## **Receiptbook API Documentation**

## **Receiptbook APIs**

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#### **Overview**

Receipt-backend allows users to develop applications that integrate with a customer instance of the receiptbook single-page web application. The APIs are Rest services developed using Node.js and allow users/developers to retrieve and store data for the receiptbook web application.

# **Receiptbook APIs**

Host the data of the Receiptbook website.

There are multiple endpoints/API actions available for this API, and this document describes them in detail:

### Users API Action #1

Functionality	Get the users of the Brewbean website application.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/users	
HTTP Methods	GET	
Scope	This API allows a user to get the users account	
	information that was supplied on the Receiptbook	
	website.	

Output Param	Datatype	Description
id	String	A unique string value that identifies each user.
email	String	A string value that represents the users email address in the system.
firstname	String	A string value that represents the user's firstname in the system.
lastname	String	A string value that represents the user's lastname in the system.
password	String	An encrypted string value that represents the user's password in the system.

### Sample Response:

# Users API Action #2

Functionality	Get the current user based on userid from the system.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/users/:id
HTTP Methods	GET
Scope	This API allows a user to get specific user account
	information that was supplied in the system.

Output Param	Datatype	Description
id	String	A unique string value that identifies each user.
email	String	A string value that represents the users email address in the system.
firstname	String	A string value that represents the user's firstname in the system.
lastname	String	A string value that represents the user's lastname in the system.
password	String	The user's password will be encrypted (bcrypt) before being stored in the database.

#### Sample Response:

## Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

#### Sample Response:

Status: 404 Not Found

Invalid ID.

# Users API Action #3

Functionality	Add the user to the system.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/users/	
HTTP Methods	POST	
Scope	This API allows a user's information to be stored in a	
	MongoDB database on the backend.	

# Request Body Parameters for API Action #3

Input Param	Datatype	REQ*	Description
email	String	Required	A valid email address for a user placing an order on the website. Must be a unique value.
firstname	String	Required	User's firstname. Must be 3 or more characters in length.
lastname	String	Required	User's lastname. Must be 5 or more characters in length.
password	String	Required	User's password. Must be 5 or more characters in length.

# Sample Request:

```
{
...."email": "test2@gmail.com",
...."firstname": "firstname2",
...."lastname": "lastname2",
...."password": "password2"
}
```

Output Param	Datatype	Description
auth	Boolean	A boolean value that verifies that the user was successfully created within the database and a JSON Web Token was created for this user.
token	String	JSONW Web Token passed back for user Authentication. This token is used in the x-access- token header for authenticating users.

```
Sample Response:
{
    "auth": true,
    "token":
```

"eyJhbGciOiJIUzl1NilsInR5cCl6lkpXVCJ9.eyJpZCl6ljYyMjU3N2lwMjM2NjFkMDAxNjcxMDMwZClsImlhdCl6 MTY0NjYyMjY0MCwiZXhwIjoxNjQ2NzA5MDQwfQ.JlljFpegch5bk5HSY7lRd1nr3gXijBvZ8uSgZDoKiQk" }

## Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 400 Bad Request

"firstname" must be a string

# Users API Action #4

Functionality	Update the user's account information in the system.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/users/:id
HTTP Methods	PUT
Scope	This API allows a user's information to be updated in a
	MongoDB database on the backend.

# Request Body Parameters for API Action #4

Input Param	Datatype	REQ*	Description
email	String	Required	Update email address for a user placing an order on the website. Must be a unique value. Enter current value if value will not change.
firstname	String	Required	Update user's firstname. Must be 3 or more characters in length. Enter current value if value will not change.
lastname	String	Required	Update user's lastname. Must be 3 or more characters in length. Enter current value if value will not change.
password	String	Required	User's password. Must be 5 or more characters in length. Enter current value if value will not change.

# Sample Request:

```
{
...."email": "test2@gmail.com",
...."firstname": "firstname2",
...."lastname": "lastname2",
...."password": "password2"
}
```

# Review the table below to understand this API's 200 response parameters:

Output Param	Datatype	Description
id	String	A unique string value that identifies each user.
email	String	A string value that represents the user's updated email.
firstname	String	A string value that represents the user's updated firstname
lastname	String	A string value that represents the user's updated lastname.
password	String	A string value that represents the user's updated password.

### Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

#### Sample Response:

Status: 400 Bad Request

"password" is required

#### Or

Something failed. Error has been logged.

## Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

404 Not Found

Invalid ID.

## Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Sample Response:

Status: 401 Unauthorized

Access Denied. No token provided.

# Users API Action #5

Functionality	Delete the user from the system.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/users/:id	
HTTP Methods	DELETE	
Scope	This API allows a user to be deleted from the MongoDB	
	database on the backend.	

Output Param	Datatype	Description
id	String	A unique string value that identifies the user that's deleted from the system.
email	String	A string value that represents the user's email address that will be deleted.
firstname	String	A string value that represents the user's firstname that will be deleted.
lastname	String	A string value that represents the user's lastname that will be deleted.
password	String	The user's password that will be deleted from the system.

### Sample Response:

```
"_id": "62257abd23661d001671030e",
    "email": "test2@gmailcom",
    "firstname": "firstname2",
    "lastname": "lastname2",
    "password": "$2b$10$/tUcuqvUcrb7bjaQ90jz6u.qtF.fwkKkmI7PQCkVltqn7uvCo6Eqq",
    "__v": 0
}
```

## Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 401 Unauthorized

Access Denied. No token provided.

### Review the table below to understand this API's 403 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Sample Response:

Status: 403 Forbidden

Access is denied.

### Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 404 Not Found

Invalid ID.

# Receipts API Action #1

Functionality	Get the receipts from the system.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/receipts
HTTP Methods	GET
Scope	This API allows a user to retrieve all the receipts from the
	system stored in a MongoDB database.

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

```
"_id": "62243eb9436ce8001652e2d8",
   "receiptDate": "3-5-2022",
   "receivedFrom": "EJ",
    "amount": 25,
    "paymentOf": "strawberry cake",
    "paymentType": "Paypal",
    "signature": "cc",
    "email": "test1@gmail.com",
    "user": "62243c60436ce8001652e2d7",
    "__v": 0
},
   "_id": "62243ef3436ce8001652e2d9",
    "receiptDate": "3-5-2022",
   "receivedFrom": "Dave",
    "amount": 30,
    "paymentOf": "pound cake",
    "paymentType": "Zelle",
    "signature": "cc",
   "email": "test1@gmail.com",
    "user": "62243c60436ce8001652e2d7",
    "_ v": 0
```

# Receipts API Action #2

Functionality	Get the current receipt based on id.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/receipts/:id	
HTTP Methods	GET	
Scope	This API allows a user to get a specific receipt stored in	
	the system.	

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

### Sample Response:

```
"_id": "62243eb9436ce8001652e2d8",
    "receiptDate": "3-5-2022",
    "receivedFrom": "EJ",
    "amount": 25,
    "paymentOf": "strawberry cake",
    "paymentType": "Paypal",
    "signature": "cc",
    "email": "test1@gmail.com",
    "user": "62243c60436ce8001652e2d7",
    "__v": 0
}
```

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

### Sample Response:

Status: 404 Not Found

Invalid ID.

# Receipts API Action #3

Functionality	Add the coffee items to the system.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/receipts/
HTTP Methods	POST
Scope	This API allows receipts to be stored in a MongoDB database on the backend.
	This API also requires an x-access-token (JWT -JSON Webtoken) to be supplied in the request header.

# Request Body Parameters for API Action #3

Input Param	Datatype	REQ*	Description
receiptDate	String	Y	The date the receipt was stored in the system.
receivedFrom	String	Υ	Name of the customer who purchased the item.
amount	Number	Υ	The dollar amount the item was sold for.
paymentOf	String	Υ	The item's name that was sold.
paymentType	String	Y	The payment method used to purchase the item.
signature	String	Υ	The signature of the user who owns a set of receipts.
Email	String	Υ	The user's email address.

### Sample Request:

```
{
...."receiptDate": "3-8-2022",
...."receivedFrom": "Terry",
...."amount": 30.00,
...."paymentOf": "pound cakes",
...."paymentType": "zelle",
...."signature": "cc",
...."email": "test3@gmail.com",
...."user": "6226d9f98ee3e4001665ada3"
}
```

$\checkmark$	x-access-token	eyJhbGciOiJlUzl1NilsInR5cCl6lkpXVCJ9.eyJpZCl6ljYyMjZkO WY5OGVIM2U0MDAxNjY1YWRhMylsImlhdCl6MTY0NjcxMz
		MzNywiZXhwljoxNjQ2Nzk5NzM3fQ.Z8QvtZVKVR0mw1DjvjP hLwCC47cutevz5h6uv5lpdC8

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

```
"_id": "6227e554796532001667a943",
    "receiptDate": "3-8-2022",
    "receivedFrom": "Terry",
    "amount": 30,
    "paymentOf": "pound cakes",
    "paymentType": "zelle",
    "signature": "cc",
    "email": "test3@gmail.com",
    "user": "6226d9f98ee3e4001665ada3",
    "__v": 0
}
```

### Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 400 Bad Request

Something failed. Error has been logged.

# Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

### Sample Response:

Status: 401 Unauthorized

Access Denied. No token provided.

# Receipts API Action #4

Functionality	Retrieve the receipts from the system based on the user's email address.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/receipts/receiptsByEmail
HTTP Methods	POST
Scope	This API allows customer receipts to be retrieved from the MongoDB database based on the user's email address.
	This API also requires an x-access-token (JWT -JSON Webtoken) to be supplied in the request header.

# Request Body Parameters for API Action #4

Input Param	Datatype	REQ*	Description
Email	String	Υ	The user's email address.

### Sample Request:



Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

```
"_id": "6226dce28ee3e4001665ada4",
"receiptDate": "3-7-2022",
"receivedFrom": "Nick",
"amount": 25,
"paymentOf": "strawberry cake",
"paymentType": "cash",
"signature": "cc",
"email": "test3@gmail.com",
"user": "6226d9f98ee3e4001665ada3",
" v": 0
"_id": "6227e554796532001667a943",
"receiptDate": "3-8-2022",
"receivedFrom": "Terry",
"amount": 30,
"paymentOf": "pound cakes",
"paymentType": "zelle",
"signature": "cc",
"email": "test3@gmail.com",
"HEAR": "622640f08aa3a4001665a4a3"
```

### Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 400 Bad Request

Something failed. Error has been logged.

## Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

### Sample Response:

Status: 401 Unauthorized

Access Denied. No token provided.

## Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 404 Not Found

There are no receipts for this account!

# Receipts API Action #5

Functionality	Retrieve the receipts from the system based on the user	
	id.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/receipts/userReceipts	
HTTP Methods	POST	
Scope	This API allows customer receipts to be retrieved from	
	the MongoDB database based on the user's user id.	
	This API also requires an x-access-token (JWT -JSON	
	Webtoken) to be supplied in the request header.	

# Request Body Parameters for API Action #5

Input Param [	Datatype	REQ*	Description
user S	String	Υ	The user id.

### Sample Request:



x-access-token

eyJhbGciOiJIUzl1NilsInR5cCl6lkpXVCJ9.eyJpZCl6ljYyMjZkO
WY5OGVIM2U0MDAxNjY1YWRhMylsImlhdCl6MTY0NjcxMz
MzNywiZXhwljoxNjQ2Nzk5NzM3fQ.Z8QvtZVKVR0mw1DjvjP
hLwCC47cutevz5h6uv5lpdC8

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

```
"_id": "6226dce28ee3e4001665ada4",
"receiptDate": "3-7-2022",
"receivedFrom": "Nick",
"amount": 25,
"paymentOf": "strawberry cake",
"paymentType": "cash",
"signature": "cc",
"email": "test3@gmail.com",
"user": "6226d9f98ee3e4001665ada3",
" v": 0
"_id": "6227e554796532001667a943",
"receiptDate": "3-8-2022",
"receivedFrom": "Terry",
"amount": 30,
"paymentOf": "pound cakes",
"paymentType": "zelle",
"signature": "cc",
"email": "test3@gmail.com",
"HEAR": "622640f08aa3a4001665a4a3"
```

### Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 400 Bad Request

Something failed. Error has been logged.

## Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

### Sample Response:

Status: 401 Unauthorized

Access Denied. No token provided.

## Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 404 Not Found

There are no receipts for this account!

# Receipts API Action #6

Functionality	Update the receipt in the system.	
Base Path	https://intense-brushlands-88175.herokuapp.com/	
Dependency	None	
Endpoint URL / Resource	/api/v1/receipts/:id	
HTTP Methods	PUT	
Scope	This API allows a receipt to be updated in a MongoDB database on the backend.	
	This API also requires an x-auth-token (JWT -JSON Webtoken) to be supplied in the request header.	

# Request Body Parameters for API Action #6

Input Param	Datatype	REQ*	Description
receiptDate	String	The date the receipt was stored in the system.	receiptDate
receivedFrom	String	Name of the customer who purchased the item.	receivedFrom
amount	Number	The dollar amount the item was sold for.	amount
paymentOf	String	The item's name that was sold.	paymentOf
paymentType	String	The payment method used to purchase the item.	paymentType
signature	String	The signature of the user who owns a set of receipts.	signature
Email	String	The user's email address.	Email
User	String	The user's unique id.	User

## Sample Request:

```
{
...."receiptDate": "3-7-2022",
...."receivedFrom": "Nick",
...."amount": 25,
...."paymentOf": "strawberry cake",
...."paymentType": "zelle",
...."signature": "cc",
...."email": "test3@gmail.com",
...."user": "6226d9f98ee3e4001665ada3"
}
```

## Review the table below to understand this API's 200 response parameters:

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Unique id generated for each receipt from MongoDB database.

```
"_id": "6226dce28ee3e4001665ada4",
    "receiptDate": "3-7-2022",
    "receivedFrom": "Nick",
    "amount": 25,
    "paymentOf": "strawberry cake",
    "paymentType": "zelle",
    "signature": "cc",
    "email": "test3@gmail.com",
    "user": "6226d9f98ee3e4001665ada3",
    "__v": 0
}
```

### Review the table below to understand this API's 400 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 400 Bad Request

"topping" is required

#### Or

Something failed. Error has been logged.

## Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

### Sample Response:

Status: 401 Unauthorized

Access Denied. No token provided.

# Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

404 Not Found

Invalid ID.

# Receipts API Action #7

Functionality	Delete the receipt from the system.
Base Path	https://intense-brushlands-88175.herokuapp.com/
Dependency	None
Endpoint URL / Resource	/api/v1/receipts/:id
HTTP Methods	DELETE
Scope	This API allows a receipt to be deleted from the MongoDB database on the backend.
	This API also requires an x-auth-token (JWT -JSON Webtoken) to be supplied in the request header.

Output Param	Datatype	Description
receiptDate	String	The date the receipt was stored in the system.
receivedFrom	String	Name of the customer who purchased the item.
amount	Number	The dollar amount the item was sold for.
paymentOf	String	The item's name that was sold.
paymentType	String	The payment method used to purchase the item.
signature	String	The signature of the user who owns a set of receipts.
Email	String	The user's email address.
User	String	The user's unique id.
id	String	Id of receipt to be deleted.

### Sample Response:

```
"_id": "6226dce28ee3e4001665ada4",
    "receiptDate": "3-7-2022",
    "receivedFrom": "Nick",
    "amount": 25,
    "paymentOf": "strawberry cake",
    "paymentType": "zelle",
    "signature": "cc",
    "email": "test3@gmail.com",
    "user": "6226d9f98ee3e4001665ada3",
    "__v": 0
}
```

### Review the table below to understand this API's 401 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 401 Unauthorized

Access Denied. No token provided.

### Review the table below to understand this API's 403 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Sample Response:

Status: 403 Forbidden

Access is denied.

## Review the table below to understand this API's 404 response parameters:

Output Param	Datatype	Description
code	String	The error code.
message	String	Textual description of the problem.

Status: 404 Not Found

Invalid ID.