

# QA Automation Code Challenge - API Test Framework Setup and Test Case Implementation

The company has developed a new API endpoint to collect bank info from customers.

As an Automation Engineer/QA, you are required to develop an API Framework and implement test cases to cover this new endpoint.

## Tasks and requirement:

- Analysis the business requirement (attached)
- Setup API Test framework using your most comfortable tech stack
- Write automated api tests to verify the new endpoint is working as expected
- Focus on functional testing only, both positive and negative tests
- Document any defects/issues found, and include all necessary info for Dev to reproduce and fix the issue (in Word or other type of file you think appropriate)
- Submit your project via Github or zipped file and include README file for setup and executing tests
- Tests should be able to run from command line, so it's easy for CI integration
- The tests will run in different environments, so make the endpoint url configurable, make sure include instruction in README for the usage

## Business requirement for new endpoint /bank:

Airwallex needs an API service endpoint to collect customers' bank details, at this very early stage, we only accept bank country US, AU and CN.

We also want to have a field for payment method (can be either LOCAL or SWIFT), when it's SWIFT, customer needs to pass a valid swift code to us in the payload.

Payload fields:

- payment\_method: mandatory, value should be either LOCAL or SWIFT
- bank\_country\_code: mandatory, can be one of US, AU, CN
- account name: mandatory, any character, length from 2 to 10
- account number: mandatory
  - for US, account number is 1-17 character long, can be any character
  - for AU, account number is 6-9 character long, can be any character
  - for CN, account number is 8-20 character long, can be any character
- swift\_code:
  - mandatory when payment method is SWIFT
  - the 5th and 6th character of swift code should match the bank country code, e.g. ICBK**CN**BJ is a valid swift code for **CN**
  - swift code should be either 8 or 11 characters
- bsb:
  - mandatory when bank country is AU
  - 6 characters
- aba:
  - mandatory when bank country is US
  - 9 characters

If the request passes the field validation, 200 response will returned.

If the request failed the validation, we need to return 400 http response with proper error message, some sample messages as below:

- when account\_number not given: "account\_number' is required"
- account\_number length error: "Length of account\_number should be between 7 and 11 when bank\_country\_code is 'US'"
- wrong swift code: "The swift code is not valid for the given bank country code: US"
- swift code length error: "Length of 'swift\_code' should be either 8 or 11"

## Endpoint details from Dev:

The developer has complete the first version of this new endpoint and provided the following details:

- URL: <http://preview.airwallex.com:30001/bank>
- http method: POST
- sample payload:
  - ```
{
  "payment_method": "SWIFT",
  "bank_country_code": "US",
  "account_name": "John Smith",
```

```
"account_number": "123",  
"swift_code": "ICBCUSBJ",  
"aba": "11122233A"  
}
```

- sample 200 response:

- {  
 "success": "Bank details saved"  
}

To be deployed soon:

Another environment URL: <https://demo.airwallex.com:30001/bank>