Building Database Applications- Lab 1 – Create simple architecture

1. Introduction.
   a. You can use C#/Java/C++ language for realize tasks.
   b. I propose use Git Hub for store yours project and send me a link to adam.hakowski@wab.edu.pl or send compressed project via email.
2. Create project with layers(can be folders or packages or assemblies):
   a. Models
      i. Create class with name Cart and with fields:
         1. Id, Integer
         2. CreatedDate, DateTime
         3. UpdatedDate, DateTime
         4. UserId, Integer
         5. Articles, List<Article>
         6. Value, Decimal
      ii. Create class Article with fields:
         1. Id, Integer
         2. Name, String
         3. Price, Decimal
         4. Quantity, Integer
         5. Unit, String
   b. Repositories
      i. Create class CartRepository with functions/methods
         1. GetCart with Id as argument/ entry parameter. Mock example date.
         2. GetAllCarts with UpdateDate as argument
         3. GetAllCarts and return all carts
   c. Services
      i. Create class CartService with functions/methods:
         1. GetAllCarts and get data by CartRepository. Calculate Value of Cart by formula:
            Value = Sum(Article Price * Article Quantity)
   d. Views
      i. Create class CartView and call GetAllCarts from CartService