



ENTITY FRAMEWORK HANDS-ON LABS

Designed for Skill Assure

ABSTRACT

Hands-On-Labs for designing and implementing Data Access Layer using the Entity Framework

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Entity Framework Hands-On-Labs

Expected Time to Complete: 90 Minutes

Create an Empty .Net Project called "*SellPhonesStore*"

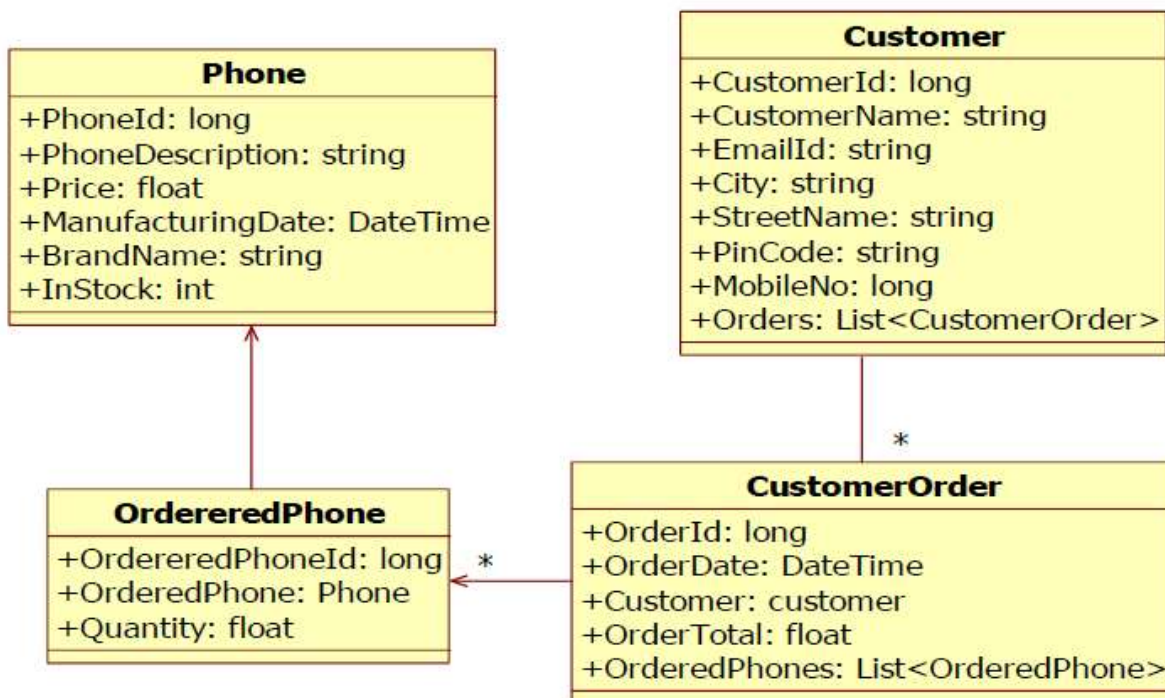
Lab 1: Entities

Step 1:

Add a Class Library project called "*SellPhonesStore.Entities*" into the empty project you have created before.

Step 2:

Create **Phone**, **Customer**, **CustomerOrder** and **OrderedPhone** classes and provide properties and relationships as shown in the below class diagram.



Step 3: Validations

- Phone Price should not take negative values
- Phone Description must be mandatory with 500 max characters
- Customer Name must be mandatory with 100 max characters
- Customer EmailId is mandatory and it should be valid mail id
- Ordered Phone Quantity is non-negative

Lab2: Data Access Layer using EF Code First

Step 1:

Create a Data Access Layer using Entity Framework Code First by adding a new Class Library project called "***SellPhonesStore.DataAccess***"

Step 2:

Install a nuget package "***Entity Framework***" into the DAL layer project

Step 3:

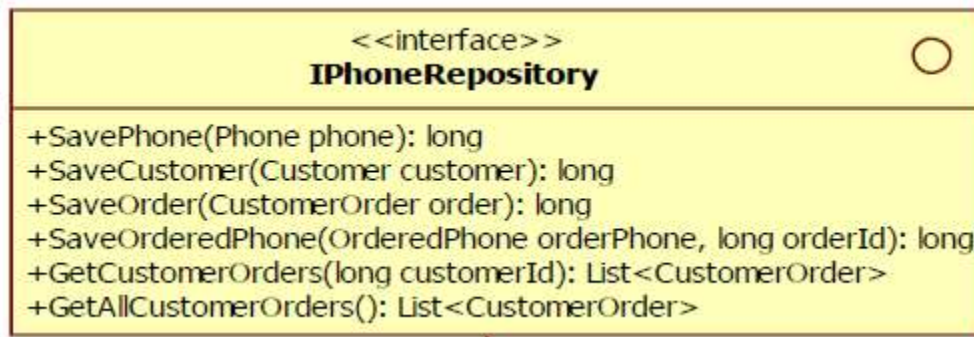
Add an Entity Layer Project ***SellPhonesStore.Entities*** as a reference into your ***SellPhonesStore.DataAccess*** DAL project

Step 4:

Add a sub class ***SellPhonesStoreDbContext*** and extend from ***DbContext*** class of EF with a suitable ***DbSet<T>*** properties

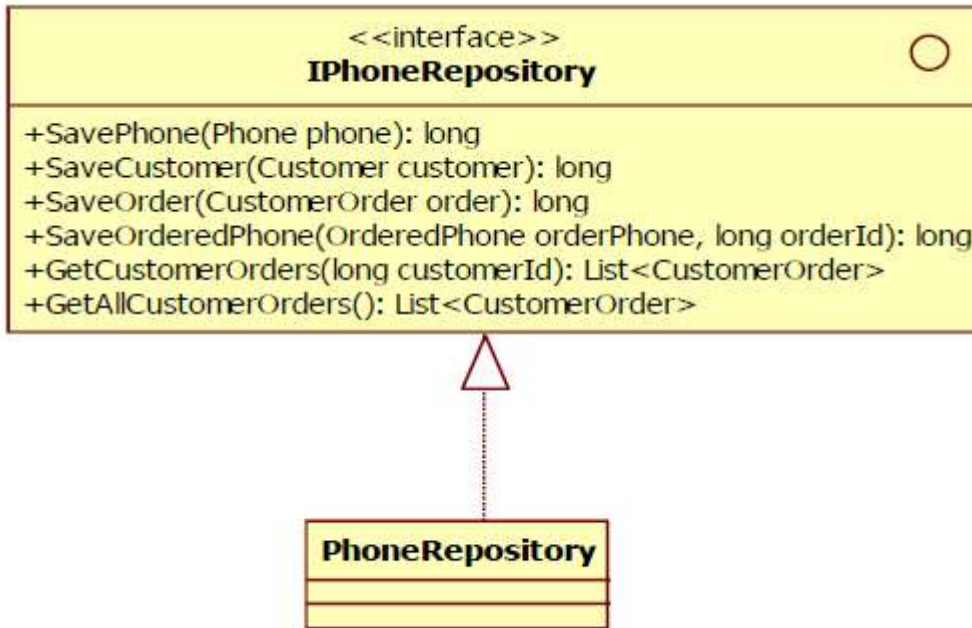
Step 5:

Add an Interface "***IPhoneRepository***" into your DAL layer project with the following abstractions



Step 6:

Create a class "***PhoneRepository***" and implement the ***IPhoneRepository*** interface in your DAL Project using Entity Framework Code First Approach



Lab 3: Console Client Application

Step 1:

Add a new Console Client Application "*SellPhonesStore.ConsoleClient*"

Step 2:

Call all the methods in DAL layer and verify the database for confirmation.