This is a demo development project on Moula coding challenge.

The demo API site is now hosted on Azure cloud at url: <http://mycustomerapi.azurewebsites.net/>

The source codes are stored in Github at url: <https://github.com/pluo2000/Customer.API>

Details of the development are as below

1. Development Tool: Visual Studio 2019
2. Application type: Microsoft Web Api 2 application
3. Programming language: C#

1. OS: .NET Framework 4.7.2 on Windows

1. Technical Design:

* Multi tiers application architecture is used to separate the layers of api, business logic and data.
* Local file (Files\Customers.json) is used as data storage and configured in Web.Config file of the API project.
* Dependency Inversion and Dependency injection design patterns are used in the codes to provide for flexibility in switching the data storage provider in future.

1. Unit test: a nunit test project is included in the solution.
2. System Test: Two Http API endpoints are provided for retrieving user balance information sorted by the newest date. It is suggested to use RestEasy or Postman tool to test the APIs.

* retrieve by user name: <https://mycustomerapi.azurewebsites.net/api/Customer/Name/Jimmy>
* retrieve by user id

<https://mycustomerapi.azurewebsites.net/api/Customer/UserId/12>

1. CI/CD:

* Azure DevOps Build and Release Pipelines are used to build the source codes from Github and then deployed into Azure Cloud App Service site (<http://mycustomerapi.azurewebsites.net/>)
* YAML file is attached 
* The site is also configured to support Github CI/CD via Github Action workflow.