API Development

Part 1 – Design & develop an API

Your first job is to get the API-Connect development and testing environment up and running. You will be installing it on a crash and burn testing laptop for now. You will then create the basis for an application that will exposes an API.

To Do List

Begin with a fairly common IBM starting point:

https://developer.ibm.com/apiconnect

1) Combine your experience with any instructions you find and need in order to set up the API Connect development and testing environment on the laptop.

2) Create a simple Loopback application called mobile-bank-api. In the future, you will extend the application to expose an API. Be sure to add a model and datasource
      Name: mobile-bank-api
      Kind: empty-server
      Model name: bank_account

3) Start API Connect and log in.

4) Verify that the application is available to continue building.

Part 2 – Complete the application and test the API

Now that you have created the basis for the mobile-bank-api application and logged in to the API Connect development and testing environment, complete it the application, ensuring that it exposes an appropriate API. Then run any tests you normally would, given the type of API you created.

To Do List

1. While completing the application and creating the model ensure that it includes an appropriate set of parameters:

- o Customer first name, customer last name, account number, account balance
- o Use datasource "db (memory)
- o Ensure that the model is exposed via REST API, and that it uses "json" not "xml",

2) Go to the Source and make the following two changes –
   a) Change the base path to /api/apiBase
   b) Change the responses for /routes from '200' to '450' and modify the description accordingly.

3). Using the API Connect development and testing environment, verify that mobile-bank-api properly starts and stops. Run any tests you prefer.

Part 3 – Publish the API

Now it's time to take what you've done and get it into the Bluemix environment so you can work on it further from there and get it ready for staging.

To Do List

1) Publish the API's into the default Bluemix sandbox catalog.
   New name: bank-2

2) Go to your online Bluemix account, and verify that the API's are there and accessible.

If it's not already open, use this link with your credentials –
https://new-console.ng.bluemix.net/

Part 4 – Create a second API

Using API Connect in Bluemix, create a new API.

In the next part, you will create a product that makes the API available to developers so that it can be consumed.

To Do List

1) Create a new API within Bluemix. Make it bare bones, just enough to ~~be~~ evaluate.

      API name: lighthouse-mobile-api
      Contact: Use test credentials
      Details: Make it http and use json and CORS

2) Add a policy to invoke a proxy using this url and details:
      url: jsonplaceholder.typicode.com/posts
      Name: json proxy
      Description: test proxy

Part 5 – Create an API product that includes the API's

Create a product that includes both API's that you created earlier.

To Do List

1) Create a "API product" called lighthouse-apis that includes the API's you created previously.

      a) Limit who can see this product to only authenticated users.
      b) Add a second unlimited plan that requires approval.
      c) Limit the API call rate to 50 calls/minute.
      d) Add your contact info.

2) Make the product available in the Staging catalog.