

Sri Lanka Institute of Information Technology Sri Lanka

B.Sc. (Hons) in Information Technology

MODERN TOPICS IN INFORMATION TECHNOLOGY (IT4020)

Assignment Report

Assignment 01

Declaration

We declare that this is our own work, and this proposal does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or Institute of higher learning and to the best of our knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Introduction

This is a plug-in project with numerous plug-ins that will connect together, as well as a producer who will produce services and consumers who will consume those services and make it available to the user. The Apache Felix Framework was used to construct this, which was installed and ran on the Eclipse Equinox platform.

This is for an Online Shopping store. Mainly, this online store has variety of categories.

- Men's clothes section
- Women's clothes section
- Kids clothes section
- Shoes section

User can go to each main sector and buy whatever they want based on their wishes. For this OSGi framework Men's clothes, Women's clothes, Kids clothes and shoes sections are the producers/services of this system. The consumer/subscriber of the system is online shop.

Main objective of this system is to provide a service for clients to buy the clothes online using this system.

Table of the Content

D	eclaration	2
In	troduction	3
Li	st of Figures	5
1.	System Diagram	6
2.	Manifest implementations	7
	Online Kids Shop publisher (Producer/Service)	7
	Online Men Shop publisher (Producer/Service)	7
	Online Shoes publisher (Producer/Service)	8
	Online Women's Shop publisher (Producer/Service)	8
	Kids Shop subscriber (Consumer/Subscriber)	9
	Men Shop subscriber (Consumer/Subscriber)	9
	Online shoes subscriber (Consumer/Subscriber)	10
	Online womens subscriber (Consumer/Subscriber)	10
	Integrated - Online shop subscriber (Consumer/Subscriber)	11
3.	Bundles	12
	Online Kids Shop publisher	12
	Online Men Shop publisher	12
	Online Shoes publisher	13
	Online Women's Shop publisher	13
	Online Kids Shop Subscriber	14
	Online Men Shop Subscriber	14
	Online Shoes Subscriber	15
	Online Women Shop Subscriber	15
	Integrated - Online Shop Subscriber	16
4.	Behavior and Outputs	17
	Available bundles status	17
	Outputs	19

List of Figures

Figure 1.1: Overall System Diagram	6
Figure 2.1: Online Kids Shop publisher Manifest.mf file	7
Figure 2.2: Online Men Shop publisher Manifest.mf file	7
Figure 2.3: Online Shoes publisher Manifest.mf file	8
Figure 2.4: Online Women's Shop publisher Manifest.mf file	8
Figure 2.5: Online kids Shop subscriber Manifest.mf file	9
Figure 2.6: Online Men Shop subscriber Manifest.mf file	9
Figure 2.7: Online shoes Subscriber Manifest.mf file	10
Figure 2.8: Online shoes subscriber Manifest.mf file	10
Figure 2.9: Online Shop subscriber Manifest.mf file	11
Figure 3.1 : Online Kids Shop publisher bundle	12
Figure 3.2: Online Men Shop publisher bundle	12
Figure 3.3: Online Shoes publisher bundle	13
Figure 3.4: Online Women's Shop publisher bundle	13
Figure 3.5: Online Kids Shop Subscriber bundles	14
Figure 3.6:Online MenShop subscriber bundles	14
Figure 3.7: Online Shoes subscriber bundles	15
Figure 3.8: Online Women Shop subscriber bundles	15
Figure 3.9: Online Shop subscriber bundles	16
Figure 4.1: Available Kids Shop activated bundles	17
Figure 4.2: Available Men Shop activated bundles	17
Figure 4.3: Available Shoe Shop activated bundles	18
Figure 4.4: Available Women Shop activated bundles	18
Figure 4.5:intergrated all active bundles status	19
Figure 4.6: Output for kid clothes	19
Figure 4.7: Output for women clothes	20
Figure 4.8: Output for men clothes	20
Figure 4.9: Output for shoes	21

1. System Diagram

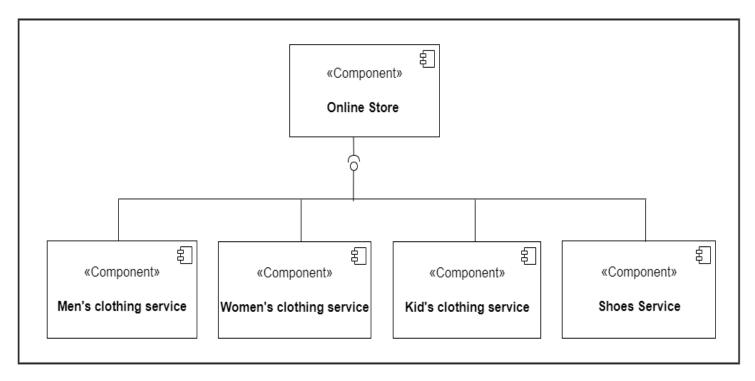


Figure 1.1: Overall System Diagram

2. Manifest implementations

Online Kids Shop publisher (Producer/Service)

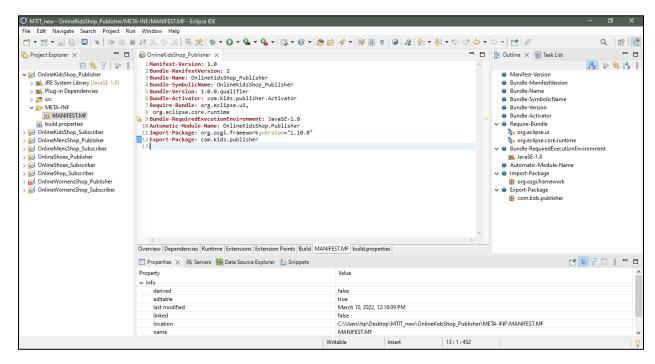


Figure 2.1: Online Kids Shop publisher Manifest.mf file

Online Men Shop publisher (Producer/Service)

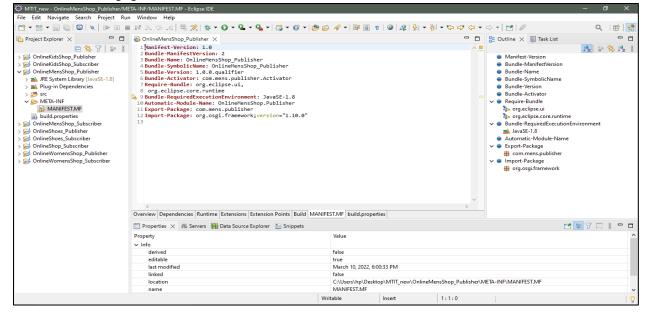


Figure 2.2: Online Men Shop publisher Manifest.mf file

Online Shoes publisher (Producer/Service)

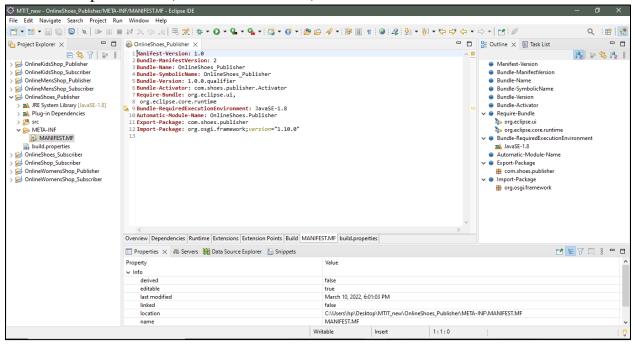


Figure 2.3: Online Shoes publisher Manifest.mf file

Online Women's Shop publisher (Producer/Service)

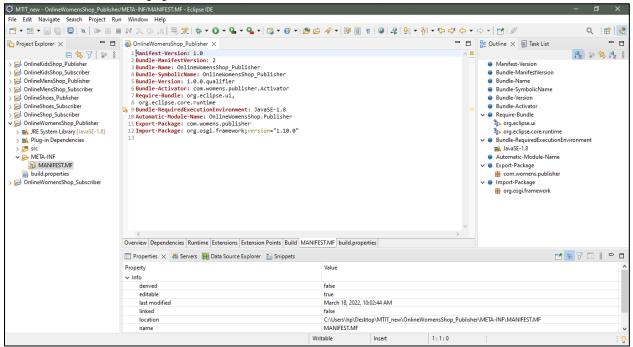


Figure 2.4: Online Women's Shop publisher Manifest.mf file

Kids Shop subscriber (Consumer/Subscriber)

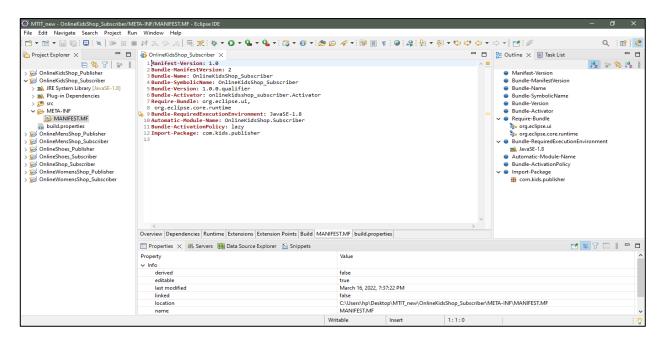


Figure 2.5: Online kids Shop subscriber Manifest.mf file

Men Shop subscriber (Consumer/Subscriber)

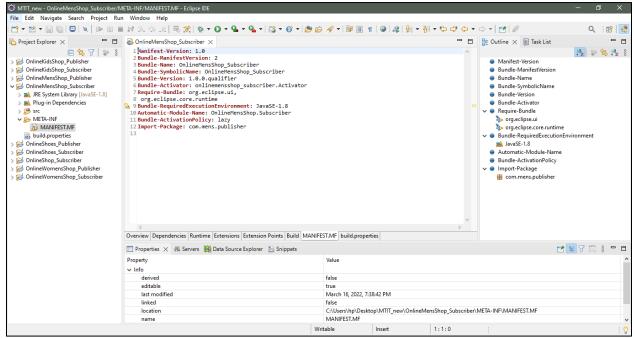


Figure 2.6: Online Men Shop subscriber Manifest.mf file

Online shoes subscriber (Consumer/Subscriber)

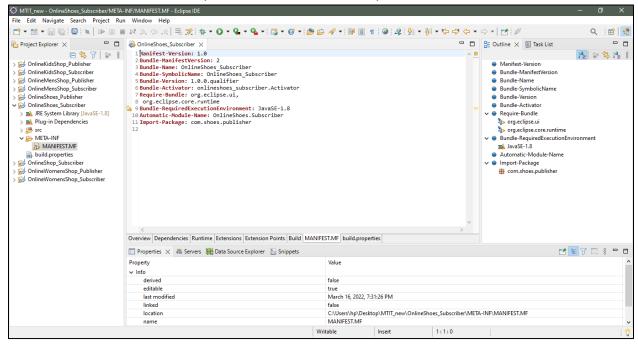


Figure 2.7: Online shoes Subscriber Manifest.mf file

Online Women shop subscriber (Consumer/Subscriber)

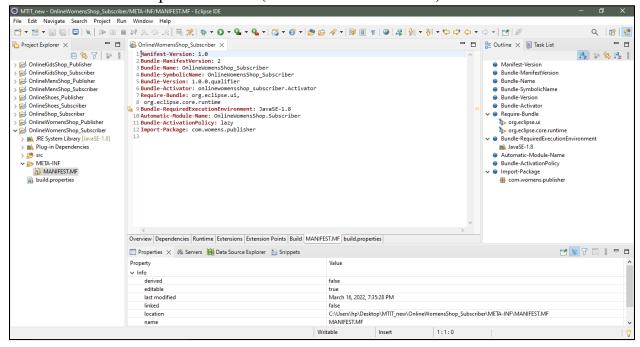


Figure 2.8: Online shoes subscriber Manifest.mf file

Integrated - Online shop subscriber (Consumer/Subscriber)

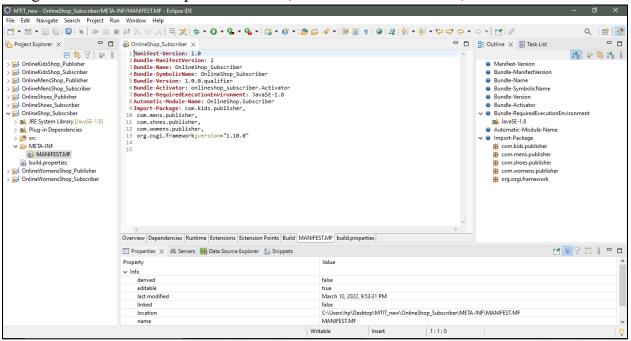


Figure 2.9: Online Shop subscriber Manifest.mf file

3. Bundles

Online Kids Shop publisher

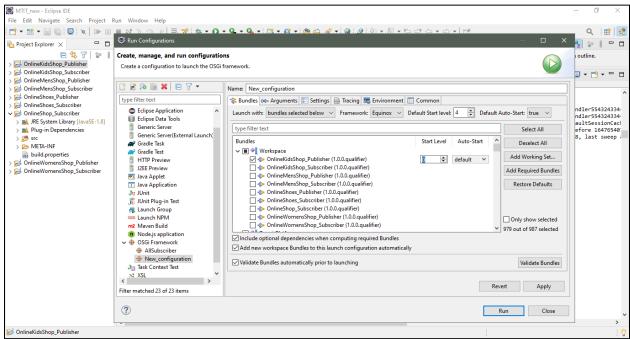


Figure 3.1: Online Kids Shop publisher bundle

Online Men Shop publisher

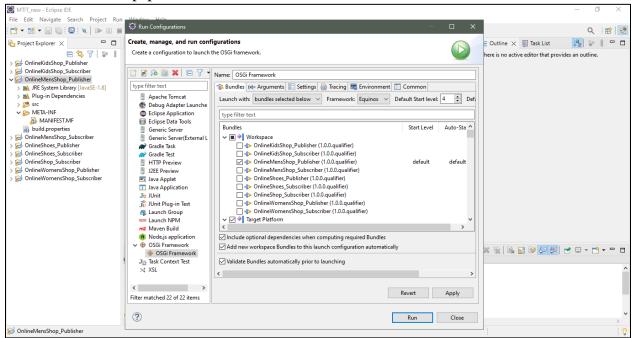


Figure 3.2: Online Men Shop publisher bundle

Online Shoes publisher

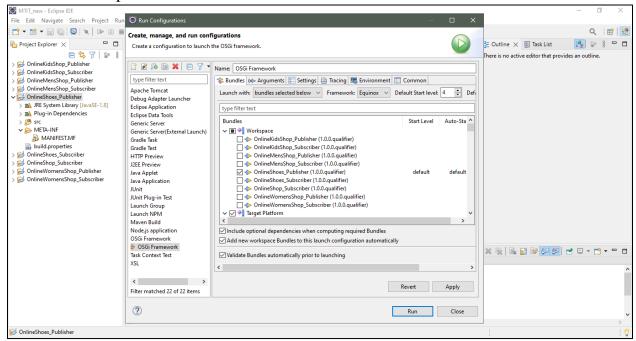


Figure 3.3: Online Shoes publisher bundle

Online Women's Shop publisher

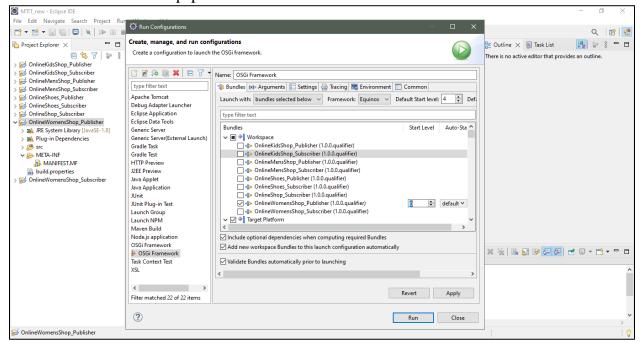


Figure 3.4: Online Women's Shop publisher bundle

Online Kids Shop Subscriber

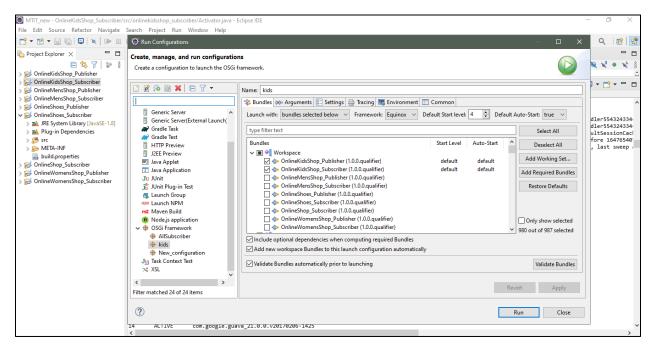


Figure 3.5: Online Kids Shop Subscriber bundles

Online Men Shop Subscriber

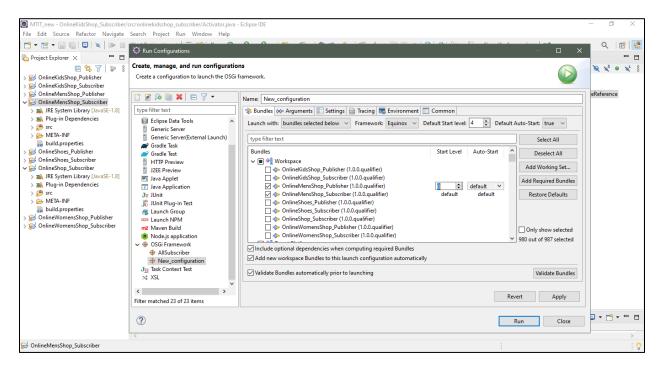


Figure 3.6:Online MenShop subscriber bundles

Online Shoes Subscriber

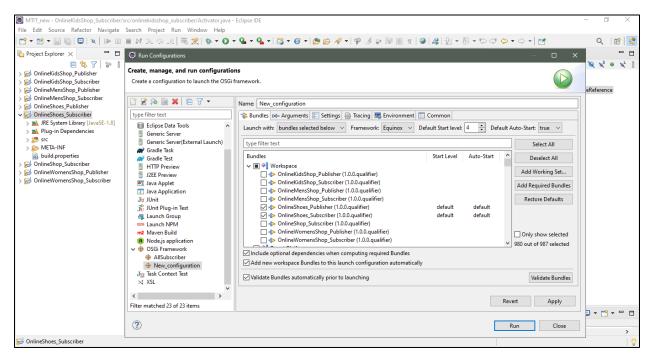


Figure 3.7: Online Shoes subscriber bundles

Online Women Shop Subscriber

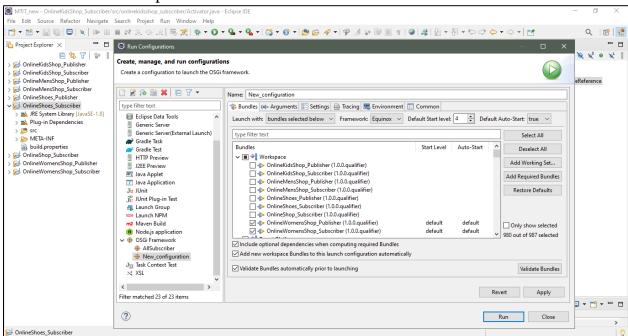


Figure 3.8: Online Women Shop subscriber bundles

Integrated - Online Shop Subscriber

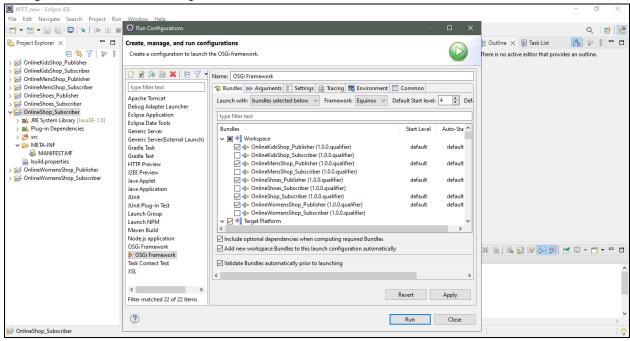


Figure 3.9: Online Shop subscriber bundles

4. Behavior and Outputs

Available bundles status

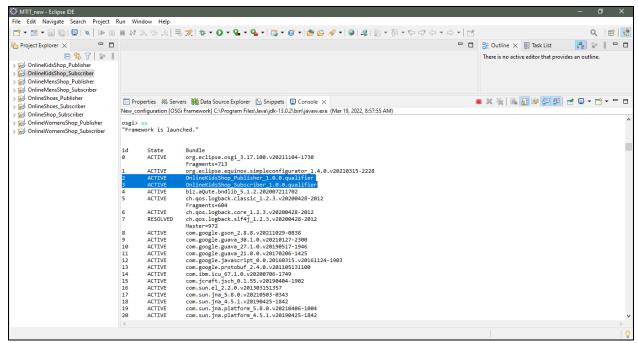


Figure 4.1: Available Kids Shop activated bundles

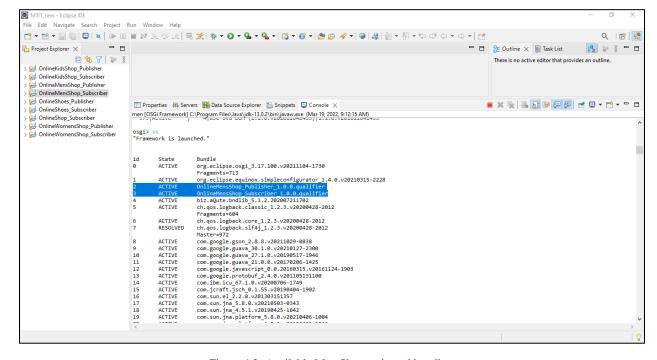


Figure 4.2: Available Men Shop activated bundles

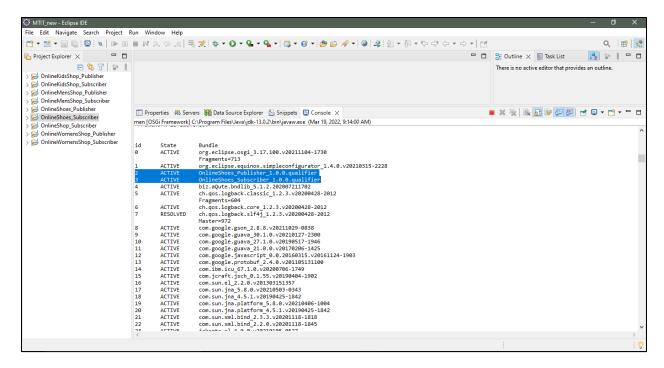


Figure 4.3: Available Shoe Shop activated bundles

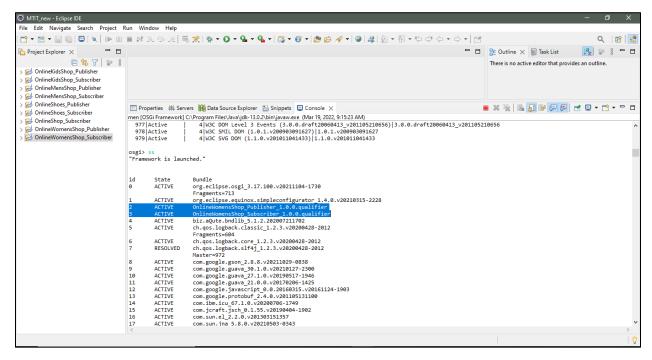


Figure 4.4: Available Women Shop activated bundles

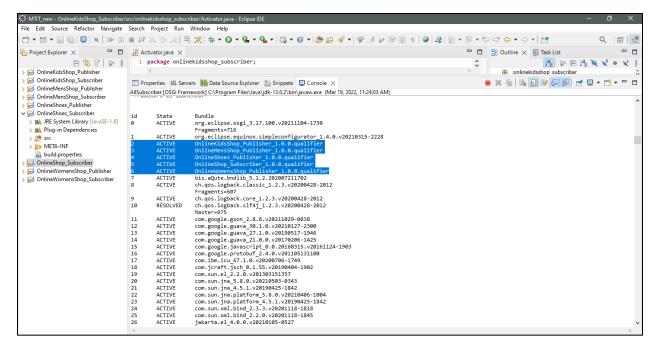


Figure 4.5: Integrated all active bundles status

Outputs

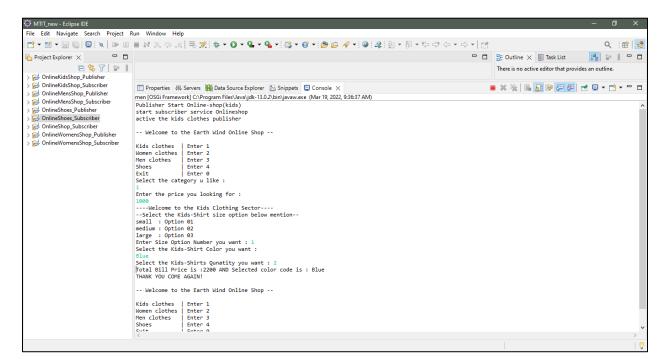


Figure 4.6: Output for kid clothes

```
MTIT_new - Eclipse IDE
 File Edit Navigate Search Project Run Window Help
Q 🔡 😭
                              - -
Project Explorer ×
                                                                                                                                                                                        □ □ □ Outline × □ Task List □ □ □
                  E $ 7 | $ 8
 > 🔀 OnlineKidsShop_Publisher
 >  OnlineKidsShop_Subscriber
>  OnlineMensShop_Publisher
                                             Properties & Servers Data Source Explorer Snippets Console X
                                                                                                                                                                                               AllSubscriber [OSGi Framework] C\Program Files\Java\jdk-13.0.2\bin\javaw.exe (Mar 19, 2022, 9:47:10 AM) acctive the Ktus Etothes publisher
  A OnlineMensShop Subscriber
                                            active the womens clothes publisher
active the mens clothes publisher
active the Shoes publisher
   OnlineShoes Publisher
   OnlineShoes_Subscriber

√ ├── OnlineShop_Subscriber

   > M JRE System Library [JavaSE-1.8]
> M Plug-in Dependencies
                                            Kids clothes | Enter 1 | Women clothes | Enter 2 | Men clothes | Enter 3 | Shoes | Enter 4 | Exit | Enter 0 | Select the category u like :
   > # src
> # META-INF
 build.properties

OnlineWomensShop_Publisher
  OnlineWomensShop_Subscriber
                                             Enter the price you looking for :
                                             Frock : Option 02

Enter Size Option Number you want : 1

--Select the Nomens size option below mention-

small : Option 01

medium : Option 02

large : Option 03

Enter Size Option Number you want : 2

Select the Women-dress Color you want :

Pink
                                             Pink
Select the Momen-dress Qunatity you want : 4
|--Dress Details--
Color code :Pink| Gategory : Denim
Total Bill Price is : 6800
THANK YOU COME AGAIN!
```

Figure 4.7: Output for women clothes

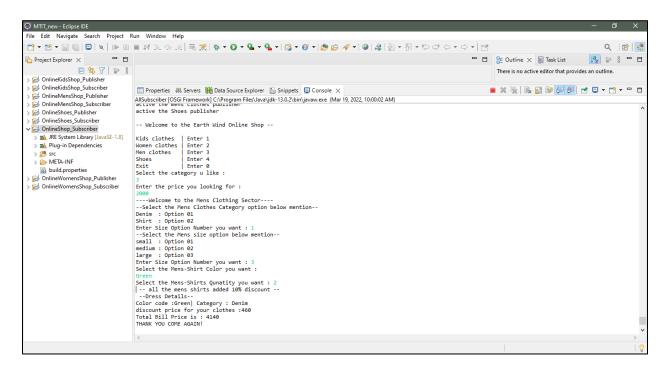


Figure 4.8: Output for men clothes

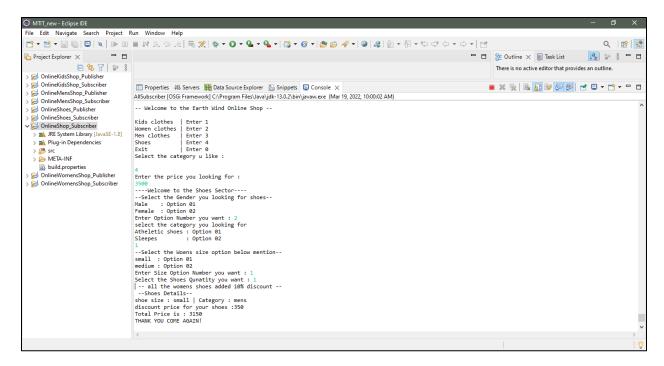


Figure 4.9: Output for shoes