

FPT ACADEMY INTERNATIONAL FPT – APTECH COMPUTER EDUCATION

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[Online Jewellery Shopping]

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|-------------|--------------------------------|----------------|--|
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1: REVIEW I

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1.1 INTRODUCTION:

- Mr. Robert D'costa started the business from the scratch in 2005. The flagship company of Yash Gems & Jewelleries (P) ltd was formed to carry on the business of manufacturing and trading of Gold & Diamond Jewellery.
- To manufacture diamond Jewellery with ultimate brilliance, *Yash* has employed the latest and most advanced technologies for manufacturing diamond jewellery.
- As a supplier to some of the most exclusive retailers, Yash have intimate knowledge of the
 cultures and trends of the markets served. The national sales and distribution network team
 allows them to cultivate a close relationship with the customers and guarantees efficient
 services.
- Yash believes in reflecting their jewellery with special magic, conjured by melting of spirit
 and dedication, labour and craftsmanship, and art of work. The talented designers, skilled
 craftsmen and dedicated managers use state-of-the-art technology to produce the finest
 level of diamond jewellery for leading retailers.
- The company's sincere desire is to give every client a reason to feel good. And policy is to offer top quality merchandise to the customers at the best possible price.
- With a vision and motto of providing its customers products of impeccable quality, Yash
 has outnumbered many in innovative design and quality, making itself the benchmark and
 hallmark of the Indian jewellery industry.

1.2 PROPOSED SOLUTION:

To develop a complete web-based solution for Yash

- The motive of this Online Jewellery Shopping Web Application is to allow the user to play
 with the search tool and create different combinatorial search criterion to perform
 exhaustive search.
- Provide Interactive interface through which a user can interact with different areas of application easily.
- A search engine that provides an easy and convenient way to search for products specific
 to their needs. The search engine would list a set of products based on the search term and
 the user can further filter the list based on various parameters.

- Provide Shopping Cart feature thereby allowing the user to add products to or remove products from the shopping cart by dragging the products in to or out of the shopping cart.
- Provides accurate level of security so that transactions can be made confidentially.
- People who are not much aware of the system can easily make purchase by easy to register interface.

1.3 REQUIREMENT SPECIFICATION:

- In this system the vendor can launch his/her jewellery products with details of them on website. (Details needs to be captured are as per the table ItemMst below in data dictionary section.)
- He can keep these products for sale as well as can update his site with new ornaments time to time.
- Vendor on his server machine is able to take purchase orders from customers around the
 world and by validating the truth of orders with verification of customer details he may
 dispatch the delivery of ornaments to customers via post or courier.
- Vendor can also keep the records of all the customers in a database on his server machine.(UserRegMst in data dictionary)
- He also can create reports of his organization sales using database. He can collect bills form customers online using credit card numbers from customers.
- On the other hand customers on client machine can access the site for online jewellery shopping from any part of the world using internet service.
- Customer can select the ornaments from displayed ornaments and can give online orders for purchasing.
- Customer can provide his specific requirement as the weight of diamond, type, brand, carat for gold, name of gems, quality etc.
- Customer can pay his bills using credit card facility for shopping. The valid customers can send gift ornaments to their relatives and friends on other address through this system
- The Search option on the site is very useful for quick search for the ornaments which the customer needs. This reduces the search and browsing time of clients. Ornaments list is available to clients on this system.

- Customers are able to create their own accounts with individual secured passwords to the vendors. Account holder customer could log in directly by entering login name and password.
- A database should be maintained on the server machine. The database includes customer's details, login details, product list, order details, Bill details, transaction details etc. the database is helpful in getting quick information reports
- In addition to the exclusive search for the jewellery, the site should also provide information about diamonds and various gems. Their history as well as benefits of using gems.
- The information about diamond certification should also be provided.
- The home page should be made attractive by posting the various discount schemes/gift offers/ festive offers/new launches etc.

1.4 HARDWARE / SOFTWARE REQUIREMENTS:

A. Server Requirement



| Component | Requirement |
|--------------|---|
| CPU | Processor type: Pentium IV-compatible processor or faster Processor speed: Recommended: 2.0 GHz or faster |
| os | Microsoft Windows Server 2012 with IIS |
| Memory (RAM) | RAM: Minimum: 512 MB Recommended: 2 GB or more |
| Hard Drive | Free space: Minimum: 200 MB Recommended: 50 GB or more |

| | Maximum: Operating system maximum |
|--|-----------------------------------|
|--|-----------------------------------|

Software

| Component | Requirement |
|--------------------------|---------------------------|
| Microsoft .NET Framework | Version 4.6 or higher |
| RDBMS | Microsoft SQL Server 2017 |

B. Client Requirement

Hardware

| Component | Requirement |
|--------------|--|
| CPU | Processor type: Pentium III-compatible processor or faster Processor speed: Recommended: 1.0 GHz or faster |
| os | All OS (Window, Linux, Android, Mac OS) |
| Memory (RAM) | RAM: Minimum: 512 MB Recommended: 1 GB or more Maximum: Operating system maximum |
| Hard Drive | Free space: Minimum: 10 MB |

4 Software

| Component | Requirement |
|-------------|----------------------------|
| Web Browser | Chrome, Opera (up to date) |

1.5 DEVELOPMENT SOFTWARE:

- ***** Microsoft Window 10
- ***** Visual Studio 2019
- ***** Visual Studio Code
- Microsoft Sql Server 2018
- **Git**
- * Zoom

1.6 TECHNOLOGY:

- *** HTML/CSS**
- ***** BOOTSTRAP
- *** JQUERY**
- * AJAX
- ***** ASP .NET CORE WEB
- ***** ASP .NET CORE API
- *** DEPENDENCY INJECTION**

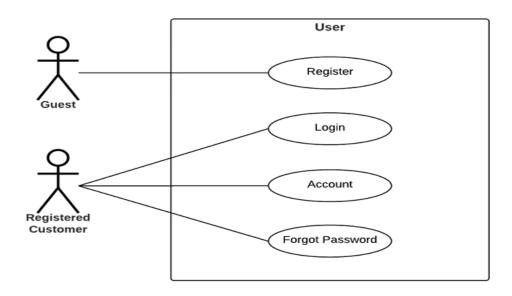
1.7 TASKSHEET REVIEW I

| Project Ref. No: 3 | Project Title: Online Jewellery Shopping | Date of Preparation of Activity Plan | | | |
|-----------------------|---|--------------------------------------|----------------|-------------------|-----------|
| No. | Task | Actual Start Date | Actual Days | Team Member Names | Status |
| 01 | Acknowledgment | | | All Members | Completed |
| 02 | Problem Definition | 2021 | | All Members | Completed |
| 03 | Customer Requirement | 21, 2 | 2 | All Members | Completed |
| 05 | Hardware/Software | Jan (| | All Members | Completed |
| 06 | Task sheet | | | All Members | Completed |

| | Prepare By: Group 1 | Approved By: Faculty | |
|--------------------|---------------------|----------------------|--|
| | Team Leader | | |
| | | | |
| Date: Jan 31, 2021 | | | |
| | | | |
| | Le Minh | Mr. Ngo Phuoc Nguyen | |

2: REVIEW II

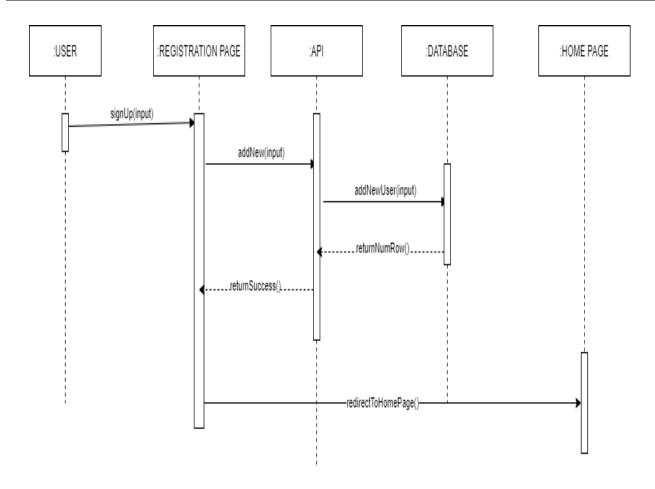
2.1 Use Case and Sequence Diagram



2.2 User -- Register as Customer

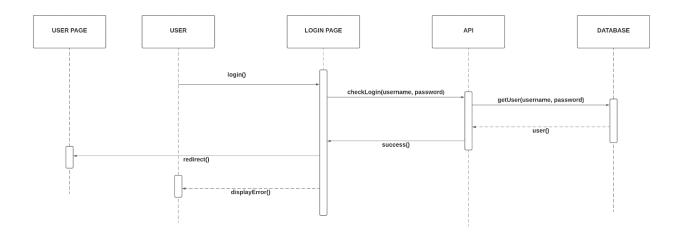
| Author | Bui Quoc Tuan | | |
|-----------------------|---|---|--|
| Use Case Name | Register as Customer | | |
| Actors | Guest | | |
| Description | Guest registers an account on the website and b | pecomes a member (customer) | |
| Requirements | Guest provides their register information | | |
| Pre-conditions | N/A | | |
| D 4 134 | Success: Guest creates a Customer account in t | his website | |
| Post-conditions | Fail: Refill information | | |
| | Actor's actions: | System's responses: | |
| Basic flow | Actor clicks 'Register' link on Home Page. 3. Actor inputs register's information and click 'Register' button. | 2. System redirects to Register page and displays Registration form with the following controls: - 'Username' text field - 'Password' text field - 'Confirm Password' text field - 'First Name' text field - 'Last Name' text field - 'Email' text field - 'Phone1' text field - 'Register' button - 'Reset' button 4. System validates the information. 5. System inserts the account into database | |

| | | 6. System show success message. |
|------------|--|---|
| | Actor's actions: | System's responses: |
| Exceptions | Actor left 'Username' text field blank. Username has already existed. Actor left 'Password' text field blank. Actor left 'Confirm Password' text field blank. Password and confirm password don't match. Actor left 'Name' text field blank. Actor left 'Birthday' field blank. Input age is less than 16. Actor left 'Phone' text field blank. Input phone is not numeric format or phone length is not between 8 and 14 characters. Actor left 'Email' text field blank or input an invalid email address. | System displays message to actor: - 'Username cannot be blank' 'This Username has already existed' 'Password cannot be blank'' 'Confirm Password cannot be blank' 'Confirm Password does not match password.' - 'Name cannot be blank' 'Birthday is invalid' 'Age must be over 16' 'Phone is invalid' 'The phone number should be numeric only and must be between 8 and 14 digits' 'Email is invalid'. |



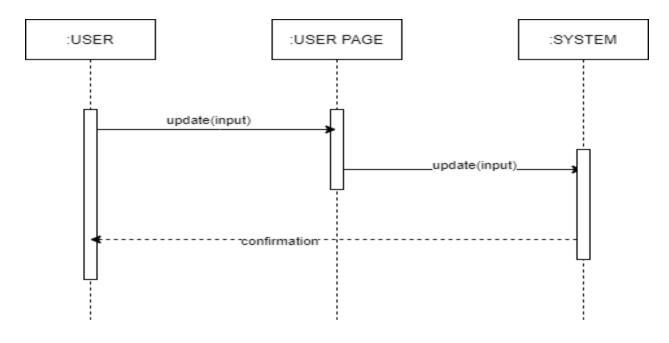
2.3 Login as Customer

| Author | Le Minh | |
|------------------------|--|--|
| | | |
| Use Case Name | Login | |
| Actors | Customer | |
| Description | Customer who has registered an account can l | ogin |
| Requirements | Actor provides username and password | |
| Pre-conditions | Actor must register an account | |
| Post-conditions | Success: User is logged in to website | |
| r ost-conditions | Fail: Refill information | |
| | Actor's actions: | System's responses: |
| | 1. Actor clicks on 'Login' button. | 2. System redirects to Login Page with the |
| | | following controls |
| Basic flow | | - 'Username' text field |
| Dasic How | | - 'Password' text field |
| | | - 'Login' button |
| | 3. Actor inputs Username (or email) and | 4. System checks the information. |
| | Password, then click the 'Login' button. | 5. System redirects to User's dashboard. |
| | Actor's actions: | System's responses: |
| Exceptions | 1. Actor inputs invalid username (or email) | System redirects to Login page with the |
| | and password. | following controls: |
| | • | - 'Username' text field |
| | | - 'Password' text field |
| | | - 'Login' button. |
| | | System shows message: "Invalid Username |
| | | and password". |



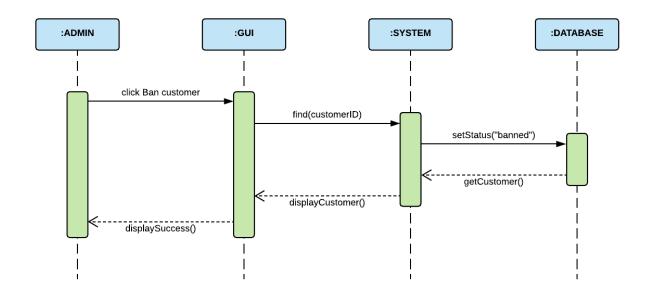
2.4 Update as Customer

| Author | Le Minh | |
|-----------------|--|--|
| Use Case Name | Update Customer's Profile | |
| Actors | Customer | |
| Description | Customer wants to Update their profile's inform | nation. |
| Requirements | Actor provides profile information | |
| Pre-conditions | Actor has logged in. | |
| D 4 1141 | Success: Profile's information of this user has b | een updated. |
| Post-conditions | Fail: Refill information | • |
| | Actor's actions: | System's responses: |
| Basic flow | Actor clicks 'Profile' button in Actor's Home page menu. 3. Actor updates information and click 'Save' button. | 2. System redirects to Update Profile page and displays Update Profile form with the following controls: - 'Old Password' text field - 'New Password Confirm' text field - 'New Password Confirm' text field - 'First Name' text field - 'East Name' text field - 'Birthday' field - 'Gender' radio button - 'Address' text field - 'Phone' text field (x2) - 'Email' text field - 'Save' button - 'Cancel' button 4. System checks the information. 5. System updates the account in database and then redirects to User's Dashboard |
| | Actor's actions: | System's responses: |
| Exceptions | 1. Actor left 'New Password' text field blank. 2. Actor left 'Confirm Password' text field blank. 3. New Password and New Password Confirm do not match. 4. Actor left 'Name' text fields blank. 5. Actor left 'Birthday' field blank. 6. Input age in 'Birthday' field is less than 16. 7. Actor left 'Address' text field blank. 8. Actor left 'Phone' text fields blank. 9. Input phone is not in numeric or phone length is not in between 8 and 14 characters. 10. Actor left 'Email' text field blank or input an invalid email address. | System displays message to actor: - 'Password cannot be blank' 'Confirm Password can't be blank' 'Confirm password does not match Password.'= - 'Name cannot be blank' 'Birthday is invalid' 'Age must be over 16' 'Address cannot be blank' 'Phone is invalid' 'The phone number should be numeric only and must be between 8 and 14 digits' 'Email is invalid'. |



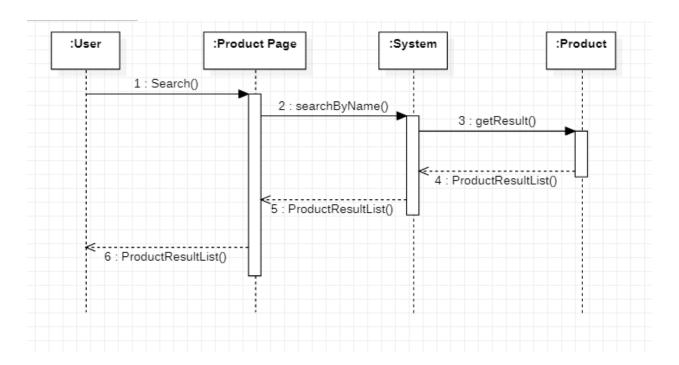
2.5 Customer Ban (Admin)

| Author | Bui Quoc Tuan | | |
|-----------------------|--|--|--|
| Use case name | Ban a customer | | |
| Actors | Administrator | | |
| Description | When admin wants to ban a customer | When admin wants to ban a customer | |
| Requirements | Actor provides customer's information | | |
| Pre-conditions | Actor is logged in as admin or super admin | | |
| Post-conditions | Success: set customer's status into "Banned" and updated in database | | |
| Post-conditions | Fail: No changes are made | | |
| | Actor's actions: System's responses: | | |
| | 1. Actor chooses Customer row on Customer | 2. System updates customer's status in | |
| Basic flow | list and click "Ban" button. | database. | |
| | | 3. System displays confirmation message or | |
| | | error message. | |



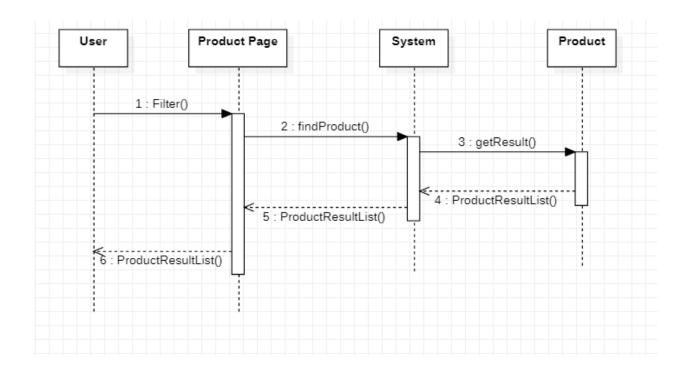
2.6 Product -- Search Product As Customer

| Author | Bui Quoc Tuan | |
|---|--|---|
| Use case name | Search products | |
| Actors | Guest/Customer | |
| Description | When Guest/Customer wants to search product | |
| Requirements | Actor provides search phrase | |
| Pre-conditions | N/A | |
| Success: Show products that matches search phrase | | nrase |
| Post-conditions | Fail: No product is show | |
| | Actor's actions: System's responses: | |
| | 1. Actor inputs search phrase. | 2. System show list of products that match |
| | | the search phrase. |
| Basic flow | 3. Actor clicks product's name in list or view | 4. System allows actor to sort products by: |
| Dusic nov | every product that matches search phrase. | - Oldest |
| | | - Newest |
| | | - Lowest Price |
| | | - Highest Price |



2.7 Filter Product

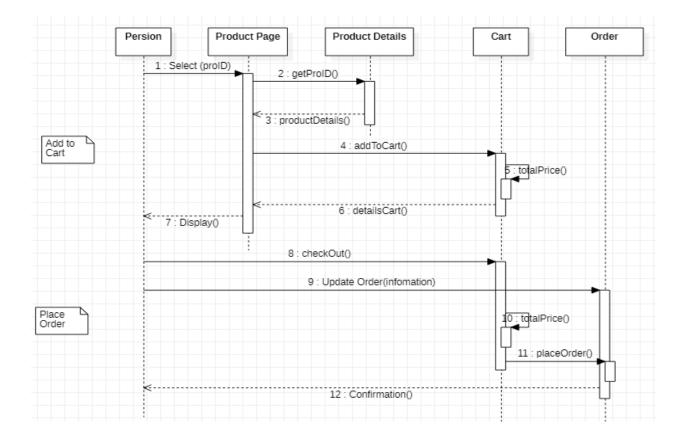
| Author | Phan Van Phuong | |
|-----------------------|---|---|
| Use case name | Product Filter | |
| Actors | Guest/Customer | |
| Description | Guest/Customer wants to filter products by one | e or multiple conditions |
| Requirements | Actor chooses conditions by ticking checkboxe | es |
| Pre-conditions | N/A | |
| Post-conditions | Success: Products that matches condition(s) are shown | |
| Post-conditions | Fail: No product is shown | |
| | Actor's actions: | System's responses: |
| | 1. Actor ticks one or multiple of the | 2. System show products that satisfy the |
| | following checkboxes: | condition(s) |
| | - Categories | 3. System allows actor to sort products by: |
| Basic flow | - Collections | - Oldest |
| | - Attributes | - Newest |
| | - Price | - Lowest Price |
| | | - Highest Price |
| | | - |



2.8 Place Orders

| | T | 1 |
|------------------------|--|---|
| Author | Le Minh | |
| Use case name | Check Out and Place Orders | |
| Actors | Guest/Customer | |
| Description | Guest/Customer wants to order products | |
| Requirements | Actor must choose at least one product to add t | so cart |
| Pre-conditions | Cart has at least one product | |
| Post-conditions | Success: Actor order successfully | |
| r ost-conditions | Fail: Refill information | |
| | Actor's actions: | System's responses: |
| Basic flow | Actor chooses a product and click 'Add to Cart' button. Actor clicks 'Checkout' button. Actor inputs Voucher Code and clicks 'Apply Voucher' button. Actor inputs order information, then click 'Place Order' button. Actor inputs Card Owner's Name, Card Number and Security Code. | System adds product to cart by Sku ID. System shows Cart and added products. System verifies voucher code. System shows all products in cart and calculate unit price. System redirects to Order Information page and show the following controls: 'Billing Name' text field 'Address' text field 'Required date' 'Payment' checkboxes Systems show Payment Page if user chooses Pay with Card method. |

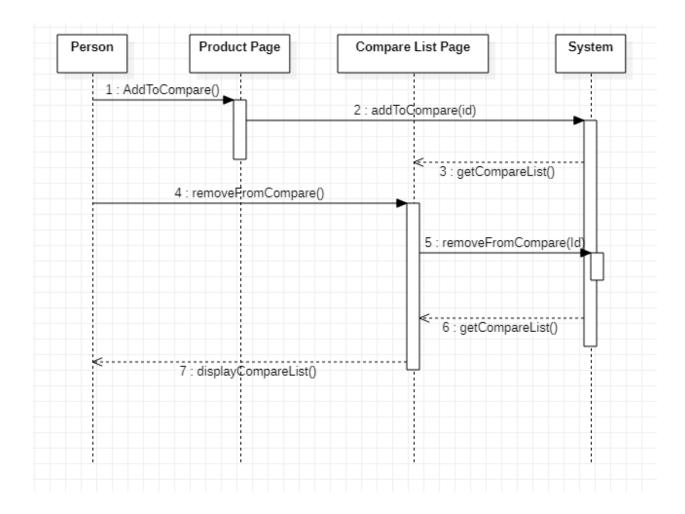
| | 11. System validates information.12. System redirects to Order page and shows order's status. |
|--|--|
| | |



2.9 Compare Product

| Author | Phan Van Phuong | |
|-----------------------|---|---------------------|
| Use Case Name | Compare products | |
| Actors | Guest/Customer | |
| Description | Customer compares products | |
| Requirements | Customer choose products they want to compare | |
| Pre-conditions | N/A | |
| Post-conditions | Success: show a list of compared products | |
| Basic flow | Actor's actions: | System's responses: |

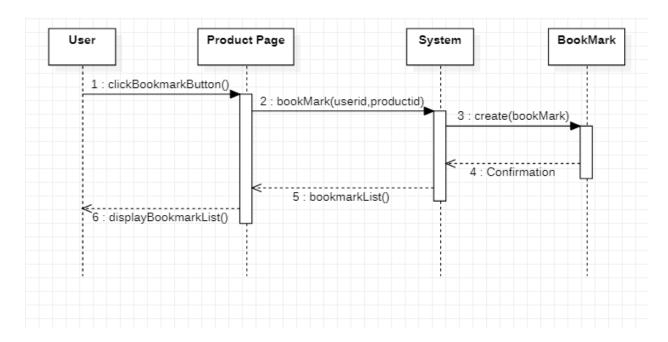
| | Actor adds click 'compare' button on product. Actor clicks 'Compare List' button in the menu. | System adds product into compared list and shows the number of products which are added (default: 0). System redirects to Compare List Page and shows all compared products. |
|------------------|--|---|
| Alternative flow | 1. Actor clicks 'Remove this item' button. | 2. System removes product form compared list. |
| | Actor's actions: | System's responses: |
| Exceptions | 1. Actor added more than 5 products. | 2. System does not add product and redirects to Compare List Page. |



2.10Bookmark Product

| Author | Phan Van Phuong |
|------------------------|---|
| Use Case Name | Bookmark product |
| Actors | Customer |
| Description | Customer wants to bookmark products to view it later |
| Requirements | Customer choose products they want to bookmark |
| Pre-conditions | Actor is logged in |
| Post-conditions | Success: show bookmarked products in customer's bookmark list |

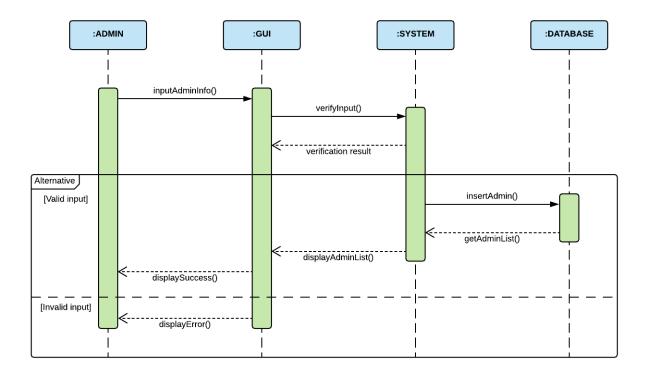
| | Actor's actions: | System's responses: |
|------------|--|---|
| Basic flow | Actor clicks 'bookmark' icon on each product in Product Page. Actor clicks 'Wish List' link. | 2. System adds bookmark in database.4. System shows list of bookmarked |
| | 3. Actor chees wish list link. | products. |



2.11Admin -- Add Admin's Account

| Author | Phan Minh Cuong | | |
|-----------------------|---|--|--|
| Use case name | Add admin's accounts | | |
| Actors | Super Administrator | | |
| Description | When admin wants to add a new admin's accou | unt in the database | |
| Requirements | Super Admin provides admin information | | |
| Pre-conditions | Actor is logged in as a Super Admin | | |
| Post-conditions | Success: a new admin's account is created in the database | | |
| Post-conditions | Fail: Refill information | | |
| | System's responses: | | |
| | 1. Actor chooses Admin Tab on menu. | 2. System redirects to 'Admin List' page and | |
| | | display a list of existing admin. | |
| | 3. Actor chooses 'Create an Admin Account' | 4. System displays admin form with the | |
| | button. | following fields. | |
| Basic flow | | - Admin's Username | |
| | | - Admin's password | |
| | | - Confirm password | |
| | 5. Actor inputs information to create admin. | - Admin's role | |
| | | 6. System validates inputs. | |
| | | 7. System adds new admin to database. | |
| | | 7. System displays confirmation message. | |
| | Actor's actions: | System's responses: | |
| Exceptions | 1. Actor left 'Username' field blank. | | |
| | | | |

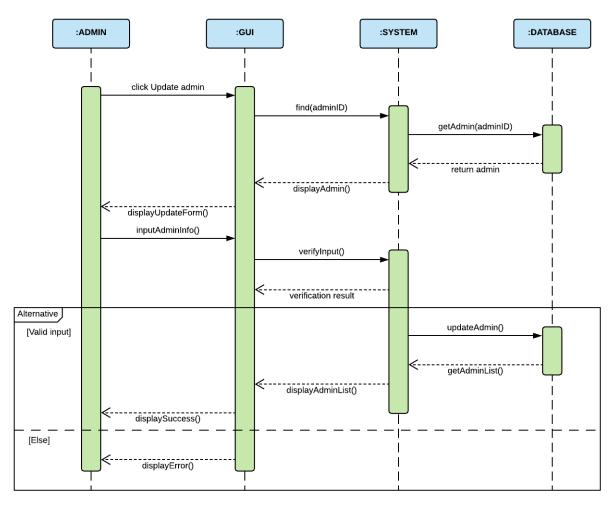
| 2. Actor inputs an existing Username. | System displays messages: |
|---------------------------------------|------------------------------------|
| 2. Actor left 'Password' field blank. | - 'Username' cannot be blank'. |
| 3. 'Confirm password' does not match | - 'Username already exists' |
| 'Password'. | - 'Password cannot be blank'. |
| | - 'Confirm password does not match |
| | password' |



2.12Update Admin

| Author | Phan Minh Cuong | | |
|-----------------------|---|--|--|
| Use case name | Update admin's accounts | | |
| Actors | Super Administrator | | |
| Description | When admin wants to update an admin's accou | unt in the database | |
| Requirements | Super Admin provides admin information | | |
| Pre-conditions | Actor is logged in as a Super Admin | | |
| Dogt conditions | Success: admin's account is updated in the database | | |
| Post-conditions | Fail: Refill information | | |
| | Actor's actions: | System's responses: | |
| | 1. Actor chooses Admin Tab on menu. | 2. System redirects to 'Admin List' page and | |
| | | display a list of existing admin. | |
| | 3. Actor chooses Admin they want to update. | 4. System displays admin form with the | |
| Basic flow | | following fields. | |
| Dasic now | | - Admin's password | |
| | | - Confirm password | |
| | | - Admin's role | |
| | 5. Actor inputs information to update admin. | 6. System validates inputs. | |
| | | 7. System updates admin in database. | |

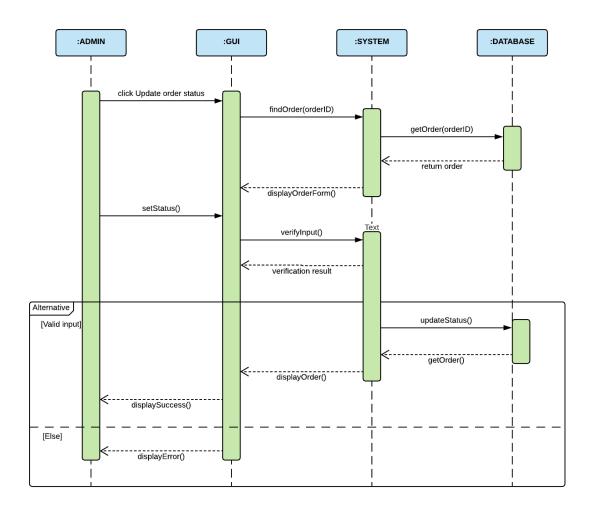
| | | 8. System displays confirmation message or error message. |
|------------|---------------------------------------|---|
| | Actor's actions: | System's responses: |
| | 1. Actor left 'Username' field blank. | System displays messages: |
| | 2. Actor inputs an existing Username. | - 'Username' cannot be blank'. |
| Exceptions | 2. Actor left 'Password' field blank. | - 'Username already exists' |
| | 3. 'Confirm password' does not match | - 'Password cannot be blank'. |
| | 'Password'. | - 'Confirm password does not match |
| | | password' |



2.13Order (Update Order's Status)

| Author | Le Minh |
|---------------|-----------------------|
| Use case name | Update Order's Status |

| Actors | Administrator | | |
|-----------------------|--|---|--|
| Description | When admin wants to update order's status | | |
| Requirements | Actor provides order's information | | |
| Pre-conditions | Actor is logged in as admin or super admin | | |
| Post-conditions | Success: order's status is updated in the database | | |
| Post-conditions | Fail: refill information | | |
| | Actor's actions: | System's responses: | |
| | 1. Actor chooses Order Tab on menu. | 2. System redirects to 'Order List' page and | |
| | | display a list of existing orders. | |
| Basic flow | 3. Actor clicks 'Update Status' button on an | 4. System displays a list of statuses: Pending, | |
| | order. | Confirmed, Canceled, Completed, On | |
| | | Delivery. | |
| | 5. Actor chooses the status they want to | 6. System updates collection in database. | |
| | update. | 7. System displays confirmation message. | |



2.14Report -- View Report

| Author | Phan Minh Cuong |
|---------------|---------------------|
| Use case name | View Product Report |
| Actors | Administrator |

| Description | When admin wants to view report on products | |
|------------------------|---|--|
| Requirements | N/A | |
| Pre-conditions | Actor is logged in as admin or super admin | |
| Post-conditions | Success: Display a report on products | |
| | Actor's actions: System's responses | |
| Basic flow | 1. Actor chooses 'Product | |

2.15 View Order Report

| Author | Bui Quoc Tuan | | |
|------------------------|--|---|--|
| Use case name | View Order Report | | |
| Actors | Administrator | Administrator | |
| Description | When admin wants to view repor | When admin wants to view report on orders | |
| Requirements | N/A | | |
| Pre-conditions | Actor is logged in as admin or super admin | | |
| Post-conditions | Success: Display a report on orders | | |
| | Actor's actions: System's responses | | |
| Basic flow | 1. Actor chooses 'Order | | |
| | Report' in menu. | | |

View Customer Report

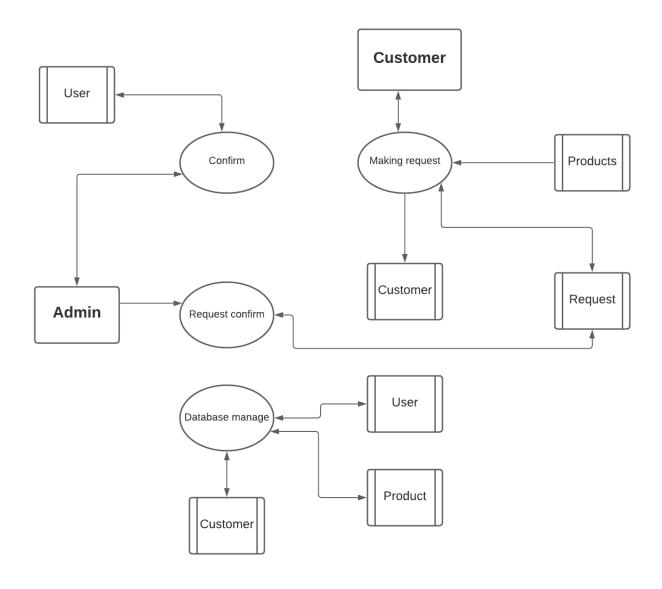
| Author | Bui Quoc Tuan | |
|------------------------|--|--|
| Use case name | View Customer Report | |
| Actors | Administrator | |
| Description | When admin wants to view report on customers | |
| Requirements | N/A | |
| Pre-conditions | Actor is logged in as admin or super admin | |
| Post-conditions | Success: Display a report on customers | |
| | Actor's actions: System's responses | |
| Basic flow | 1. Actor chooses 'Customer Report' page. 2. System redirects to 'Customer Report' page. | |

2.16DFD's

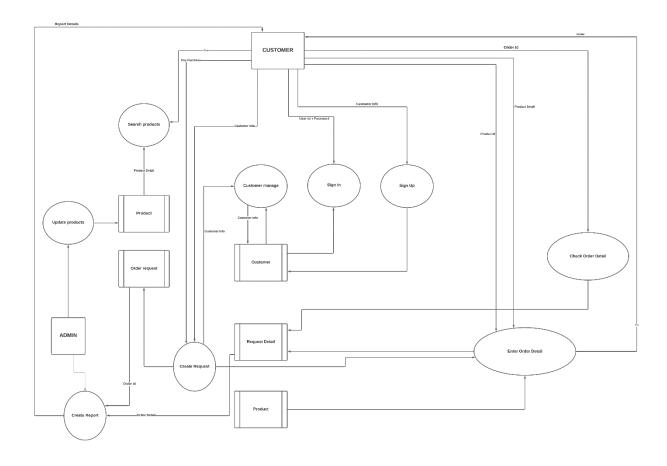
Level 0



Level 1



Level 2



2.17 Database Design

2.17.1 TABLE NAME: AdminLoginMst

| Field Name | Data Type | Key | Description |
|------------|-------------|-------------|---------------|
| UserName | Varchar(50) | Primary key | Administrator |
| | | | Name |
| Password | Varchar(50) | Not Null | Password Of |
| | | | Admin |

2.17.2 TABLE NAME: BrandMst

| Field Name | Data Type | Key | Description |
|------------|--------------|-------------|------------------|
| Brand_ID | Varchar (10) | Primary key | ID Of Particular |
| | | | Brand |
| Brand_Type | Varchar(50) | Not Null | Type Of Brand |
| | | | (Asmi,D'damas,e |
| | | | tc) |

2.17.3 TABLE NAME: CatMst

| Field Name | Data Type | Key | Description |
|------------|--------------|-------------|------------------|
| Cat_ID | Varchar (10) | Primary key | ID Of Category |
| Cat_Name | Varchar(50) | Not Null | Name Of Category |

TABLE NAME: CertifyMst

| Field Name | Data Type | Key | Description |
|--------------|--------------|-------------|---------------------|
| Certify_ID | Varchar (10) | Primary key | ID Of Certification |
| Certify_Type | Varchar(50) | Not Null | Name Of |
| | | | Certification |
| | | | (918,920,etc) |

2.17.4 TABLE NAME: DimMst

| Field Name | Data Type | Key | Description |
|---------------|---------------|-------------|--------------------------------------|
| Style_Code | Varchar(50) | Foreign Key | Code Of Style |
| DimQlty_ID | Varchar (10) | Foreign Key | ID Of Diamond Quality |
| DimSubType_ID | Varchar (10) | Foreign Key | Sub Type ID Of Diamond |
| Dim_Crt | Numeric(10,2) | Not Null | Carat Of Diamond |
| | | | (18 Crt,22 Crt,etc) |
| Dim_Pcs | Numeric(10,2) | Not Null | Total Pcs Of Diamond In Item |
| Dim_Gm | Numeric(10,2) | Not Null | Weight Of Each Diamond(Grams) |
| Dim_Size | Numeric(10,2) | Not Null | Size Of Each Diamond |
| Dim_Rate | Numeric(10,2) | Not Null | Rate Of Each Diamond |
| Dim_Amt | Numeric(10,2) | Not Null | Total Amount Of All Diamonds In Item |

2.17.5 TABLE NAME: DimQltyMst

| Field Name | Data Type | Key | Description |
|------------|--------------|-------------|------------------------------------|
| DimQlty_ID | Varchar (10) | Primary Key | ID Of Diamond Quality |
| DimQlty | Varchar(50) | Not Null | Quality Of Diamond (AD,FD,VVS,etc) |

2.17.6 TABLE NAME: GoldKrtMst

| Field Name | Data Type | Key | Description |
|-------------|--------------|-------------|---------------------|
| GoldType_ID | Varchar (10) | Primary Key | ID Of Gold Type |
| Gold_Crt | Varchar(50) | Not Null | Carat Of Gold |
| | | | (18 Crt,22 Crt,etc) |

2.17.7 TABLE NAME: ProdMst

| Field Name | Data Type | Key | Description |
|------------|--------------|-------------|-----------------|
| Prod_ID | Varchar (10) | Primary Key | Product ID |
| Prod_Type | Varchar(50) | Not Null | Type Of Product |

2.17.8 TABLE NAME: StoneMst

| Field Name | Data Type | Key | Description |
|--------------|---------------|-------------|--------------------------------|
| Style_Code | Varchar(50) | Foreign Key | Code Of Style |
| StoneQlty_ID | Varchar(50) | Foreign Key | ID Of Stone Quality |
| Stone_Gm | Numeric(10,2) | Not Null | Weight Of Each Stone(Grams) |
| Stone_Pcs | Numeric(10,2) | Not Null | Total Pcs Of Stones In Item |
| Stone_Crt | Numeric(10,2) | Not Null | Carat Of Stone |
| Stone_Rate | Numeric(10,2) | Not Null | Rate Of Each Stone |
| Stone_Amt | Numeric(10,2) | Not Null | Total Amount Of Stones In Item |

2.17.9 TABLE NAME: StoneQltyMst

| Field Name | Data Type | Key | Description |
|--------------|--------------|-------------|---------------------|
| StoneQlty_ID | Varchar (10) | Primary Key | ID Of Stone Quality |
| StoneQlty | Varchar(50) | Not Null | Quality Of Stone |
| | | | (Ruby,Meena,etc) |

2.17.10 TABLE NAME: UserRegMst

| Field Name | Data Type | Key | Description |
|------------|--------------|-------------|--------------------|
| userID | Varchar (10) | Primary key | User ID |
| userFname | Text | Not Null | First Name Of User |
| user:Lname | Text | Not Null | Last Name Of User |
| address | varchar(Max) | Not Null | Address Of User |
| city | nvarchar(50) | Not Null | City Of User |
| state | nvarchar(50) | Not Null | State Of User |
| mobNo | Text | Not Null | Mobile Number |
| emailID | Text | Not Null | EmailID Of User |
| dob | nvarchar(50) | Not Null | Birth Date Of User |
| cdate | nvarchar(50) | Not Null | Current Date |
| password | Varchar(50) | Not Null | Password Of Users |

2.17.11 TABLE NAME: ItemMst

| Field Name | Data Type | Key | Description |
|--------------|---------------|-------------|---------------------------------|
| Style_Code | Varchar(50) | Primary Key | Code Of Style |
| Pairs | Numeric(3,0) | Not Null | Pairs Of Product |
| Brand_ID | Varchar (10) | Foreign Key | ID Of Particular Brand |
| Quantity | Numeric(18,0) | Not Null | Available Quantity |
| Cat_ID | Varchar (10) | Foreign Key | ID Of Category |
| Prod_Quality | Varchar(50) | Not Null | Quality Of Product |
| Certify_ID | Varchar (10) | Foreign Key | ID Of Certification |
| Prod_ID | Varchar (10) | Foreign Key | Product ID |
| GoldType_ID | Varchar (10) | Foreign Key | ID Of Gold Type |
| Gold_Wt | Numeric(10,3) | Not Null | Weight Of Gold |
| Stone_Wt | Numeric(10,2) | Not Null | Weight Of Stone |
| Net_Gold | Numeric(10,3) | Not Null | Net Gold |
| Wstg_Per | Numeric(10,3) | Not Null | Wastage In Percentage |
| Wstg | Numeric(10,3) | Not Null | Wastage |
| Tot_Gross_Wt | Numeric(10,3) | Not Null | Total Gross Weight |
| Gold_Rate | Numeric(10,2) | Not Null | Rate Of Gold |
| Gold_Amt | Numeric(10,2) | Not Null | Amount Of Gold In Item |
| Gold_Making | Numeric(10,2) | Not Null | Gold Making Charges |
| Stone_Making | Numeric(10,2) | Not Null | Stone Making Charges |
| Other_Making | Numeric(10,2) | Not Null | Other Making Charges |
| Tot_Making | Numeric(10,2) | Not Null | Total Making Charges |
| MRP | Numeric(10,2) | Not Null | MRP Of Product (Including Stone |
| | | | Making,Gold Making And Other |
| | | | Making) |

2.17.12 TABLE NAME: DimQltySubMst

| Field Name | Data Type | Key | Description |
|---------------|-------------|-------------|------------------------|
| DimSubType_ID | Varchar(10) | Primary Key | Sub Type ID Of Diamond |
| DimQlty | Varchar(50) | Not Null | Quality Of Diamond |

2.17.13 TABLE NAME: DimInfoMst

| Field Name | Data Type | Key | Description |
|------------|-------------|-------------|---------------------|
| DimID | Varchar(10) | Primary Key | Diamond ID |
| DimType | Varchar(50) | Not Null | Type Of Diamond |
| DimSubType | Varchar(50) | Not Null | Sub Type Of Diamond |
| DimCrt | Varchar(50) | Not Null | Carat Of Diamond |
| DimPrice | nchar(50) | Not Null | Price Of Diamond |
| DimImg | Varchar(50) | Not Null | Image Of Diamond |

2.17.14 TABLE NAME: Inquiry

| Field Name | Data Type | Key | Description |
|------------|-------------|-------------|------------------|
| ID | Varchar(10) | Primary Key | ID Of user. |
| Name | Varchar(50) | Not Null | Name Of User. |
| City | Varchar(50) | Not Null | City Of User. |
| Contact | Nchar(10) | Not Null | Contact Number |
| EmailID | Varchar(50) | Not Null | Email ID |
| Comment | Varchar | Not Null | Comments Of user |
| Cdate | Date | Not Null | Current Date |

2.17.15 TABLE NAME: JewelTypeMst

| Field Name | Data Type | Key | Description |
|----------------|-------------|-------------|-------------------|
| ID | Varchar(10) | Primary Key | ID Of Jewellery |
| Jewellery_Type | Varchar(50) | Not Null | Type Of Jewellery |

2.17.16 TABLE NAME: CartList

| Field Name | Data Type | Key | Description |
|--------------|---------------|----------|-----------------|
| ID | Varchar (10) | Primary | ID Of Category |
| | | Key | |
| Product_Name | Varchar(50) | Not Null | Name Of Product |
| MRP | Numeric(10,2) | Not Null | MRP of product |

2.18TASKSHEET REVIEW 2

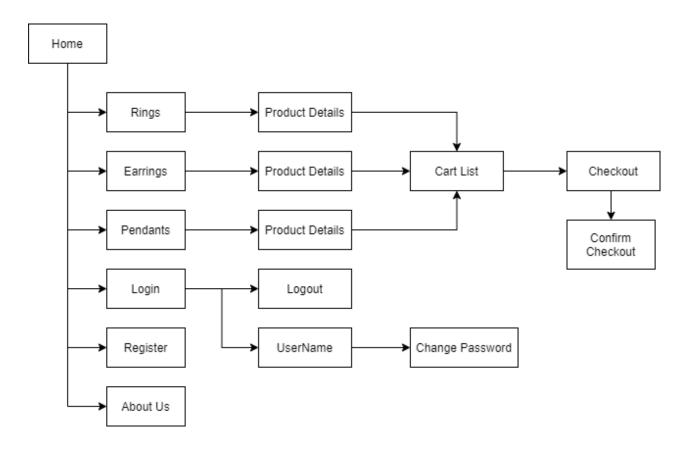
| No. | Contents | Member | Activity Plan | Prepara | ation |
|-----|------------------|------------------------------------|---------------|-------------|-----------|
| NO. | Contents | | Start Date | Actual Days | Status |
| 1 | Use Case and | | | | |
| 1 | Sequence Diagram | Le Minh, | | | |
| 2 | Process Diagram | Bui Quoc Tuan, Phan Minh Cuong, | 1/02/2021 | 6 | Completed |
| 3 | DFD | Phan Van Phuong | 1/02/2021 | O | Completed |
| 4 | Database Design | | | | |

| | Prepare By: Group 1 | Approved By: Faculty |
|-------------------|---------------------|----------------------|
| | Team Leader | |
| | | |
| Date: Feb 9, 2021 | | |
| | | |
| | Le Minh | Mr. Ngo Phuoc Nguyen |

3: REVIEW III

3.1 Site Map

3.1.1 Client's Site Map



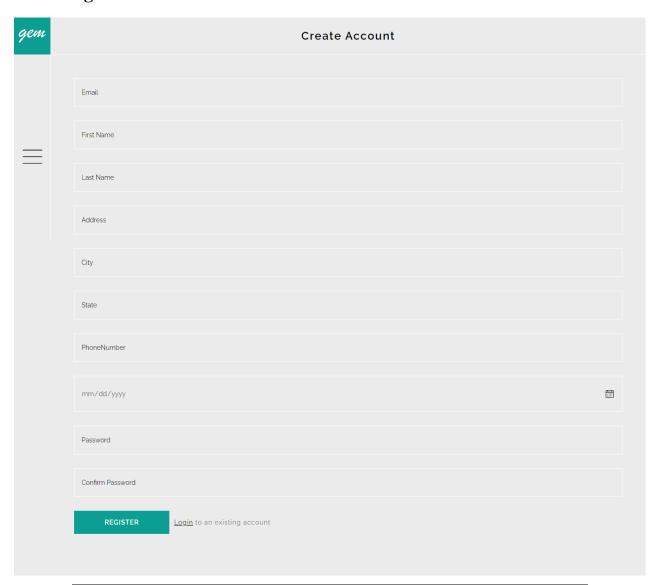
3.2 GUI Design

3.2.1 Home



| Description | Home page |
|----------------|---|
| Connect From | N/A |
| Connect To | Login page, Rings page, Earrings page, Pendants page, Cart, Checkout, Compare |
| Validation | N/A |
| Initial Values | N/A |
| Events | - Navigate the website by clicking on menu items or products. |

3.2.2 Register



| Description | Guest signs up for new account |
|--------------|--------------------------------|
| Connect From | Home |
| Connect To | Login page, Home |

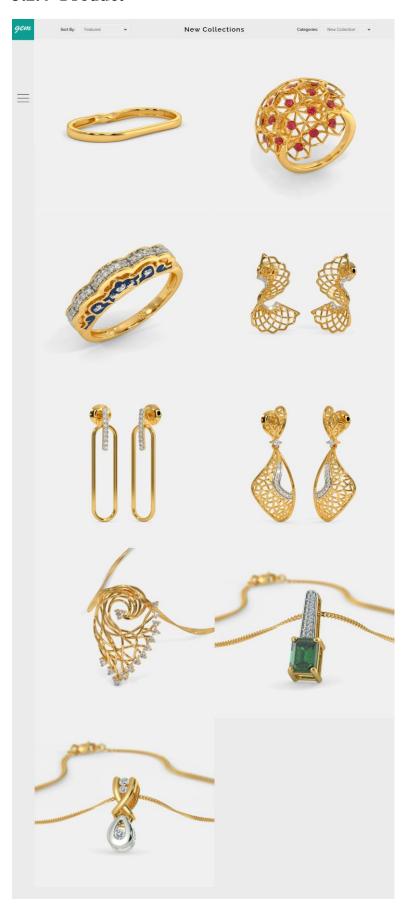
| Validation | All fields: not blank First name & last name: must be not contains special characters Username: must be unique Email: must be valid email format Password: must be between 6 to 20 characters Confirm password: must be the same as password |
|----------------|---|
| Initial Values | N/A |
| Events | - When click button "Register" |

3.2.3 **Login**



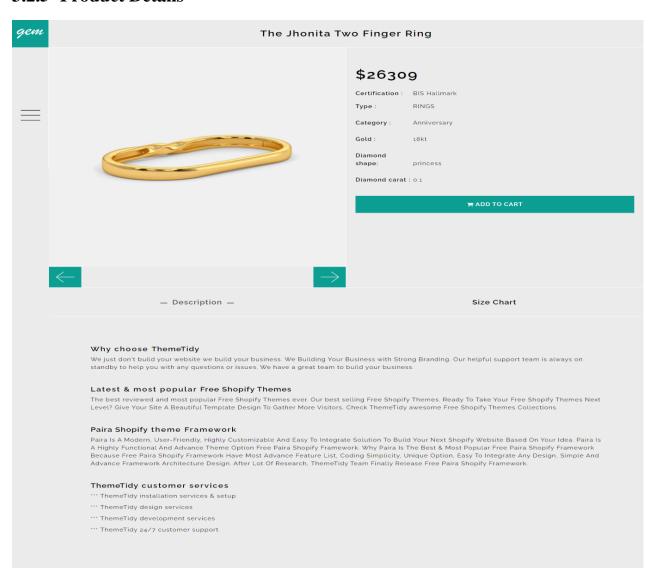
| Description | Login with email and password |
|----------------|--|
| Connect From | Home |
| Connect To | Customer's profile, Forget password |
| Validation | All fields: not blank - Email: must be valid email format - Password: must be more than 6 characters - Email & Password must be the same with database |
| Initial Values | N/A |
| Events | When click button "Login", check email and password, then login. Login success, go to profile page When click "Forgot Your Password?" link, go to Forgot password page |

3.2.4 Product



| Description | Show list of products |
|-----------------|--|
| Connect From | Home, top Navigation |
| Connect To | Product detail, cart, compare list |
| Validation | N/A |
| Initial Values | List of products following given criteria (category, |
| illitial values | collection, attributes, price, etc.) |
| Events | - When click on product, redirect to product detail. |

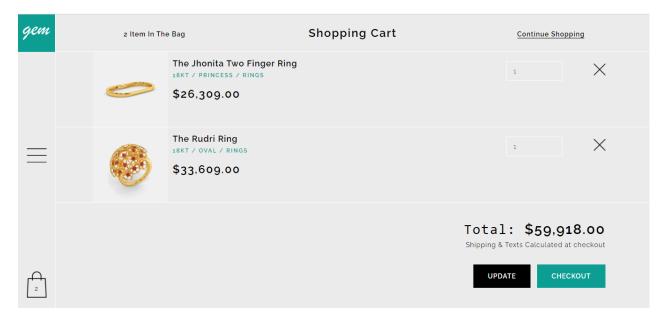
3.2.5 Product Details



| Description | Show product's detail |
|--------------|--|
| Connect From | Home, product page, cart, compare list |
| Connect To | Cart, Review |

| Validation | N/A |
|----------------|--|
| Initial Values | Product's detail: name, price, size, attribute, discount |
| | value, description |
| Events | - When click button "Add To Cart", add product to cart |
| LVEIILS | - When choose a different size, reload price. |

3.2.6 Cart Page



| Description | Cart page | |
|----------------|---|--|
| Connect From | Top Navigation | |
| Connect To | Place Order page | |
| Validation | Cart is not empty | |
| Initial Values | List of products in cart | |
| Events | If customer is logged in, they can add the product to the cart. If customer is not logged in, they need to be logged in to be able to add a product the shopping cart. When click "Checkout" button, redirect to Place Order page When adjust quantity, update quantity and subtotal When click "x" icon, remove item from cart | |

3.2.7 Place Order Page

| gem | Confirm Checkout | | | |
|-----|------------------|---|---|-------------|
| _ | phan | Phan Phuong vanphuongs197@gmail.com Payment Cash On Delivery | Shipping Address Phan Phuong 012345667 86 au co, tp hcm, Viet nam | |
| _ | | Iter | ns Ordered | |
| | | The Ambrosia Pendant | 1 | \$7,962.00 |
| | | The Jhonita Two Finger Ring | 1 | \$26,309.00 |
| | | | Total: \$34 Shipping & Texts Calculat | |
| | | | ← BACK TO ✓ CO | NFIRM |

| Description | Show Order page |
|--|--------------------|
| Connect From | Cart |
| Connect To | Home, Payment page |
| Initial Values List of products in cart Optional: Your information and shipping address | |
| - When check "Confirm" button, the order will I confirmed as complete | |

3.3 TASKSHEET REVIEW 3

| NI- | Contacts | Manakan | Activity Plan | Prepar | ation |
|-----|---------------------------|-------------------------------------|---------------|-------------|-----------|
| No. | Contents | Member | Start Date | Actual Days | Status |
| | Client | | | | |
| 1 | Home | | | | |
| 2 | Register | | | | |
| 3 | Login | | 1/02/2021 | 6 | Completed |
| 4 | Reset Customer's Password | | | | |
| 5 | Rings | | | | |
| 6 | Earrings | | | | |
| 7 | Pendants | | | | |
| 8 | Product Details | | | | |
| 9 | Cart List | Le Minh, Bui Quoc Tuan, | | | |
| 10 | Chectout | Phan Minh Cuong, Phan Van Phuong | | | |
| 11 | Confirm Checkout | | | | |
| | Admin | | | | |
| 16 | Admin's Dashboard | | | | |
| 17 | Category List | | | | |
| 18 | Category Add | | | | |
| 19 | Category Update | | | | |
| 20 | Collection List | | | | |
| 21 | Collection's Product List | | | | |
| 22 | Collection Add | | | | |

| 23 | Collection Update | | |
|----|--------------------|--|--|
| 24 | Product List | | |
| 26 | Product Details | | |
| 27 | Product Add | | |
| 28 | Product Update | | |
| 29 | Attribute Overview | | |
| 30 | Attribute Add | | |
| 31 | Customer Overview | | |
| 32 | Order Overview | | |

| | Prepare By: Group 1 | Approved By: Faculty |
|----------------------|---------------------|----------------------|
| | Team Leader | |
| | | |
| Date: March 18, 2021 | | |
| | | |
| | Le Minh | Mr. Ngo Phuoc Nguyen |