API Documentation

TechTrek API

31st October 2019

1   Introduction

This is your guide to using the TechTrek API as part of today's hackathon. The APIs have been built to provide you with some useful data that will come in handy when you build your expense tracking app.

The APIs are secured and you will have to provide your "identity" and "token" in the **header** of every request you make. This should be made available to you by now and if you do not have it, please reach out to any one of us. The APIs are also rate limited. This means that if you make more than 5 request a second, the API endpoint will stop serving your requests until your quota is refreshed.

2   Personas

We have included two personas for your to work with in today's hackathon. They have considerably different spending patterns and behaviours. The data in the API is designed in such a way to give them some character that you can work with (if you can spot them).

2.1   John Lim Ze Yang

Student. 18 Years Old. Just about to graduate from university. Owns one savings account with DBS. No credit account with DBS. Gets S$800 dollars allowance at the end of each month, credited by cash deposit John seems to be making frequent of cash transfers. Why transfer when you can PayLah?

2.2   Mary Tan Hui Shan

Executive. 26 years old. One savings account with DBS. Two credit cards with DBS. Salary of S$3,300 gets credited into her savings account at the end of each month. It seems that Mary has a lot of cash sitting idle in her savings account, it will be good if we can help Mary utilise this money.

3   API Documentation

The API is hosted at:

http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com

The API is designed to return various HTTP status code in the response header and your application should handle them appropriately.

HTTP Status Code	Remarks
200	Success. That's when you got it right. If data is empty, it might mean that there is no available information based on your query.
400	Bad request. The request parameters or path variables are incorrect.
401	Unauthorized. Either you have forgotten to include the "identity" or "token" field or they are incorrect.
404	Not found. The URL that you entered is incorrect and hence no resource can be found
429	Too many requests. You are attempting to make too many requests. The API is rate limited to 5 requests per second per token.
500	Internal server error. This means that its our fault and our API is (most likely) facing some issues.

3.1   Customers Information

GET Customer ID

http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/customers/:userName

Retrieve customer's information for a given username. The customer is always referenced using the customer Id in the API.

Headers	
identity	your_identity
token	your_token

Path Variable	
userName	"marytan" or "limzeyang" or "prasannaghali"

GET Customer Details

http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/customers/:customerId/details

Retrieve customer's details for a given customer Id.

Headers	
identity	your_identity
token	your_token

Path Variable	
customerId	The customerId that is used to reference a customer

3.2   Transactions

GET Transactions Details

http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/transactions/:accountId?from=01-01-2018&to=02-01-2019

Retrieve a list of transactions for a given account. This API currently only supports "SAVINGS" account. The earliest transaction is on the 1st of January 2018 [01-01-2018] and the latest is on the 31st of January 2019 [01-31-2019]. The "from" date and "to" date should be passed as request parameters and the format of the date is MM-dd-YYYY.

Headers	
identity	your_identity
token	your_token

Path Variable	
accountId	A valid account Id that references a savings account.

Params	
from	A valid start date of the transactions. Earliest is 01-01-2018.
to	A valid end date of the transactions. Latest is 01-31-2019.

3.3 Accounts

GET List of Deposit Accounts

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/accounts/deposit/:customerId

Retrieves a list of deposit accounts belonging to a customer referenced by the customer Id provided.

Headers	
identity	your_identity
token	your_token

Path Variable	
customerId	The customerId that is used to reference a customer

GET Balance of a Deposit Account

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/accounts/deposit/:accountId/balance?month=1&year=

Retrieves the current running balance of a deposit account referenced by the provided accountId if the optional parameters are not provided. If month and year fields are provided, the month end balance will be returned. The month is 0 indexed - 0 is January and 11 is December. The earliest transaction is on the 1st of January 2018 and thus, the earliest month end balance that can be queried is for the month of January, 2018.

Headers	
identity	your_identity
token	your_token

Path Variable	
accountId	The accountId of a savings account

Params	
month	[Optional] The month and year field allows querying of past month end balances of the account
year	[Optional] The month and year field allows querying of past month end balances of the account

GET List of Credit Accounts

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/accounts/credit/:customerId

Retrieves a list of credit accounts belonging to a customer referenced by the customerId provided. Note that not all customers have credit accounts.

Headers	
identity	your_identity
token	your_token

Path Variable	
customerId	The customerId that is used to reference a customer

GET Outstanding Balance of a Credit Account

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/accounts/credit/:accountId/balance

Retrieves the current outstanding balance of a credit account. This API does not support past month end balances.

Headers	
identity	your_identity
token	your_token

Path Variable	
accountId	The accountId of a credit account

3.4 Marketing

GET List of Marketing Messages

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/marketing

Retrieve a list of summaries of marketing messages

Headers	
identity	your_identity
token	your_token

GET Details of a Marketing Message

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/marketing/id

Retrieve details of a particular marketing message

Headers	
identity	your_identity
token	your_token

Path Variable	
id	The id of a marketing message

3.5 Message

GET Personal Messages

> http://techtrek-api-gateway.ap-southeast-1.elasticbeanstalk.com/message/:customerId

Retrieve a list of personal inbox messages for a customer referenced by the given customer Id.

Headers	
identity	your_identity
token	your_token

Path Variable	
customerId	The customerId that is used to reference a customer