Overview of the overall structure of the application: this application is a basic Inventory management system which can be used to create, modify, delete and browse Products along with Category and Unit of measurement. This application contains 3 separate components as –

1. Database Scripts: to create database (sql server 2012 or higher)
2. InventoryServices: it consist of web apis for database layer.
3. InventoryUi: it consists of Ui part using ASP.Net web forms.

These 3 components can be installed on the same or different machines.

Software required:

1. Visual Studio 2017 or higher.
2. Sql server Management studio 2012 or higher.
3. Chrome / Firefox

Steps to create the database (database name ‘Inventory’) (Sql server 2012 or higher)-

(Note: Sometimes the database creation through script may fail due to following reasons-

if proper path for database files is not given in the script.

Permission issue.

So, a better approack can be to create database in Sql server Management studio through right click the Databases node in the left pane and use New Database menu option.)

1. Download the project from <https://github.com/manishankarghoshkatni/Derivco_01.git> as a zip archive.
2. Open the archive and navigate to Db\_Scripts folder under the root folder. It contains 2 script files-
   1. Db\_Create.sql – it contains database creation scripts.
   2. Obj\_Create.sql – it contains Table and other objects creation scripts like stored procedures along with record insert commands.
3. Open Sql server Management studio –
   1. Open Db\_Create.sql using File -> Open menu command. It contains a database creation command like as follows –

CREATE DATABASE [Inventory]

CONTAINMENT = NONE

ON PRIMARY

( NAME = N'Inventory', FILENAME = N'<PATH TO DATABASE LOCATION>\Inventory.mdf' , SIZE = 5120KB , MAXSIZE = UNLIMITED, FILEGROWTH = 1024KB )

LOG ON

( NAME = N'Inventory\_log', FILENAME = N' <PATH TO DATABASE LOCATION >\Inventory\_log.ldf' , SIZE = 2048KB , MAXSIZE = 2048GB , FILEGROWTH = 10%)

GO

* 1. Replace < PATH TO DATABASE LOCATION> with a proper file location where the current sql server instance has the rights to create database.

1. Execute the script.
2. Right click the Databases node in the left pane in Sql server Management studio click Refresh menu option to ensure that the database has been created successfully with database name as ‘Inventory’.

Steps to create other database objects like table, stored proc etc –

1. Open Obj\_Create.sql script file using File -> Open menu command in Sql server Management studio.
2. Execute the script.
3. Right click the database node ‘Inventory’ in the left pane in Sql server Management studio and click Refresh menu option to see the newly created database objects.

Start the web api application:

1. Navigate to ‘Assignment\ Api\InventoryServices’ folder.
2. Double click the InventoryServices.sln file to open the project in visual studio 2017 or higher.
3. Open the web.config from the root folder.
4. Locate the connection string with the name as ‘InventoryEntities’ and find the ‘data source’ option in it. Replace it with a proper value. It takes the format as ‘Database host\sql server instance name’ like mydbhost\sqlexpress
5. Save it.
6. Run the project. It will open a browser window and display ‘Product Service running …’ once started.

Start the Ui application:

1. Navigate to ‘Assignment\UI\InventoryUi’ folder.
2. Double click the InventoryUi.sln file to open the project in visual studio 2017 or higher.
3. If the web api and UI applications are running on the same machine, then steps through 4 to 7 can be skipped.
4. Open the web.config from the root folder.
5. Locate the following line under appSettings as ‘<add key="WebApiRootUrl" value="http://localhost:49732/" />’
6. Change ‘localhost’ with the target machine name or ip of the machine where the web api service is running.
7. Save the file.
8. Run the project. It will open in browser and display the UI. It contains 3 main menu options-
   1. Product-
      1. Add: to add new Product.
      2. Search / Modify/Delete: to Search / Modify/Delete existing Product.
   2. Category-
      1. Add: to add new Category.
      2. Search / Modify/Delete: to Search / Modify/Delete existing Category.
   3. Unit-
      1. Add: to add new Unit.
      2. Search / Modify/Delete: to Search / Modify/Delete existing Unit.