

The attached zip file is a Visual Studio solution. It can be launched by double cliking the solution file. It has the following projects:

* The "DataStore" project is the simluated data store for the single product;
* The "EmailUtility" is a utility project to send the emails;
* The "CreditServiceImplementation" project defines and implements the credit card service. For demonstration purpose only, it accepts any string as redit card number and any decimal as charge amount;
* The "CreditServiceHost" project is a web applcation serves as the host of the WCF web service;
* The "UnitTest" project is the unit test project to test the data store, the email utility, and the service implementation;
* The "UIClient" is a WPF application to test the the data store, the email utility, and the service. It will truly communicate with the WCF service to make a fake credit card charge. To run the "UIClient" application, you will need to start the "CreditServiceHost" web application first. Since we are not sending emails, so the "UIClient" will always fail to place the order.

The following picture shows that all the unit tests passed:



The Visual studio solution is developed by Visual Studio 2015 Express. You will need compatible Visual Studio version to open it.