

Digital Broker System

A Software Engineering Project Submitted

By

Semester: Summer_21_22		Section: F	Group Number: 06	
SN	Student Name	Student ID	Contribution (CO1+CO2)	Individual Marks
01	Rudra,Arnob Saha	20-42666-1		
02	Karim,Md. Fahimul	18-36416-1		
03	Riaz Sarker	20-42362-1		
04	Asmaul Husna Jarin	20-42363-1		
05	Mushfiq Qayyum	17-33170-1		

PROJECT PROPOSAL

1. Background to the Problem

If anyone wants to exchange their assets in our country, they face different difficulties like fake documents, scam, over pricing, hassle in agreements etc. To remove these hassles, we introduced our platform. It will remove all these hassles in buying and selling assets.

2. Solution to the Problem

One step solution to find buyer & seller anywhere across the country to exchange their assets without any hassle. A platform where we will provide real buyers & sellers with appropriate agreements and also ensure its fulfillment & validity. We will provide a strong verification, proper agreement. We are looking for highly motivated buyers and sellers to boost our customer community. It will help our clients to maximize the productivity of money by minimizing the hassle in asset exchange. We have some competitors like B.property, Bikroy.com etc. They don't verify every single user and mostly they deal with property related buying & selling issues. But we will deal with any asset like Shares, Gold, Bond, Property, Insurance, Vehicles etc.

Functions and their specification

1. Registration/ Create account

- Go to registration
- Enter The name, mail, phone
- Details to verify user
- Set password
- Priority Level: High
- Precondition: user have username and password

2. Login:

- The software shall allow users to login with their given username and password.
- The login credentials (username and password) will be verified with database records.
- If the login is successful the home page of the user account will be displayed.
- If the username and/or password has been inserted wrong, the random verification code will be generated and sent to the user's email address by the system to retry login.
- If the number of login attempt exceed its limit (3 times), the system shall block the user account login for one hour [optional function]
- Priority Level: High
- Precondition: user have valid user name and password

3. Profile:

- Pay to update profile
- Details about that person
- Details about your product
- Confirm updates
- Budget setting
- Media
- Notifications
- search
- Communications
- Accounts for financial statement
- payment
- Logout
- Precondition: user have valid Login updated profile

4. Notification:

- Click bar
- Details of any updates
- Priority Level: low
- Precondition: updated profile

5. Search:

→ Search: for buyer

- Budget specification
- Market specification
- Pay for search
- Priority Level: High
- Precondition: user has valid user id , password, updated profile, Pay for search (package).

→ Search: for seller

- Budget specification
- Market specification
- Priority Level: High
- Precondition: user has valid user id , password, updated profile, Pay for search (package).

6. communication:

- Pay to communicate others
- Block
- Send
- Unsend
- Show documents
- Refer previous communication
- Like or dislike comments
- Priority Level: High
- Precondition: user has valid user id, Pay to communicate with others(package).

7. Accounts/ Financial statement:

- Bank Statement
- Income Fund Source
- Must have a valid Bank/Mobile bank Account .

8. Payment:

- Select any package for (Profile, Search, Communicate,Agreement)
- Bkash, Nagad, Visa Card, MasterCard, Debit Card, American Express are the payment options
- User must have to select payment method from these payment methods
- If user select Visa Card, MasterCard, Debit Card, American Express then s/he need to provide card details
- After giving the payable amount S/He can proceed to make payment after clicking on the payment button
- After a successful payment user will get a confirmation message on his cell phone and also will get a notification on the website
- If user select Bkash or Nagad, then s/he need to provide her/his Bkash or Nagad number
- Then user need to give the payable amount
- After that user need to provide her/his Bkash or Nagad pin number in order to make the payment
- Then user can proceed to make payment after clicking on the payment button
- After a successful payment user will get a confirmation message on his cell phone and also will get a notification on the website
- Priority Level: High
- Precondition: user must have to Choose an package and payment method

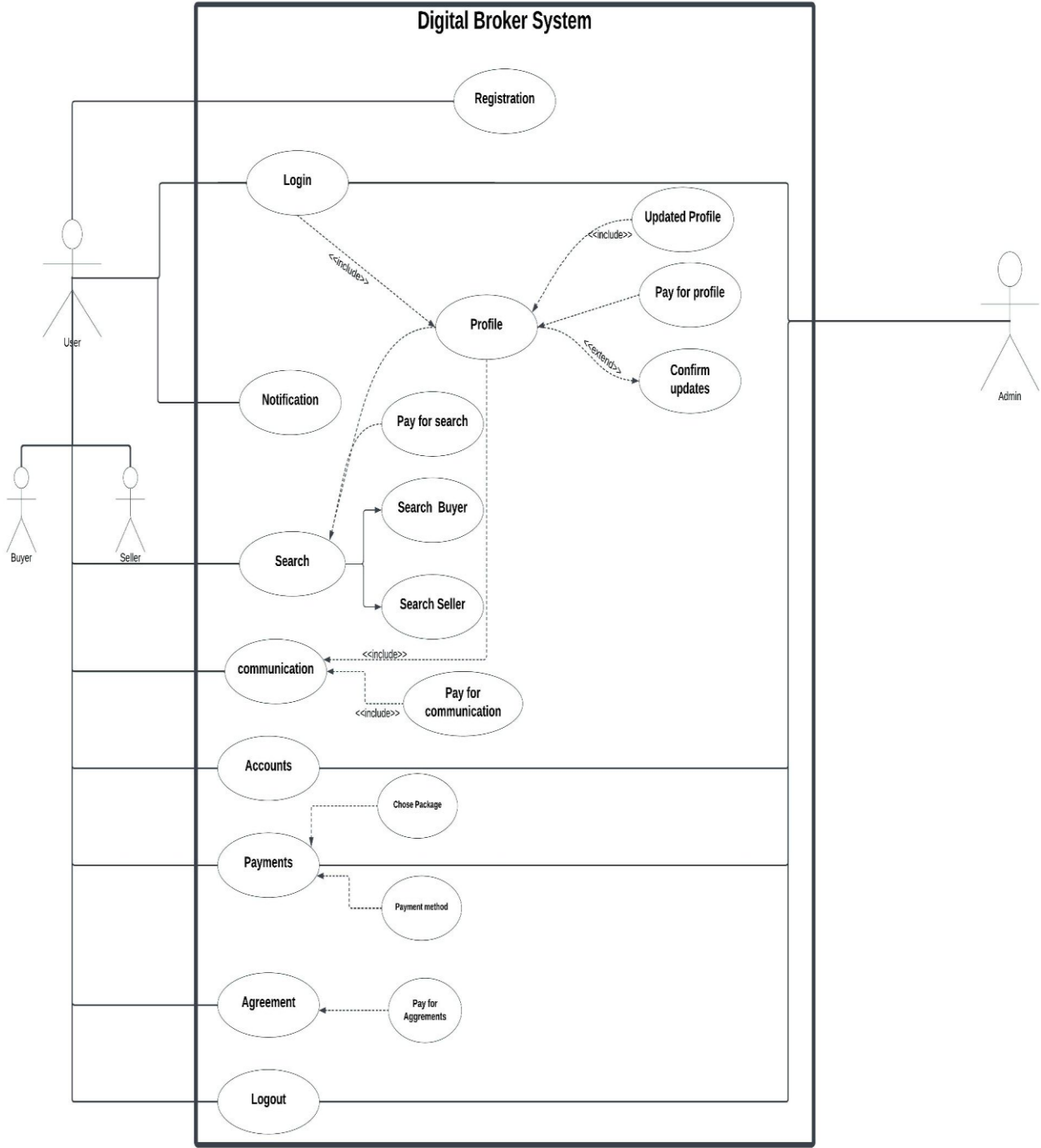
9. Agreement:

- Sellers must upload their selling documents or agreements to verify its authentication before any sale advertisement. Admin should verify his/her uploading documents to insure its validity.
- Buyer must verify his/her identity with supported documents to register themselves into the system as a buyer/seller. Admin can also verify his/her identity and approve his/her registration.
- If any seller/buyer doesn't verify their information with a valid document,He/she can't register into the system.
- Admin reserves the right to change or delete any information if any false information is found.
- Pay to Close Agreement
- Priority Level: High
- Precondition: user has valid user Pay to Close Agreement

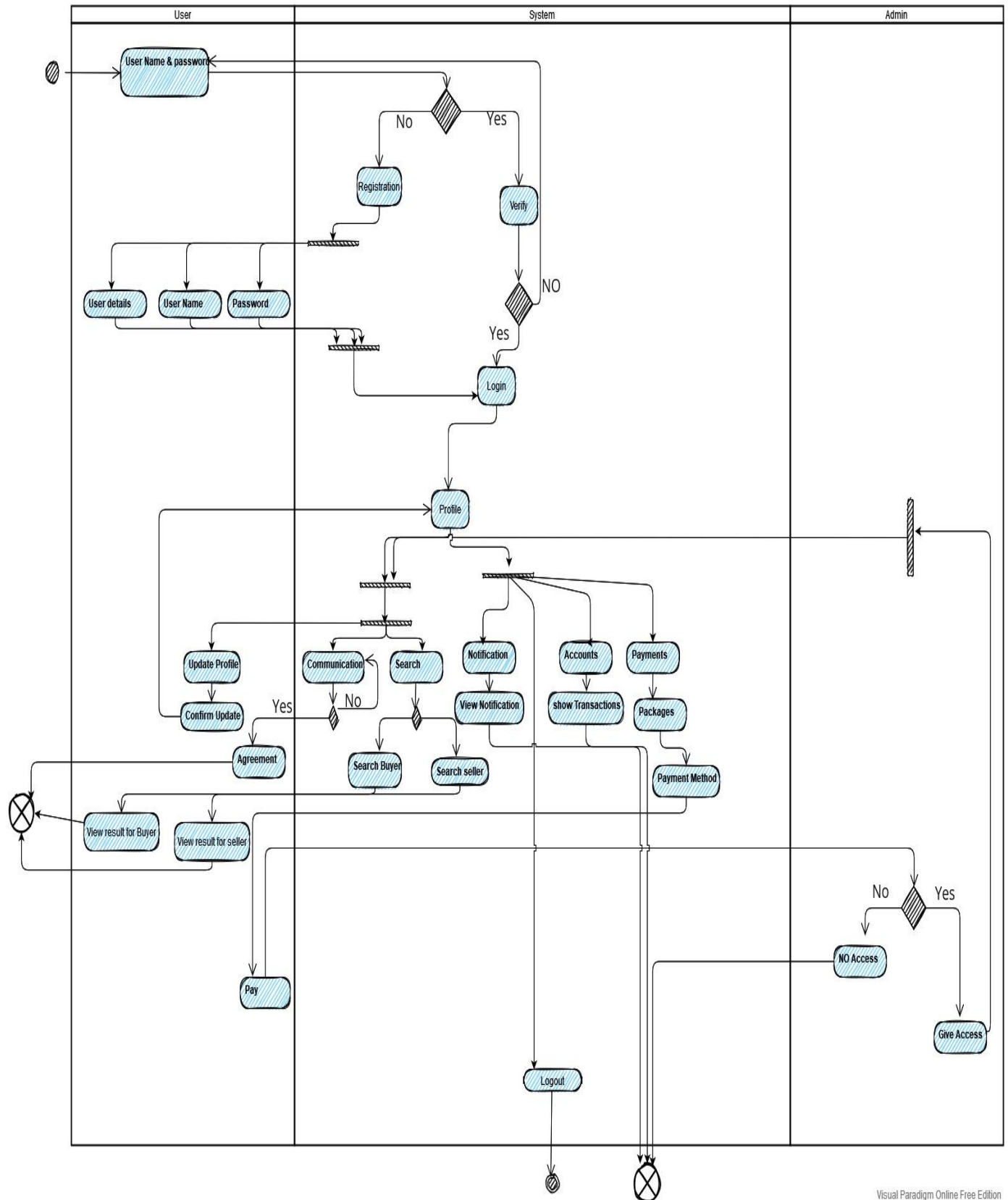
10. Logout:

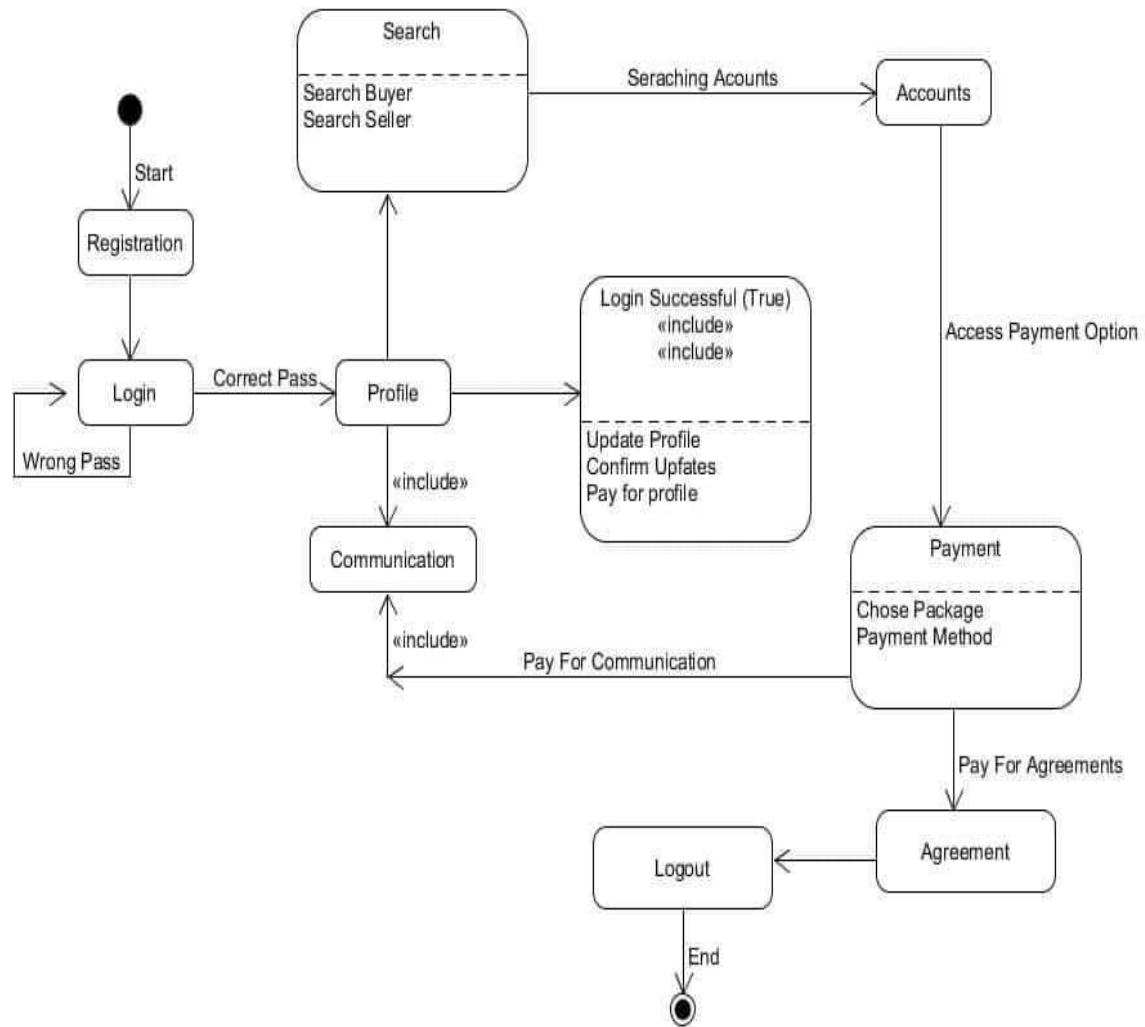
- Logout from account
- Show login page again for reconnecting

USE CASE Diagram



Activity Diagram





Digital Broker System

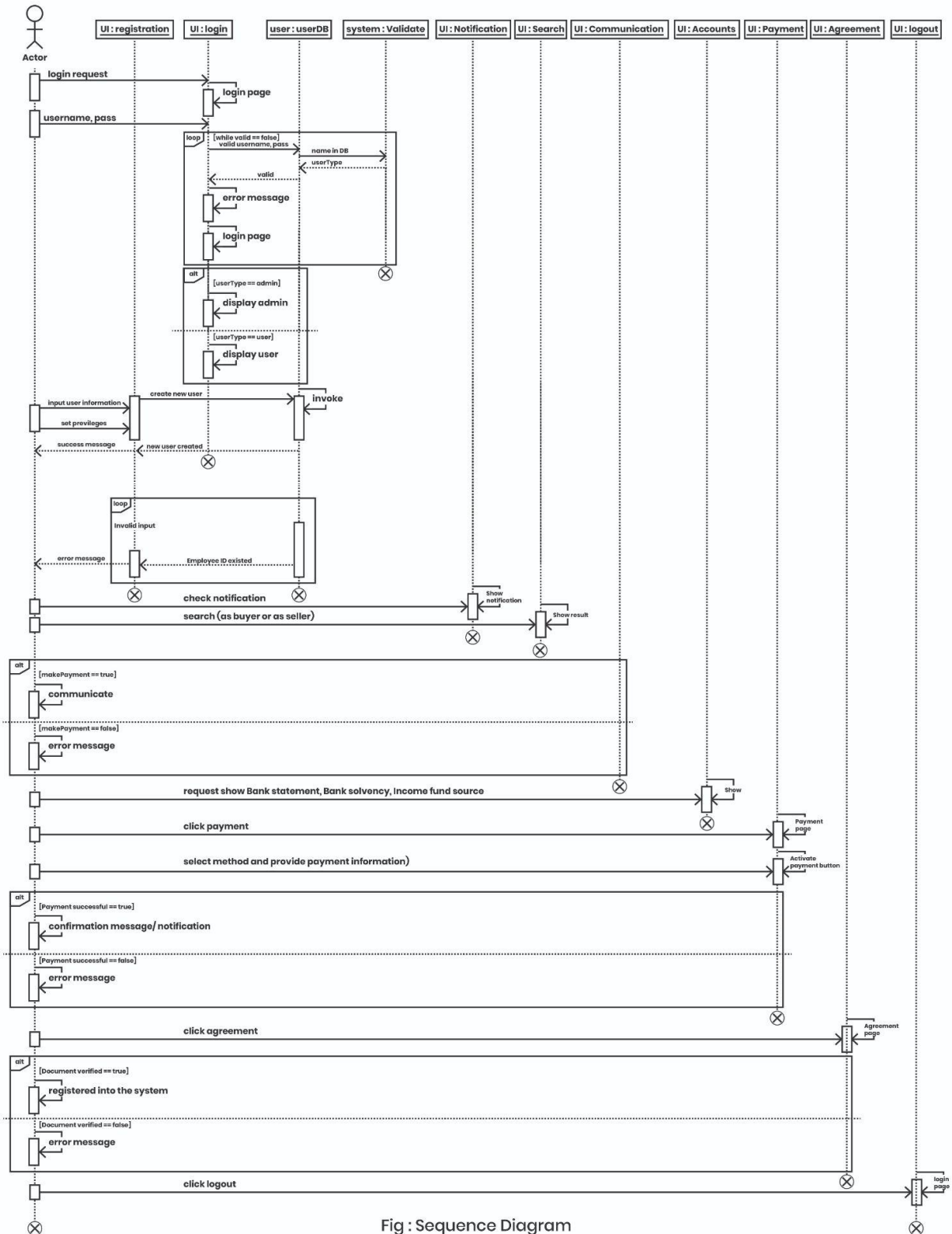
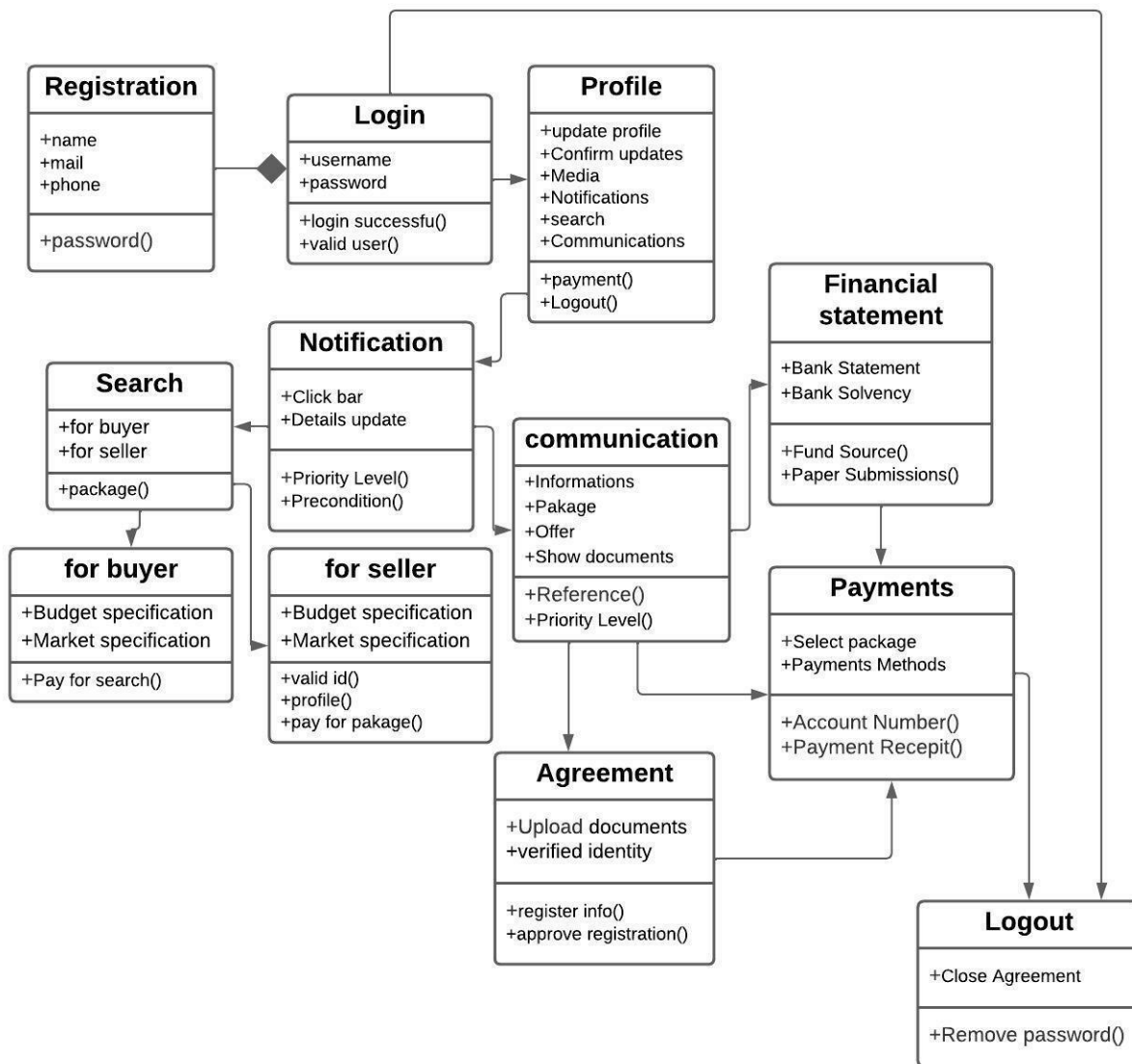


Fig : Sequence Diagram

Class Diagram



Process Model: Scrum framework will be used for 'Digital Broker'. Scrum is an Agile methodology consisting of lightweight management practices that have relatively little overhead. Scrum is based on three pillars: Transparency, Inspection, and Adaptation. It helps teams work together and develop an impactful project in a short period .

Scrum Process Model :



Scrum uses an approach that is both iterative and incremental. Which will help 'Digital Broker' in these way

- Scrum can help teams complete project deliverables quickly and efficiently
- Scrum ensures effective use of time and money
- Large projects are divided into easily manageable sprints
- Developments are coded and tested during the sprint review
- Works well for fast-moving development projects
- There are frequent assessments of the project, which enhances predictability and mitigates risk.
- scrum points out everything developers are NOT doing right.

The Waterfall model is best for projects with rigid rules and structures, fixed scope, deadline, and budget. On the other hand, Agile is suitable if the project depends on getting to market first and then iterating upon customers' feedback. However, if you prefer structure within your Agile model that guides your team to follow some defined rules, then Scrum is the best model. That is why we prefer Scrum for 'Digital Broker' .

SYSTEM UI DESIGN (PROPOSED)

Log in & Registration

Need Help?



Username

Password

[forgot password?](#)

LOGIN

[Register?](#)

registration



REGISTER AS

☐ *BUYER*

☐ *SELLER*

Confirm



registration

Name

Address

Phone

Nationality

Passport No

Nid No

Password


Confirm Password

☒ I Agree To The Terms & Conditions

register

Profile

D



✓

Arnob Saha Rudro

Buyer

Edit Profile

Notifications

Account

Payment

LOG OUT

Write Post

Post

Media

Arnob Saha Rudro

D

Edit Profile

Name : Arnob Saha Rudro

Address : XXXXXXXXXXXXX

Phone : 017XXXXXXXX

Nationality : Bangladeshi

Passport No : BM21098168/M

Nid No : 28XXXXXXXXX

Password : *****

Given Information is correct.

save

BACK

D

Edit Profile

Name : Arnob Saha Rudro

Address : XXXXXXXXXXXXX

Phone : 017XXXXXXXX

Nationality : Bangladeshi

Passport No : BM21098168/M

Nid No : 28XXXXXXXXX

Password : *****

Information Saved Successfully!

BACK

Notification

D

←

Notifications

As a buyer ▾

🔍

All

Unread

Communication

D

🔍

←

Fahimul Karim

Seller

View Profile

+

New Message

↑

Accounts/ Financial statement



ACCOUNT DETAILS

Name : Arnob Saha Rudro

Master Card Number: 21XXXXX

PIN : *****

VISA Card Number: 22XXXXXX

PIN : *****

Bank Acc. Number: 29XXXXXX

● Given Information is correct.

save

BACK



ACCOUNT DETAILS

Name : Arnob Saha Rudro

Master Card Number: 21XXXXX

PIN : *****

VISA Card Number: 22XXXXXX

PIN : *****

Bank Acc. Number: 29XXXXXX

Information Saved Successfully!

BACK



Transaction History



Date : 22.06.22
Name : Fahimul Karim
[View Transaction Details](#)




Date : 27.06.22
Name : Riaz Sarkar
[View Transaction Details](#)



Date : 29.06.22
Name : Asmaul Husna Zerin
[View Transaction Details](#)

BACK

Payment



Payment

Select Package

- ☒ Package 1
- ☐ Package 2
- ☐ Package 3

Only Search

Only Search & Communication

Search, Communication, Agreements

Method

- ☐ Master Card
- ☒ Visa Card
- ☐ Bank Account
- ☐ Mobile Banking

Master Card Details

Continue

Visa Card Details

Continue

Visa Card Details

Continue

Mobile Banking Details

☒ Bkash ☐ Nagad ☐ Rocket ☐ Nexus Pay

Account Holder Name

Phone Number

PIN

Continue

Mobile Banking Details

☒ Bkash ☐ Nagad ☐ Rocket ☐ Nexus Pay

Account Holder Name

Phone Number

PIN

Continue

Bank Account Details

Account Holder Name

Account Number

Branch

Phone

Continue

Search



Most Recent

See All

 Name
Details

 Name
Details

 Name
Details

 Name
Details

 Name
Details

 Name
Details



Set Search

As a buyer ▼

Budget

1  1000000

Category

- ☐ Land
- ☒ Car
- ☐ Gold
- ☐ Stock Share

DONE

Profile Visit



Fahimul Karim

Seller

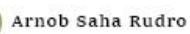
Joined 2days ago

[View Agreements](#)

Pictures



Media

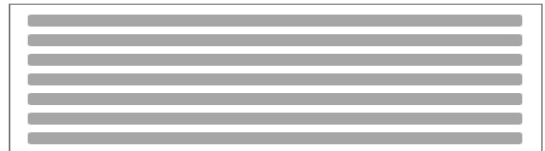


Agreement



Agreement

Details



Pictures



Project Name: Digital Broker System	Test Designed by: Riaz
Test Case ID: FR_1001	Test Designed date:19.07.22
Test Priority (Low, Medium, High):Medium	Test Executed by:Fahimul
Module Name: Accounts	Test Execution date:19.07.22

Test Title: Verify Accounts functionality
Description:Test Accounts of Digital Broker System App
Precondition (If any): Must have a valid Bank/Mobile bank Account .

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to accounts from profile 2.Set Bank Account Information 3.Saved Bank Account Information 4.Show Bank Statement 5.Show income source	View Transaction History View Transaction Details	User should able to View Bank Statement and Income Fund Source	Satisfied	Pass

Post Condition: Users can see each and every detail about their Bank/ Mobile Bank account.
--

Project Name: Digital Broker System	Test Designed by:Fahimul
Test Case ID: FR_1002	Test Designed date:19.07.22
Test Priority (Low, Medium, High):High	Test Executed by: Riaz
Module Name:Payment	Test Execution date:19.07.22

Test Title:Verify Payment Method
Description:Test App Test payment Method for Digital Broker System App
Precondition (If any):Must have a valid Bank/Mobile bank Account Logedin.

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to payment from profile 2.select Package 3.select method 4. Pay	Click Payment Select Package Select payment method	User can Select any package for (Profile, Search, Communicate,Agreement) User must have to select payment method from all payment methods Successful Payment	As expected	Pass

Post Condition: Show payment history in Accounts to the user
--

Project Name: Digital Broker System	Test Designed by:Fahimul
Test Case ID: FR_1003	Test Designed date: 21/07/22
Test Priority (Low, Medium, High): High	Test Executed by: Mushfiq Qayyum
Module Name: Registration	Test Execution date: 21/07/22

Test Title: Verify registration system
Description:Test App registration system for Digital Broker System App
Precondition (If any): user must have a unique username and a password

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to Digital Broker System App 2. Confirm his/her role as Buyer or Seller 3. Provide all the information into the registration page 4. Click the checkbox of terms	Name: Riaz Sarker Address: Dhaka, Bangladesh Phone: 01954069336 Nationality: Bangladeshi Passport No: 1111 NID No: 2222 Password: 12345 Confirm Password: 12345	User should be registered into the system	As expected	Pass

and condition s 5. Click on the register button				
---	--	--	--	--

Post Condition: Show the confirmation of successful registration

Project Name: Digital Broker System	Test Designed by: Riaz
Test Case ID: FR_1004	Test Designed date: 21/07/22
Test Priority (Low, Medium, High): Medium	Test Executed by: Mushfiq Qayyum
Module Name: Login	Test Execution date: 21/07/22

Test Title: Verify login system
Description: Test App login system
Precondition (If any): user must have a valid username and a password

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<ol style="list-style-type: none"> Go to Digital Broker System App Enter correct username and password Click on the login button 	Username: riaz sarker Password: 12345	User should be logged in into the system	As expected	Pass

Post Condition: Successful login confirmation will be displayed and user will be redirect to his/her profile
--

Project Name: Digital Broker System	Test Designed by: Riaz
Test Case ID: FR_1005	Test Designed date:21.07.22
Test Priority (Low, Medium, High):High	Test Executed by:Zerin
Module Name:Profile	Test Execution date:21.0722

Test Title:Verify Profile
Description:Test App Profile
Precondition (If any): Successful Registration and Login

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.view Profile function after login 2. Search 3.View Notification 4.Edit Profile. 5.Logout works 6.Check Communication 7.check account 8.Check Payment 9. Write post	Profile found for both buyer and seller Profile and every other functions	Found Users Profile and can access all other functions	As expected	Pass

Post Condition: Every function works properly and can exit from every state

Project Name: Digital Broker System	Test Designed by: Riaz
Test Case ID: FR_1006	Test Designed date: 21.07.22
Test Priority (Low, Medium, High): High	Test Executed by: Rudro
Module Name: Search : Search For Buyer	Test Execution date: 21.07.22

Test Title: Search : For Buyer
Description:Test App Searching Option
Precondition (If any): user has valid user id,password,updated profile,Pay for search (package)

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<p>go to Digital Broker System App.</p> <p>then login to the app using a valid username and password.</p> <p>go to the Profile Section & Enter to the search option.</p> <p>At first you can pay for accessing search options. Then you can search & you can set search manually.</p>	<p>[I am searching a seller profile]</p> <p>Profile Name : Fahimul Karim</p>	Search Found.	As expected	Pass

Post Condition: If the searching data is found then it will be displayed and user will be redirect to that
--

Project Name: Digital Brokar System	Test Designed by:Fahimul
-------------------------------------	--------------------------

Test Case ID: FR_1007	Test Designed date: 21.07.22
Test Priority (Low, Medium, High): High	Test Executed by: Rudro
Module Name: Search : For Buyer	Test Execution date: 21.07.22

Test Title: Search : For Buyer
Description:Test App Searching Option
Precondition (If any): user has valid user id , password, updated profile, Pay for search (package)

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<p>go to Digital Broker System App.</p> <p>then login to the app using a valid username and password.</p> <p>go to the Profile Section & Enter to the search option.</p> <p>At first you can pay for accessing search options. Then you can search & you can set search manually.</p>	<p>[I am searching a buyer profile]</p> <p>Profile Name : Riaz Sarker</p>	Search Found.	As expected	Pass

Post Condition: If the searching data is found then it will be displayed and the user will be redirected to that search.
--

Project Name: Digital Brokar System	Test Designed by:Fahimul
-------------------------------------	--------------------------

Test Case ID: FR_1008	Test Designed date: 23-07-2022
Test Priority (Low, Medium, High): High	Test Executed by: Riaz Sarker
Module Name: Communication	Test Execution date:23-07-2022

Test Title: Communication
Description:Test Communication of Digital Broker System App
Precondition (If any): User must complete their deal with clear communication.

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<ol style="list-style-type: none"> 1. Go to Digital Broker System App 2. Select Seller or buyer id. 3. Provide all the information for selling or buying products. 4. Communication must be continued respectfully. 	<p>Id found</p> <p>Communicate with other buyers/sellers</p>	Communicate with others	As expected	Pass

Post Condition: Users can see each and every detail about their Communications.

Project Name: Digital Brokar System	Test Designed by: Riaz Sarker
Test Case ID: FR_1009	Test Designed date:23-07-2022
Test Priority (Low, Medium, High): High	Test Executed by: Riaz Sarker
Module Name: Agreement	Test Execution date:23-07-2022

Test Title: Agreement
Description: Test Agreement of Digital Broker System App
Precondition (If any): User must have full-filled their Agreement.

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to Digital Brokar System App 2.Select Seller or buyer id. 3. Select product for buy or sell with legal agreement. 4. Agreement should be completed with each person's wishingly.	Clauses are not ready to serve Not pre defined every time	Found required clauses	Not up to the mark	Fail

Post Condition: Users can see each and every detail about their necessary Agreement for deal.

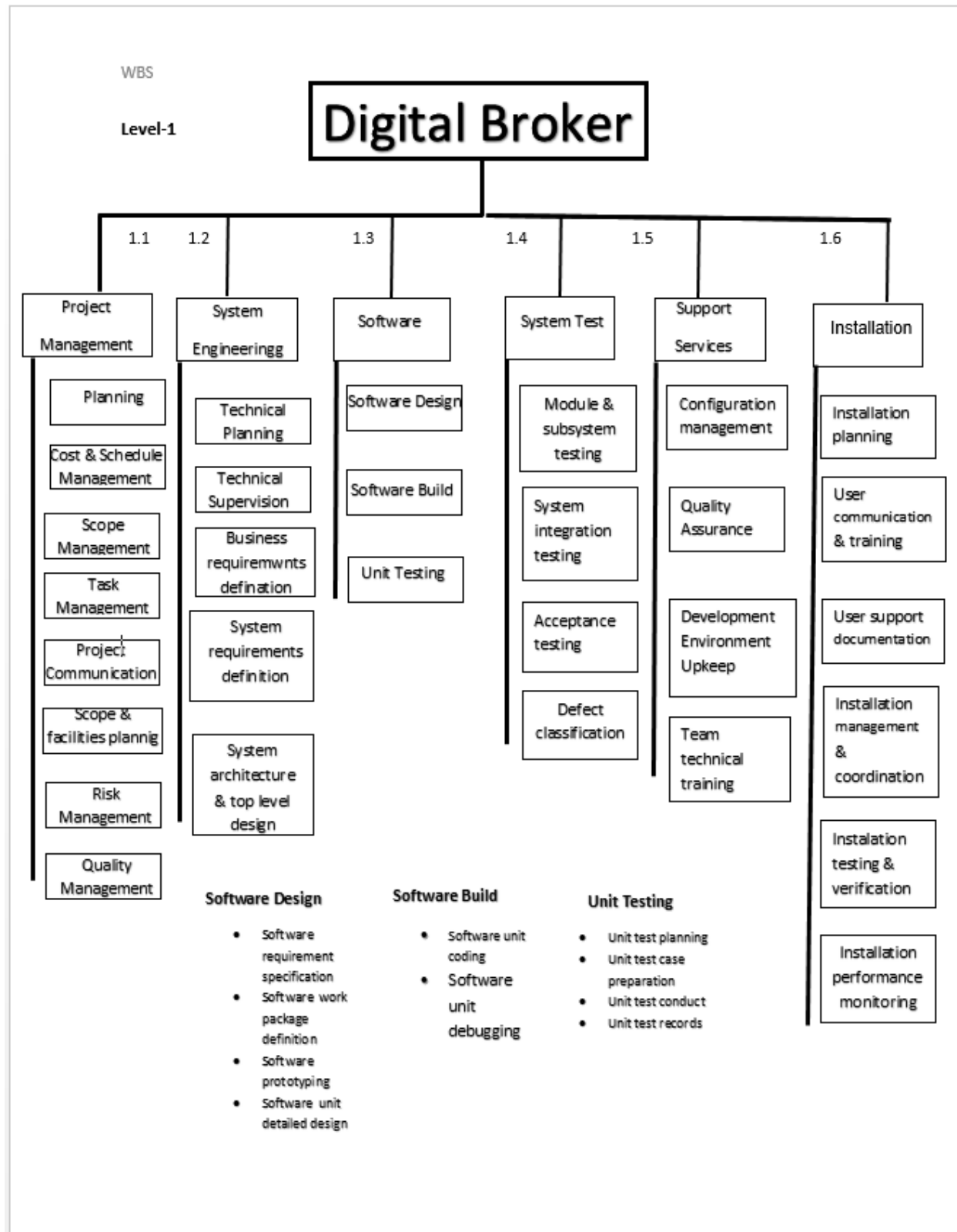
Project Name: Digital Brokar System	Test Designed by:Fahimul
Test Case ID: FR_1010	Test Designed date:
Test Priority (Low, Medium, High):Medium	Test Executed by:Zerin
Module Name:Notification	Test Execution date:21.07.21

Test Title:verify notification function
Description:Test App Notification
Precondition (If any):

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Login 2.Check notification from profile	Check notification	Get notification	AS Expected	Pass

Post Condition: can exit and can move to communication
--

Work Breakdown Structure



Activity Key

- A Analysis Design Documentation
- B Code Debugging
- C Integration Testing Installation

Pre-game 5W

- A Overall Planning 2
- B High-Level Architecture 2
- C Update Product Backlog 1

GamePhase 13W

- A Sprint Backlog List 2d
- A Sprint Phase
- A Module 1 4d
- A Analysis
- A Design
- B Development
- C Testing
- A Module 2 4d
- A Analysis
- A Design
- B Development
- C Testing
- A Module 3 2W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 4 1W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 5 3d
- A Analysis
- A Design
- B Development
- C Testing
- A Module 6 2W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 7 2W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 8 1W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 9 1W
- A Analysis
- A Design
- B Development
- C Testing
- A Module 10 3d
- A Analysis
- A Design
- B Development
- C Testing

Post Game 3W

- C System Integration 1W
- C System Testing 2W
- A Documentation 1W
- B Final Release 2W

TimeLine chart 2

