

API Documentation

1. Get Hotel Analytics

API to process file (if present) and upload its data into database. Returns JSON response with the phrase as the key and list of hotel, minimum, maximum and average ratings corresponding to the services.

Request

Method	URL
GET/ POST	<a href="http://localhost:8000/get_scores/<topic*>/">http://localhost:8000/get_scores/<topic*>/

Optional parameter. In case of missing argument, all the phrases are considered.

URL Parameter	Mandatory	Value Type	Description
topic*	O	String	Phrase such as Service/Internet/Cleanliness

Optional parameter. In case of missing argument, all the phrases are considered.

POST Data Structure

Params	Mandatory	Value Type	Constraints/ possible values	Description
file	M	files	Must be a json file	Accepts file and processes it.

Note:

- M stands for Mandatory parameters
- O stands for Optional parameters.

Example Request POST Data:

```
curl -X POST -F 'file=@<path-to-file>' http://localhost:8000/get_scores/Service/
```

Response

```
{
  "Service": [
    {"hotel_name": "Holiday Inn Los Angeles International Airport", "max": 5, "avg": 3.3, "min": 1},
    {"hotel_name": "Shores Resort and Spa", "max": 5, "avg": 4.2, "min": 1},
    {"hotel_name": "BEST WESTERN PLUS Eagle Rock Inn", "max": 5, "avg": 3.6, "min": 1}
  ],
  "Cleanliness": [
    {"hotel_name": "BEST WESTERN PLUS Eagle Rock Inn", "max": 5, "avg": 4.2, "min": 2},
    {"hotel_name": "Shores Resort and Spa", "max": 5, "avg": 4.4, "min": 1},
    {"hotel_name": "Holiday Inn Los Angeles International Airport", "max": 5, "avg": 3.6, "min": 1}
  ],
}
```

```

"Overall": [
  {"hotel_name": "Shores Resort and Spa", "max": 5, "avg": 4.2, "min": 1},
  {"hotel_name": "BEST WESTERN PLUS Eagle Rock Inn", "max": 4, "avg": 3.4, "min": 1},
  {"hotel_name": "Holiday Inn Los Angeles International Airport", "max": 5, "avg": 3.1, "min": 1}
]
}

```

Status	Example Response
200	{ "Cleanliness": [{ "max": 5.0, "avg": 4.4, "hotel_name": "Shores Resort and Spa", "min": 1.0}, { "max": 5.0, "avg": 4.2, "hotel_name": "BEST WESTERN PLUS Eagle Rock Inn", "min": 2.0}, { "max": 5.0, "avg": 3.6, "hotel_name": "Holiday Inn Los Angeles International Airport", "min": 1.0}] }
400	{ "Status": 400, "Message": "Missing File." }
400	{ "Status": 400, "Message": "Invalid file" }
404	{ "Status": 404, "Message": "Invalid topic requested" }

Architectural Level

1. Database - PostgreSQL

Following tables are created when django migrations are being run.

PostgreSQL is being used because it allows easy relational database storage with transactional level data and aggregations. Foreign key relations allowed tables without overcrowding with data.

Table Schema

Table "statistics_hotelinfo"

Column	Type	Modifiers
id	integer	not null default nextval
hotel_id	character varying(64)	not null
name	character varying(512)	not null
url	character varying(256)	not null
image_url	character varying(256)	not null
price	character varying(16)	
address_locality	character varying(64)	not null
address_pincode	integer	not null
address_region	character varying(64)	not null
address_street	character varying(64)	

Referenced by:

FOREIGN KEY (hotel_id) REFERENCES statistics_hotelinfo(id)

FOREIGN KEY (hotel_id) REFERENCES statistics_hotelinfo(id)

Table "statistics_hotelreviews"

Column	Type	Modifiers
id	integer	not null default nextval
review_id	character varying(64)	not null
title	character varying(128)	not null
author	character varying(128)	not null
author_location	character varying(128)	not null
review_date	timestamp with time zone	not null
content	character varying(5126)	not null
hotel_id	integer	not null

Foreign-key constraints:

FOREIGN KEY (hotel_id) REFERENCES statistics_hotelinfo(id)

Referenced by:

FOREIGN KEY (review_id) REFERENCES statistics_hotelreviews(id)

Table "statistics_hotelratings"

Column	Type	Modifiers
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id	integer	not null default
topic	character varying(64)	not null
score	integer	not null
hotel_id	integer	not null
review_id	integer	not null

Foreign-key constraints:

FOREIGN KEY (review_id) REFERENCES statistics_hotelreviews(id)

FOREIGN KEY (hotel_id) REFERENCES statistics_hotelinfo(id)

Table "statistics_semanticsinfo"

Column	Type	Modifiers
id	integer	not null default nextval
phrase	character varying(32)	not null
semantic_type	character varying(16)	not null
value	numeric(2,1)	not null