# Assignment 2: API Spec

## CS 493: Cloud Application Development

## Oregon State University

Change log	
Create a Business	
Get a Business	4
List all Businesses	5
Edit a Business	6
Delete a Business	8
List all Businesses for an Owner	9
Create a Review	10
Get a Review	12
Edit a Review	13
Delete a Review	15
List all Reviews for a User	16

## Change Log

Version	Change	Date
1.0	Initial version.	Oct 1, 2024

## Create a Business

Allows you to create a new business.

## POST /businesses

Request

Path Parameters

None

Request Body

Required

Request Body Format

JSON

#### Request JSON Attributes

Name	Description	Required?
owner_id	The ID of the owner. A number	Yes
name	The name of the business.	Yes
street_address	Street address of the business.	
city	City	Yes
state	Two letter code for the state	Yes
zip_code	5 digit zip code.	Yes

#### Request Body Example

```
{
  "owner_id": 123,
  "name": "Mandola's",
  "street_address": "4900 N Lamar Blvd",
  "city": "Austin",
  "state": "TX",
  "zip_code": 78751
}
```

#### Response

Response Body Format

JSON

## Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing any of the 6 required attributes, the business must not be created, and 400 status code must be returned.
		You don't need to validate the values of the attributes

	and can assume that if the request contains any of the listed attributes, then that attribute's value is valid.
	You can also assume that the request will not contain any extraneous attribute (i.e., the request JSON will never contain any attribute that is not listed above).

#### Response Examples

• Datastore will automatically generate an ID and store it with the entity being created. Your app must send back this value in the response body as shown in the example.

#### Success

```
Status: 201 Created

{
  "id": 156789,
  "owner_id": 123,
  "name": "Mandola's",
  "street_address": "4900 N Lamar Blvd",
  "city": "Austin",
  "state": "TX",
  "zip_code": 78751
}
```

```
Status: 400 Bad Request

{
"Error": "The request body is missing at least one of the required attributes"
}
```

## Get a Business

Allows you to get an existing business

```
GET /businesses/:business_id
```

#### Request

#### Path Parameters

Name	Description
business_id	ID of the business

#### Request Body

None

#### Response

## Response Body Format

**JSON** 

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No business with this business_id exists

#### Response Examples

#### Success

```
Status: 200 OK

{
    "id": 156789,
    "owner_id": 123,
    "name": "Mandola's",
    "street_address": "4900 N Lamar Blvd",
    "city": "Austin",
    "state": "TX",
    "zip_code": 78751
}
```

```
Status: 404 Not Found
{
"Error": "No business with this business_id exists"
}
```

## List all Businesses

List all the businesses.

#### **GET /businesses**

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

**JSON** 

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	

Response Examples

#### Success

```
Status: 200 OK
[
    "city": "Austin",
    "id": 5631671361601536,
    "name": "Mandola's",
    "owner_id": 1234123,
    "state": "TX",
    "street_address": "4900 N Lamar Blvd",
    "zip_code": 78751
    "city": "Austin",
    "id": 5632499082330112,
    "name": "Torchy Tacos",
    "owner_id": 412349834,
    "state": "TX",
    "street_address": "5024 Burnet Road",
    "zip_code": 78754
  }
```

## Edit a Business

Allows you to edit a business. Replacement semantics.

```
PUT /businesses/:business_id
```

#### Request

#### Path Parameters

Name	Description
business_id	ID of the business

## Request Body

Required

## Request Body Format

**JSON** 

## Request JSON Attributes

Name	Description	Required?
owner_id	The ID of the owner. A number	Yes
name	The name of the business.	Yes
street_address	Street address of the business.	
city	City	
state	Two letter code for the state	Yes
zip_code	5 digit zip code. Yes	

#### Request Body Example

```
{
  "owner_id": 123,
  "name": "Mandola's Italian",
  "street_address": "4900 N Lamar Blvd",
  "city": "Austin",
  "state": "TX",
  "zip_code": 78751
}
```

#### Response

## Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	If the request is missing any of the 6 required attributes, the business must not be updated, and 400 status code must be returned.
		You don't need to validate the values of the attributes and can assume that if the request contains any of the

		listed attributes, then that attribute's value is valid.
		You can also assume that the request will not contain any extraneous attribute (i.e., the request JSON will never contain any attribute other than the ones that are listed).
Failure	404 Not Found	No business with this business_id exists

## Response Examples

#### Success

```
Status: 200 OK

{
    "id": 156789,
    "owner_id": 123,
    "name": "Mandola's Italian",
    "street_address": "4900 N Lamar Blvd",
    "city": "Austin",
    "state": "TX",
    "zip_code": 78751
}
```

```
Status: 400 Bad Request

{
"Error": "The request body is missing at least one of the required attributes"
}
```

```
Status: 404 Not Found
{
    "Error": "No business with this business_id exists"
}
```

## Delete a Business

Allows you to delete a business. Note that if there are any reviews for a business, deleting the business also deletes those reviews.

#### DELETE /businesses/:business\_id

#### Request

#### Path Parameters

Name	Description
business_id	ID of the business

#### Request Body

None

#### Response

No body

## Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	404 Not Found	No business with this business_id exists

## Response Examples

#### Success

#### Status: 204 No Content

```
Status: 404 Not Found
{
"Error": "No business with this business_id exists"
}
```

## List all Businesses for an Owner

List all the businesses for an owner.

#### GET /owners/:owner\_id/businesses

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

**JSON** 

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	

Response Examples

#### Success

```
Status: 200 OK
[
    "city": "Austin",
    "id": 5631671361601536,
    "name": "Torchy's",
    "owner_id": 412349834,
    "state": "TX",
    "street_address": "5100 Mueller Drive",
    "zip_code": 78761
    "city": "Austin",
    "id": 5632499082330112,
    "name": "Torchy Tacos",
    "owner_id": 412349834,
    "state": "TX",
    "street_address": "5024 Burnet Road",
    "zip_code": 78754
```

## Create a Review

Allows you to create a new review.

#### POST /reviews

Request

Path Parameters

None

Request Body

Required

Request Body Format

**JSON** 

#### Request JSON Attributes

Name	Description	Required?
user_id	ID of the user. A number	Yes
business_id	ID of the business	Yes
stars	Number of stars, 0 to 5 (inclusive)	Yes
review_text	String	No

#### Request Body Example

```
{
  "user_id": 12134,
  "business_id": 156789,
  "stars": 4,
  "review_text": "Mandola's has great pasta"
}
```

#### Response

Response Body Format

**JSON** 

#### Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing any of the 3 required attributes, the business must not be created, and 400 status code must be returned.
		You don't need to validate the values of the attributes user_id, starts and review_text can assume that if the request contains any of the these attributes, then that attribute's value is valid. However, you cannot assume that a business with the provided value of business_id exists. If no such business exists, 404 status code must be returned.

		You can also assume that the request will not contain any extraneous attribute (i.e., the request JSON will never contain any attribute that is not listed above).
Failure	404 Not found	No business exists with the provided business_id
Failure	409 Conflict	A previous review already exists by this user for this
		business.

#### Response Examples

• Datastore will automatically generate an ID and store it with the entity being created. This value needs to be sent in the response body as shown in the example.

#### Success

```
Status: 201 Created

{
    "id": 19884,
    "user_id": 12134,
    "business_id": 156789,
    "stars": 4,
    "review_text": "Mandola's has great pasta"
}
```

```
Status: 400 Bad Request

{
"Error": "The request body is missing at least one of the required attributes"
}
```

```
Status: 404 Not found
{
"Error": "No business with this business_id exists"
}
```

```
Status: 409 Conflict
{
   "Error": "You have already submitted a review for this business. You can update
   your previous review, or delete it and submit a new review"
}
```

## Get a Review

Allows you to get an existing review.

```
GET /reviews/:review_id
```

#### Request

#### Path Parameters

Name	Description
review_id	ID of the review

## Request Body

None

#### Response

Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No review with this review_id exists

#### Response Examples

#### Success

```
Status: 200 OK

{
    "id": 19884,
    "user_id": 12134,
    "business_id": 156789,
    "stars": 4,
    "review_text": "Mandola's has great pasta"
}
```

```
Status: 404 Not Found
{
"Error": "No review with this review_id exists"
}
```

## Edit a Review

Allows you to edit a review. Partial update semantics. Only update the fields that are in the request.

#### PUT /reviews/:review\_id

Request

#### Path Parameters

Name	Description
review_id	ID of the review

Request Body

Required

Request Body Format

**JSON** 

#### Request JSON Attributes

Name	Description	Required?
stars	Number of stars, 0 to 5 (inclusive)	Yes
review_text	String	No

#### Request Body Example

```
{
  "stars": 4,
  "review_text": "Mandola's has great pasta. Mista salad is great too!"
}
```

#### Response

Response Body Format

JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	400 Bad Request	If the request is missing the attribute stars, the review must not be updated, and 400 status code must be returned.
		You don't need to validate the values of the attributes and can assume that if the request contains any of the listed attributes, then that attribute's value is valid.
		You can also assume that the request will not contain any extraneous attribute (i.e., the request JSON will never contain any attribute other than the ones that are listed).
Failure	404 Not Found	No review with review_id exists

Response Examples

Success

Status: 200 OK

```
{
  "id": 19884,
  "user_id": 12134,
  "business_id": 156789,
  "stars": 4,
  "review_text": "Mandola's has great pasta. Mista salad is great too!"
}
```

```
Status: 400 Bad Request

{
"Error": "The request body is missing at least one of the required attributes"
}
```

```
Status: 404 Not Found

{
"Error": "No review with this review_id exists"
}
```

## Delete a Review

Allows you to delete a review.

## DELETE /reviews/:review\_id

#### Request

#### Path Parameters

Name	Description
review_id	ID of the review

## Request Body

None

#### Response

No body

## Response Body Format

Success: No body

Failure: JSON

#### Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	404 Not Found	No review with this review_id exists

#### Response Examples

#### Success

#### Status: 204 No Content

```
Status: 404 Not Found

{
"Error": "No review with this review_id exists"
}
```

## List all Reviews for a User

List all the reviews.

#### GET /users/:user\_id/reviews

Request

Path Parameters

None

Request Body

None

Response

Response Body Format

**JSON** 

#### Response Statuses

Outcome	Status Code	Notes
Success	200 OK	

#### Response Examples

#### Success