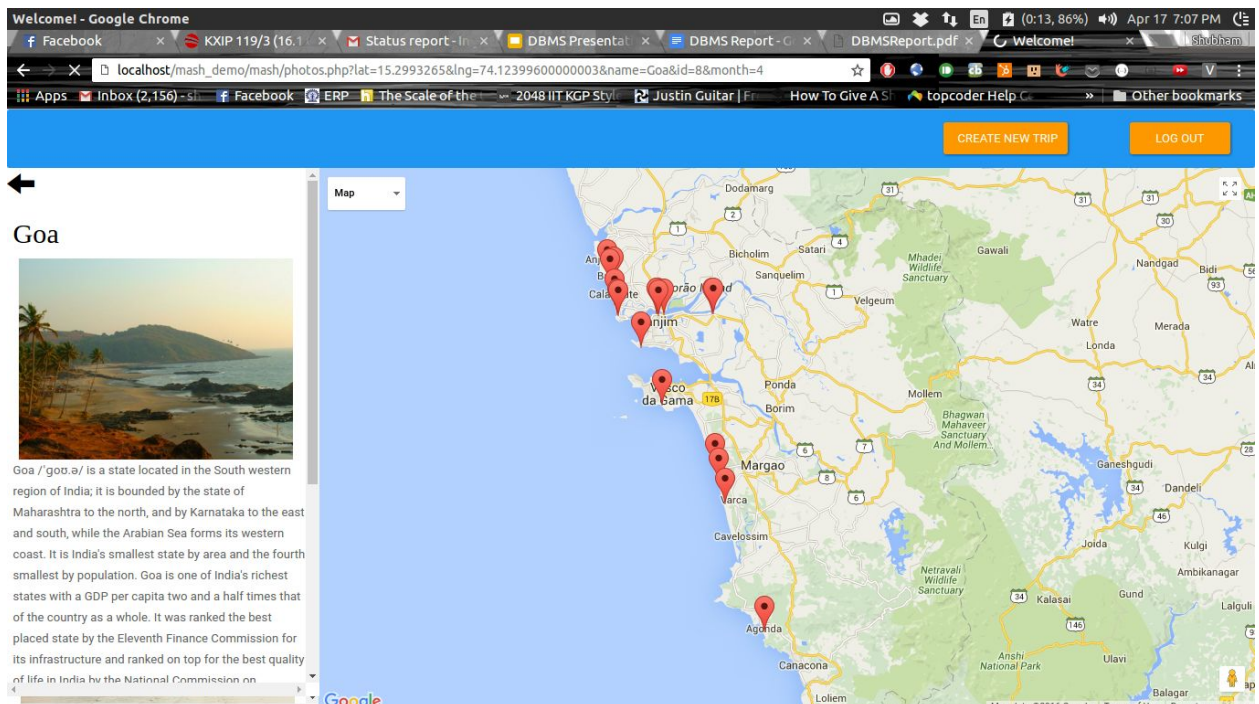
Ajax Live Search for searching already planned trips :



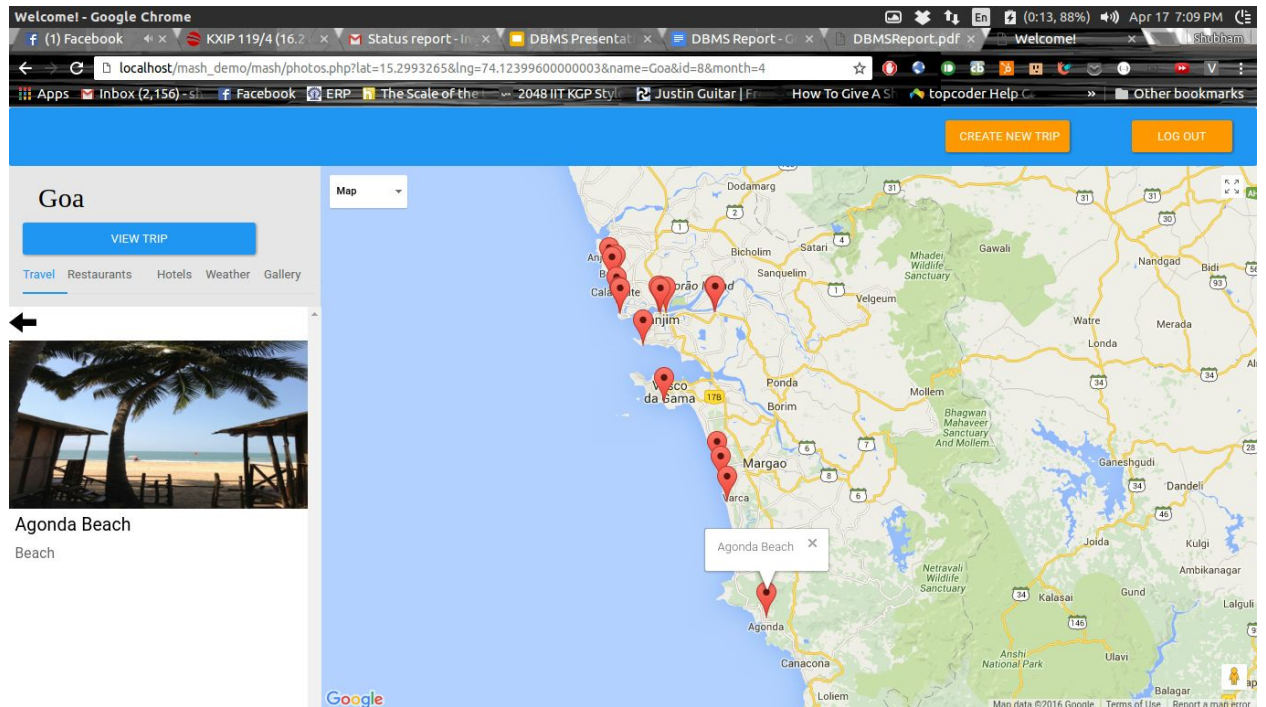
Tour Page:



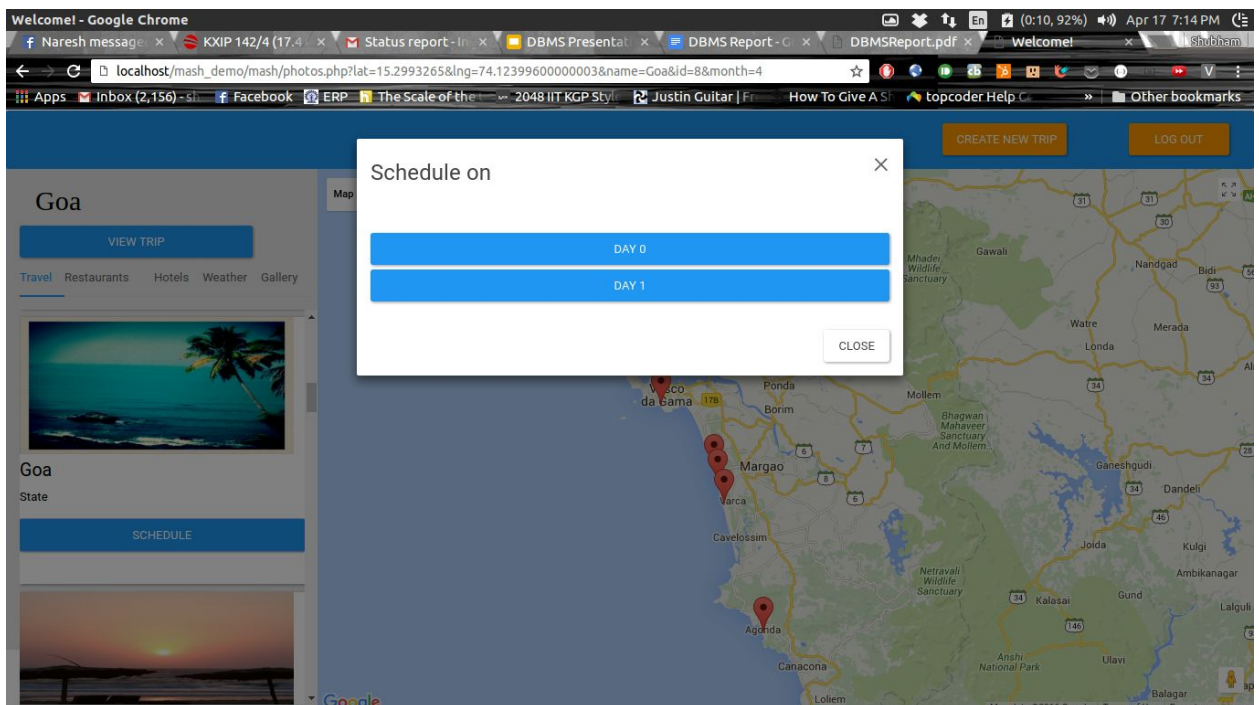
Wikipedia Info (When Clicked on City Name):



Place Shown corresponding to marker clicked:



Place can be Scheduled by clicking on schedule button corresponding to that place:



Trip Overview when clicked on View Trip Button:

