

Personal Finance: API Spec

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The URL for this application is: <https://mcmannis-final.appspot.com/>

The URL for user account creation and login is: <https://mcmannis-final.appspot.com/>

Description: This API stores financial accounts (“accounts”), and financial transactions (“transactions”). An account can have any number of corresponding transactions, but each transaction can only be linked to a single account. Upon creation, accounts have no corresponding transactions and transactions are not linked to an account.

User Entity: A user entity (“user”) is created when first authenticating through the URL above. A user account is only created if one does not already exist in the system, based on the email address provided by the authentication process. Upon authentication, the user will be provided their API ID number and a JWT. When an API request calls for a user_id, it is the user API ID number that is used in the request. Internally, most entities store a “owner” value, which is the user's email address. When accessing protected resources, the JWT is verified and the email address of the corresponding user is extracted. This email address is then compared to the stored owner of the resource, and, if they match, the user is permitted to access that resource. Both accounts and transactions are owned by user entities, and there is an endpoint where users can see all accounts belonging to them, which in turn list all transactions in the respective account.

Get a User

Allows you to get an existing user

GET /users/:user_id

Request

Request Parameters

Name	Type	Description	Required?
user_id	String	ID of the user	Yes

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No user with this user_id exists
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the user is not returned, and a 406 status code is returned

Response Examples

Success

Status: 200 OK <pre>{ "last_name": "McMannis", "first_name": "Shawn", "email": "skmcmannis@gmail.com", "self": "https://mcmannis-final.appspot.com/users/5749328048029696", "id": "5749328048029696" }</pre>

Failure

Status: 404 Not Found No user with this user_id exists

Status: 406 Not Acceptable Not acceptable
--

Get all Users

Allows you to get all users

GET /users

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the users are not returned, and a 406 status code is returned

Response Examples

Success

Status: 200 OK

```
{
  "users": [
    {
      "email": "mcmannis@oregonstate.edu",
      "last_name": "Mc Mannis",
      "first_name": "Shawn Karl",
      "id": "5700305828184064",
      "self": "https://mcmannis-final.appspot.com/users/5700305828184064"
    },
    {
      "email": "skmcmannis@gmail.com",
      "last_name": "McMannis",
      "first_name": "Shawn",
      "id": "5749328048029696",
      "self": "https://mcmannis-final.appspot.com/users/5749328048029696"
    }
  ],
  "total_records_returned": 2
}
```

Failure

Status: 406 Not Acceptable

Not acceptable

Create an Account

Allows you to create a new account

POST /accounts

Request

Request Parameters

None

Request Body

Required

Request Body Format

Application/JSON

Request JSON Attributes

Name	Type	Description	Required?
name	String	The name of the account	Yes
bank	String	The name of the bank holding the account	Yes
acct_num	String	The account number	Yes

Request Body Example

```
{
  "name": "Checking",
  "bank": "Local Credit Union",
  "acct_num": "49818161651"
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond name, bank, and acct_num are ignored.
Failure	400 Bad Request	If the request is missing any of the 3 required attributes, the account is not created, and a 400 status code is returned.
Failure	400 Bad Request	If the name attribute is shorter than 2 characters, longer than 20 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the account is not created, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the account is not created, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the account is not created, and a 401 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept

		header, the account is not created, and a 406 status code is returned.
Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the account is not created, and a 415 status code is returned.

Response Examples

Success

Status: 201 Created

```
{
  "id": "5664902681198592",
  "name": "Checking",
  "bank": "Local Credit Union",
  "acct_num": "49818161651",
  "transactions": [],
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592"
}
```

Failure

Status: 400 Bad Request

The request object is missing at least one of the required attributes

Failure

Status: 400 Bad Request

The name attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Get an Account

Allows you to get an existing account

GET /accounts/:account_id

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No account with this account_id exists
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the account is not returned, and a 406 status code is returned

Response Examples

Success

```
Status: 200 OK

{
  "name": "Checking",
  "acct_num": "49818161651",
  "transactions": [],
  "bank": "Local Credit Union",
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592",
  "id": "5664902681198592"
}
```

Failure

```
Status: 404 Not Found

No account with this account_id exists
```

Failure

Status: 406 Not Acceptable

Not acceptable

Get all Accounts

Allows you to get all accounts

GET /accounts

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the accounts are not returned, and a 406 status code is returned

Response Examples

Success

Status: 200 OK

```
{
  "accounts": [
    {
      "transactions": [],
      "bank": "The Dresser",
      "owner": "mcmannis@oregonstate.edu",
      "name": "Piggy Bank",
      "acct_num": "1",
      "id": "5078547773259776",
      "self": "https://mcmannis-final.appspot.com/accounts/5078547773259776"
    },
    {
      "transactions": [],
      "bank": "BigBank",
      "owner": "skmcmannis@gmail.com",
      "name": "Home Loan",
      "acct_num": "7841689161",
      "id": "5638186843766784",
      "self": "https://mcmannis-final.appspot.com/accounts/5638186843766784"
    },
    {
```

```

    "name": "Checking",
    "acct_num": "49818161651",
    "transactions": [],
    "bank": "Local Credit Union",
    "owner": "skmcmannis@gmail.com",
    "id": "5664902681198592",
    "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592"
  },
  {
    "transactions": [],
    "bank": "BigBank",
    "owner": "skmcmannis@gmail.com",
    "name": "Car Loan",
    "acct_num": "1519816515616",
    "id": "5669869676658688",
    "self": "https://mcmannis-final.appspot.com/accounts/5669869676658688"
  },
  {
    "name": "Credit Card",
    "acct_num": "7894811352",
    "transactions": [],
    "bank": "NY Bank",
    "owner": "skmcmannis@gmail.com",
    "id": "5672749318012928",
    "self": "https://mcmannis-final.appspot.com/accounts/5672749318012928"
  }
],
"next": "http://mcmannis-final.appspot.com/accounts?cursor=Ci8SKWoQbX5tY21hbm5pcy1maW5hb-HIVCxIIYWNjb3VudHMYgICAgN7qiQoMGAAGAA==",
"total_records_returned": 7
}

```

Failure

Status: 406 Not Acceptable

Not acceptable

Get all Accounts by User ID

Allows you to get all accounts belonging to a specified user

GET /users/:user_id/accounts

Request

Request Parameters

Name	Type	Description	Required?
user_id	String	ID of the user	Yes

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the accounts are not returned, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the accounts are not returned, and a 401 status code is returned.
Failure	403 Forbidden	If the user_id does not match the account associated with the bearer token, the accounts are not returned, and a 403 status code is returned.
Failure	404 Not Found	If the user_id does not correspond to a user entity in the system, the accounts are not returned, and a 404 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the accounts are not returned, and a 406 status code is returned

Response Examples

Success

Status: 200 OK

```
{
  "accounts": [
    {
      "transactions": [],
      "bank": "BigBank",
      "owner": "skmcmannis@gmail.com",
      "name": "Home Loan",
      "acct_num": "7841689161",
      "id": "5638186843766784",
      "self": "https://mcmannis-final.appspot.com/accounts/5638186843766784"
    },
    {
      "transactions": [],
      "bank": "Local Credit Union",
      "owner": "skmcmannis@gmail.com",
      "name": "Checking",
      "acct_num": "49818161651",
      "id": "5664902681198592",
      "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592"
    },
    {
      "name": "Car Loan",
      "acct_num": "1519816515616",
      "transactions": [],
      "bank": "BigBank",
      "owner": "skmcmannis@gmail.com",
      "id": "5669869676658688",
      "self": "https://mcmannis-final.appspot.com/accounts/5669869676658688"
    },
    {
      "name": "Credit Card",
      "acct_num": "7894811352",
      "transactions": [],
      "bank": "NY Bank",
      "owner": "skmcmannis@gmail.com",
      "id": "5672749318012928",
      "self": "https://mcmannis-final.appspot.com/accounts/5672749318012928"
    },
    {
      "name": "Savings",
      "acct_num": "197915616",
      "transactions": [],
      "bank": "Local Credit Union",
      "owner": "skmcmannis@gmail.com",
      "id": "5679790782676992",
      "self": "https://mcmannis-final.appspot.com/accounts/5679790782676992"
    }
  ]
}
```

```
}  
],  
  "next": "http://mcmannis-final.appspot.com/users/5749328048029696/accounts?  
cursor=Ci8SKWoQbX5tY21hbm5pcy1maW5hbHIVCxIIYWVudHMYgICAwNW3iwoMGAAGAA==",  
  "total_records_returned": 6  
}
```

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

User_id does not match authentication token

Failure

Status: 404 Not Found

No user with this user_id exists

Failure

Status: 406 Not Acceptable

Not acceptable

Edit an Account (PUT)

Allows you to edit an account

PUT /accounts/:account_id/

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes

Request Body

Name	Type	Description	Required?
name	String	The name of the account	Yes
bank	String	The name of the bank holding the account	Yes
acct_num	String	The account number	Yes

Request Body Example

```
{
  "name": "Checking",
  "bank": "Local Credit Union",
  "acct_num": "49818161651"
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond name, bank, and acct_num are ignored.
Failure	400 Bad Request	If the request is missing any of the 3 required attributes, the account is not updated, and a 400 status code is returned.
Failure	400 Bad Request	If the name attribute is shorter than 2 characters, longer than 20 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the account is not updated, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the account is not updated, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the account is not updated, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the account is not updated, and a 403 status code is returned.
Failure	404 Not Found	If the account_id does not correspond to an account

		entity in the system, the account is not updated, and a 404 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept header, the account is not updated, and a 406 status code is returned.
Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the account is not updated, and a 415 status code is returned.

Response Examples

Success

Status: 201 OK

```
{
  "id": "5664902681198592",
  "name": "Joint Checking",
  "bank": "Local Credit Union",
  "acct_num": "191561681",
  "transactions": [],
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592"
}
```

Failure

Status: 400 Bad Request

The request object is missing at least one of the required attributes

Failure

Status: 400 Bad Request

The name attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

Account owner does not match authentication token

Failure

Status: 404 Not Found

No account with this account_id exists

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Edit an Account (PATCH)

Allows you to edit an account

PATCH /accounts/:account_id/

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes

Request Body

Name	Type	Description	Required?
name	String	The name of the account	No
bank	String	The name of the bank holding the account	No
acct_num	String	The account number	No

Request Body Example

```
{
  "name": "Business Checking"
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond name, bank, and acct_num are ignored.
Failure	400 Bad Request	If the name attribute is shorter than 2 characters, longer than 20 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the account is not updated, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the account is not updated, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the account is not updated, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the account is not updated, and a 403 status code is returned.
Failure	404 Not Found	If the account_id does not correspond to an account entity in the system, the account is not updated, and a 404 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept header, the account is not updated, and a 406 status code is returned.

Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the account is not updated, and a 415 status code is returned.
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Response Examples

Success

Status: 201 OK

```
{
  "id": "5664902681198592",
  "name": "Joint Checking",
  "bank": "Local Credit Union",
  "acct_num": "191561681",
  "transactions": [],
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/accounts/5664902681198592"
}
```

Failure

Status: 400 Bad Request

The name attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

Account owner does not match authentication token

Failure

Status: 404 Not Found

No account with this account_id exists

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Delete an Account

Allows you to delete an account

DELETE /accounts/:account_id

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes

Request Body

None

Response

No body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the account is not deleted, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the account is not deleted, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the account is not deleted, and a 403 status code is returned.
Failure	404 Not Found	No account with this account_id exists

Response Examples

Success

Status: 204 No Content

Failure

Status: 401 Unauthorized
Unauthorized

Failure

Status: 401 Unauthorized
Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden
Account owner does not match authentication token

Failure

Status: 404 Not Found

No account with this account_id exists

Create a Transaction

Allows you to create a new transaction

POST /transactions

Request

Request Parameters

None

Request Body

Required

Request Body Format

Application/JSON

Request JSON Attributes

Name	Type	Description	Required?
payee	String	The name of the payee	Yes
date	String	The date the transaction occurred on	Yes
amount	Double	The amount of the transaction	Yes

Request Body Example

```
{
  "payee": "Albertsons",
  "date": "12/10/2019",
  "amount": 121.52
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond payee, date, and amount are ignored.
Failure	400 Bad Request	If the request is missing any of the 3 required attributes, the transaction is not created, and a 400 status code is returned.
Failure	400 Bad Request	If the payee attribute is shorter than 2 characters, longer than 60 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the transaction is not created, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not created, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not

		created, and a 401 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept header, the transaction is not created, and a 406 status code is returned.
Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the transaction is not created, and a 415 status code is returned.

Response Examples

Success

Status: 201 Created

```
{
  "id": "6204447680102400",
  "payee": "Albertsons",
  "date": "12/10/2019",
  "amount": 121.52,
  "account": null,
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/transactions/6204447680102400"
}
```

Failure

Status: 400 Bad Request

The request object is missing at least one of the required attributes

Failure

Status: 400 Bad Request

The payee attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Get a Transaction

Allows you to get an existing transaction

GET /transactions/:transaction_id

Request

Request Parameters

Name	Type	Description	Required?
transaction_id	String	ID of the transaction	Yes

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No transaction with this transaction_id exists
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the transaction is not returned, and a 406 status code is returned

Response Examples

Success

```
Status: 200 OK

{
  "amount": 121.52,
  "date": "12/10/2019",
  "account": null,
  "payee": "Albertsons",
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/transactions/5630121163620352",
  "id": "5630121163620352"
}
```

Failure

```
Status: 404 Not Found

No account with this account_id exists
```

Failure

```
Status: 406 Not Acceptable
```

Not acceptable

Get all Transactions

Allows you to get all transaction

GET /transactions

Request

Request Parameters

None

Request Body

None

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If anything but 'application/json' specified in the Accept header, the transactions are not returned, and a 406 status code is returned

Response Examples

Success

Status: 200 OK

```
{
  "transactions": [
    {
      "account": null,
      "payee": "Comcast",
      "owner": "skmcmannis@gmail.com",
      "amount": 512.41,
      "date": "12/10/2019",
      "id": "5093108584808448",
      "self": "https://mcmannis-final.appspot.com/transactions/5093108584808448"
    },
    {
      "account": null,
      "payee": "Albertsons",
      "owner": "skmcmannis@gmail.com",
      "amount": 121.52,
      "date": "12/10/2019",
      "id": "5630121163620352",
      "self": "https://mcmannis-final.appspot.com/transactions/5630121163620352"
    },
  ],
}
```

```

    "date": "12/10/2019",
    "account": null,
    "payee": "Sony",
    "owner": "mcmannis@oregonstate.edu",
    "amount": 499.99,
    "id": "5640060892348416",
    "self": "https://mcmannis-final.appspot.com/transactions/5640060892348416"
  },
  {
    "payee": "Chevron",
    "owner": "skmcmannis@gmail.com",
    "amount": 29.85,
    "date": "12/10/2019",
    "account": null,
    "id": "5703401627189248",
    "self": "https://mcmannis-final.appspot.com/transactions/5703401627189248"
  },
  {
    "payee": "Fred Meyer",
    "owner": "skmcmannis@gmail.com",
    "amount": 42.13,
    "date": "12/10/2019",
    "account": null,
    "id": "5707090131681280",
    "self": "https://mcmannis-final.appspot.com/transactions/5707090131681280"
  }
],
"next": "http://mcmannis-final.appspot.com/transactions?cursor=CjMSLWoQbX5tY21hbm5pcy1-
maW5hbHIZCzIMdHJhbnNhY3Rpb25zGICAgMCX0pEKDBGAIAA=",
"total_records_returned": 7
}

```

Failure

Status: 406 Not Acceptable

Not acceptable

Edit a Transaction(PUT)

Allows you to edit a transaction

PUT /transactions/:transaction_id/

Request

Request Parameters

Name	Type	Description	Required?
transaction_id	String	ID of the transaction	Yes

Request Body

Name	Type	Description	Required?
payee	String	The name of the payee	Yes
date	String	The date the transaction occurred on	Yes
amount	Double	The amount of the transaction	Yes

Request Body Example

```
{
  "payee": "Albertsons",
  "date": "12/10/2019",
  "amount": 221.52
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond payee, date, and amount are ignored.
Failure	400 Bad Request	If the request is missing any of the 3 required attributes, the transaction is not updated, and a 400 status code is returned.
Failure	400 Bad Request	If the payee attribute is shorter than 2 characters, longer than 60 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the transaction is not updated, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not updated, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not updated, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the transaction is not updated, and a 403 status code is returned.
Failure	404 Not Found	If the transaction_id does not correspond to a transaction

		entity in the system, the transaction is not updated, and a 404 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept header, the transaction is not updated, and a 406 status code is returned.
Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the transaction is not updated, and a 415 status code is returned.

Response Examples

Success

Status: 201 OK

```
{
  "id": "5630121163620352",
  "payee": "Albertsons",
  "date": "12/10/2019",
  "amount": 221.52,
  "account": null,
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/transactions/5630121163620352"
}
```

Failure

Status: 400 Bad Request

The request object is missing at least one of the required attributes

Failure

Status: 400 Bad Request

The name attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

Transaction owner does not match authentication token

Failure

Status: 404 Not Found

No transaction with this transaction_id exists

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Edit a Transaction(PATCH)

Allows you to edit a transaction

PATCH /transaction/:transaction_id/

Request

Request Parameters

Name	Type	Description	Required?
transaction_id	String	ID of the transaction	Yes

Request Body

Name	Type	Description	Required?
payee	String	The name of the payee	No
date	String	The date the transaction occurred on	No
amount	Double	The amount of the transaction	No

Request Body Example

```
{
  "amount": 321.52
}
```

Response

Response Body Format

Application/JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	Any additional attributes beyond payee, date, and amount are ignored.
Failure	400 Bad Request	If the payee attribute is shorter than 2 characters, longer than 60 characters, or includes any non-standard ASCII characters (including extended ASCII characters), the transaction is not updated, and a 400 status code is returned.
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not updated, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not updated, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the transaction is not updated, and a 403 status code is returned.
Failure	404 Not Found	If the account_id does not correspond to a transaction entity in the system, the transaction is not updated, and a 404 status code is returned.
Failure	406 Not Acceptable	If anything but 'application/json' is specified in the Accept header, the transaction is not updated, and a 406 status code is returned.

Failure	415 Unsupported Media Type	If anything but 'application/json' is specified in the Content-Type header, the transaction is not updated, and a 415 status code is returned.
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Response Examples

Success

Status: 201 OK

```
{
  "id": "5630121163620352",
  "payee": "Albertsons",
  "date": "12/10/2019",
  "amount": 321.52,
  "account": null,
  "owner": "skmcmannis@gmail.com",
  "self": "https://mcmannis-final.appspot.com/transactions/5630121163620352"
}
```

Failure

Status: 400 Bad Request

The name attribute is invalid

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

Account owner does not match authentication token

Failure

Status: 404 Not Found

No account with this account_id exists

Failure

Status: 406 Not Acceptable

Not acceptable

Failure

Status: 415 Unsupported Media Type

Server only accepts application/json data

Delete a Transaction

Allows you to delete a transaction

```
DELETE /transactions/:transaction_id
```

Request

Request Parameters

Name	Type	Description	Required?
transaction_id	String	ID of the transaction	Yes

Request Body

None

Response

No body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not deleted, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not deleted, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the transaction is not deleted, and a 403 status code is returned.
Failure	404 Not Found	No transaction with this transaction_id exists

Response Examples

Success

```
Status: 204 No Content
```

Failure

```
Status: 401 Unauthorized

Unauthorized
```

Failure

```
Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token
```

Failure

```
Status: 403 Forbidden

Transaction owner does not match authentication token
```

Failure

Status: 404 Not Found

No transaction with this transaction_id exists

Assign a Transaction to an Account

Allows you to assign a transaction to an account

PATCH /accounts/:account_id/transactions/:transaction_id

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes
transaction_id	String	ID of the transaction	Yes

Request Body

None

Response

No body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not assigned, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not assigned, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the transaction is not assigned, and a 403 status code is returned.
Failure	403 Forbidden	If the transaction is already assigned to an account, the transaction is not reassigned, and a 403 status code is returned
Failure	404 Not Found	No account with this account_id exists OR no transaction with this transaction_id exists

Response Examples

Success

Status: 204 No Content

Failure

Status: 401 Unauthorized

Unauthorized

Failure

Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token

Failure

Status: 403 Forbidden

Account owner and/or transaction owner does not match authentication token

Failure

Status: 403 Forbidden

This transaction is already assigned to an account

Failure

Status: 404 Not Found

The specified account and/or transaction do not exist

Remove a Transaction from an Account

Allows you to remove a transaction from an account

```
DELETE /accounts/:account_id/transactions/:transaction_id
```

Request

Request Parameters

Name	Type	Description	Required?
account_id	String	ID of the account	Yes
transaction_id	String	ID of the transaction	Yes

Request Body

None

Response

No body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If the provided bearer token is expired or invalid, the transaction is not removed, and a 401 status code is returned.
Failure	401 Unauthorized	If the bearer token is not provided, the transaction is not removed, and a 401 status code is returned.
Failure	403 Forbidden	If the account associated with the bearer token does not match the owner of the resource, the transaction is not removed, and a 403 status code is returned.
Failure	403 Forbidden	If the transaction is no assigned to an account, the transaction is not removed, and a 403 status code is returned
Failure	404 Not Found	No account with this account_id exists OR no transaction with this transaction_id exists

Response Examples

Success

```
Status: 204 No Content
```

Failure

```
Status: 401 Unauthorized

Unauthorized
```

Failure

```
Status: 401 Unauthorized

Unauthorized: Invalid token type or missing token
```

Failure

Status: 403 Forbidden

Account owner and/or transaction owner does not match authentication token

Failure

Status: 403 Forbidden

This transaction is not assigned to this account

Failure

Status: 404 Not Found

The specified account and/or transaction do not exist