ESKİŞEHİR OSMANGAZİ UNIVERSITY
COMPUTER ENGINEERING DEPARTMENT

Dr. Öğr. Üyesi Uğur GÜREL

Online Book Store

Object Oriented Programming II

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Grup Members

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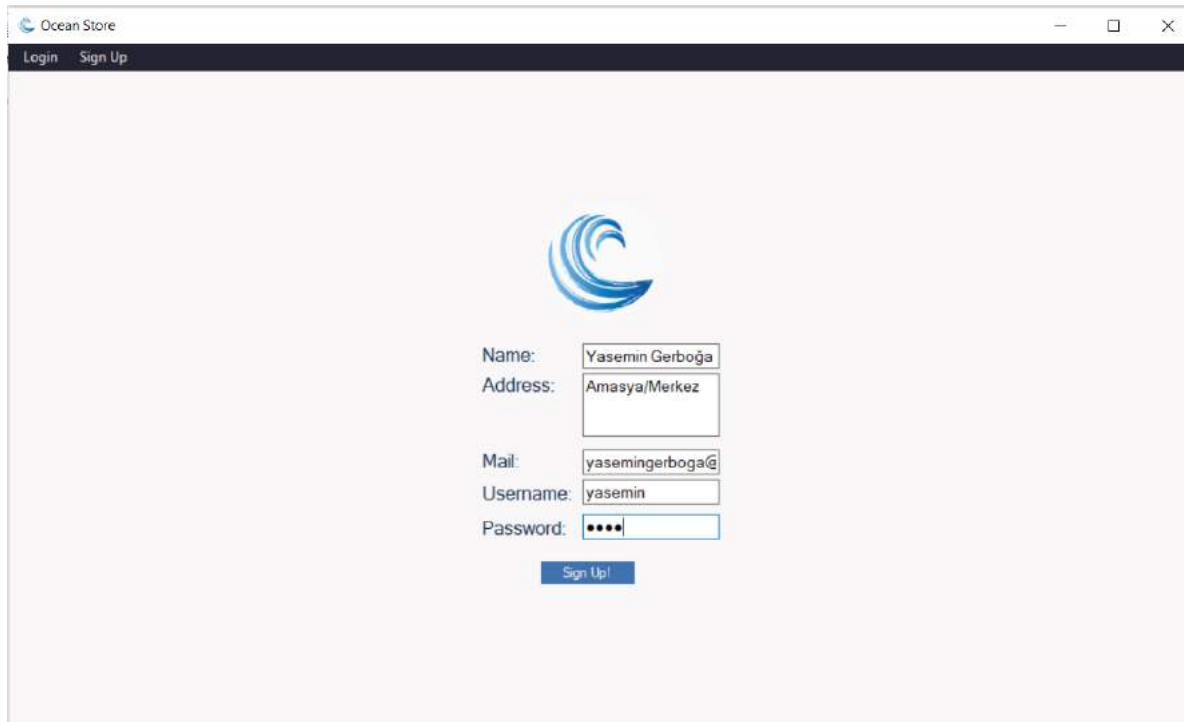152120171041 Elif Esra EKER

152120171056 Yasemin GERBOĞA

CONTENT PAGE

1. INTRODUCTION

The project's purpose is to gain the shopping experience to customer. The project's idea is to purchase product from online shopping application. The customer logins to the application with username and password. The customer can examine product and it's properties (name,price,piece that received) after login. The customer can add product as many products as wants also can remove products from shopping cart. The customer can choose one of from cash,credit card or transfer/EFT for payment . The customer can choose delivery address. The customer must enter verification code that sent to e-mail address. Therefore the customer should enter correct e-mail address. The customer's invoice will sent to customer's e-mail address in .pdf format. The customer can see cargo status and can see old orders.

2. DESIGN

2.1. UML
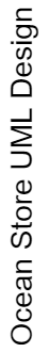
2.2. SAMPLE OUTPUT OF PROGRAM FOR SAMPLE INPUT
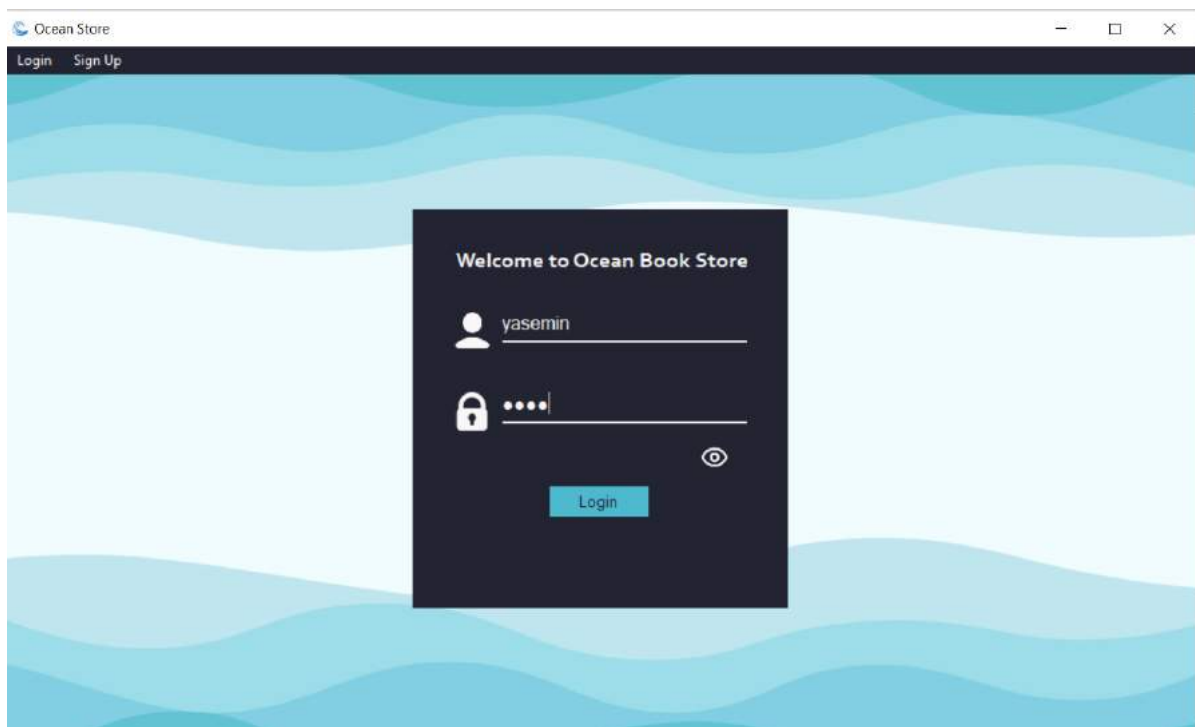
SIGN UP SCREEN

This screen provides us sign up to the application

LOGIN SCREEN
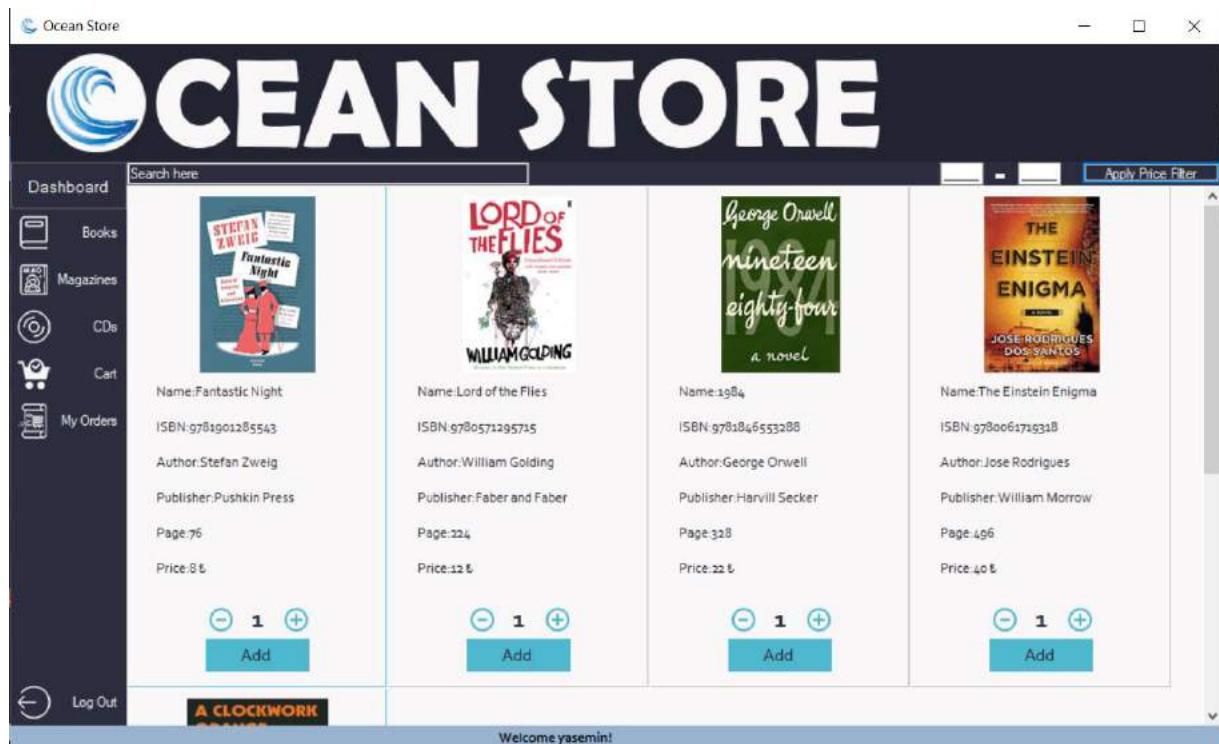
This screen provides us login to the application
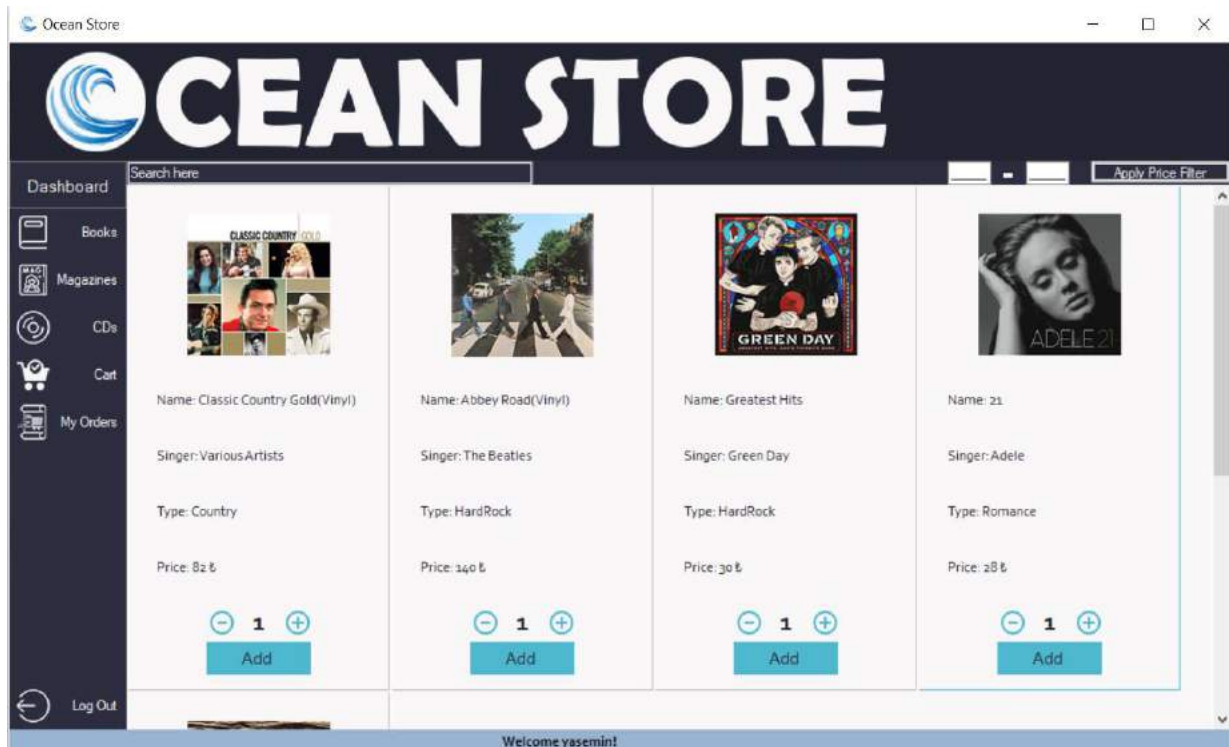
BOOKS SCREEN
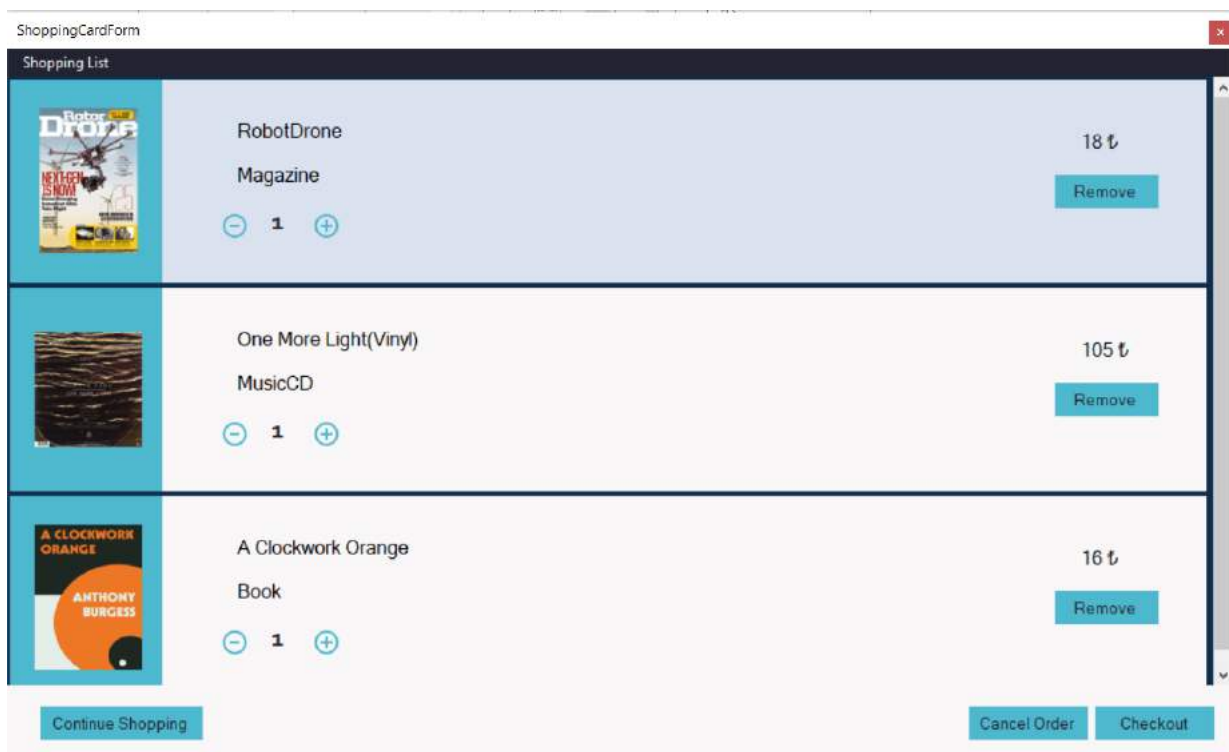This screen provides us list of books
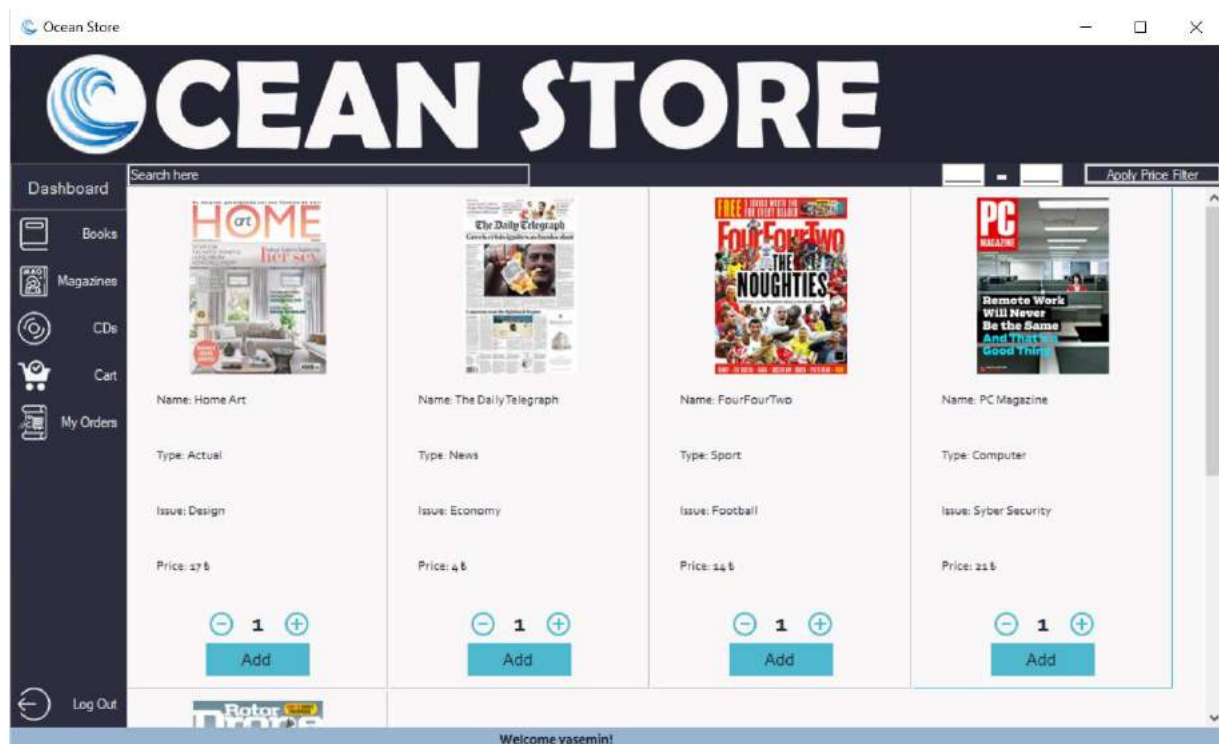
MAGAZINES SCREEN
This screen provides us list of magazines.

MUSICCD SCREEN
This screen provides us list of musicCd

SHOPPING LIST
This screen shows shopping cart

PAYMENT SCREEN
This screen shows payment operations

VERIFICATION CODE IN MAIL
This screen shows verification code that sent to the e-mail
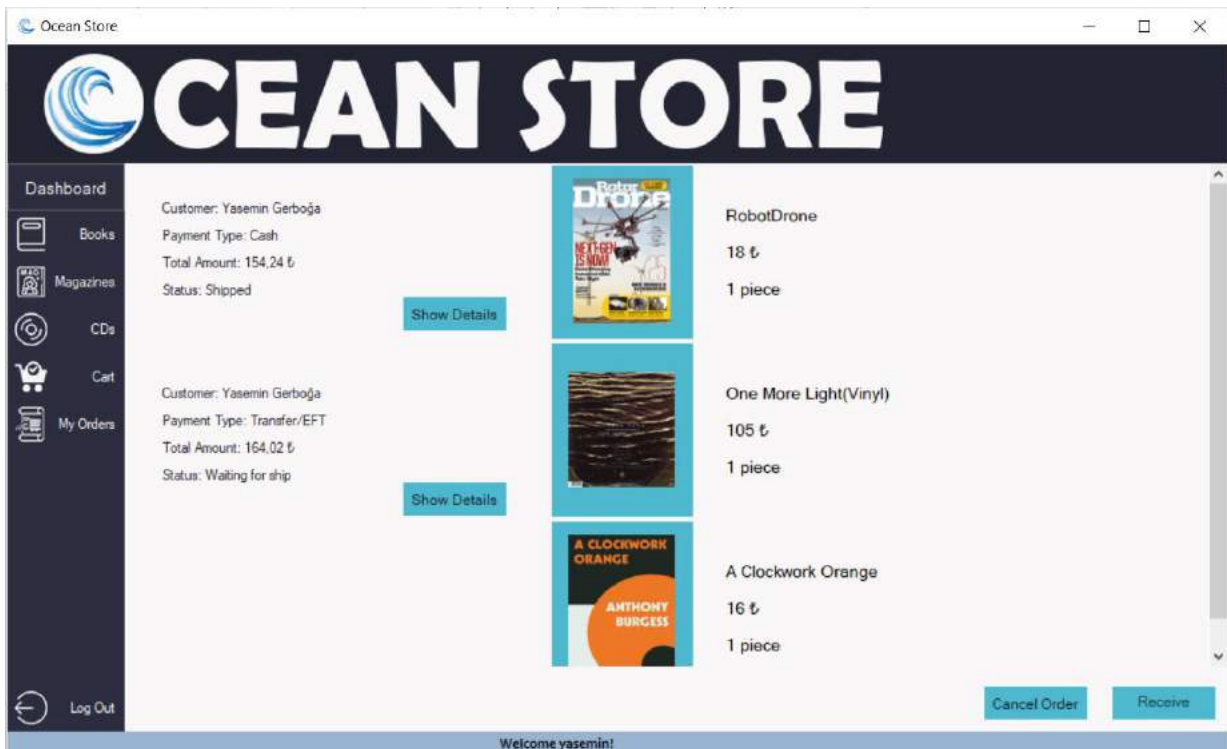
	Date	31.05.2020 23:30:56
	Username	yasemin
	Order ID	6
	Cargo Amount	0
	Payment Amount	164,02

Image	ID	Name	Quantity	Total Price
	25	Robot&Drone	1	18
	35	One More Light(Vinyl)	1	105
	15	A Clockwork Orange	1	16

INVOICE PDF FILE IN MAIL

This screen shows invoice information that sent to the e-mail

MY ORDERS SCREEN

This screen shows orders belong to customer

ADMIN BOOKS SCREEN
In this screen, admin can add, delete and update books.

ADMIN MAGAZINES SCREEN
In this screen, admin can add, delete and update magazines.

ADMIN MUSICCD SCREEN
In this screen, admin can add, delete and update musicCd

ADMIN ORDERS SCREEN
In this screen, admin can see all customer's orders

2.3. DESIGN PATTERN DESCRIPTION

Design patterns are an important part of object-oriented programming. We used two types of design patterns in this project.

Singleton Pattern

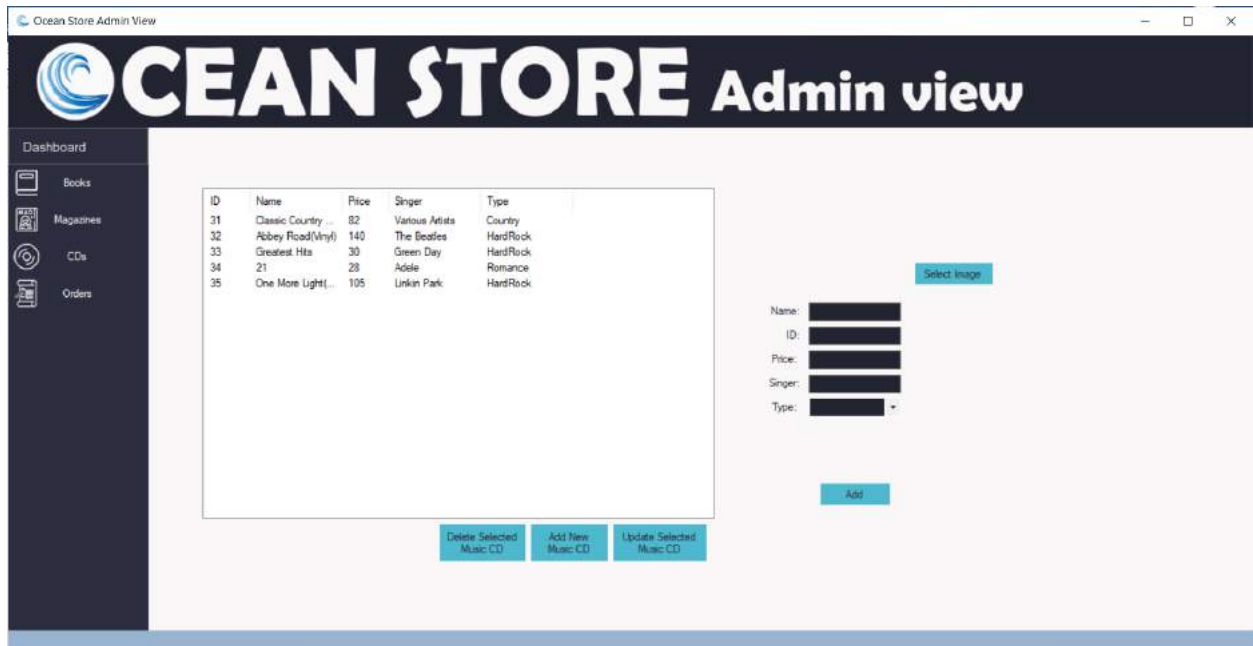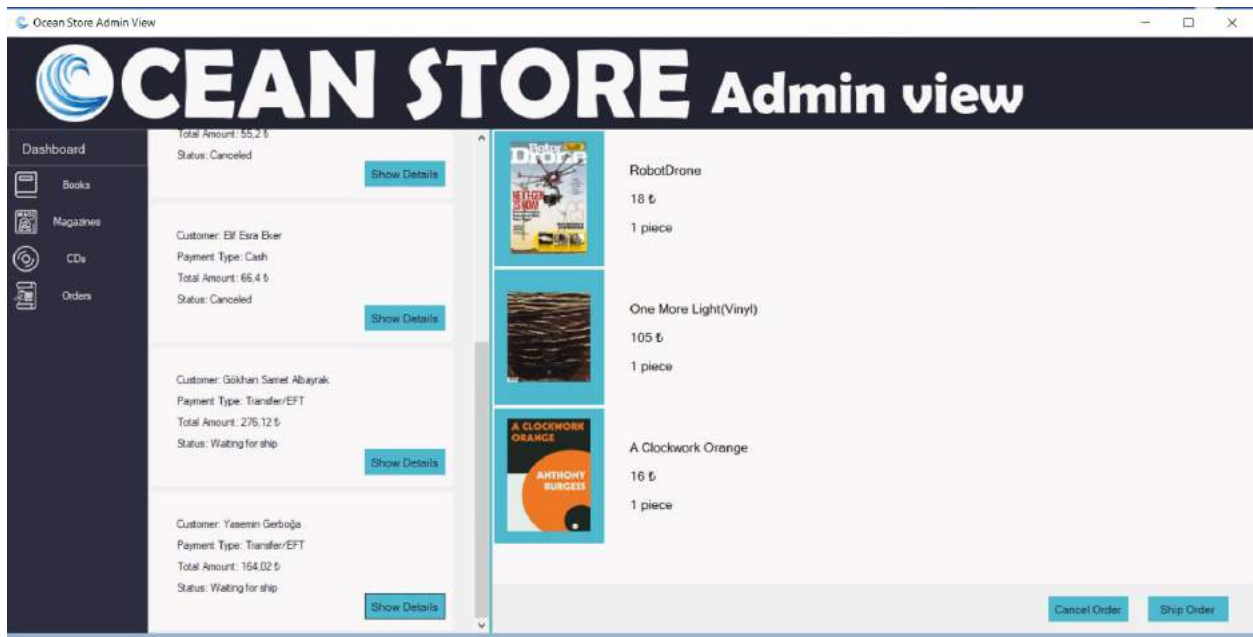We will explain the singleton desing pattern and why we use it. Singleton Design Pattern is in the Creational Design Pattern group. Singleton desgin pattern is the design pattern that guarantees that only one object is created at run time. One of our purposes is to make the logged in user unique. We created a class for this requirement and let the class managed its own instance. We accessed instance via getInstance() method via another class. In Singleton Pattern, an object is created only when we need it. So, we avoided creating global variable. We use this pattern in Logger class and Logined Customer class in project.

FactoryMethod Pattern

We used the factory design pattern as the second pattern. The Factory design pattern is a structure based on class creation. Since the program we wrote has more than one class that is similar to each other, we used this pattern in order to use the new operator each time when creating such classes, or to write code as if they were independent from each other. We used this structure when producing a product with the factories we created or when producing more than one similar product. We use polymorphism. Product class is not interested in the instance. Let's think. We are a customer who goes to the restaurant. We want to eat meal but we don't interested in how the meal cooks. Product class is customer and the instance of product is a meal. When creating an object, we created a creator object and we created it with the factory. (BookFactory, MagazineFactory, MusicCdFactory). While accessing the information inside, we accessed object with virtual FactoryMethod () function by giving the type of our object.

2.4. TASK ASSIGNMENTS

SİNA KUŞOĞLU	AdminScreen, LoginScreen, SignUp Screen, ShoppingCard, Invoice, Util, StoreMainScreen, MyOrders, ItextSharp
İSMAİL DEMİRCAN	Logined Customer, ShoppingCard, ShoppingList, Util, Search and Price Filter, FactoryMethod, Logger
GÖKHAN SAMET ALBAYRAK	MusicCd Design, MusiCd Screen, Product, Book, Magazine, MusicCd, MusicCdFactory, Invoice, MyOrders, Logger
YASEMİN GERBOĞA	Books Design, Books Screen, Customer, BookFactory, Invoice, Util, StoreMainScreen
ELİF ESRA EKER	Magazines Design, Magazines Screen, MagazineFactory, Creator, ShoppingCard Class, ItemtoPurchase, Util

3. DUTY OF THE TEAM MEMBERS (PERCENT)

SİNA KUŞOĞLU -- %26

İSMAİL DEMİRCAN -- %22

GÖKHAN SAMET ALBAYRAK------------------------------- %19

YASEMİN GERBOĞA --- %19

ELİF ESRA EKER --- %14