Project Report for Project 2

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- Provider's company information

- Provider's available commodities for distributor

- Button for connecting to distributors and table showing distributor lists of name

- Provider's message box with an assigned port number

● Distributor's company information

● Distributor's items sold to customer

- Distributor's items needed from providers

- Button for connecting to provider

- Purchase list showing items requesting to providers
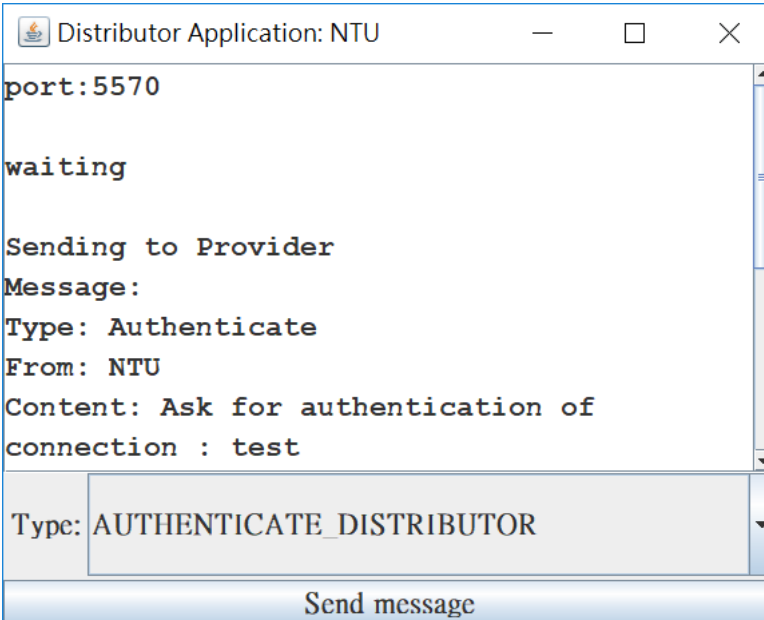
ID	Name	Brand	Price	Needed a...
2	cookieMo...	cookie	20.0	
3	choco	chocolate	30.0	

Type in needed amounts

- Distributor's message box – sending authentication request


```
port:5570

waiting

Sending to Provider
Message:
Type: Authenticate
From: NTU
Content: Ask for authentication of
connection : test
```
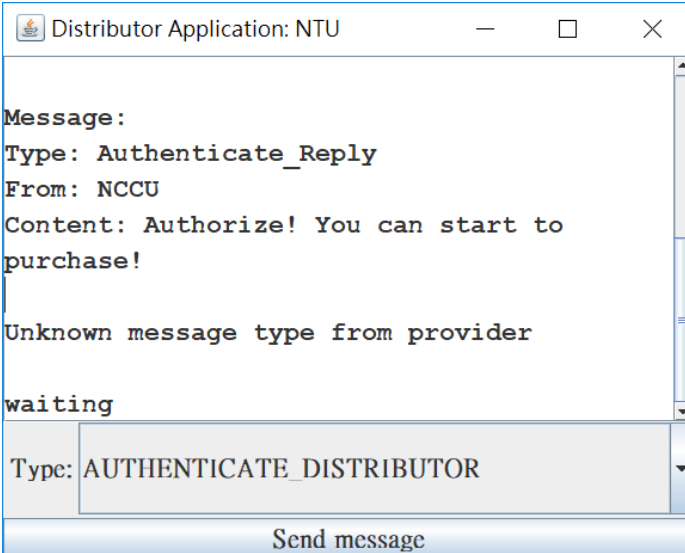
Type: AUTHENTICATE_DISTRIBUTOR

Send message

- Distributor's message box – Reply message with Authentication from provider


```
Message:
Type: Authenticate_Reply
From: NCCU
Content: Authorize! You can start to
purchase!

Unknown message type from provider

waiting
```

Type: AUTHENTICATE_DISTRIBUTOR

Send message

- Provider's message box – receiving authentication message from providers

```
Provider Application: NCCU        —    □    ✕

the port number is:5570

Message:
Type: Authenticate
From: NTU
Content: Ask for authentication of
connection : test

NTU found!|




            Broadcast message
```
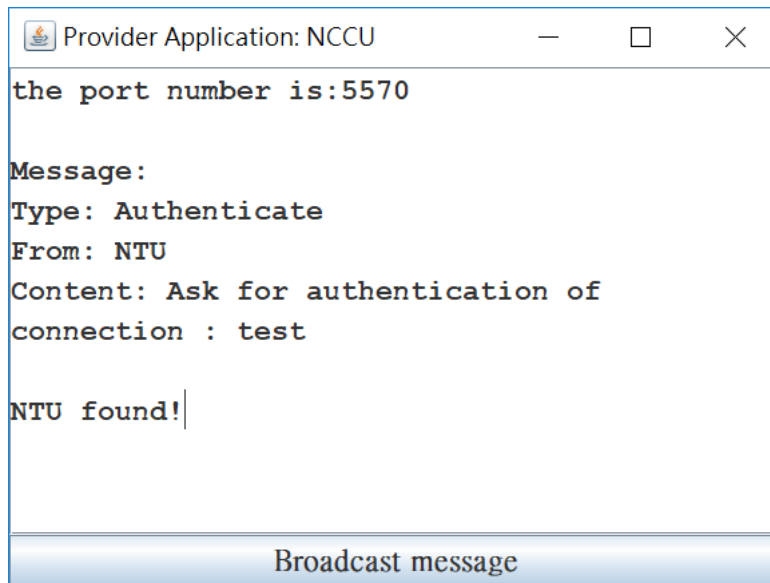
- Distributor's message box – sending supply list request to provider

```
Distributor Application: NTU      —    □    ✕

Sending to Provider
Message:
Type: Request_Supply
From: NTU
Content:
<SupplyList><Supply><supplyName>cookieMonst
er</supplyName><supplyAmount>10</supplyAmou
nt></Supply><Supply><supplyName>choco</supp
lyName><supplyAmount>20</supplyAmount></Sup
ply></SupplyList>

 Type: REQUEST_SUPPLY_LIST               ▼

              Send message
```
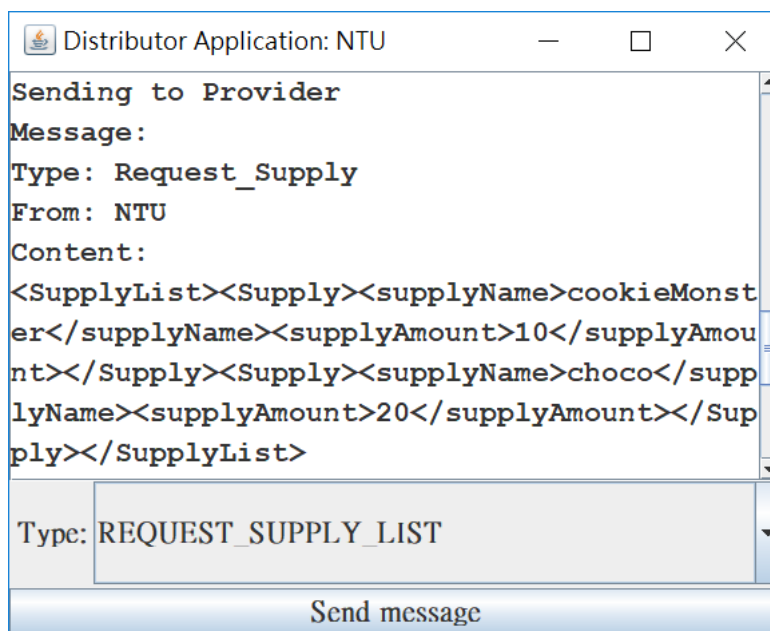
- Distributor's message box – receiving request supply reply from providers

```
Distributor Application: NTU          —    □    ×

Message:
Type: Request_Supply_Reply
From: NCCU
Content: supplylistReply: cookieMonster:Not
found!choco:Found, Not enough amount!

Unknown message type from provider

waiting

Type: REQUEST_SUPPLY_LIST              ▼

              Send message
```

- Provider's message box – receiving supply request from distributors

```
Provider Application: NCCU          —    □    ×

Message:
Type: Request_Supply
From: NTU
Content:
supplylist:cookieMonster:10,choco:20,

              Broadcast message
```

- Distributor's message box – sending purchase request to providers

```
Distributor Application: NTU          —    □    ×

Sending to Provider
Message:
Type: Request_Purchase
From: NTU
Content:
<SupplyList><Supply><supplyName>cookieMonst
er</supplyName><supplyAmount>10</supplyAmou
nt></Supply><Supply><supplyName>choco</supp
lyName><supplyAmount>20</supplyAmount></Sup
ply></SupplyList>

Type: REQUEST_PURCHASE                  ▼

              Send message
```
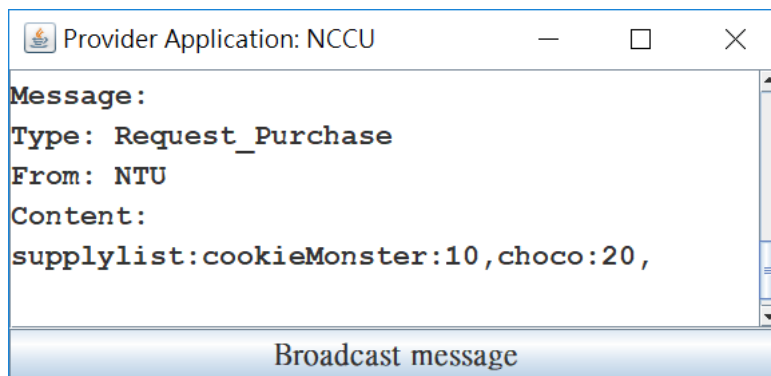
- Provider's message box – receiving purchase request from distributors


```
Provider Application: NCCU        —    □    ✕

Message:
Type: Request_Purchase
From: NTU
Content:
supplylist:cookieMonster:10,choco:20,

                Broadcast message
```

- Distributor's message box – sending terminate message to providers


```
Distributor Application: NTU        —    □    ✕

Sending to Provider
Message:
Type: Terminate
From: NTU
Content: End of the transaction




Type: TERMINATE                              ▾

                Send message
```
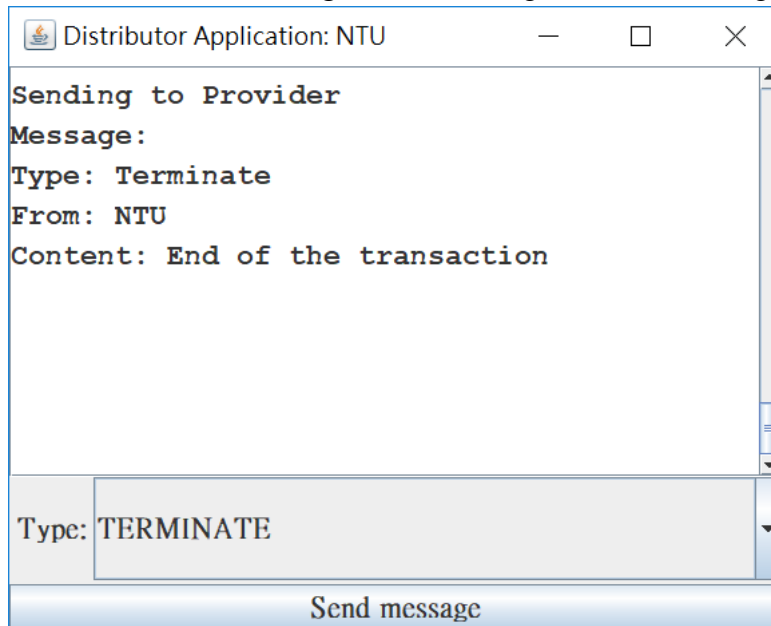
- Provider's message box – receiving end of communication from distributors


```
Provider Application: NCCU        —    □    ✕

Message:
Type: Terminate
From: NTU
Content: End of the transaction

Socket closed!
                Broadcast message
```
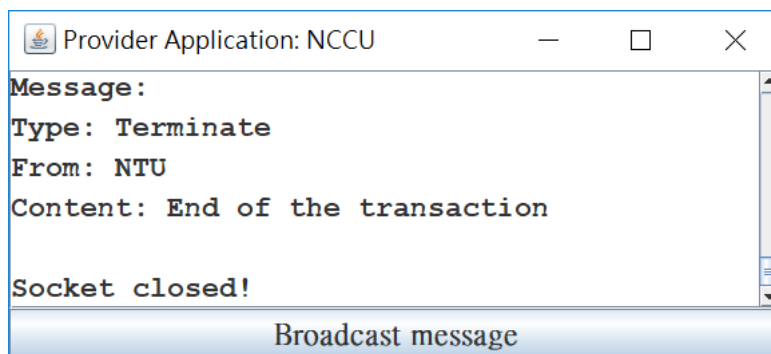
- Provider's xml file

```xml
<?xml version="1.0"?>
- <Provider>
  - <CompanyInfo>
      <CompanyName>NCCU</CompanyName>
      <CompanyAddress>TAIPEI</CompanyAddress>
      <CompanyContact>0000-000-111</CompanyContact>
    </CompanyInfo>
  - <ItemsSold>
    - <SellSupply>
      - <Supply>
          <SupplyID>1</SupplyID>
          <SupplyName>COOKIE</SupplyName>
          <SupplyBrand>COOKIE</SupplyBrand>
          <SupplyPrice>20.0</SupplyPrice>
          <SupplyAvailable>30</SupplyAvailable>
        </Supply>
      </SellSupply>
    - <SellSupply>
      - <Supply>
          <SupplyID>2</SupplyID>
          <SupplyName>candy</SupplyName>
          <SupplyBrand>candy</SupplyBrand>
          <SupplyPrice>10.0</SupplyPrice>
          <SupplyAvailable>50</SupplyAvailable>
        </Supply>
      </SellSupply>
    - <SellSupply>
      - <Supply>
          <SupplyID>3</SupplyID>
          <SupplyName>choco</SupplyName>
          <SupplyBrand>choco</SupplyBrand>
          <SupplyPrice>20.0</SupplyPrice>
          <SupplyAvailable>10</SupplyAvailable>
        </Supply>
      </SellSupply>
    </ItemsSold>
  - <DistributorName>
      <Name>CCU</Name>
      <Name>CNN</Name>
      <Name>NTU</Name>
      <Name>CIA</Name>
      <Name>CNA</Name>
    </DistributorName>
  </Provider>
```

- Distributor's xml file

```xml
<?xml version="1.0"?>
- <Distributor>
   - <CompanyInfo>
        <CompanyName>NTU</CompanyName>
        <CompanyAddress>Taichung</CompanyAddress>
        <CompanyContact>tel: 0800-000-111</CompanyContact>
     </CompanyInfo>
   - <ItemsSold>
      + <SellSupply>
      - <SellSupply>
         - <Supply>
              <SupplyID>2</SupplyID>
              <SupplyName>candyCrush</SupplyName>
              <SupplyBrand>CANDY</SupplyBrand>
              <SupplyPrice>30.0</SupplyPrice>
              <SupplyAvailable>400</SupplyAvailable>
           </Supply>
        </SellSupply>
     </ItemsSold>
   - <ItemsNeeded>
      - <NeedSupply>
         - <Supply>
              <SupplyID>2</SupplyID>
              <SupplyName>cookieMonster</SupplyName>
              <SupplyBrand>cookie</SupplyBrand>
              <SupplyPrice>20.0</SupplyPrice>
              <SupplyNeeded>100</SupplyNeeded>
           </Supply>
        </NeedSupply>
      + <NeedSupply>
     </ItemsNeeded>
  </Distributor>
```