

Web API Instructions

By using this web API, you will be able to:

- Find a receipt in the database using the user id and the image url of the receipt
- Add a new receipt to the database
- Update a receipt that is already in the database
- Delete an existing receipt

GET Request

Name	Method	Description
/receipt	GET	Find an existing receipt

Search Parameters

Name	Data Type	Required/Optional	Description
user	string	required	user id
image_url	string	required	encoded url of the receipt image

Sample Request

http://localhost:8080/Itemize/receipt?user=1

&image_url=http%3A%2F%2Fwww.samplerequest.com

(This sample request will access the receipt with user_id="1" and image_url="http://www.samplerequest.com")

Response Value

Name	Type	Definition
merchant name	String	Name of the store
merchant address	String	Address of the store (empty string if not exist)
expense category	String	category of the expense
purchase date	Date	Date of purchase (not the date when the entry was created)
subtotal	Float	Two digits after decimal
tips	Float	Two digits after decimal
discount	Float	Two digits after decimal
taxes	Float	Two digits after decimal
grand total	Float	Two digits after decimal
image url	String	url of the receipt image

Sample Response

- If no receipt is found

null

- If the corresponding receipt is found

```
{  
  "merchant name": "McDonald's",  
  "merchant address": "18 E 42nd St, New York, NY 10017",  
  "purchase date": "2017-01-15",  
  "subtotal": 3.5,  
  "grand total": 4,
```

```

    "taxes":0.5,
    "discount":0,
    "image url":"http://samplerequest.com",
    "expense category":"food",
    "tips":0
}

```

POST Request

Name	Method	Description
/receipt	POST	Add a new receipt

Search Parameters

Name	Data Type	Required/Optional	Description
user	string	required	user id
image_url	string	required	encoded url of the receipt image
merchant_name	string	required	encoded string of the merchant name
merchant_address	string	optional	encoded string of the merchant address
category	string	required	expense category
subtotal	number	optional	
taxes	number	optional	
tips	number	optional	
discount	number	optional	
grand_total	number	required	
date	string	required	purchase date, has to be in the format of MMddyyyy

Sample Request

http://localhost:8080/Itemize/receipt?user=1&merchant_name=McDonald%27s&image_url=http%3A%2F%2Fwww.samplerequest.com&category=food&grand_total=4&date=01152017

(This will add a receipt of user 1, the image url of the receipt is www.samplerequest.com, the merchant name of the receipt is McDonald's, the expense category is food, the grand total is 4 dollars, and the purchase date is Jan 15, 2017)

Response Value

Name	Type	Definition
status	String	If post successfully, status will be okay; If missing required parameters, status will be "Invalid Parameter"; If user does not exist in the user table, status will be "User does not exist"; If due to database, posting was unsuccessful, return status will be "Unsucessful"

Sample Response

- If successfully added the receipt

```
{  
    "status": "OK",  
}
```

- If not all required parameters are in the request

```
{  
    "status": "Invalid Parameter"  
}
```

- If the user does not exist in the database

```
{  
    "status": "User Does Not Exist"  
}
```

- If post unsuccessfully due to database reasons

```
{  
    "status": "Unsuccessful"  
}
```

PUT Request

Name	Method	Description
/receipt	PUT	Update an existing receipt

Search Parameters

Name	Data Type	Required/Optional	Description
user	string	required	user id
image_url	string	required	encoded url of the receipt image
merchant_name	string	optional	encoded string of the merchant name
merchant_address	string	optional	encoded string of the merchant address
category	string	optional	expense category
subtotal	number	optional	
taxes	number	optional	
tips	number	optional	
discount	number	optional	
grand_total	number	optional	
date	string	optional	purchase date, has to be in the format of MMddyyyy

Sample Request:

http://localhost:8080/Itemize/receipt?user=1&image_url=http%3A%2F%2Fwww.samplerequest.com&grand_total=6

(This sample request will update the corresponding receipt's grand total to 6)

Response Value

Name	Type	Definition
status	String	If update successfully, status will be okay; If missing required parameters, status will be "Invalid Parameter"; If receipt does not exist in the user table, status will be "Receipt does not exist"; If due to database, update was unsuccessful, return status will be "Unsucessful"

Sample Response

- If successfully updated the receipt

```
{  
  "status": "OK",  
}
```

- If not all required parameters are in the request

```
{  
  "status": "Invalid Parameter"  
}
```

- If receipt does not exist in the database

```
{  
  "status": "Receipt Does Not Exist"  
}
```

- If update unsuccessfully due to database reasons

```
{  
  "status": "Unsuccessful"  
}
```

DELETE Request

Name	Method	Description
/receipt	DELETE	Delete an existing receipt

Search Parameters

Name	Data Type	Required/Optional	Description
user	string	required	user id
image_url	string	required	encoded url of the receipt image

Sample Request:

http://localhost:8080/Itemize/receipt?user=1&image_url=http%3A%2F%2Fwww.samplerequest.com

(This will delete the receipt of user 1 and the image url of the receipt is <http://www.samplerequest.com>)

Response Value

Name	Type	Definition
status	String	If successfully delete, status will be okay; If missing required parameters, status will be "Invalid Parameter"; If due to database, deletion was unsuccessful, return status will be "Unsucessful"

Sample Response

- If successfully delete the receipt

```
{  
    "status":"OK",  
}
```

- If not all required parameters are in the request

```
{  
    "status":"Invalid Parameter"  
}
```

- If delete unsuccessfully due to database reasons

```
{  
    "status": "Unsuccessful"  
}
```