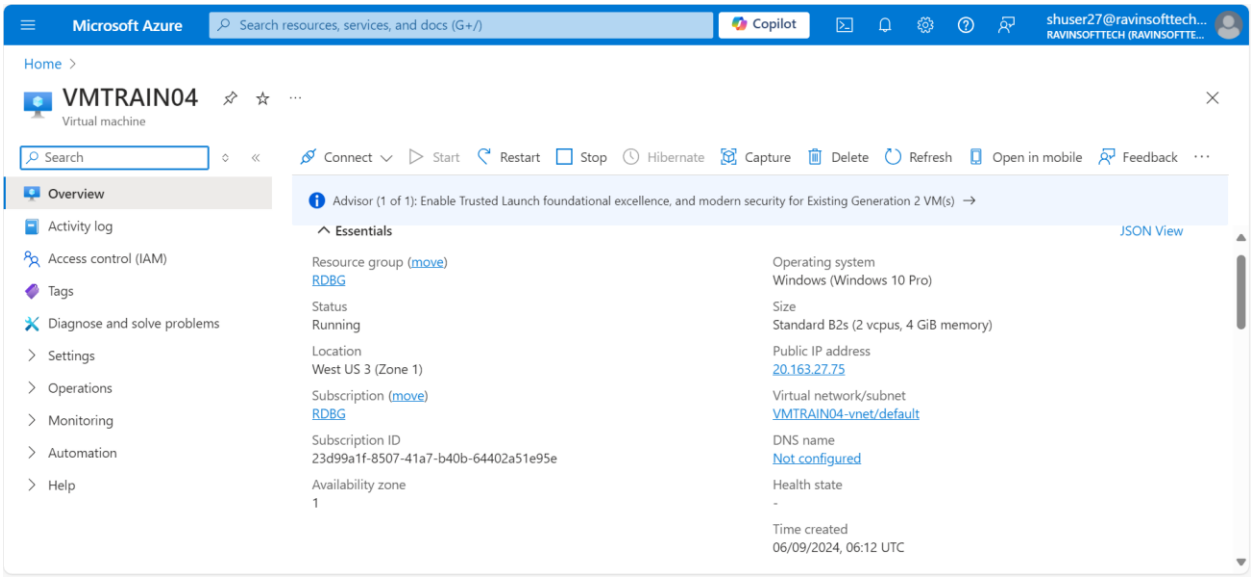
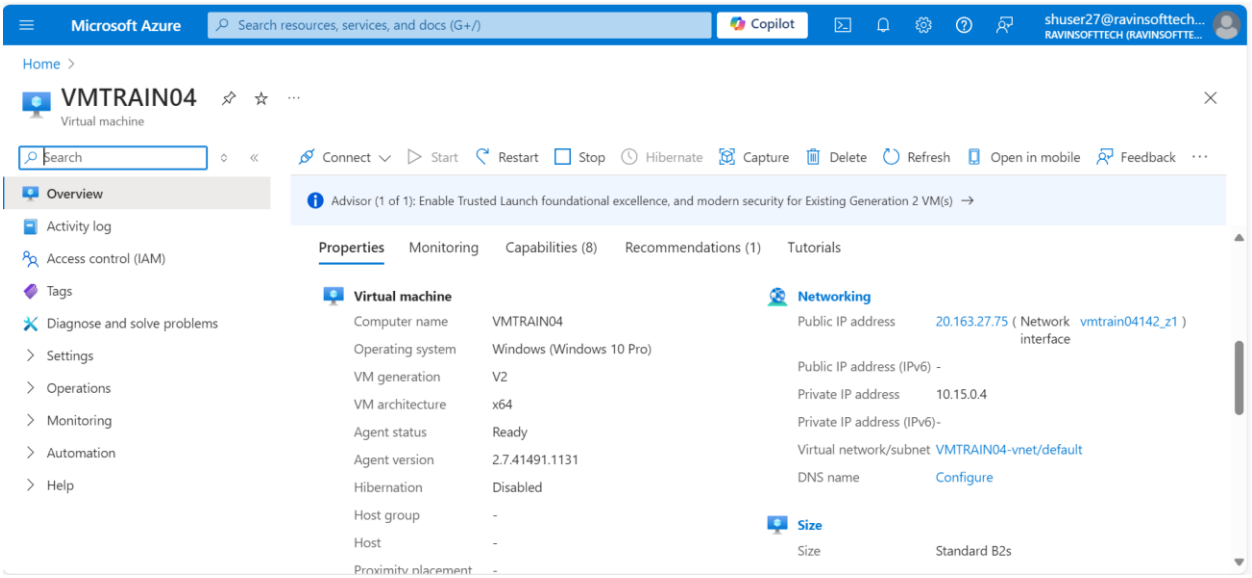
Name: Sushma Singh

Email: sushma.singh@shell.com

GitHub Repository Link: https://github.com/AhinRain/CaseStudy0609.git

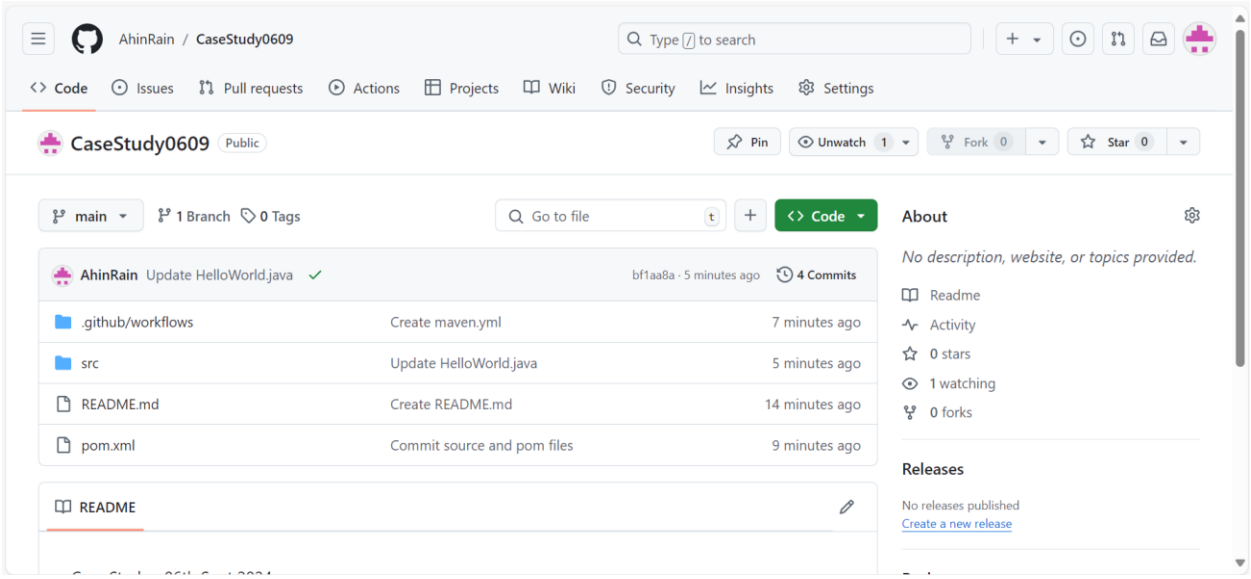
1. VM Creation

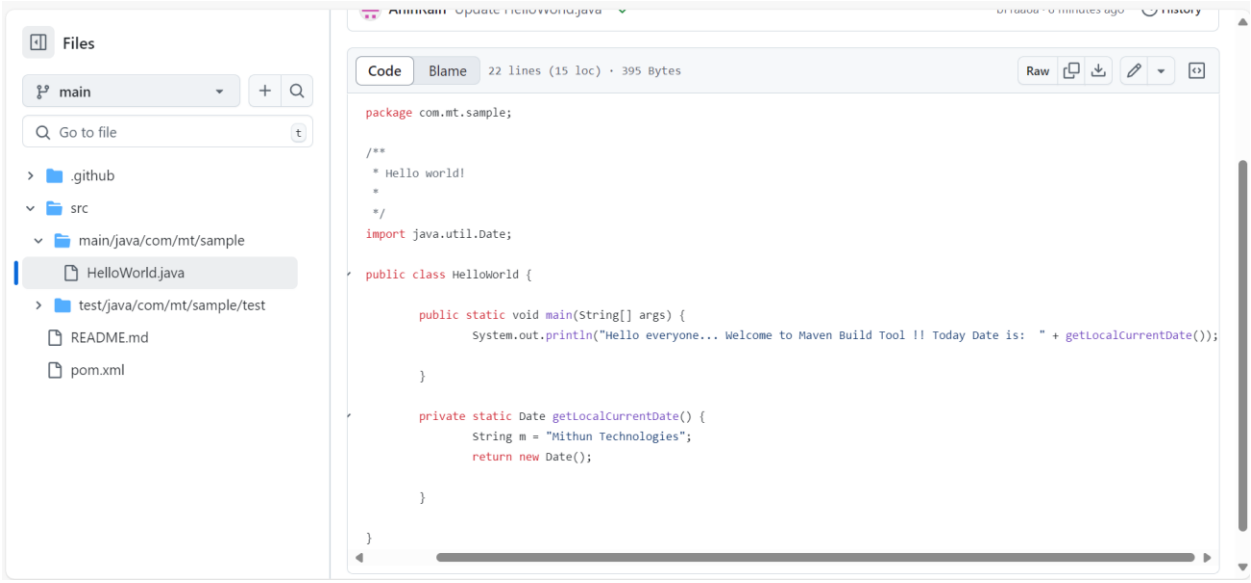


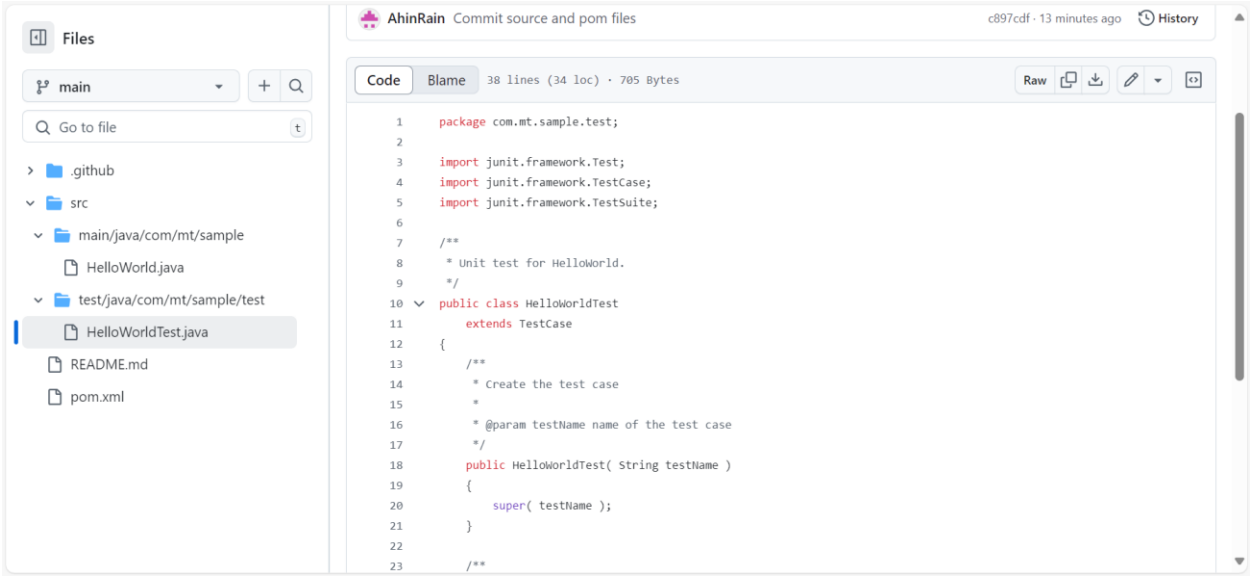


2. Case Study of GitHub Actions

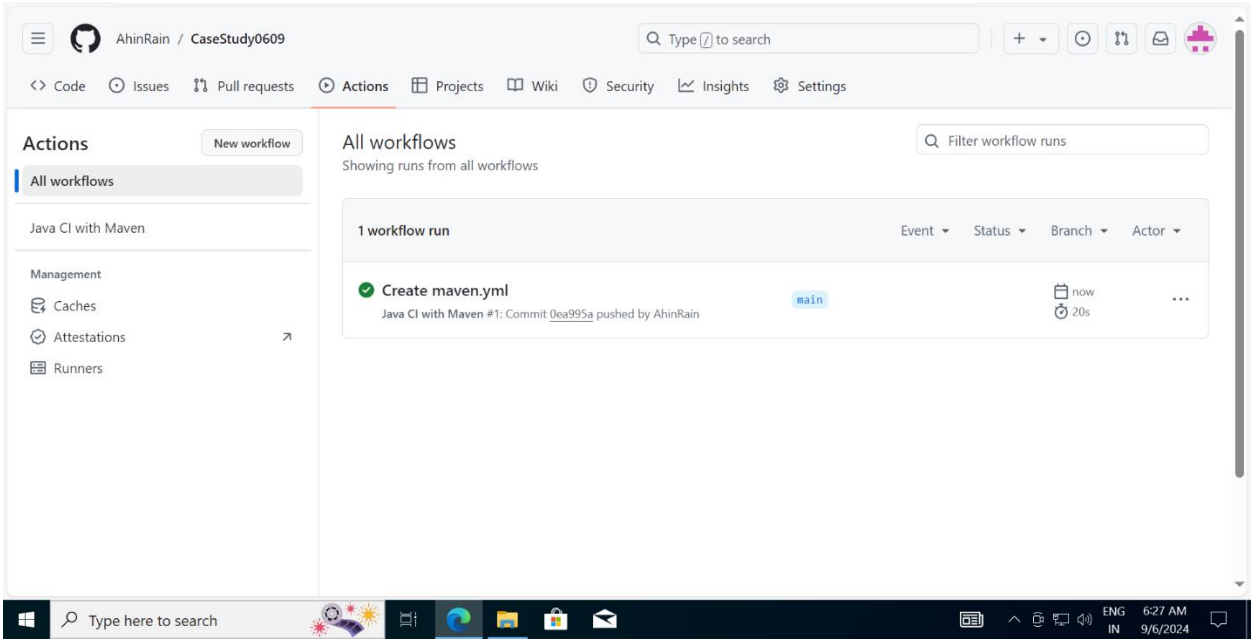
- **Code Structure with Main Java and Test Java Files:**



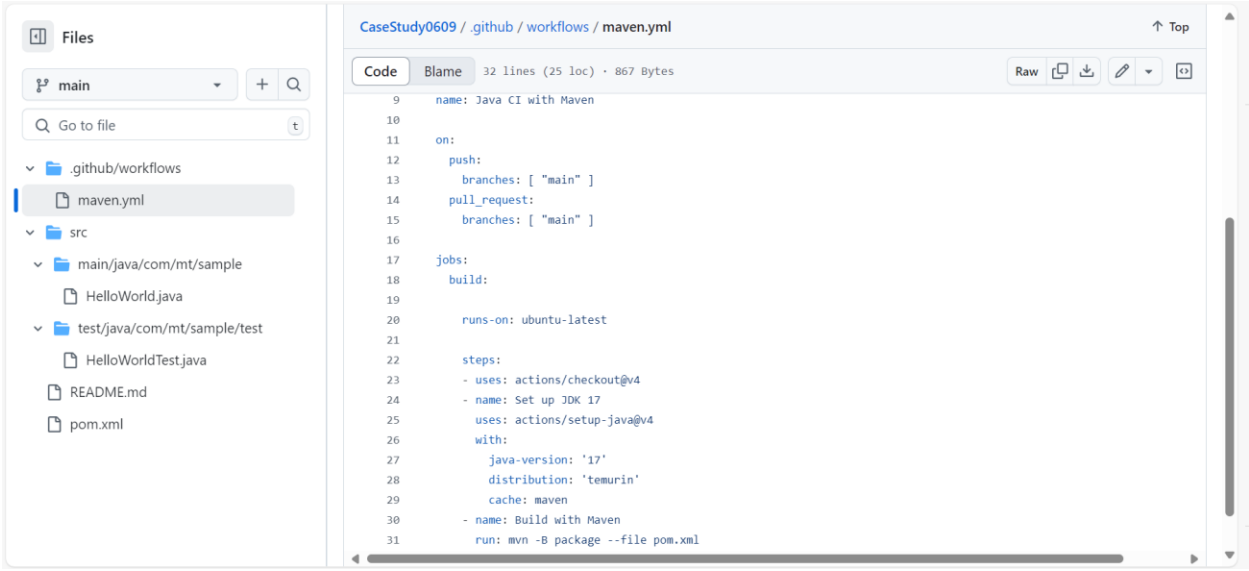


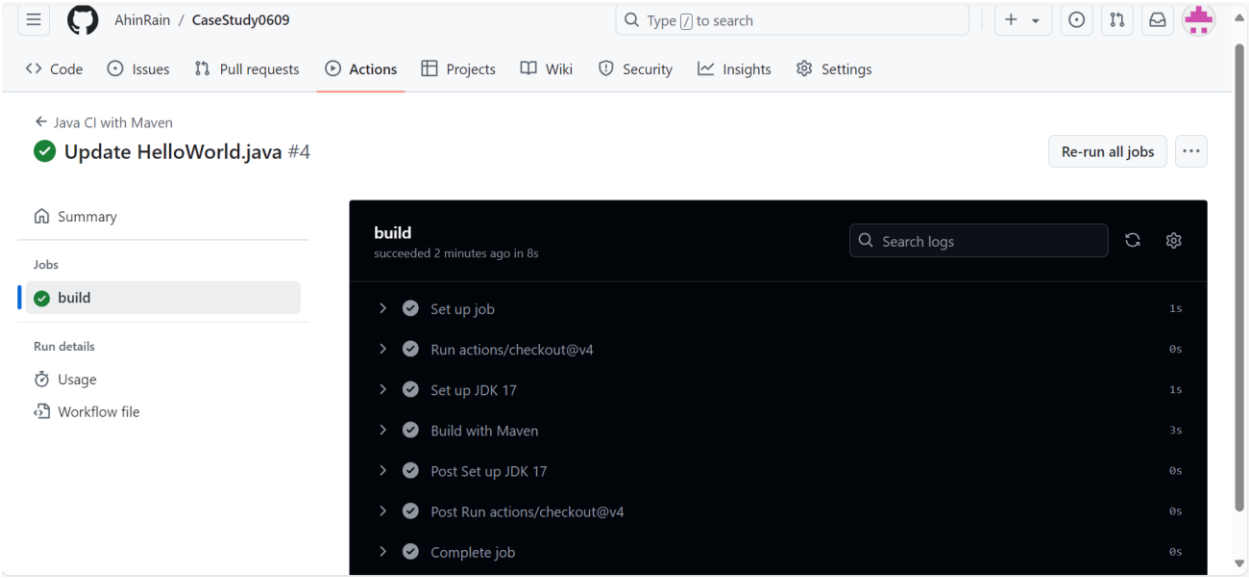


- **Initial Build Success:**



- **Maven.yml and its Build:**



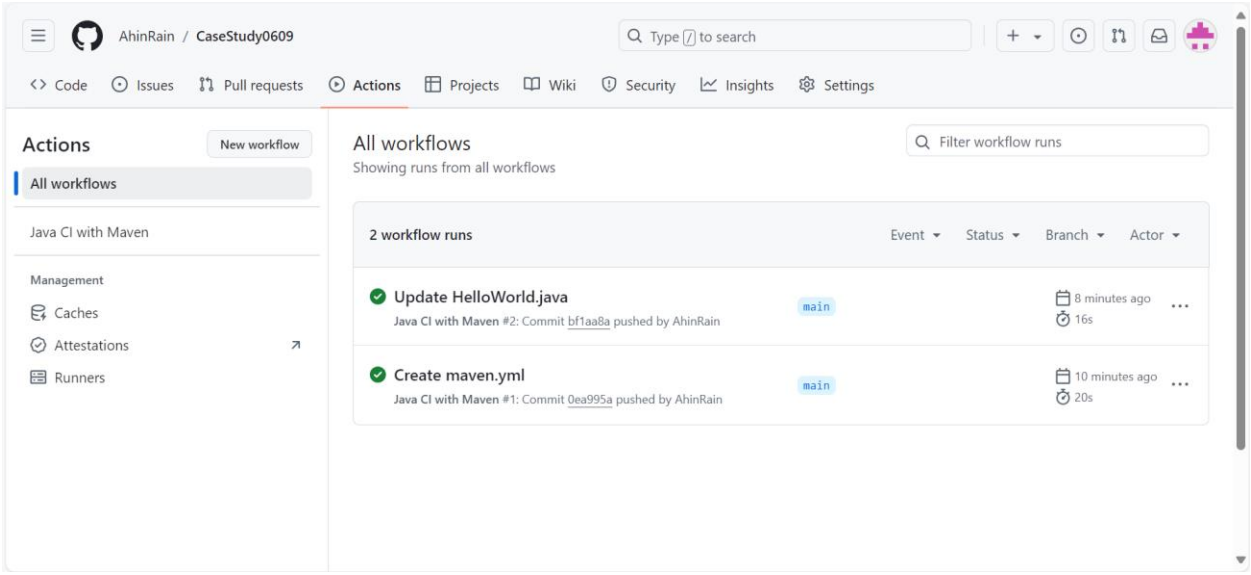


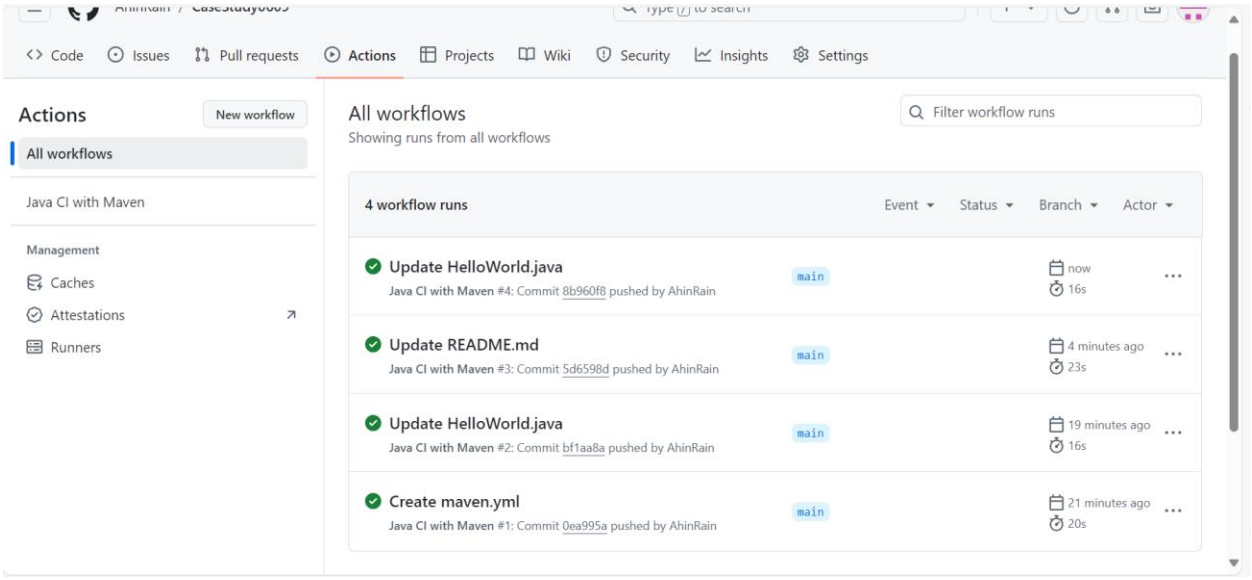
- **Changes in the Github Code:**

- **Build Success after all the Changes:**

- Changes Done:

1. Removed Comments
2. Made changes in the print statement

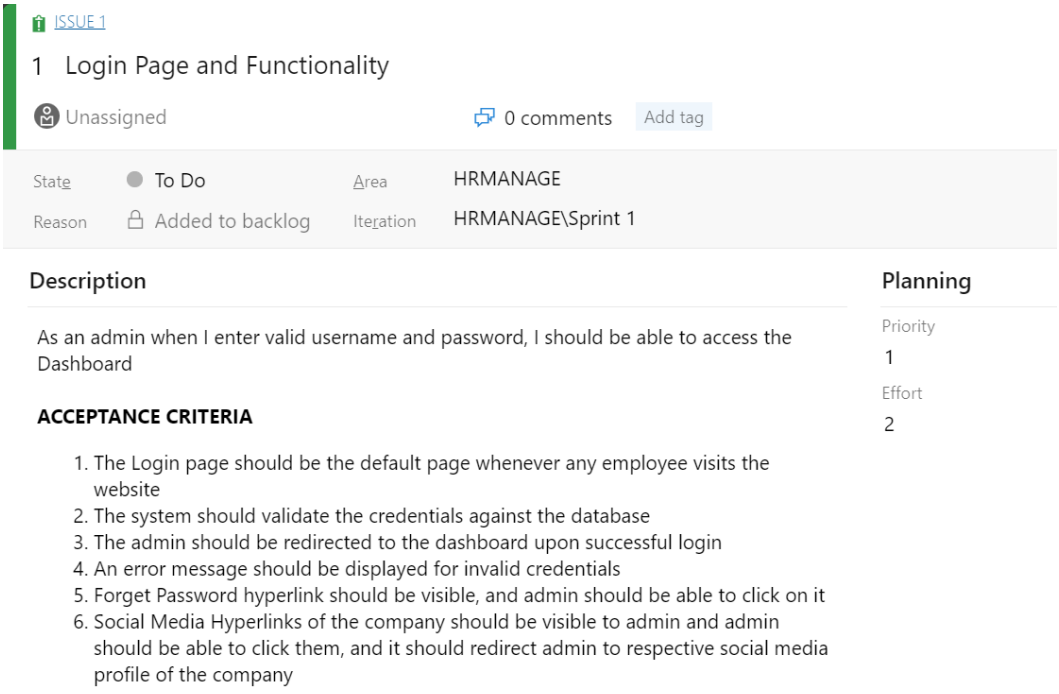




3. FUNCTIONAL TEST SUITE FOR ORANGEHRM

Description of the File: Here Function refers to the User Stories of the Platform. This File Include the Screenshot of the user stories and test cases from azure DevOps platform.

FUNCTION 1



TASK 2

2 Test Case 1 [Valid Credentials]

Unassigned | 0 comments | Add tag

State	Doing	Area	HRMANAGE
Reason	Started	Iteration	HRMANAGE\Sprint 1

Description

Scenario: login with valid credentials
Given the admin is on the login page
When the admin enters valid credentials
And clicks the login button
Then the admin should be redirected to the dashboard

| username | password |
| admin | admin123 |

Result = Successful

Planning

Priority
1
Activity
Testing
Remaining Work
1

TASK 3

3 Test Case 2 [Invalid Credentials]

Unassigned | 0 comments | Add tag

State	Doing	Area	HRMANAGE
Reason	Started	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Login with Invalid Credentials
Given the admin is on the login page
When the admin enters invalid credentials
And clicks the login button
Then the admin should see an error message
And remain on the login page

| username | password |
| john.doe | WrongPass |

Result = Successful

Planning

Priority
1
Activity
Testing
Remaining Work
2

TASK 4

4 Test Case 3 [Password Reset Link]

Unassigned 0 comments Add tag

State	Doing	Area	HRMANAGE
Reason	Started	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Password reset link is available
Given the admin is on the login page
When the admin clicks the "Forgot Password" link
Then the admin should be redirected to the password reset page

Result = Successful

Discussion

Planning

Priority
2

Activity
Testing

Remaining Work
1

TASK 5

5 Test Case 4 [Logout Feature]

Unassigned 0 comments Add tag

State	Doing	Area	HRMANAGE
Reason	Started	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Logout functionality Given the admin is logged in
When the admin clicks the logout button
Then the admin should be redirected to the login page
And the session should be terminated

Result = Successful

Discussion

Planning

Priority
2

Activity
Testing

Remaining Work
1

TASK 6

6 Test Case 5 [Social Media HyperLinks]

Unassigned 0 comments Add tag

State	Doing	Area	HRMANAGE
Reason	Started	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Social Media Hyper Links Visible and Clickable
When admin is on Login Page
Then it should be able to see the social media hyperlinks
And those hyperlinks should be clickable
And on clicking them admin should be redirected to respective social media profile of the company

Result = Successful

Discussion

Planning

Priority
3
Activity
Testing
Remaining Work
1

FUNCTION 2

ISSUE 9

9 Admin Dashboard Functionality

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

As an admin, I want to be able to punch in my time, view a graph of my work hours for the week, and access help guides from the Admin dashboard so that I can track my working hours and get assistance when needed.

Acceptance Criteria:
The admin must be able to punch in their time using the clock button.
The system must display a graph showing the work hours for the week.
The x-axis of the graph must represent days, and the y-axis must represent time.
The help button must open a new tab with different guides.
The guides must be relevant to the Admin functionality.

Planning

Priority
2
Effort
3

TASK 10

10 Test Case 1

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that the admin can punch in their time.
Test Data: Valid admin credentials, current time.
Given the admin is logged in
When the admin navigates to the "Time at Work" tab
And clicks the clock button
And enters the punch in time
Then the punch in time should be recorded successfully

Severity: High
Priority: High

Planning

Priority
2
Activity
Testing
Remaining Work
2

TASK 11

11 Test Case 2

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Case 2: View Weekly Graph
Test Scenario: Verify that the weekly graph displays correctly.
Test Data: Valid admin credentials, recorded punch in times.
Given the admin is logged in
When the admin navigates to the "Time at Work" tab
Then the graph should display the work hours for the week with days on the x-axis and time on the y-axis

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
2

TASK 12

12 Test Case 3

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Case 3: Help Button Opens New Tab
Test Scenario: Verify that clicking the help button opens a new tab.
Test Data: N/A
Given the admin is logged in
When the admin navigates to the Admin tab
And clicks the help button with a question mark symbol
Then a new tab should open with different guides

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
2

TASK 13

13 Test Case 4

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Case 4: Relevant Guides Displayed
Test Scenario: Verify that the guides displayed are relevant to the Admin functionality.
Test Data: N/A
Given the admin is logged in
When the admin navigates to the Admin tab
And clicks the help button
Then the new tab should display guides relevant to the admin functionality

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
3

TASK 14

14 Test Case 5

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Case 5: Graph Data Accuracy
Test Scenario: Verify that the graph accurately reflects the recorded punch in times.
Test Data: Valid admin credentials, multiple punch in times.
Given the admin is logged in
When the admin navigates to the "Time at Work" tab
Then the graph should accurately reflect the recorded punch in times for the week

Severity: High
Priority: High

Planning

Priority
2
Activity
Testing
Remaining Work
4

FUNCTION 3

ISSUE 15

15 Admin Access for Management Tab

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

As an administrator, I want to be able to access the management tab using my admin credentials so that I can manage the system settings.

Acceptance Criteria:
The admin must be able to access the management tab with valid admin credentials.
The system must display an error message for invalid admin credentials.
The “Confirm” button must be disabled when the admin username and password fields are empty.
The “Cancel” button must return the user to the previous page.
The admin must be able to log out from the management tab.

Planning

Priority
2
Effort
3

TASK 16

16 Test Case 1

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that an admin can access the management tab with valid admin credentials.
Test Data: Valid admin username and password.
Given the admin is logged in
When the admin navigates to the management tab
And enters valid admin credentials
And clicks the "Confirm" button
Then the admin should be granted access to the management tab

Severity: High
Priority: High

Planning

Priority
2

Activity
Testing

Remaining Work
2

TASK 17

17 Test Case 2

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that access to the management tab is denied with invalid admin credentials.
Test Data: Invalid admin username and password.
Given the admin is logged in
When the admin navigates to the management tab
And enters invalid admin credentials
And clicks the "Confirm" button
Then the admin should see an error message indicating invalid credentials

Severity: High
Priority: High

Planning

Priority
2

Activity
Testing

Remaining Work
3

TASK 18

18 Test Case 3

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that the “Confirm” button is disabled when admin username and password fields are empty.
Test Data: Empty admin username and password fields.
Given the admin is logged in
When the admin navigates to the management tab
And the admin username and password fields are empty
Then the "Confirm" button should be disabled

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
2

TASK 19

19 Test Case 4

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that clicking the “Cancel” button returns the user to the previous page.
Test Data: N/A
Given the admin is logged in
When the admin navigates to the management tab
And clicks the "Cancel" button
Then the admin should be returned to the previous page

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
3

TASK 20

20 Test Case 5

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Case 2.5: Admin Logout
Test Scenario: Verify that an admin can log out from the management tab.
Test Data: N/A
Given the admin is logged in
When the admin navigates to the management tab
And clicks the "Logout" button
Then the admin should be logged out and redirected to the login page

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
2

FUNCTION 4

ISSUE 21

21 Search Functionality

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

As a user, I want to be able to use the search tab to find specific information within the OrangeHRM system.

Acceptance Criteria:
The user must be able to perform a search with a valid query and receive relevant results.
The system must display no results for an invalid search query.
The “Search” button must be disabled when the search query field is empty.
Search results must be paginated if they exceed a certain number.
Search results must be sortable by different criteria.

Planning

Priority
2
Effort
3

TASK 22

22 Test Case 1

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that a valid search query returns relevant results.
Test Data: Valid search query.
Given the user is logged in
When the user navigates to the search tab
And enters a valid search query
And clicks the "Search" button
Then relevant search results should be displayed

Severity: High
Priority: High

Planning

Priority
2
Activity
Testing
Remaining Work
2

TASK 23

23 Test Case 2

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that an invalid search query returns no results.
Test Data: Invalid search query.
Given the user is logged in
When the user navigates to the search tab
And enters an invalid search query
And clicks the "Search" button
Then no search results should be displayed

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
1

TASK 24

24 Test Case 3

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that the search button is disabled when the search query field is empty.
Test Data: Empty search query field.
Given the user is logged in
When the user navigates to the search tab
And the search query field is empty
Then the "Search" button should be disabled

Severity: Medium
Priority: Medium

Planning

Priority
2

Activity
Testing

Remaining Work
2

TASK 25

25 Test Case 4

Unassigned | 0 comments | Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that search results are paginated if they exceed a certain number.
Test Data: Search query that returns a large number of results.
Given the user is logged in
When the user navigates to the search tab
And enters a search query that returns a large number of results
And clicks the "Search" button
Then search results should be displayed with pagination controls

Severity: Medium
Priority: Medium

Planning

Priority
2

Activity
Testing

Remaining Work
2

TASK 26

26 Test Case 5

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Test Scenario: Verify that search results can be sorted by different criteria.
Test Data: Search query.
Given the user is logged in
When the user navigates to the search tab
And enters a search query
And clicks the "Search" button
And sorts the search results by different criteria (e.g., date, relevance)
Then search results should be sorted according to the selected criteria

Severity: Medium
Priority: Medium

Planning

Priority
2
Activity
Testing
Remaining Work
2

FUNCTION 5

Bug report for the Test Cases for this Functionality is generated separately

ISSUE 27

27 My Info

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backlog	Iteration	HRMANAGE\Sprint 1

Description

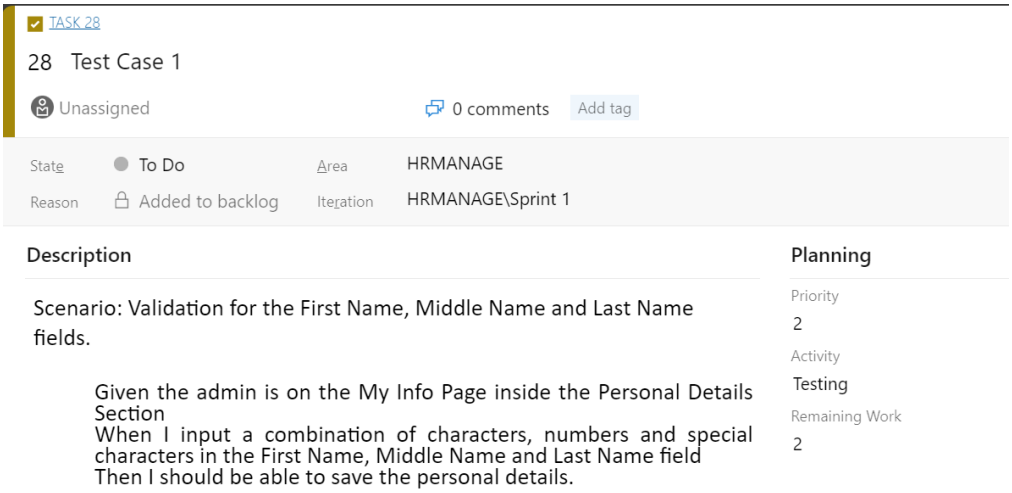
As an admin I should be able to add and save my Personal Details under My Info page in a personal details section which should contain First Name, Middle Name and Last Name under the Name field, a field to input Employee id, other id, Driver's License Number, License Expiry Date which should be selected by a calendar, a Dropdown to choose nationality from all the possible nationalities sorted in alphabetical order, a dropdown to choose Marital status from Single, Married and Other, Date of Birth from a calendar, Gender from two radio buttons namely Male and Female.

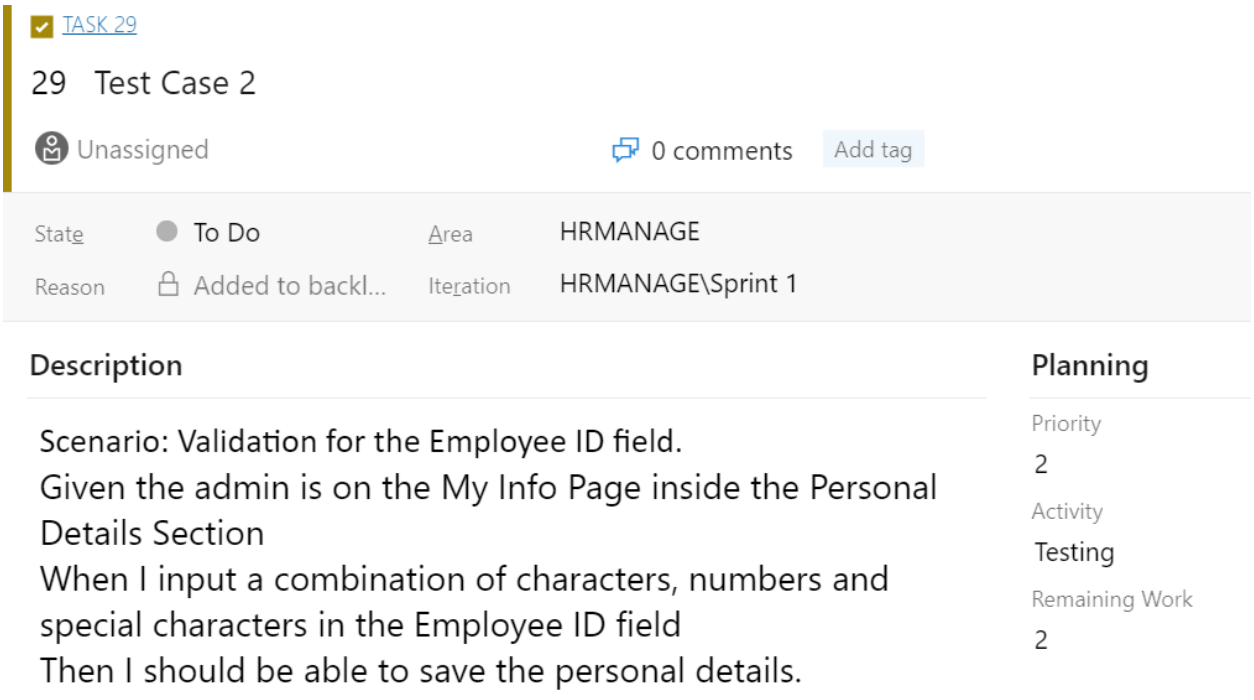
Acceptance Criteria:

1. The First Name, Middle Name and Last Name contain a combination of alphabets, numbers and special characters.
2. The Employee ID field contain a combination of alphabets, numbers and special symbols.
3. The Driver's license number contain a combination of alphabets, numbers and special symbols.
4. The License Expiry Date Calendar should not allow setting an expiry date in the past.
5. The Date of Birth Calendar should not allow setting a date in the future.

Planning

Priority
1
Effort
3


TASK 28
28 Test Case 1
Unassigned
0 comments
Add tag
State
To Do
Area
HRMANAGE
Reason
Added to backlog
Iteration
HRMANAGE\Sprint 1
Description
Scenario: Validation for the First Name, Middle Name and Last Name fields.
Given the admin is on the My Info Page inside the Personal Details Section
When I input a combination of characters, numbers and special characters in the First Name, Middle Name and Last Name field
Then I should be able to save the personal details.
Planning
Priority
2
Activity
Testing
Remaining Work
2


TASK 29
29 Test Case 2
Unassigned
0 comments
Add tag
State
To Do
Area
HRMANAGE
Reason
Added to backl...
Iteration
HRMANAGE\Sprint 1
Description
Scenario: Validation for the Employee ID field.
Given the admin is on the My Info Page inside the Personal Details Section
When I input a combination of characters, numbers and special characters in the Employee ID field
Then I should be able to save the personal details.
Planning
Priority
2
Activity
Testing
Remaining Work
2

TASK 30

30 Test Case 3

Unassigned 0 comments Add tag

State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Validation for the Driver's License Field.
Given the admin is on the My Info Page inside the Personal Details Section
When I input a combination of characters, numbers and special characters in the Driver's License ID field
Then I should be able to save the personal details.

Planning

Priority
2
Activity
Testing
Remaining Work
3

TASK 31

31 Test Case 4

Unassigned 0 comments Add tag

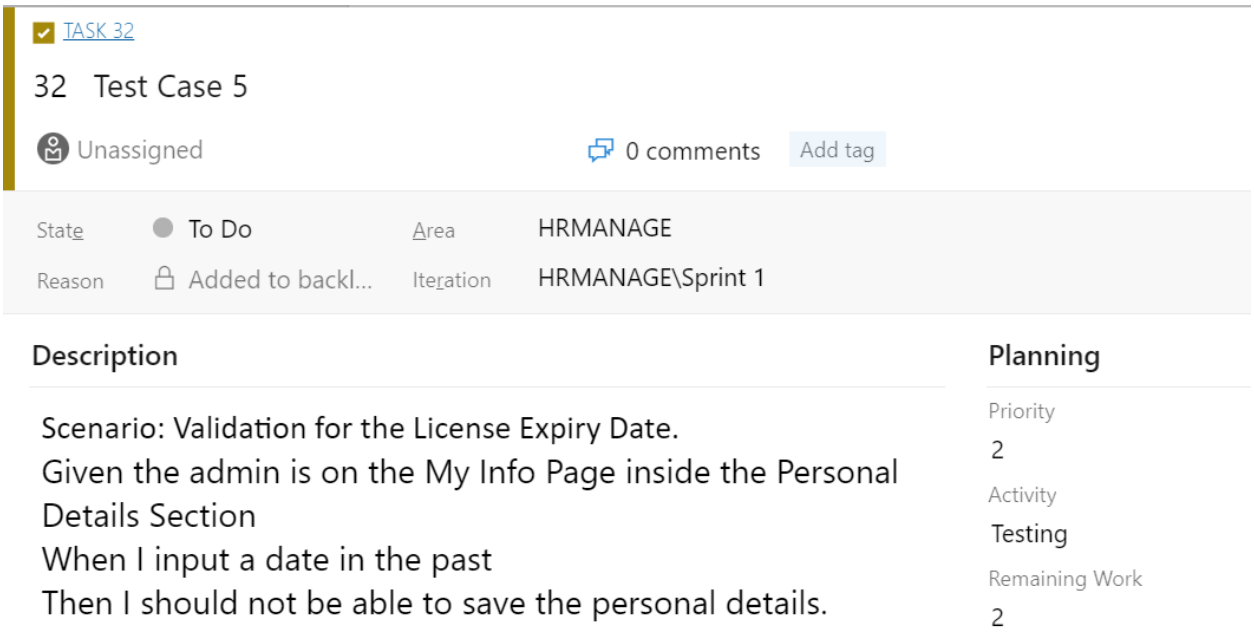
State	To Do	Area	HRMANAGE
Reason	Added to backl...	Iteration	HRMANAGE\Sprint 1

Description

Scenario: Validation for the Date of Birth field.
Given the admin is on the My Info Page inside the Personal Details Section
When I input a date of birth from the dropdown calendar which is in the past
Then I should not be able to save the personal details.

Planning

Priority
2
Activity
Testing
Remaining Work
3



4. CONSOLIDATED BUG REPORT FOR ALL THE USER STORIES:

Total Bugs Found: 5

Overview: During the functional testing of the OrangeHRM website, a total of five bugs were identified. These bugs primarily relate to the incorrect handling of date fields and the display of employee details. The usability of the website is impacted by these issues, as they can lead to incorrect data entry and confusion for the users. Below is a summary of each bug found:

Detailed:

Bug ID number	B__001
Name	Details of employee are correctly displayed
Reporter	HARSHIKA SOFAT
Submit Date	06/09/2024, 10:56 AM
Summary	The name of the employee should be correctly entered
Platform	Window

Browser	Chrome
Severity	Medium
Assigned to	Developer
Priority	2

Description

The first and last name of some employees contains parts of the code.

Steps to reproduce

> go to Orangehrm website
> go to pim section
> In employee list option sort in ascending order

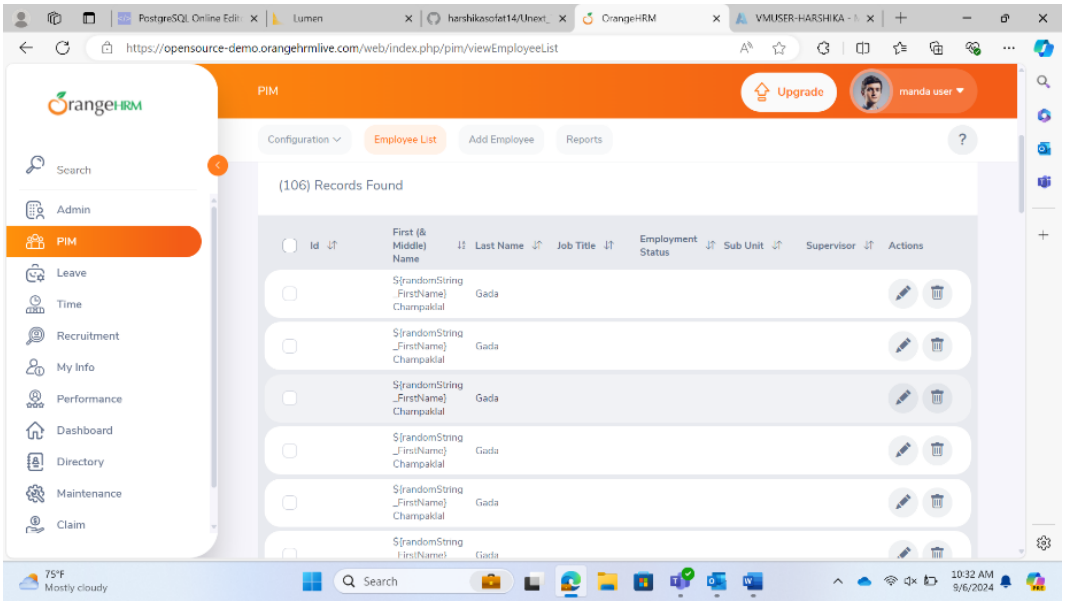
Expected result

The name of the employee should be correct with no numbers and codes part

Actual result

The name of the employee contains parts of the code

Screenshot



Bug ID number	B__002
Name	Details of employees are correctly displayed
Reporter	Puneet
Submit Date	06/09/2024, 11:04 AM
Summary	Each employee should have a different employee id
Platform	WINDOWS
Browser	CHROME
Severity	HIGH
Assigned to	Developer
Priority	1

Description

3 employees have the same employee id 0303 but each employee should have different emp id

Steps to reproduce

> go to Orangehrm website
> go to pim section
> In employee list option sort in ascending order
>In the end of the page there are 3 employees with same emp id

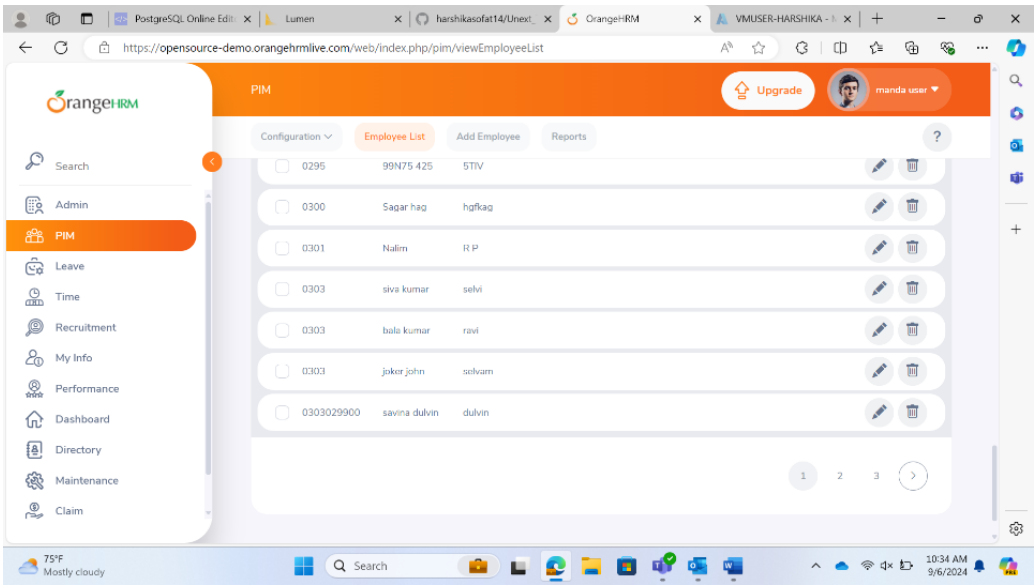
Expected result

Each employee should have different employee id

Actual result

3 employees have the same employee id 0303

Screenshot



Bug ID number	B__003
Name	Future Date Selection in DOB
Reporter	Akshay Rai
Submit Date	06/09/2024, 11:04 AM
Summary	The date of birth (DOB) field allows selection of future dates, which is incorrect.
Platform	WINDOWS
Browser	CHROME
Severity	Low
Assigned to	Developer
Priority	2

Description: In the “My Info” tab, under “Personal Details,” the DOB field allows users to select future dates using the calendar. This should not be possible as a date of birth cannot be in the future.

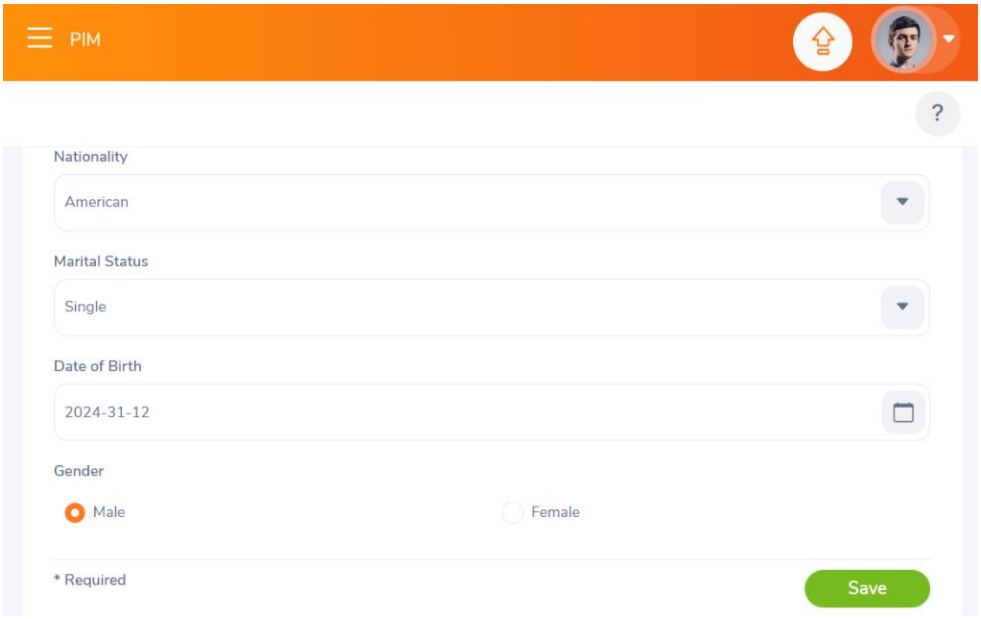
Steps to reproduce:

- Log in to the OrangeHRM system.

- Navigate to the “My Info” tab.
- Go to the “Personal Details” section.
- Click on the DOB field to open the calendar.
- Select a future date.

Expected result: The calendar should restrict the selection to past and present dates only.

Actual result: The calendar allows the selection of future dates.



Bug ID number	B__004
Name	Future Date Selection in Qualifications
Reporter	Tanisha
Submit Date	06/09/2024, 11:04 AM
Summary	The “From” date in the qualifications section allows selection of future dates, which is incorrect.
Platform	WINDOWS
Browser	CHROME

Severity	Medium
Assigned to	Developer
Priority	4

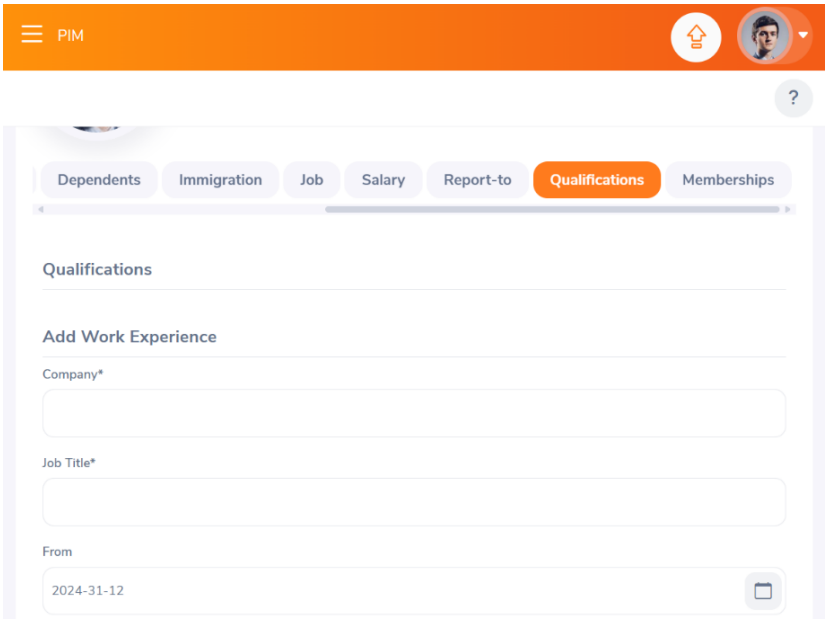
Description: In the “My Info” tab, under the “Qualifications” section, the “From” date field allows users to select future dates. This should not be possible as qualifications cannot start in the future.

Steps to reproduce:

- Log in to the OrangeHRM system.
- Navigate to the “My Info” tab.
- Go to the “Qualifications” section.
- Click on the “From” date field to open the calendar.
- Select a future date.

Expected result: The calendar should restrict the selection to past and present dates only.

Actual result: The calendar allows the selection of future dates.



Bug ID number	B__005
Name	Past Date Selection in Immigration Expiry Date
Reporter	Sushma

Submit Date	06/09/2024, 11:04 AM
Summary	The expiry date field in the immigration section allows selection of past dates, which is incorrect.
Platform	WINDOWS
Browser	CHROME
Severity	Medium
Assigned to	Developer
Priority	5

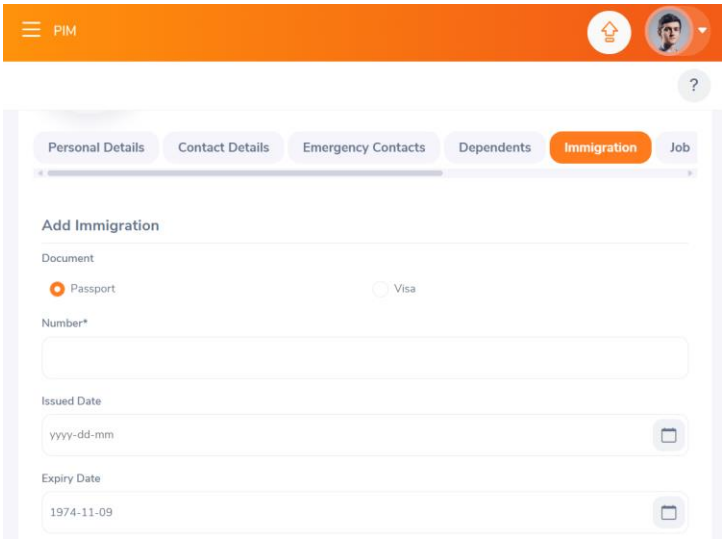
Description: In the “My Info” tab, under the “Immigration” section, the expiry date field allows users to select past dates using the calendar. This should not be possible as an expiry date cannot be in the past.

Steps to reproduce:

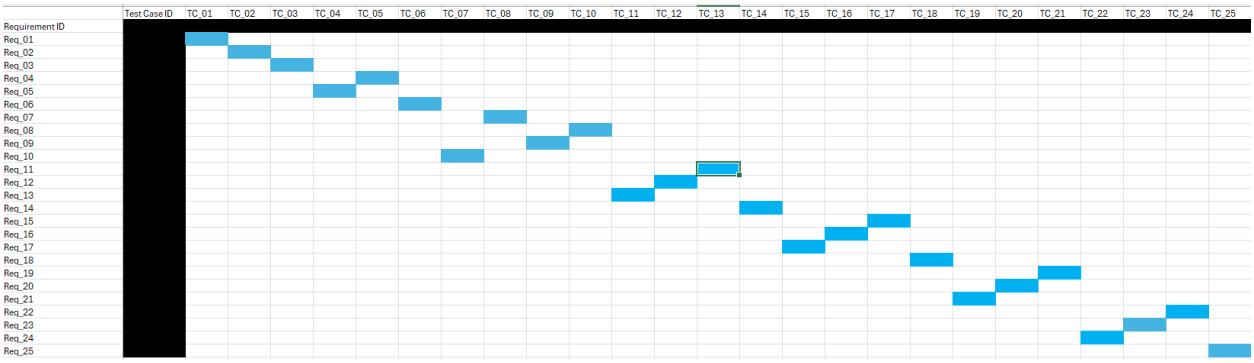
- Log in to the OrangeHRM system.
- Navigate to the “My Info” tab.
- Go to the “Immigration” section.
- Click on the expiry date field to open the calendar.
- Select a past date.

Expected result: The calendar should restrict the selection to present and future dates only.

Actual result: The calendar allows the selection of past dates.



5. Requirement Traceability Matrix (RTM):



Requirement ID	Requirement Description
R1	User should be able to successfully log in with valid credentials
R2	System should prevent login with invalid credentials
R3	User should be able to log out successfully
R4	User should be able to request a password reset link
R5	User should be able to search for employees
R6	User should be able to view employee details
R7	User should be able to link their Facebook profile
R8	User interface should be user-friendly and intuitive
R9	User should be able to link their LinkedIn profile
R10	System should perform efficiently under load
R11	System should validate the driver license field in personal details
R12	System should validate the employee ID field in personal details
R13	System should validate the name field in personal details
R14	System should validate the license expiry field in personal details
R15	System should validate the relationship field in emergency contact
R16	System should validate the contact name field in emergency contact
R17	System should validate the date of birth field in personal details
R18	System should validate the home telephone field in emergency contact
R19	System should validate the radio button to select document type in immigration section
R20	System should validate the emergency contact list
R21	System should validate the mobile number field in emergency contact
R22	System should validate that the passport field is not blank
R23	System should validate the expiry date field in immigration section
R24	System should validate the passport number field in immigration section
R25	System should validate the issued by field in immigration section

Test Case ID	Test Case Description
TC1	Successful Login
TC2	Unsuccessful login with Invalid Credential
TC3	Password Reset Link
TC4	Logout Functionality
TC5	Search function
TC6	Employee details
TC7	User interface
TC8	Performance
TC9	LinkedIn
TC10	Facebook
TC11	Validation for name
TC12	Validation for employee ID
TC13	Validation for driver license
TC14	Validation for license expiry
TC15	Validation for DOB
TC16	Validation for the contact name field
TC17	Validation for relationship
TC18	Validation for home telephone
TC19	Validation for mobile number
TC20	Validation for emergency contact list
TC21	Validation of radio button to select doc type
TC22	Validation for passport number field
TC23	Validation for expiry date field
TC24	Blank validation for passport
TC25	Validation for issued by field