

# Mobile Backend Development

Lab - Restful API (2)

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## Restaurant

- Name
- address
- image\_url
- avg\_rating
- Delivery hours...
- Opening time

## Food

- Name
- price
- promo\_price
- Description
- image\_url

- 1 Restaurant have many foods
- 1 restaurant have many reviews
- 1 order can have many orderItem
- 1 orderItem can have many food
- 1 restaurant has many order
- 1 Order can have one restaurant
- 1 food has one restaurant...
- 1 user can have many review
- 1 user can have manu orders..

## Review

- Name
- date
- rating
- comment

## OrderItem

- Food
- Quantity
- notes

## Order

- OrderItem
- Billing
- User
- 

## User

- name
- email
- Phone number
- address
-

Database Action	Route / url	Method
Create	/places	POST
Read - GET all - Get a particular place from db	/places <b>/places/:id</b>	GET
Update	<b>/places/:id</b>	PUT
Delete	<b>/places/:id</b>	DELETE

## Places

- Name
- Description
- Email
- Phone number
- rating...

## Review

- Name
- date
- rating
- comment

1 place have many reviews

1 review belong to a particular place

# Routing

Operation	Route	Method
Create	/places/:place_id/reviews	POST
Read	All - /places/:place_id/reviews Particular id - /places/:place_id/reviews/:review_id	GET
Update	/places/:place_id/reviews/:review_id	PUT
Delete	/places/:place_id/reviews/:review_id	DELETE

New average rating = (averagerating \* rating.length) + newrating / (rating.length + 1)

$$= (0 * 0) + 5 / (0 + 1) = 5$$

$$= (5 * 1) + 3 / (1 + 1) = 4$$

$$= (4 * 2) + 4 / (2 + 1) = 4$$

$$= (4 * 3) + 2 / 4 = 3.5$$

# Mini Projects

- You will need to build an API based on scenario given.
- You have to identify the requirement, some scenarios require a database and some will not.
- The projects need to be deployed to Heroku.

# Timestamp API

Build a full stack JavaScript app that is functionally similar to this: <https://timestamp-ms.herokuapp.com/> and deploy it to Heroku.

I can pass a string as a parameter, and it will check to see whether that string contains either a unix timestamp or a natural language date (example: January 1, 2016).

If it does, it returns both the Unix timestamp and the natural language form of that date.

If it does not contain a date or Unix timestamp, it returns null for those properties



# URL Shortener

Build a full stack JavaScript app that is functionally similar to this: <https://little-url.herokuapp.com/> and deploy it to Heroku.

**User Story:** I can pass a URL as a parameter and I will receive a shortened URL in the JSON response.

**User Story:** If I pass an invalid URL that doesn't follow the valid `http://www.example.com` format, the JSON response will contain an error instead.

**User Story:** When I visit that shortened URL, it will redirect me to my original link.

# Request Header Parser API

Build a full stack JavaScript app that is functionally similar to this:

<https://cryptic-ridge-9197.herokuapp.com/api/whoami/> and deploy it to Heroku.

I can get the IP address, language and operating system for my browser.