ROR assignment details

First assignment:

Application - Transaction API

Code details -
   https://github.com/rah00l/transactions-api

Quick Information -
   • Created a Restful API solution
   • To get all transactions for a specific consumer and or for a merchant
   • Added three endpoints one for each dataset / table
   • Added test cases
   • Supporting Post and or Put Requests.
   • Added few redords of transactions merchants and consumers.

Tech Specs -
   • Ruby 2.3.3
   • Database: sqlite / seed file (few transactions merchants and consumers.)
   • Framework: Rails 5.1.2
   • Test Framework - rspec - fixtures factory_girl_rails
   • HTTP client - httpie

Test suite output -

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $bundle exec rspec
......................................

Finished in 3.26 seconds (files took 5.78 seconds to load)
38 examples, 0 failures

rahul@rahul-Inspiron-N5010 transactions-api (master) $
```

API Endpoints (Manual test output)– Used HTTP client – **httpie**

Consumers – 3 End points

POST /consumers(.:format)   consumers#create
        http POST :3000/consumers first_name=Aarmbh last_name=Pal

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http POST :3000/consumers first_name=Aarmbh last_name=Pal
HTTP/1.1 201 Created
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"4a5a3ca4a7e644a8eff7e5146dfd7eb7"
Transfer-Encoding: chunked
X-Request-Id: c614e74f-8eb7-481b-82af-930fa75bf35f
X-Runtime: 0.089389

{
    "created_at": "2017-07-09T00:03:45.810Z",
    "first_name": "Aarmbh",
    "id": 4,
    "last_name": "Pal",
    "updated_at": "2017-07-09T00:03:45.810Z"
}
```

consumers GET   /consumers(.:format)   consumers#index
        http :3000/consumers

PUT   /consumers/:id(.:format) consumers#update
        http PUT :3000/consumers/3 first_name=Ananya

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/consumers
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"52102332e04200c59c3b9ca8f4850c6a"
Transfer-Encoding: chunked
X-Request-Id: 1c7a77ad-e6af-4ccf-949b-a0a2cb00e763
X-Runtime: 0.050283

[
    {
        "created_at": "2017-07-08T23:53:32.196Z",
        "first_name": "Nand",
        "id": 1,
        "last_name": "Kishor",
        "updated_at": "2017-07-08T23:53:32.196Z"
    },
    {
        "created_at": "2017-07-08T23:53:49.134Z",
        "first_name": "Raj",
        "id": 2,
        "last_name": "Kumar",
        "updated_at": "2017-07-08T23:53:49.134Z"
    },
    {
        "created_at": "2017-07-08T23:53:55.859Z",
        "first_name": "Anvay",
        "id": 3,
        "last_name": "Lal",
        "updated_at": "2017-07-08T23:53:55.859Z"
    }
]
rahul@rahul-Inspiron-N5010 transactions-api (master) $http PUT :3000/consumers/3 first_name=Ananya
HTTP/1.1 204 No Content
Cache-Control: no-cache
X-Request-Id: 01282620-327b-48cd-aca2-2baeb2fe1f7e
X-Runtime: 0.993377
```

Merchants – 3 End points

POST /merchants(.:format)   merchants#create
http POST :3000/merchants name=merchant_name domain=domain_name

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http POST :3000/merchants name=merchant_name domain=domain_name
HTTP/1.1 201 Created
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"d0adc285fbb0fd83bfc5218e6c3aa7fa"
Transfer-Encoding: chunked
X-Request-Id: 76b0ed16-8b01-40db-9d0f-a6a00593d27c
X-Runtime: 0.096081

{
    "created_at": "2017-07-09T06:00:05.459Z",
    "domain": "domain_name",
    "id": 4,
    "name": "merchant_name",
    "updated_at": "2017-07-09T06:00:05.459Z"
}
```

merchants GET   /merchants(.:format)   merchants#index
http :3000/merchants

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/merchants
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"3fa081959f173b498aba7f1fbc0d3db2"
Transfer-Encoding: chunked
X-Request-Id: c154a8bb-5706-4f09-b856-d8f43db32801
X-Runtime: 0.289605

[
    {
        "created_at": "2017-07-08T23:54:02.341Z",
        "domain": "https://www.yatra.com/",
        "id": 1,
        "name": "Yatra",
        "updated_at": "2017-07-08T23:54:02.341Z"
    },
    {
        "created_at": "2017-07-08T23:54:11.422Z",
        "domain": "http://www.cinepolisindia.com",
        "id": 2,
        "name": "cinepolisindia",
        "updated_at": "2017-07-08T23:54:11.422Z"
    },
    {
        "created_at": "2017-07-08T23:54:20.950Z",
        "domain": "http://www.chaipoint.com",
        "id": 3,
        "name": "chaipoint",
        "updated_at": "2017-07-08T23:54:20.950Z"
    }
]
```

PUT   /merchants/:id(.:format) merchants#update
http PUT :3000/merchants/4 name="PVR Cinemas"

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http PUT :3000/merchants/4 name="PVR Cinemas"
HTTP/1.1 204 No Content
Cache-Control: no-cache
X-Request-Id: 56e9d98d-e92a-44b9-8895-40d3c1924775
X-Runtime: 0.109018
```

Transactions – 6 End points (3 related with consumers and 3 with merchants)

consumer_transactions GET   /consumers/:consumer_id/transactions(.:format)
transactions#index
        http :3000/consumers/1/transactions

merchant_transactions GET   /merchants/:merchant_id/transactions(.:format)
transactions#index
        http :3000/merchants/1/transactions

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/consumers/1/transactions
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"eb4b0db27dd8c4caac2e038482991548"
Transfer-Encoding: chunked
X-Request-Id: c2081d5b-abe3-436b-b3fe-18235955c06c
X-Runtime: 0.322598

[
    {
        "consumer_id": 1,
        "created_at": "2017-07-08T23:54:33.252Z",
        "date": "2017-07-03",
        "id": 1,
        "merchant_id": 1,
        "sale_amount": "63.48",
        "updated_at": "2017-07-08T23:54:33.252Z"
    },
    {
        "consumer_id": 1,
        "created_at": "2017-07-08T23:54:49.551Z",
        "date": "2017-07-05",
        "id": 2,
        "merchant_id": 2,
        "sale_amount": "47.1",
        "updated_at": "2017-07-08T23:54:49.551Z"
    }
]
```

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/merchants/1/transactions
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"3392c50b5a5a77d1d9eecfc39bfc35a4"
Transfer-Encoding: chunked
X-Request-Id: b3041973-8d01-4ab1-ae5e-38ff360eb19d
X-Runtime: 0.029403

[
    {
        "consumer_id": 1,
        "created_at": "2017-07-08T23:54:33.252Z",
        "date": "2017-07-03",
        "id": 1,
        "merchant_id": 1,
        "sale_amount": "63.48",
        "updated_at": "2017-07-08T23:54:33.252Z"
    },
    {
        "consumer_id": 2,
        "created_at": "2017-07-08T23:54:57.253Z",
        "date": "2017-06-25",
        "id": 3,
        "merchant_id": 1,
        "sale_amount": "37.4",
        "updated_at": "2017-07-08T23:54:57.253Z"
    }
]
```

POST /consumers/:consumer_id/transactions(.:format)   transactions#create
        http POST :300/consumers/1/transactions merchant_id=1 sale_amount=111
date=2017/04/11

POST /marchants/:merchant_id/transactions(.:format)   transactions#create
        http POST :3000/merchants/1/transactions consumer_id=1 sale_amount=222
date=2017/04/22

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http POST :3000/consumers/1/transactions merchant_id=1 sale_amount=111 date=2017/04/11
HTTP/1.1 201 Created
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"3d1e757af971594c2631e6271c239008"
Transfer-Encoding: chunked
X-Request-Id: cc9d58a8-ea98-48fc-8146-b9717da771c6
X-Runtime: 0.107920

{
    "consumer_id": 1,
    "created_at": "2017-07-09T14:03:50.431Z",
    "date": "2017-04-11",
    "id": 6,
    "merchant_id": 1,
    "sale_amount": "111.0",
    "updated_at": "2017-07-09T14:03:50.431Z"
}

rahul@rahul-Inspiron-N5010 transactions-api (master) $http POST :3000/merchants/1/transactions consumer_id=1 sale_amount=222 date=2017/04/22
HTTP/1.1 201 Created
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"def5622c907d5e711643cff532470c27"
Transfer-Encoding: chunked
X-Request-Id: ab24eec1-ac5c-4075-8b03-c50652f76ce2
X-Runtime: 0.136395

{
    "consumer_id": 1,
    "created_at": "2017-07-09T14:05:16.455Z",
    "date": "2017-04-22",
    "id": 7,
    "merchant_id": 1,
    "sale_amount": "222.0",
    "updated_at": "2017-07-09T14:05:16.455Z"
}
```

PUT /consumers/:consumer_id/transactions/:id(.:format) transactions#update
        http PUT :3000/consumers/1/transactions/1 sale_amount=444

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http PUT :3000/consumers/1/transactions/1 sale_amount=444
HTTP/1.1 204 No Content
Cache-Control: no-cache
X-Request-Id: e5d69495-adc4-4364-adc3-c6ed82c1d391
X-Runtime: 0.008116


rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/consumers/1/transactions
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"afb44bcb219cff4328293a89fb89b320"
Transfer-Encoding: chunked
X-Request-Id: 08d2c0c7-9aa3-4957-9d18-83be216edbdd
X-Runtime: 0.006882

[
    {
        "consumer_id": 1,
        "created_at": "2017-07-08T23:54:33.252Z",
        "date": "2017-07-03",
        "id": 1,
        "merchant_id": 1,
        "sale_amount": "444.0",
        "updated_at": "2017-07-09T14:10:49.274Z"
    },
```

PUT /merchants/:merchant_id/transactions/:id(.:format) transactions#update
    http PUT :3000/merchants/1/transactions/1 sale_amount=555

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http PUT :3000/merchants/1/transactions/1 sale_amount=555
HTTP/1.1 204 No Content
Cache-Control: no-cache
X-Request-Id: 9e15f5d2-3447-4b91-9183-4f74567dbb9c
X-Runtime: 0.095250


rahul@rahul-Inspiron-N5010 transactions-api (master) $http :3000/merchants/1/transactions
HTTP/1.1 200 OK
Cache-Control: max-age=0, private, must-revalidate
Content-Type: application/json; charset=utf-8
ETag: W/"66f347af1a91a8d7c2146075553b8b50"
Transfer-Encoding: chunked
X-Request-Id: a8d1ebd5-8673-454f-9f41-00f7b066bbf3
X-Runtime: 0.012025

[
    {
        "consumer_id": 1,
        "created_at": "2017-07-08T23:54:33.252Z",
        "date": "2017-07-03",
        "id": 1,
        "merchant_id": 1,
        "sale_amount": "555.0",
        "updated_at": "2017-07-09T14:13:41.150Z"
    },
```

http POST /marchants/:merchant_id/transactions with invalid merchant id 100

```
rahul@rahul-Inspiron-N5010 transactions-api (master) $http POST :3000/merchants/100/transactions consumer_id=1 sale_amount=222 date=2017/04/22
HTTP/1.1 422 Unprocessable Entity
Cache-Control: no-cache
Content-Type: application/json; charset=utf-8
Transfer-Encoding: chunked
X-Request-Id: b434b90b-6584-4510-8d7b-355f8a21f754
X-Runtime: 0.012110

{
    "message": "Validation failed: Merchant must exist"
}
```