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Self-appraisal form

| Project | Water Billing System | Date | 2022/5/16 |
|---------|----------------------|------|-----------|
| Role | Business Analyst | Team | |

Personal objectives – performance measurement

| Objectives | Evidence provided | Evalua | ition |
|-----------------|--|--------|------------|
| | | Studer | nt / tutor |
| | | 9 | |
| Functional | Our project was a water billing system, and I | | |
| Requirement | studied how a water distribution business | | |
| and Design | operates. In comparison to the previous sprint, | | |
| | now I have a strong understanding of technical | | |
| | concepts such as how to design a system and | | |
| | deal with various ideas, as well as the importance | | |
| | of working in groups. Throughout the project, I | | |
| | learned how to build a system from a business | | |
| | and customer viewpoint by creating the product | | |
| | backlog, use case diagram, and wireframe in | | |
| | collaboration with the developer. Link | | |
| | Functional Requirement and Design | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Tutor feedback: | | ı | ı |
| | | | |
| | | | |

| | | 9 | |
|--------------------|---|-------|------|
| | While doing testing my core focus was usability | | |
| | and how consumer accessibility. How easily a | | |
| | user can navigate and perform their task. I tested | | |
| | a water billing system according to the features | | |
| | that I have provided in a sprint backlog, product | | |
| Functional Testing | backlog, a use case diagram, activity diagram, | | |
| | class diagram, ERD, and wireframe. I tested from | | |
| | login until creating a receipt for the consumer | | |
| | where there were many errors in the system. I | | |
| | tested on time and create an issue on Github to fix | | |
| | the error and improvement on time. | | |
| | Link | | |
| | 3. Functional Testing | | |
| | | | |
| | | | |
| | | | |
| Tutor feedback: | | | |
| | | | |
| | | 10/05 | (0.0 |
| | | 18/20 | /20 |

Collaboration Document

I have consistently participated in a campfire and responded to the developer's questions. Attend the meeting on a regular basis, and I've been more flexible in improvement in the requirement. In group meetings also take feedback from all group members. I have created an issue on Github in time while doing testing. I have created and provided an updated sprint backlog, product backlog, a use case diagram, activity diagram, class diagram, and ERD with all of the required features.

Link

Evidences of Good communication and file sharing

Continuing Personal Development (CPD)

I have learned many things While working on a project, It helps to develop a Technical, Research mindset to find new solutions to a problem. I understood the importance of working in a group and understood about Technical aspects of how to create a system that covers all the business and consumer perspectives. I learned from each team member's difficulty and how they came up with a solution while performing all of the research and working as a group.

Link

Evidences of Continuing Personal Development (CPD)

Issue tracking

As a business analyst, I have communicated with developers on a daily basis and kept track of what they're doing and how they're doing it. After finishing the first sprint, I tested it and noticed numerous flaws, which I instantly reported to the developers via Github. I tested the second sprint and created an issue on Github after it was completed. The issue was with the UI and functionality, where functionalities and buttons were missing according to the sprint backlog.

Link

Evidences of Issue tracking

Appendix A

1. Functional Requirement and Design

1.1 Product backlog (User stories)

| 1 2 3 | High High | As a super admin, I want to login so that to Manage the access and level of responsibility of all admin, meterr | login: username, password eader and consumer d'Button: Login, Logout | 1 week | complete |
|----------------|--------------|--|--|-----------|----------|
| 1 2 3 | | | | I MCCV | |
| 3 | | | | 1 week | complet |
| 3 | riigii | As a super admin, I want to logout so that other person could not access the system | clicking on the Login leads to a message display as dashboard where superadmin can a | | complet |
| 3 | | Ho a super autility i want to logout so that other person could not access the system | clicking on Logout leads to out from the system | 1 week | complet |
| 3 | | | manage user: can create admin and delete | 1 week | complet |
| | High | As a super admin, I want assign Admin so that to manage Admin activities like payment activities | button: create, delete and cancel button | 2 week | complet |
| - | riigii | As a super authing i mane assign Authin so that to manage Authin activities into payment activities | textfield: username, password, userID | 2 weeks | complet |
| 1 | | | clicking on create button lead to create and cancel button lead to default page | 2 weeks | comple |
| super Admir | | | clicking on delete button lead to delete previous the admin | | 10000 |
| - Capor Mannin | _ | | manage super admin; can create and delete meter reader | 2 weeks | comple |
| 4 | High | As a super admin, I want to assign meter reader so that to manage meter reader activities like update meter b | | 2 weeks | complet |
| 4 | | | textfield: username, password, userID, location | 2 weeks | complet |
| | High | As a super admin, i want to delete previous admin and mater reader so that i can assigne new one admin, me | | 2 weeks | complet |
| | rngn | As a super duming i want to delete previous dumin and mater reader so that i can assigne new one duming me | clicking on delete button lead to delete previous the meter reader | Z WCCN3 | Compic |
| | | | manage user: can manage consumer | 3 weeks | complet |
| 5 | High | As a super admin, I want to manage consumer username or consumption detail of consumer so that I can edi | | 3 weeks | complet |
| - | riigii | As a super during, I want to manage consumer ascrimine or consumption actual or consumer so that I can can | clicking on update button lead to create and cancel button lead to default page | 3 weeks | comple |
| 6 | High | As a Admin, I want to login to own page so that I can collect payment | Chenning on appeare button read to create and cancer button read to delidit page | J WEEKS | Comple |
| 7 | High | As a Admin, I want to logarit to will page so that roan conect payment. As a Admin, I want to logarit from the system so that other person could not access the system | | | + |
| 8 | High | As a Admin, I want to change the password which was assign by the super admin so that I could add new one | | | + |
| 0 | low | As a Admin, I want to change the password which was assign by the super admin so that I could add new one | manage Admin: can manage consumed units, change password, change profile, general | c 3 wooke | comple |
| 0 | High | As a Admin, I want to change profile so that I can add few one As a Admin, I can manage consumed unit which is update by the meter reader | Button: profile, change password, cancel, edit and save | 3 weeks | comple |
| Admin | riigii | As a Authin, I can manage consumed unit which is appeare by the meter reader | clicking on cancel lead to Admin dashboard, edit button lead to change the information | 3 weeks | comple |
| Admin | - | | clicking on change password button leads change new password and change profile | 3 weeks | complet |
| | | | manage Admin: collect payment from consumer | 3 weeks | complet |
| | - | | Button: cancel, edit, save, create bill recipt, logout, change password, profile | 3 weeks | comple |
| 11 | High | As a Admin i want to collect payment from consumer to generate Bill recipt | clicking on cancel button lead to Admin dashboard, edit button lead to edit the fill inform | | comple |
| 4 | riigii | As a Admini I want to conect payment from consumer to generate bin recipt | save button lead to save information and create bill recipt lead to generate the bill recipt | | comple |
| _ | | | Save dutton lead to save information and create bili recipt lead to generate the bili recipt | 1 J WEEKS | Comple |
| - | _ | | Button: login, logout, edit, save, cancel, change password, profile | 3 week | complet |
| 12 | High | As a meter Reader i want login to own page so that i can update thr consumed data of a consumer | Click on login lead to Meter reader daashboard | 3 weeks | complete |
| 13 | High | As a meter Reader, I want to change the password which was assign by the super admin so that i could add n | | | complete |
| 4 | medium | As a meter reader. I want to change profile so that i can add another one | clicking on Logout leads to exit from the system | 3 weeks | complete |
| - | inculum | As a motor reader, r want to change prome so mat rean add anomer one | enoning on Eogout leads to extendin the system | Jucens | Compica |
| 15 | High | As meter reader i want update the consume unit bill so that consumer can pay bill | manage Meter Reader: can update the consumed unit bill | 3 weeks | complet |
| Meter Reader | | | Button: update to system | 3 weeks | complet |
| | | | Clicking update to system lead to set correct information to system | 3 weeks | complete |
| 16 | High | As a consumer i want login to system so that I can pay water bill | | | T |
| 17 | High | As a consumer, I want to logout so that other person could not access the system | Button: login, logout | 5 week | 1 |
| consumer | | | Click on button lead to consumer daashboard | 5 week | complete |
| 8 | High | As a consumer, i want to pay water bill online so that i donot need to go water bill office | consumerr: can pay the consumed unit bill | 5 week | complete |
| 1 | 10 | particular and the second seco | Button: select payment method | 6 week | complete |
| | 1 | | Clicking payment method lead to pay the water bill and generate the bill recipt | 7 week | complete |

1 Product Backlog

Here, I have divided into two section that is user stories and Acceptance criteria of product backlog

| equirement l | Epics | priority | User stories |
|--------------|--------------|-------------------|---|
| | | 0.00 | |
| - 12 | | 50000 | |
| 1 | | High | As a super admin, I want to login so that to Manage the access and level of responsibility of all admin, meterreader and consum |
| 2 | | High | As a super admin, I want to logout so that other person could not access the system |
| | | | |
| 3 | | High | As a super admin, I want assign Admin so that to manage Admin activities like payment activities |
| | | | |
| | super Admin | | |
| 4 | | High | As a super admin, I want to assign meter reader so that to manage meter reader activities like update meter bill |
| | | High | As a super admin, i want to delete previous admin and mater reader so that i can assigne new one admin, meter reader |
| | | 11.50 | |
| 5 | t e | High | As a super admin, I want to manage consumer username or consumption detail of consumer so that i can edit/delete it if necess |
| | | 1100 1100 1100 | |
| 6 | | High | As a Admin, I want to login to own page so that i can collect payment |
| 7 | | High | As a Admin, I want to logout from the system so that other person could not access the system |
| 8 | | High | As a Admin, I want to change the password which was assign by the super admin so that i could add new one |
| 9 | | low | As a Admin, I want to change profile so that I can add new one |
| 10 | Admin | High | As a Admin, I can manage consumed unit which is update by the meter reader |
| 11 | | High | As a Admin i want to collect payment from consumer to generate Bill recipt |
| | | 120 | |
| 12 | | High | As a meter Reader i want login to own page so that i can update thr consumed data of a consumer |
| 13 | | High | As a meter Reader, I want to change the password which was assign by the super admin so that i could add new one |
| 14 | | medium | As a meter reader, I want to change profile so that i can add another one |
| 22 | | 115-1- | |
| 15 | Meter Reader | High | As meter reader i want update the consume unit bill so that consumer can pay bill |
| 16 | | High | As a consumer i want login to system so that I can pay water bill |
| 17 | | High | As a consumer, I want to logout so that other person could not access the system |
| 344 | consumer | gii | The a containing that to regent so that other person could not access the system |
| 18 | | High | As a consumer, i want to pay water bill online so that i donot need to go water bill office |
| | | | |
| | | | |

² User story of product Backlog

| utton: Login, Logout icking on the Login leads to a message display as dashboard where superadmin can as icking on Logout leads to out from the system anage user: can create admin and delete utton: create, delete and cancel button xtfield: username, password, userID icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the admin anage super admin: can create and delete meter reader utton: create, delete and cancel button xtfield: username, password, userID, location icking on create button lead to create and cancel button lead to default page icking on delete button lead to create and cancel button lead to default page icking on delete button lead to delete previous the meter reader anage user: can manage consumer utton: update and cancel button icking on update button lead to create and cancel button lead to default page anage Admin: can manage consumed units, change password, change profile, generate utton: profile, change password, cancel, edit and save icking on cancel lead to Admin dashboard, edit button lead to change the information icking on change password button leads change new password and change profile anage Admin: collect payment from consumer utton: cancel, edit, save, create bill recipt, logout, change password, profile | 1 week 1 week 2 week 2 weeks 2 weeks 2 weeks 2 weeks 2 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks | completed |
|---|--|---|
| utton: Login, Logout icking on the Login leads to a message display as dashboard where superadmin can as icking on Logout leads to out from the system anage user: can create admin and delete utton: create, delete and cancel button xtfield: username, password, userID icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the admin anage super admin: can create and delete meter reader utton: create, delete and cancel button xtfield: username, password, userID, location icking on create button lead to create and cancel button lead to default page icking on delete button lead to create and cancel button lead to default page icking on delete button lead to delete previous the meter reader anage user: can manage consumer utton: update and cancel button icking on update button lead to create and cancel button lead to default page anage Admin: can manage consumed units, change password, change profile, generate utton: profile, change password, cancel, edit and save icking on cancel lead to Admin dashboard, edit button lead to change the information icking on change password button leads change new password and change profile anage Admin: collect payment from consumer utton: cancel, edit, save, create bill recipt, logout, change password, profile | 1 week 1 week 1 week 1 week 2 week 2 weeks 2 weeks 2 weeks 2 weeks 2 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks | completed |
| icking on the Login leads to a message display as dashboard where superadmin can as icking on Logout leads to out from the system anage user: can create admin and delete atton: create, delete and cancel button trifield: username, password, userID icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the admin anage super admin: can create and delete meter reader atton: create, delete and cancel button trifield: username, password, userID, location icking on create button lead to create and cancel button lead to default page icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the meter reader anage user: can manage consumer atton: update and cancel button lead to create and cancel button lead to default page icking on update button lead to create and cancel button lead to default page anage Admin: can manage consumed units, change password, change profile, generate atton: profile, change password, cancel, edit and save icking on cancel lead to Admin dashboard, edit button lead to change the information icking on change password button leads change new password and change profile anage Admin: collect payment from consumer utton: cancel, edit, save, create bill recipt, logout, change password, profile | 1 week 1 week 2 week 2 weeks 2 weeks 2 weeks 2 weeks 2 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks | completed |
| icking on Logout leads to out from the system anage user: can create admin and delete utton: create, delete and cancel button xtfield: username, password, userID icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the admin anage super admin: can create and delete meter reader utton: create, delete and cancel button xtfield: username, password, userID, location icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the meter reader anage user: can manage consumer utton: update and cancel button icking on update button lead to create and cancel button lead to default page anage Admin: can manage consumed units, change password, change profile, generate utton: profile, change password, cancel, edit and save icking on cancel lead to Admin dashboard, edit button lead to change the information icking on change password button leads change new password and change profile anage Admin: collect payment from consumer utton: cancel, edit, save, create bill recipt, logout, change password, profile | 1 week 1 week 2 week 2 weeks 2 weeks 2 weeks 2 weeks 2 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks | completed |
| anage user: can create admin and delete utton: create, delete and cancel button xtfield: username, password, userID icking on create button lead to create and cancel button lead to default page icking on create button lead to delete previous the admin anage super admin: can create and delete meter reader utton: create , delete and cancel button xtfield: username, password, userID, location icking on create button lead to create and cancel button lead to default page icking on delete button lead to delete previous the meter reader anage user: can manage consumer utton: update and cancel button icking on update button lead to create and cancel button lead to default page anage Admin: can manage consumed units, change password, change profile, generate utton: profile, change password, cancel, edit and save icking on cancel lead to Admin dashboard, edit button lead to change the information icking on change password button leads change new password and change profile anage Admin: collect payment from consumer utton: cancel, edit, save, create bill recipt, logout, change password, profile | 1 week 2 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks 3 weeks | completed |
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| icking on cancel button lead to Admin dashboard, edit button lead to edit the fill informative button lead to save information and create bill recipt lead to generate the bill recipt futton: login, logout, edit, save, cancel, change password, profile lick on login lead to Meter reader daashboard | | completed completed completed completed completed completed |
| icking on change password button leads change new password and change profile lead | | completed |
| icking on Logout leads to exit from the system | 3 weeks | completed |
| anage Meter Reader: can update the consumed unit bill | 3 weeks | completed |
| utton: update to system | 3 weeks | completed |
| licking update to system lead to set correct information to system | 3 weeks | completed |
| utton: login, logout | 5 week | 57 |
| lick on button lead to consumer daashboard | 5 week | completed |
| onsumerr: can pay the consumed unit bill | 5 week | completed |
| | 6 week | completed |
| | 7 week | completed |

³ Acceptance criteria of product backlog

2. Design (UML, ERD and wireframes)

2.1 Wireframe

To provide the developer a basic knowledge of the system, I designed a wireframe for our workflow. Super admin, admin, and meter reader are the four major performing characters.

| Login | |
|--------------|--|
| | |
| | |
| | |
| UserName | |
| | |
| | |
| Password | |
| 1 455,7514 | |
| | |
| Roles ▼ | |
| Super Admin | |
| Admin | |
| Meter Reader | |
| Consumer | |
| Lagin | |
| Login | |
| | |
| | |

4 Login Page

That's where all four actors log in. It takes you to its own dashboard after they log in.

| super Admin |
|-------------------------------|
| Manage meter Reader Account |
| manage Admin Account |
| Add consumer |
| View consumer |
| View meter reader and Admin |
| Delete meter reader and Admin |
| Sign out |
| |
| |
| |

3 Super Admin dashboard

It is the page that appears when the super admin login. They managed and assign the Admin and meter reader as well as managed the information of consumers.

| meter reader account mana | ge | |
|---------------------------|--------|--|
| | | |
| Name | | |
| Username | • | |
| Password | | |
| Location | | |
| | | |
| | Create | |
| | | |
| | | |

4 Assign Meter Reader

Here, the super admin assigns the meter reader and set up their account.

| Admin account setup | | |
|---------------------|--------|---|
| | | |
| | | |
| Name | | |
| Username | - | _ |
| Password | | |
| | Create | |
| | | |

5 Assigned Admin

Here, the super admin assigns the admin and set up their account.

| Add consumer | | |
|--------------|--------|--|
| | | |
| Name | | |
| Username | - | |
| Client ID | | |
| Address | | |
| | | |
| | Create | |
| | | |
| | | |
| | | |

6 Adding consumer

Here, the super admin manages all the information of the consumer from adding to deleting consumers.

| view consumer by super admin | | |
|---------------------------------|-----------|--------------|
| Name | username | Address |
| pujan | pujan2060 | Koteshwor |
| | | |
| - | | |
| | | |
| Enter username to Delete Client | | |
| Delete Consumer | | |
| | | |

7 View consumer

It is the page where the super admin views the consumer and deletes through their client Id

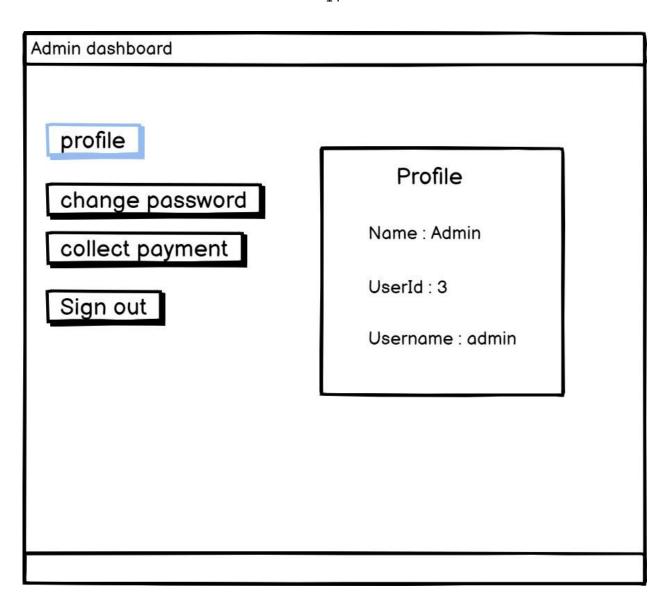
| view admin by super admin | | |
|--------------------------------|-----------|----------|
| Name | username | password |
| pujan | pujan2060 | pujan |
| 3-1 - | | |
| | | |
| Enter username to Delete admin | | |
| | | |

Super admin has the power to create as well as delete the admin, it is the page where super admin deletes the admin which was assigned.

| view meter Reader by super admin | | | |
|--|-----------|----------|-----------|
| Name | username | password | Location |
| pujan | pujan2060 | pujan | Koteshwor |
| 27 | | | |
| S | | | |
| · | | | |
| Enter username to Delete meter reader Delete meter Reader | | | |
| | | | |

9 View Meter Reader

Super admin assigned a meter reader for a different location so super admin can delete the meter reader and assign it for another location or permanently delete it.



10 Admin Dashboard

This page came after the admin login successfully to the system where the admin could manage the unit, and collect payment after that admin could sign out from the system.

| change password | |
|------------------|--|
| | |
| | |
| | |
| username | |
| Current password | |
| New password | |
| change | |
| | |

11 Change Password

There was an option that was there to change the new password because the first login password was given by the super admin.

| collect payment by admin | | |
|---------------------------------|-------|-----------|
| Client Id | Name | username |
| 123 | pujan | pujan2060 |
| | | |
| | | |
| | | |
| Enter Client Id to make payment | | |
| calculate amount | | |
| | | |

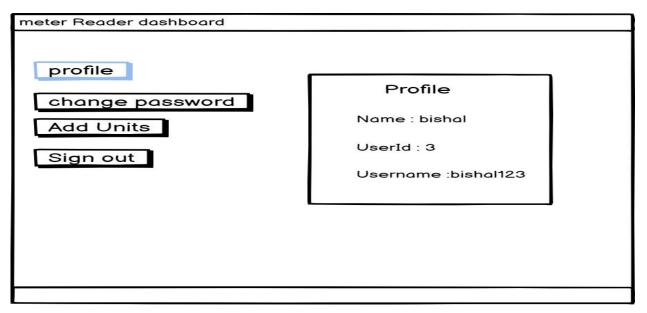
12 Collect Payment

Here, Admin can view the client and proceed to make payment

| After entering client id to make payment | |
|--|--|
| | |
| | |
| | |
| client_Id | |
| Location ——— | |
| Bill Number | |
| Use unit ———— | |
| Date ———— | |
| per unit rate ———— | |
| Discount | |
| total price | |
| Edit create bill recipt | |
| | |

13 Create Bill Recipt

Here, the admin collects the payment from the consumer and provides a bill receipt.



14 Meter Reader Dashboard

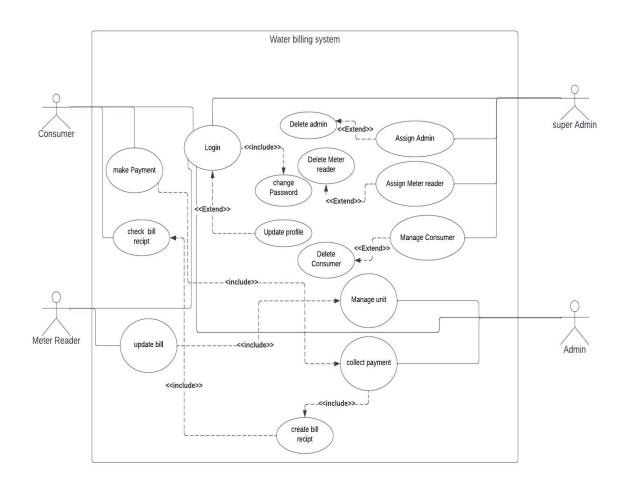
After the meter reader login to the system meter reader dashboard will open. The meter reader could change the password, and update the consumer information to the system.

| Add Units by meter reader | |
|---------------------------|--------------|
| | |
| user_Id | |
| meter_Id | |
| Location | |
| Use unit | |
| Read by | |
| Date | |
| Ac | dd to system |

15 Add Units

After taking the information like used units of consumer meter reader updates to the system which is checked by the admin. After updating the information, the meter reader could log out from the system.

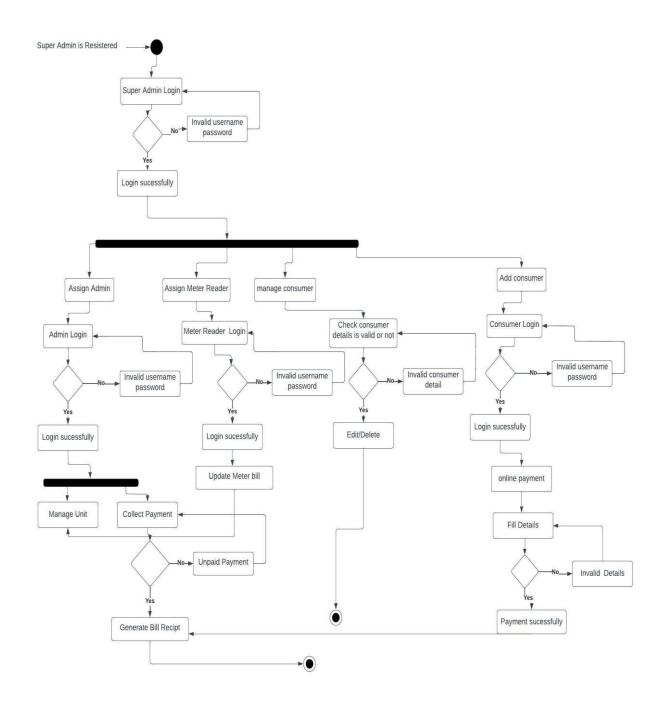
2.2 Use-case Diagram



16 Use Case Diagram

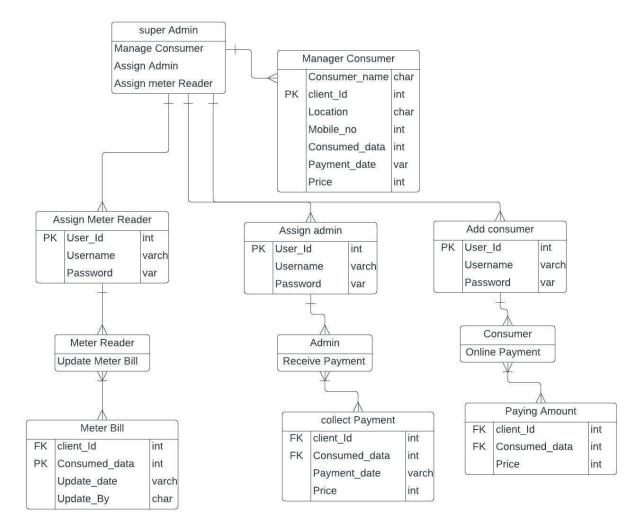
The four primary characters are super admin, admin, meter reader, and consumer. The super admin assigns the meter reader and the admin here. The customer pays the bill and receives bill receipts, while the admin monitors the unit bill and collects payments. The consumer's consumed unit bill is updated by the meter reader. The super Admin has the power to add and remove customers, Admin, and meter reader.

2.3 Activity Diagram



17 Activity Diagram

After logging in, the super admin creates and deletes admin and meter reader accounts. If the condition is fulfilled, the admin and meter reader resume their work. The admin only manages the unit bill if the meter reader updates the customer meter bill. The consumer receives a bill confirmation if the bill is paid; otherwise, the consumer does not receive a bill receipt.



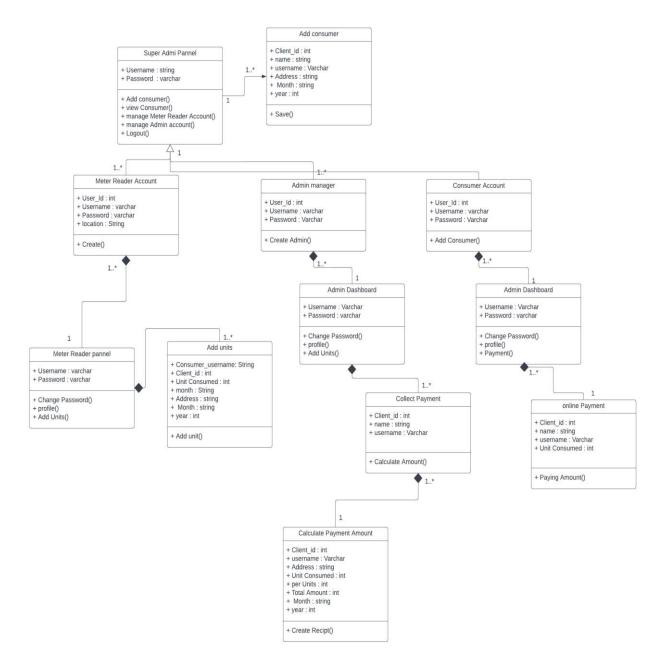
2.4 Entity relationship diagram (ERD)

20 Entity relationship diagram

The primary key is the client's Id because the super admin is responsible for adding, removing, and managing consumers. In order to update a consumer's meter bill and collect a payment, the client id is used as a foreign key. The meter reader, Consumer, and admin table function as bridge tables in our system.

2.5 Class diagram

21



18 Class Diagram

The super admin is responsible for different activities of the consumer, admin, and meter reader here. One or more admins as well as a meter reader can be appointed by the super admin. The super admin gives the admin and meter reader their user ID and password. The super admin can manage and change the many actions performed by the admin and meter reader.

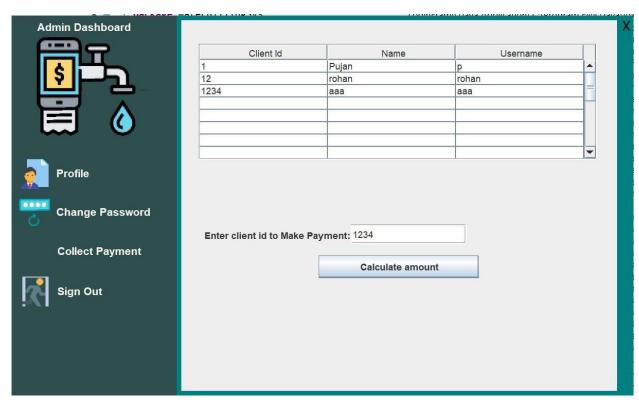
3. Functional Testing

3.1 Test Cases

3.2 Bug Report

Title 1: calculate the price of the water bill

Attachment:



```
19 Bug Report 1
at java.desktop/java.awt.EventQueue$5.run(EventQueue.java:/46)
at java.desktop/java.awt.EventQueue$5.run(EventQueue.java:744)
at java.base/java.security.AccessController.doPrivileged(AccessController
at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doInte
at java.desktop/java.awt.EventQueue.dispatchEvent(EventQueue.java:743)
at java.desktop/java.awt.EventDispatchThread.pumpOneEventForFilters(Event
at java.desktop/java.awt.EventDispatchThread.pumpEventsForFilter(EventDis
at java.desktop/java.awt.EventDispatchThread.pumpEventsForHierarchy(Event
at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThre
at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThre
at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThre
at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java.desktop/java.awt.EventDispatchThread.r
```

In the Admin dashboard, the admin has to calculate the price of the water bill.

Step to reproduce:

- · Admin should be logged in to the system.
- select the collect payment option.
- · Admin entered the user's client's Id
- · Click the calculate amount button

Title 2: Adding new meter reader

Attachment:



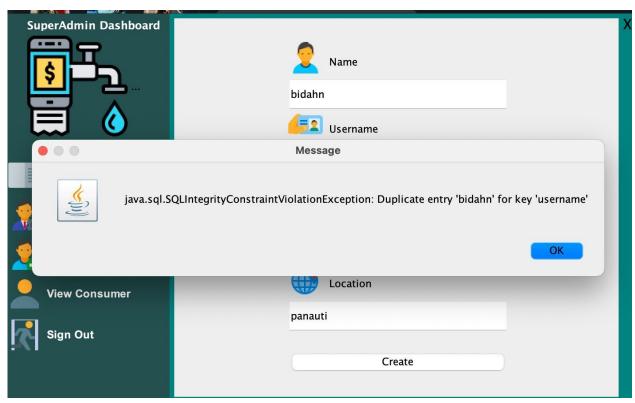
21 Bug Report 2

Step to reproduce:

- 1 Super admin should log in
- click manage meter reader button
- Enter name, username, password, location
- · click create

Title 3: Duplicate entry for username While Assign new meter reader

Attachment:



22 Bug Report 3

Step to reproduce:

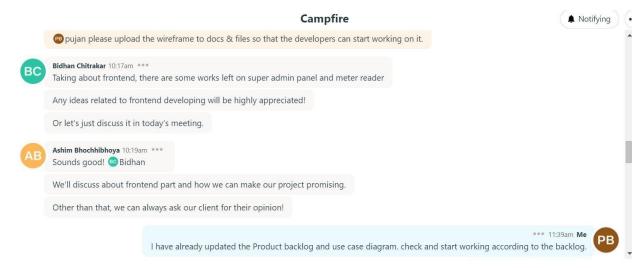
- · Super admin should log in
- clicks manage meter reader button
- Enter name, username, password, location
- click create

Appendix 2

1. Evidences of Good communication and file sharing

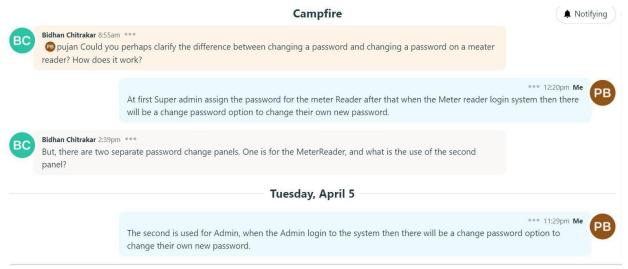
I have been collaborating with the development team on the implementation of the newly developed feature in the system over a campfire. I shared the requirement-related document with the team, which assist the developer in implementing the requested function. I have attended all the meetings and implemented the feedback of the teachers

and the team members. I provided a test case regularly and time to time discussion on solutions to bugs among the developers.



23 Good communication evidence 1

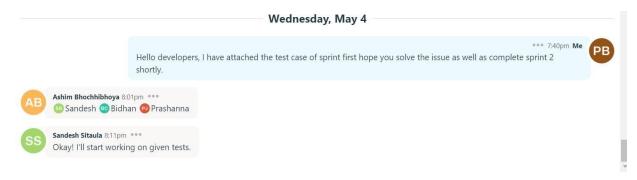
A developer team asked me about the second system workflow then I uploaded the workflow diagram, and they began working on the project. I demonstrated and shared with them the product backlog, use case, activity diagram, Class diagram, and ERD, where they could obtain a clear picture of the system's end product.



24 Good communication evidence 2

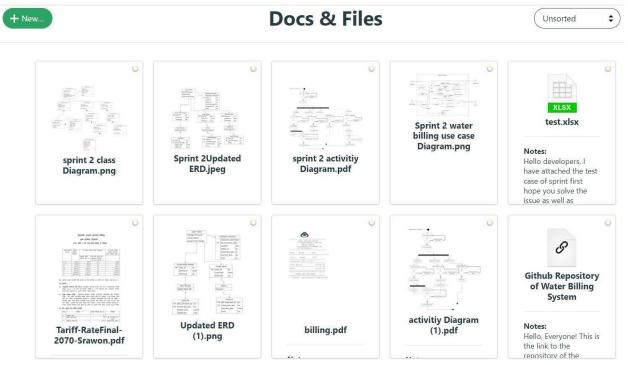
Here, the developer asked me a question regarding admin and super admin activities that is unclear as to the distinction between changing a password and changing the

password of a meter reader. So I clarify the confusion between changing a password and changing the password of a meter reader.



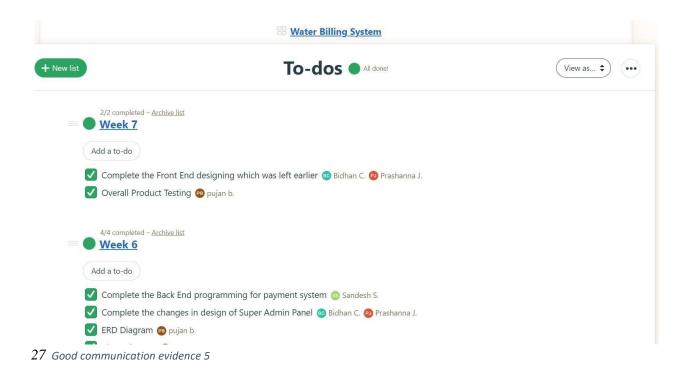
25 Good communication evidence 3

Here, I have shared a test case of a first sprint there was some error in the admin and super admin panel but most of the test cases were passed. I inform the developer regularly while testing.



26 Good communication evidence 4

These are the shared documents and files. Initially, I shared the project's workflow and other files such as the product backlog, use case, activity diagram, Class diagram, ERD, and other resources on a regular basis.



Here, I have completed the task which was assigned by the project manager on time from the product backlog to product testing.

1. Evidences of Continuing Personal Development (CPD)

My role as a business analyst is to act as a link between the developer and the business. I collaborated closely with the developer team to increase the quality of the services to be supplied, which aided in the integration and testing of the new solution. Working on this project taught me a great deal about numerous aspects of the business. I invested much of my time looking for information on YouTube and various websites.

Simplilearn was the first YouTube channel where I discovered, and it taught me how business analysts carry out various tasks. From Simplilearn, I have learned the following.

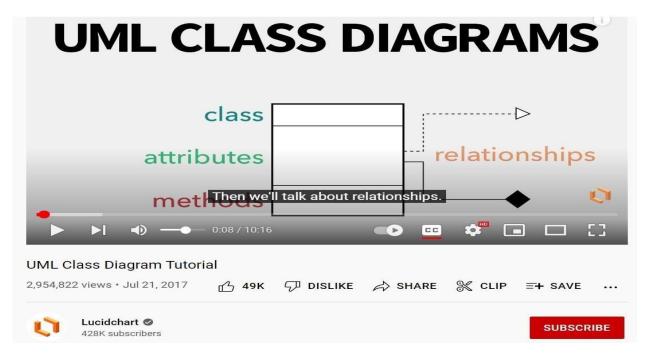


28 continuing personal development evidence 1

Many things were learned and executed after that course. I was very clear about my responsibility in the project and carried out tasks in accordance with it. I began gathering information on the water billing system and examining the current and potential issues. It assists me in making critical and logical judgments while concluding the product backlog

while composing the product and sprint backlogs. When working on a project, our team used the scrum process, which is flexible and effective, and we collaborated with everyone's input. I need to utilize Excel to capture consumer information such as username, user ID, location, mobile number, consumed unit, and payment information. This course helps to enhance writing a product backlog. This course clarified the position and responsibilities of a business analyst for me.

Lucidchart is the second YouTube channel from which I learned how business analysts create various diagrams. Lucidchart has taught me the following things.



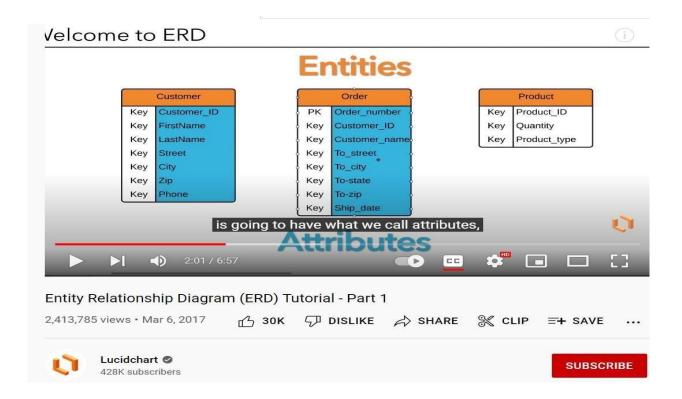
29 continuing personal development evidence 2

UML class diagram: A UML class diagram has the following basic elements:
 Attributes, Operations, and the Name of the Class



30 continuing personal development evidence 3

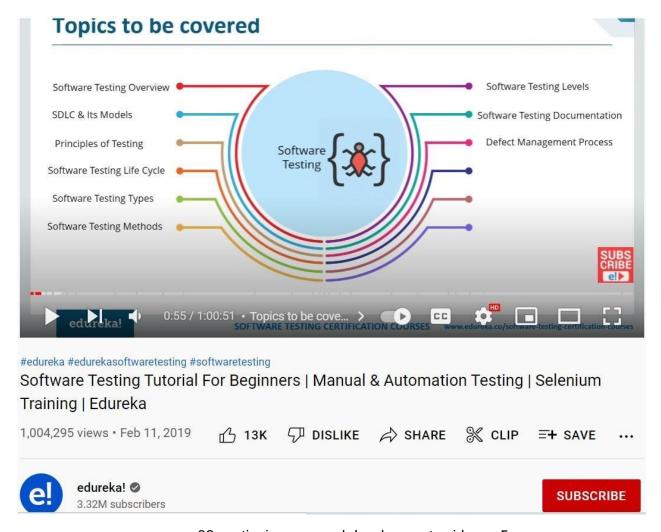
• Use-case Diagram: Use cases and actors specify what the system does and how the actors interact with it, but not how the system works inside, in use-case diagrams.



31 continuing personal development evidence 4

• Entity-relationship diagram (ERD): This diagrams show the relationships between entities. It is the foundation of business architecture, displaying the interactions between various data kinds visually (entities).

For our project, I created all four diagrams. After learning how to use them properly and what their main objective is. In the project, I made a use-case diagram with four actors: super admin, consumer, admin, and meter reader. I gave visual representations of various data sets in ERD. I have properly specified the distinct classes in the UML class diagram with Class Names, Attributes, and Operations. I depicted the transition from one task to another in an activity diagram.



32 continuing personal development evidence 5

I have learned about software testing from Edureka. I have learned about the Verification and Validation model, STLC, Types of Software Testing, Software testing methods, Software Testing levels, Software testing documentation, Defect/bug life cycle-its importance, and Automation testing - its important. I performed testing, wrote a test case, and discovered certain flaws, which I forwarded to the developer for correction.

2. Evidences of Issue tracking

I have kept track of the project's progress and made recommendations for what should be added and how the application should look. Throughout the project, I communicated with the developer team. I shared the test cases after completing them with team members and discussed on issue.



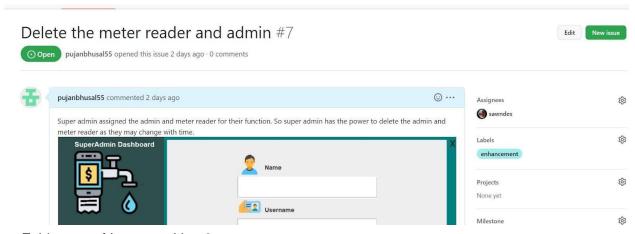
33 Evidences of Issue tracking 1

The Super admin, admin, and meter reader all have a lot of buttons when clicking on some buttons, they don't do anything, like the profile button or the change password button. So that system appears inconvenient, so I raised an issue about it.



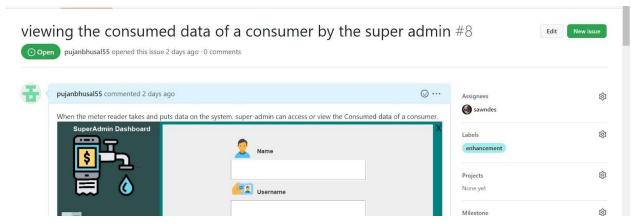
34 Evidences of Issue tracking 2

The problem was that while calculating payment, information about the customer was missing from the receipt, such as payment by, received by, Bill ID number, and consumer location. Giving discounts was a crucial and vital aspect, which I also mentioned in the product backlog. There was a discount feature that was unavailable for customers who used less water. This is something I requested the developer include on the receipt.



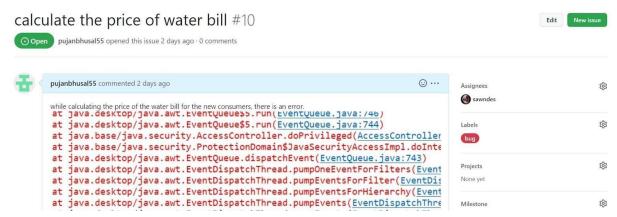
35 Evidences of Issue tracking 3

There is a problem with deleting the admin and meter reader. The admin and meter reader was assigned to their roles by the super admin. As a result, the super admin has the authority to delete the admin and meter reader, as their roles may change over time. that feature wasn't here.



36 Evidences of Issue tracking 4

The issue with viewing the Consumed data, When the meter reader takes and puts data on the system. super-admin can access or view the Consumed data of a consumer that feature wasn't available.



37 Evidences of Issue tracking 5

There was an error in calculating the price of the water bill for the new consumers. but for older consumers, there was no such error appeared. It is a critical feature, thus I raised an issue about it.

References

Abba, I. V., 2022. *Git and GitHub Tutorial – Version Control for Beginners*. [Online] Available at: https://www.freecodecamp.org/news/git-and-github-for-beginners/ [Accessed 7 4 2022].

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