

Name: Shobhit Agrawal

Submitted to: Mohammad Sohel Abbasi Sir

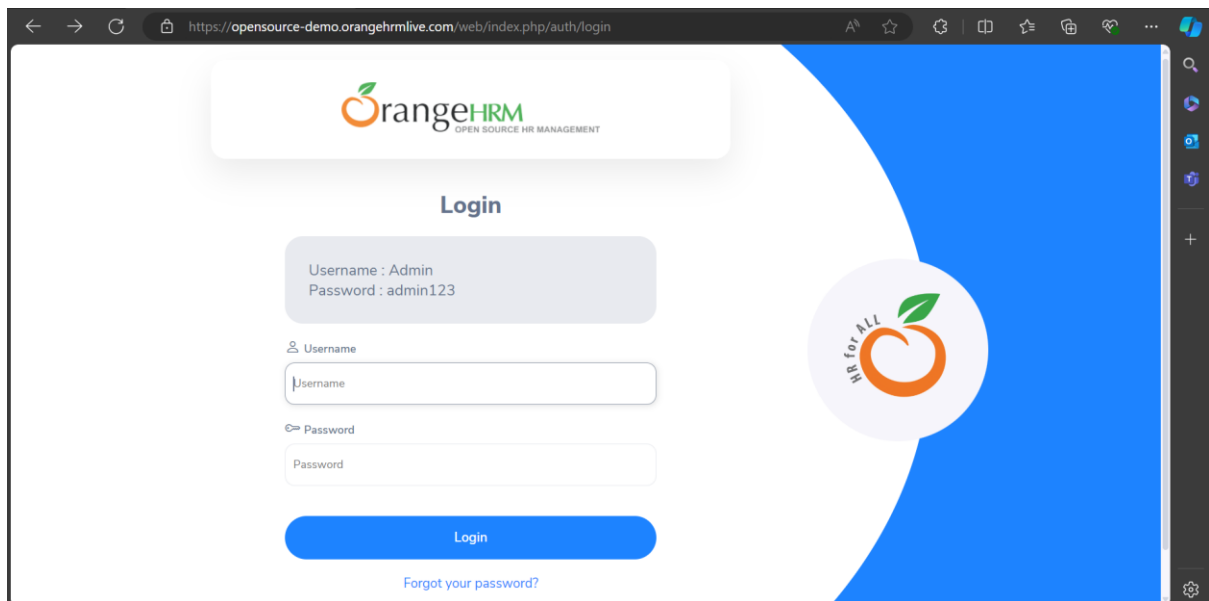
Date: 06/09/2024

Task 1: SDLC, Agile and Software Testing

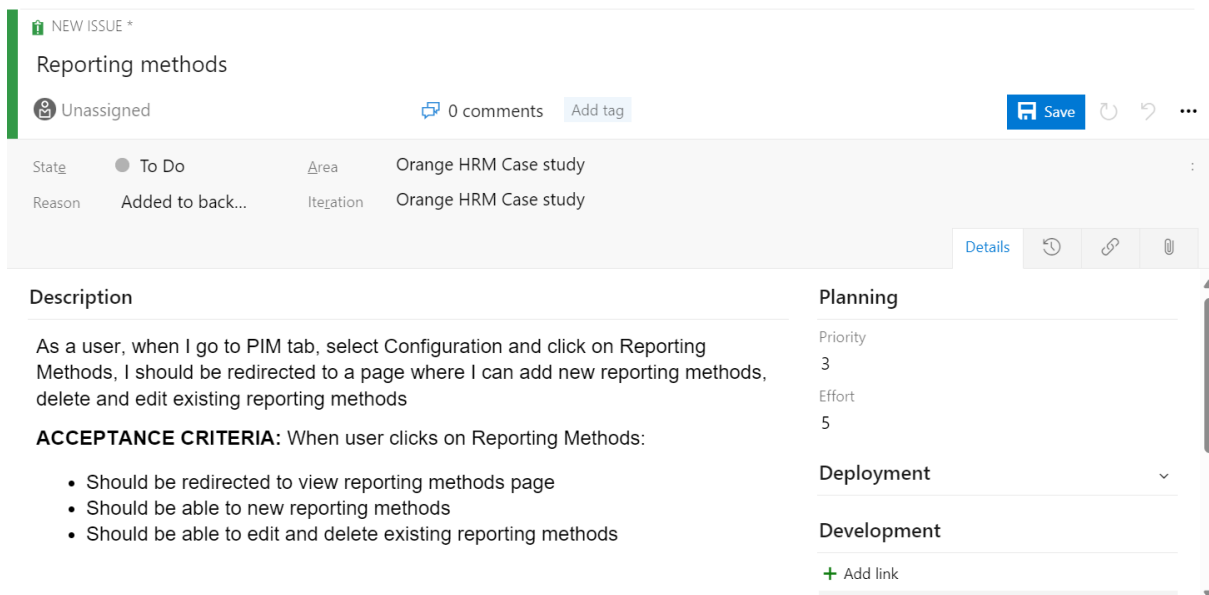
GitHub Repository Link:

[Shobhit130/OrangeHRMCaseStudy \(github.com\)](https://github.com/Shobhit130/OrangeHRMCaseStudy)

Demo Website:



User Story 1



Title: Reporting Methods

As a user, when I go to PIM tab, select Configuration and click on Reporting Methods, I should be redirected to a page where I can add new reporting methods, delete and edit existing reporting methods

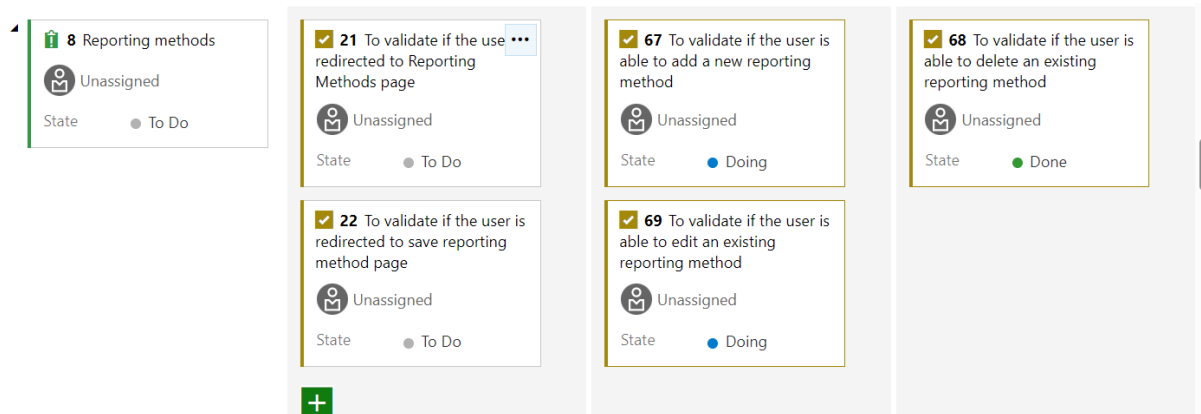
ACCEPTANCE CRITERIA: When user clicks on Reporting Methods:

- Should be redirected to view reporting methods page
- Should be able to new reporting methods
- Should be able to edit and delete existing reporting methods

Priority: 4

Effort: 5

Test Cases



TC_001

Description: To validate if the user is redirected to Reporting Methods page

Given the user is logged in to the website [OrangeHRM \(orangehrmlive.com\)](https://demo.orangehrmlive.com/) using the valid username “Admin” and valid password “admin123”

When user clicks on PIM tab -> Configuration Drop down -> Reporting Methods

Then user should be navigated to Reporting Methods page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewReportingMethods>

S. No.	Page Name	Page accessibility (Pass/Fail)	
		Actual	Expected
1	Reporting Methods	Pass	Pass

TC_002

Description: To validate if the user is redirected to save reporting method page

Given the user is on the Reporting Methods page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewReportingMethods>

And user clicks on the Add button

Then the user should be redirected to Save reporting method page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/saveReportingMethod>

S. No.	Page Name	Page accessibility (Pass/Fail)	
		Actual	Expected
1	Save Reporting Method	Pass	Pass

TC_003

Description: To validate if the user is able to add a new reporting method

Given the user is on the Save reporting method page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/saveReportingMethod>

When user writes a new reporting method in the Name field

And clicks on the Save button

Then the new reporting method should get added the reporting methods list

S. No.	New reporting method	New reporting method getting added (Pass/Fail)	
		Actual	Expected
1	Test Report	Pass	Pass

TC_004

Description: To validate if the user is able to delete an existing reporting method

Given the user is on the Reporting Methods page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewReportingMethods>

When the user clicks on the delete icon of any reporting method except Direct (as it is always in use)

And clicks on the Yes, Delete button

Then that reporting method should be deleted from the reporting methods

S. No.	Reporting method	Reporting method getting deleted (Pass/Fail)	
		Actual	Expected
1	Indirect	Pass	Pass
2	Test Report	Pass	Pass

TC_005

Description: To validate if the user is able to edit an existing reporting method

Given the user is on the Reporting Methods page <https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewReportingMethods>

When the user clicks on the edit icon of any reporting method

And writes the new name of that reporting method and clicks on Save button

Then that reporting method's name should be edited

S. No.	Reporting method	Reporting method getting deleted (Pass/Fail)	
		Actual	Expected
1	Direct	Pass	Pass
2	Indirect	Pass	Pass
3	Test Report	Pass	Pass

User story 2

ISSUE 23*

23 Admin Dashboard functionality

Unassigned

0 comments

Add tag

Save & Close

Follow

Settings

Refresh

Undo

Redo

More

State

To Do

Area

Orange HRM Case study

Updated by Aranyaa Khatawate: Just now

Reason

Added to backl...

Iteration

Orange HRM Case study\Sprint 1

Details

History

Links

Attachments

Description

As a System Administrator, I want to access a comprehensive dashboard, so that I can: Monitor and manage key HR metrics and activities efficiently

Acceptance Criteria:

- Dashboard Access:** Given that I am logged in as an admin, when I navigate to the dashboard, then I should see a summary of key HR metrics and activities.
- Key Metrics Display:** Given that I am on the dashboard, when the page loads, then I should see widgets displaying metrics such as employee count, leave requests, attendance records, and upcoming events.
- Interactive Widgets:** given that I am viewing the dashboard, when I click on a widget, then I should be redirected to a detailed

Planning

Priority

2


Effort

6

Deployment

Development

+ Add link

 Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

+ Add link

[Add an existing work item](#) as a parent

Title: Admin Dashboard Functionality

As a System Administrator, I want to access a comprehensive dashboard, so that I can: Monitor and manage key HR metrics and activities efficiently

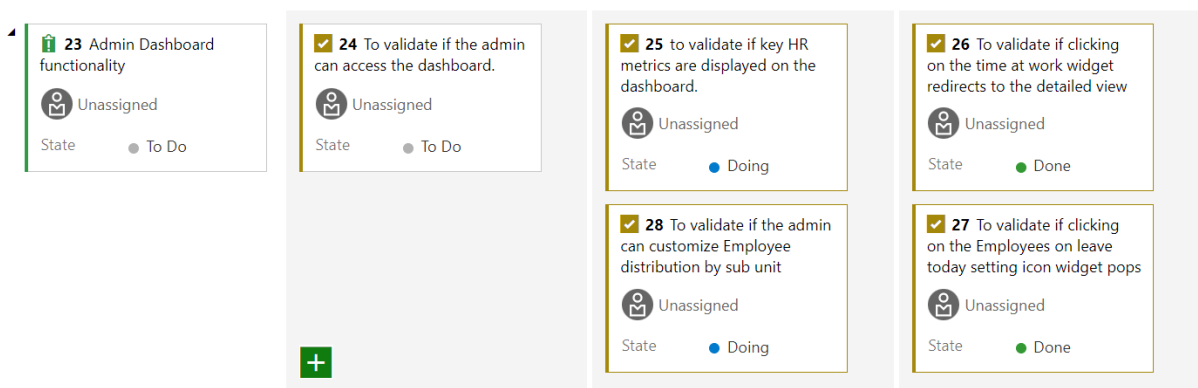
ACCEPTANCE CRITERIA:

- Dashboard Access:** Given that I am logged in as an admin, when I navigate to the dashboard, then I should see a summary of key HR metrics and activities.
- Key Metrics Display:** Given that I am on the dashboard, when the page loads, then I should see widgets displaying metrics such as employee count, leave requests, attendance records, and upcoming events.
- Interactive Widgets:** given that I am viewing the dashboard, when I click on a widget, then I should be redirected to a detailed view of the respective metric (e.g., clicking on leave requests should take me to the leave management page).

Priority: 2

Effort: 6

Test cases



TC_001

Description: To validate if the admin can access the dashboard.

Given the admin is logged in to the website [OrangeHRM \(orangehrmlive.com\)](https://opensource-demo.orangehrmlive.com/web/index.php/dashboard/index) using the valid username “Admin” and valid password “admin123”.

When the admin clicks on the “Dashboard” tab.

Then the admin should be navigated to the dashboard page displaying key HR metrics and activities.

URL: <https://opensource-demo.orangehrmlive.com/web/index.php/dashboard/index>

S. No.	Username	Password	Page accessibility (Pass/Fail)	
			Actual	Expected
1	Admin	admin123	Pass	Pass

TC_002

Description: To validate if key HR metrics are displayed on the dashboard.

Given the admin is logged in to the website [OrangeHRM \(orangehrmlive.com\)](https://opensource-demo.orangehrmlive.com/web/index.php/dashboard/index) using the valid username “Admin” and valid password “admin123”.

When the admin navigates to the dashboard page.

Then the dashboard should display widgets for Time at work, Quick Launch, Buzz latest posts, My actions, Employees on leave today, Employee Distribution by Sub Unit, Employee Distribution by Location

URL: <https://opensource-demo.orangehrmlive.com/web/index.php/dashboard/index>

S. No.	Dashboard Widget	Widget Displaying (Pass/Fail)	
		Actual	Expected

1	Time at work	Pass	Pass
2	Quick Launch	Pass	Pass
3	Buzz latest posts	Pass	Pass
4	My actions	Pass	Pass
5	Employees on leave today	Pass	Pass
6	Employee Distribution by Sub Unit	Pass	Pass
7	Employee Distribution by location	Pass	Pass

TC_003

Description: To validate if clicking on the time at work widget redirects to the detailed view of the respective metric.

Given the admin is logged in to the website [OrangeHRM \(orangehrmlive.com\)](https://opensource-demo.orangehrmlive.com/) using the valid username “Admin” and valid password “admin123”.

When the admin clicks on the “Time at work” widget clock icon on the dashboard.

Then the admin should be redirected to the “Punch In” page

URL: <https://opensource-demo.orangehrmlive.com/web/index.php/attendance/punchIn>

S. No.	Dashboard Widget	Clicking on clock icon redirects (Pass/Fail)	
		Actual	Expected
1	Time at work	Pass	Pass

TC_004

Description: To validate if clicking on the Employees on leave today setting icon widget pops up a sub menu

Given the admin is logged in to the website [OrangeHRM \(orangehrmlive.com\)](https://opensource-demo.orangehrmlive.com/) using the valid username “Admin” and valid password “admin123”.

When the admin clicks on the setting icon of the Employees on leave today widget

Then a pop up should appear

S. No.	Dashboard Widget	Clicking on settings icon pops up a sub menu(Pass/Fail)	
		Actual	Expected
1	Employees on leave today	Pass	Pass

TC_005

Description: To validate if the admin can customize Employee distribution by sub unit widget

Given the admin is logged in to the website [OrangeHRM \(orangehrmlive.com\)](http://orangehrmlive.com) using the valid username “Admin” and valid password “admin123”.

When the admin chooses to customize the dashboard layout of the Employee distribution by sub unit by clicking on the labels below the pie chart

Then the dashboard layout should be customizable according to the admin’s preferences.

S. No.	Dashboard Widget	Clicking on labels modifies the pie chart(Pass/Fail)	
		Actual	Expected
1	Employee distribution by sub unit	Pass	Pass

User story 3

NEW ISSUE *

Candidate

Unassigned0 commentsAdd tagSave

StateTo DoAreaOrange HRM Case studyReasonAdded to back...IterationOrange HRM Case study

Details

Description

As a user when I go to Candidates option in the Recruitment tab, then I should be able to Add, Edit, Search and Delete candidates.
Acceptance Criteria: When user goes to the Candidate option in Recruitment, the system should

- Allow the user to search for existing candidates
- Allow the user to add a candidate
- Allow user to view details of existing candidates
- Allow user to delete candidates

Planning

Priority2Effort4DeploymentDevelopmentAdd link

Title: Candidate

As a user when I go to Candidates option in the Recruitment tab, then I should be able to Add, Edit, Search and Delete candidates.

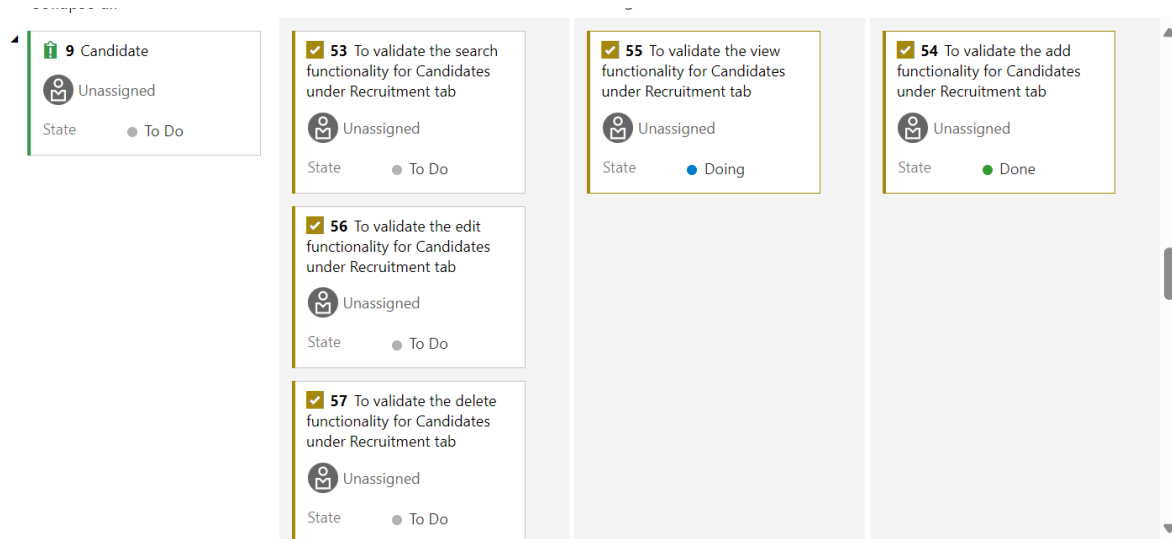
ACCEPTANCE CRITERIA: When user goes to the Candidate option in Recruitment, the system should

- Allow the user to search for existing candidates
- Allow the user to add a candidate
- Allow user to view details of existing candidates
- Allow user to delete candidates

Priority: 2

Effort: 4

Test Cases



TC_001

Description: To validate the search functionality for Candidates under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the candidates page in recruitment tab

When the user enters search criteria in the search field

And clicks the "Search" button

Then the system should display a list of candidates matching the search criteria

TC_002

Description: To validate the add functionality for Candidates under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the candidates page in recruitment tab

When the user clicks the "Add" button, fills in the candidate details

And clicks the "Save" button

Then the system should display a confirmation message

And the new candidate should appear in the list of candidates

TC_003

Description: To validate the view functionality for Candidates under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the candidates page in recruitment tab

When the user clicks on the view icon for a candidate

Then the system should display the candidate's details

TC_004

Description: To validate the edit functionality for Candidates under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently viewing a candidate's details

When the user clicks the view icon, toggles the edit button, updates the candidate's details

And clicks the "Save" button

Then the system should display a confirmation message

And the updated details should be reflected in the candidate's profile

TC_005

Description: To validate the delete functionality for Candidates under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the candidates page in recruitment tab

When the user clicks the "Delete" button for a candidate

And confirms the deletion

Then the system should display a confirmation message

And the candidate should be removed from the list of candidates

User story 4

NEW ISSUE *

Vacancies

Unassigned0 commentsAdd tagSave

StateTo DoAreaOrange HRM Case studyReasonAdded to back...IterationOrange HRM Case study

Details

Description

As a user when I go to Vacancies option in the Recruitment tab, then I should be able to Add, Edit, Search and Delete vacancies.
Acceptance Criteria: When user goes to the Vacancies option in Recruitment, the system should

- Allow the user to search for existing vacancies
- Allow the user to add vacancies
- Allow user to view details of existing vacancies
- Allow user to delete vacancies

Planning

Priority2Effort4

Deployment

Development

+ Add link

Title: Vacancies

As a user when I go to Vacancies option in the Recruitment tab, then I should be able to Add, Edit, Search and Delete vacancies.

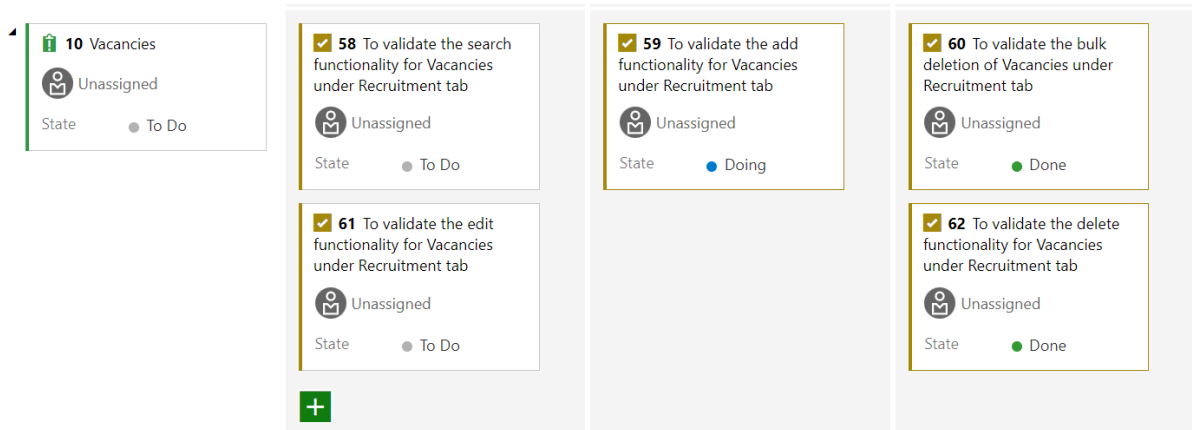
ACCEPTANCE CRITERIA: When user goes to the Vacancies option in Recruitment, the system should

- Allow the user to search for existing vacancies
- Allow the user to add vacancies
- Allow user to view details of existing vacancies
- Allow user to delete vacancies

Priority: 2

Effort: 4

Test cases



TC_001

Description: To validate the search functionality for Vacancies under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the vacancies page in recruitment tab

When the user enters search criteria in the search field

And clicks the "Search" button

Then the system should display a list of vacancies matching the search criteria

TC_002

Description: To validate the add functionality for Vacancies under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the vacancies page in recruitment tab

When the user clicks the "Add" button, fills in the vacancy details

And clicks the "Save" button

Then the system should display a confirmation message

And the new vacancy should appear in the list of vacancies

TC_003

Description: To validate the bulk deletion of Vacancies under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the vacancies page in recruitment tab

When the user selects multiple vacancies for deletion

Then the system should bulk delete all the entries and give confirmation message.

TC_004

Description: To validate the edit functionality for Vacancies under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently viewing a vacancy's details

When the user clicks on the Edit icon for a vacancy, updates the vacancy's details

And clicks the "Save" button

Then the system should display a confirmation message

And the updated details should be reflected in the vacancy's profile

TC_005

Description: To validate the delete functionality for Vacancies under Recruitment tab

Given the user is able to access the website “OrangeHRM (orangehrmlive.com)” in chrome browser and logged in using username “Admin” and password “admin123” and currently on the vacancies page in recruitment tab

When the user clicks on the delete icon for a vacancy

And confirms the deletion

Then the system should display a confirmation message

And the vacancy should be removed from the list of vacancies

User story 5

NEW ISSUE *

Termination Reasons

Unassigned0 commentsAdd tagSave

StateTo DoAreaOrange HRM Case studyReasonAdded to back...IterationOrange HRM Case study

Details

Description

As a user when I go to "Termination Reasons" under "configuration" toggle under "PIM" tab then I should be able to add, edit and delete the termination terms of any employee.

Acceptance Criteria:

When valid credentials are entered and select "Termination Reasons" page then:

• User should be able to add "Termination Reason" to the list.

• User should be able to edit the "Termination Reason" record of the employee.

• User should be able to delete the "Termination Reason" record of any employee.

Planning

Priority1Effort4

Deployment

Development

+ Add link

Title: Termination Reasons

As a user when I go to "Termination Reasons" under "configuration" toggle under "PIM" tab then I should be able to add, edit and delete the termination terms of any employee.

ACCEPTANCE CRITERIA: When valid credentials are entered and select "Termination Reasons" page then:

- User should be able to add "Termination Reason" to the list.
- User should be able to edit the "Termination Reason" record of the employee.
- User should be able to delete the "Termination Reason" record of any employee.

Priority: 1

Effort: 4

Test cases

11 Termination Reasons

Unassigned

StateTo Do

64 To check whether the Termination Reason input field in accepting text input.

Unassigned

StateTo Do

66 To validate the functionality of "Save" button on adding to the list on

Unassigned

StateTo Do

63 To validate the functionality of the "Add" button

Unassigned

StateDoing

65 To validate the functionality of "Cancel" button on adding to the list on

Unassigned

StateDone

TC_001

Description: To validate the functionality of the “Add” button

Given the user is logged in to the website “<https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>” in chrome web browser using the valid username “Admin” and valid password “admin123” and he is in the “Termination Reasons” tab under “Configuration” dropdown in “PIM” tab.

When the user clicks on the “Add” button

Then the user should be redirected to the page (<https://opensource-demo.orangehrmlive.com/web/index.php/pim/saveTerminationReasons>) which asks the user to type in the termination reason.

Bug Report

Description: The field ask for Name on termination reason page instead of reason which may create a confusion

Steps to reproduce:

- Open chrome browser
- Open the site <https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>
- Login using username: ‘Admin’ and password: admin123
- From the list select ‘PIM’ then go to ‘Configuration’ then go to ‘Termination Reason’ and click on ‘Add’ button. The input field is showing to input ‘Name’ instead it should ask to enter the ‘Reason’

Time Stamp: 06/09/2024 10:55 AM

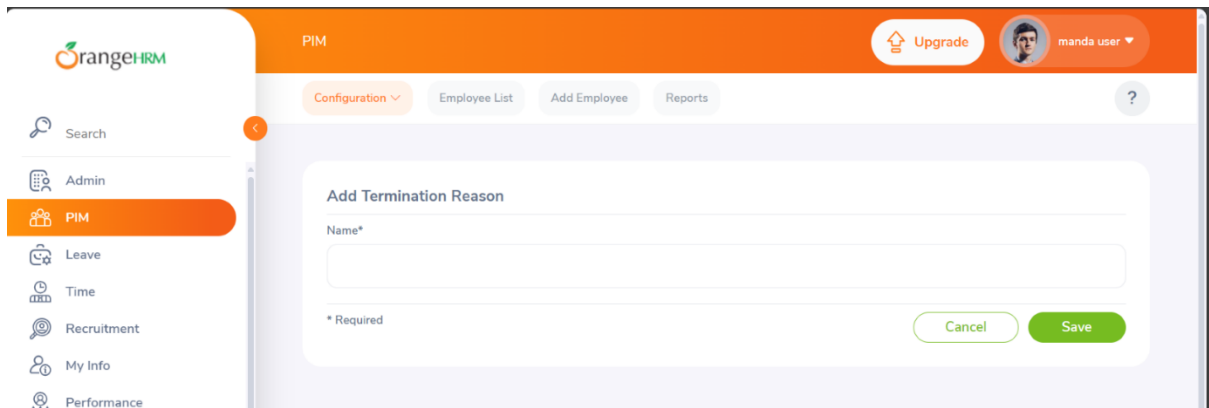
Severity: Low

Priority: Minor

Assignee: problem_dev

Expected Result: The user should be asked to enter Reason instead of Name.

Screenshot or recording:



TC_002

Description: To check whether the Termination Reason input field in accepting text input.

Given the user is logged in to the website “<https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>” in chrome web browser using the valid username “Admin” and valid password “admin123” and in the “Add” page in “Termination Reasons” tab under “Configuration” dropdown in “PIM” tab.

When the user clicks in the text field

Then the text field should accept user input

TC_003

Description: To validate the functionality of “Cancel” button on adding to the list on “Termination Reasons”.

Given the user is logged in to the website “<https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>” in chrome web browser using the valid username “Admin” and valid password “admin123” and in the “Add” page in “Termination Reasons” tab under “Configuration” dropdown in “PIM” tab.

When the user clicks on the “Cancel” button

Then the user should be redirected to the previous page (<https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewTerminationReasons>)

TC_004

Description: To validate the functionality of “Save” button on adding to the list on “Termination Reasons”.

Given the user is logged in to the website “<https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>” in chrome web browser using the

valid username “Admin” and valid password “admin123” and in the “Add” page in “Termination Reasons” tab under “Configuration” dropdown in “PIM” tab.

When the user clicks on the “Save” button after adding the valid input

Then the input should be added to the list and the user should be redirected to (<https://opensource-demo.orangehrmlive.com/web/index.php/pim/viewTerminationReasons>)

Bug Report (Flaky bug)

Description: The field ask for Name on termination reason page instead of reason which may create a confusion

Steps to reproduce:

- Open chrome browser
- Open the site <https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>
- Login using username: ‘Admin’ and password: admin123
- From the list select ‘PIM’ then go to ‘Configuration’ then go to ‘Termination Reason’ and click on ‘Add’ button. The input field is showing to input ‘Name’ instead it should ask to enter the ‘Reason’

Time Stamp: 06/09/2024 10:55 AM

Severity: Low

Priority: Minor

Assignee: problem_dev

Expected Result: The user should be asked to enter Reason instead of Name.

TC_005

Description: To validate the functionality of checkbox in the ‘Termination Reasons’ List

Given the user is logged in to the website “<https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>” in chrome web browser using the valid username “Admin” and valid password “admin123” and in the “Add” page in “Termination Reasons” tab under “Configuration” dropdown in “PIM” tab.

When the user clicks on the checkbox of the termination reason in the list

Then the user should be able to select that specific item from the list on which further functions can be performed that is deletion and updation

Name: Shobhit Agrawal

Submitted to: Mohammad Sohel Abbasi Sir

Date: 06/09/2024

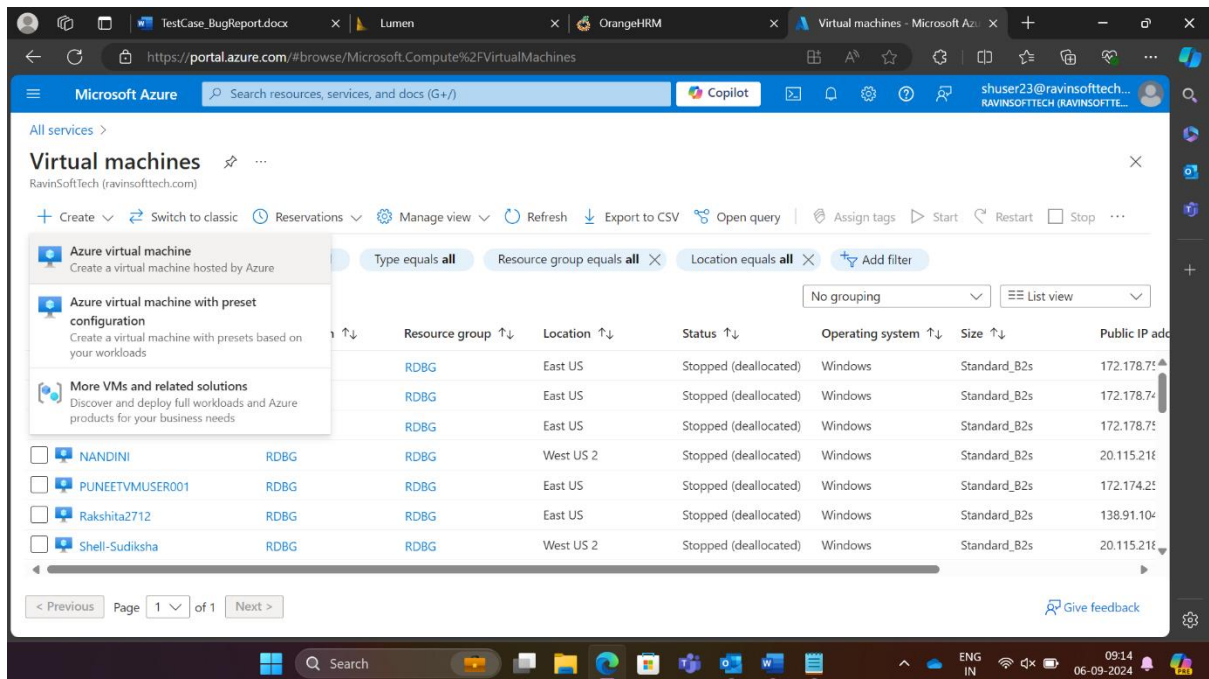
Task 2: Implementing the CI/CD Pipeline using GitHub Actions

GitHub Repository Link:

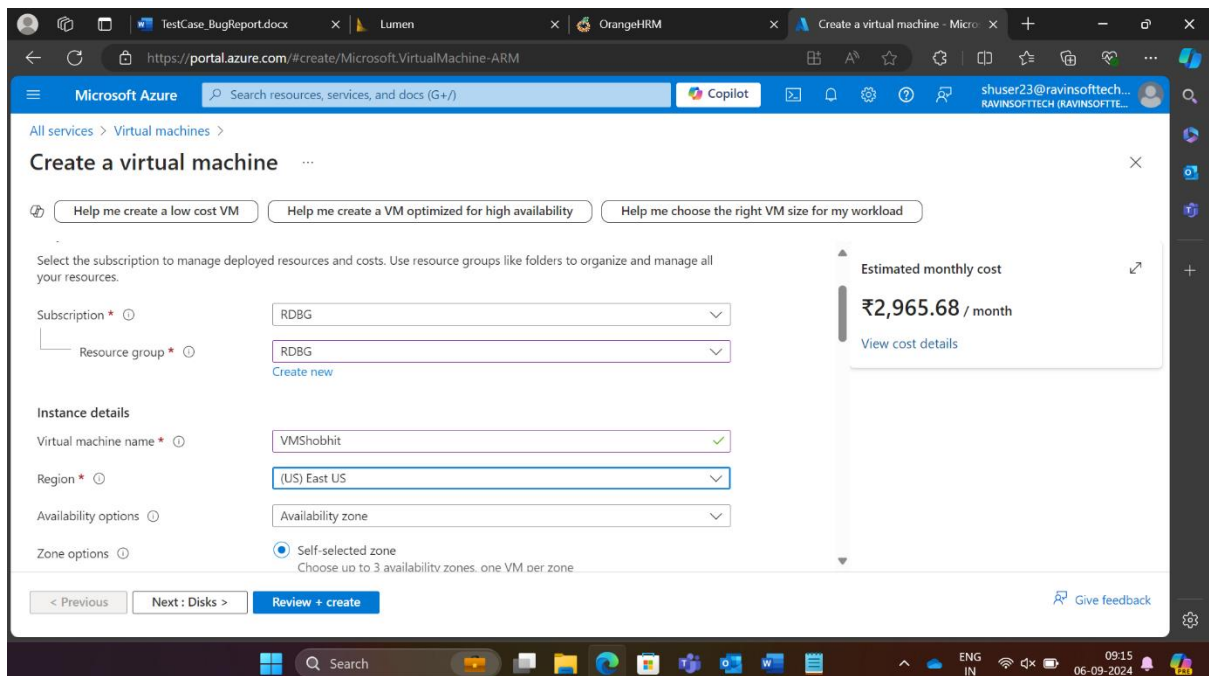
[Shobhit130/OrangeHRMCaseStudy \(github.com\)](https://github.com/Shobhit130/OrangeHRMCaseStudy)

Creating an Azure Virtual Machine

Step 1: Click on Create → Click on Azure Virtual Machine



Step 2: Select the resource group as RDBG and give a unique name (VMShobhit) with Region (US) East US



Step 3: Select Security type as Standard and Image as Windows 10 pro version 22H2 x64 gen 2 and VM architecture as x64

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal. The page is titled 'Create a virtual machine' and has a breadcrumb trail 'All services > Virtual machines >'. Below the title, there are three tabs: 'Help me create a low cost VM', 'Help me create a VM optimized for high availability', and 'Help me choose the right VM size for my workload'. The 'Security type' is set to 'Standard'. The 'Image' is set to 'Windows 10 Pro, version 22H2 - x64 Gen2'. The 'VM architecture' is set to 'x64'. The 'Run with Azure Spot discount' checkbox is unchecked. On the right side, the 'Estimated monthly cost' is displayed as ₹2,965.68 / month. At the bottom, there are buttons for '< Previous', 'Next : Disks >', and 'Review + create'.

Step 4: Give username and password (as we received in the mail)

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal, specifically the 'Administrator account' section. The 'Username' is set to 'vmuser'. The 'Password' and 'Confirm password' fields are filled with masked characters. The 'Inbound port rules' section is visible, with 'Public inbound ports' set to 'Allow selected ports'. On the right side, the 'Estimated monthly cost' is displayed as ₹4,166.22 / month. At the bottom, there are buttons for '< Previous', 'Next : Disks >', and 'Review + create'.

Step 5: In Select inbound ports, select all the available ports HTTP (80), HTTPS (443), SSH (22), RDP (3389) and check the Licensing checkbox

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The page is titled 'Create a virtual machine' and has a breadcrumb trail 'All services > Virtual machines >'. There are three tabs: 'Help me create a low cost VM', 'Help me create a VM optimized for high availability', and 'Help me choose the right VM size for my workload'. The 'Public inbound ports' section has two radio buttons: 'None' and 'Allow selected ports', with 'Allow selected ports' selected. Below this, the 'Select inbound ports' dropdown menu is open, showing 'HTTP (80), HTTPS (443), SSH (22), RDP (3389)'. A blue information box states: 'All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.' The 'Licensing' section has a checkbox 'I confirm I have an eligible Windows 10/11 license with multi-tenant hosting rights.' which is currently unchecked. On the right, a box shows the 'Estimated monthly cost' as '₹4,166.22 / month' with a link to 'View cost details'. At the bottom, there are navigation buttons: '< Previous', 'Next : Disks >', and 'Review + create'. The Windows taskbar at the bottom shows the time as 09:17 on 06-09-2024.

Step 6: Go to Next : Disks and select OS disk type as Standard HDD (Standard HDD (locally-redundant storage))

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, now at the 'Disks' step. The 'OS disk' section has two dropdowns: 'OS disk size' set to 'Image default (127 GiB)' and 'OS disk type' set to 'Standard HDD (locally-redundant storage)'. A note below the 'OS disk type' dropdown states: 'The selected VM size supports premium disks. We recommend Premium SSD for high IOPS workloads. Virtual machines with Premium SSD disks qualify for the 99.9% connectivity SLA.' The 'Delete with VM' checkbox is checked. The 'Key management' dropdown is set to 'Platform-managed key'. The 'Enable Ultra Disk compatibility' checkbox is unchecked. The 'Data disks for VMShobhit' section has a note: 'You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a'. On the right, the 'Estimated monthly cost' is updated to '₹3,016.31 / month' with a link to 'View cost details'. At the bottom, the navigation buttons are '< Previous', 'Next : Networking >', and 'Review + create'. The Windows taskbar at the bottom shows the time as 09:17 on 06-09-2024.

Step 7: Go to Next: Networking and create a unique Virtual network (ShobhitVM-net)

Create virtual network

The Microsoft Azure Virtual Network service enables Azure resources to securely communicate with each other in a virtual network which is a logical isolation of the Azure cloud dedicated to your subscription. You can connect virtual networks to other virtual networks, or your on-premises network. [Learn more](#)

Name *

Address space

The virtual network's address space, specified as one or more address prefixes in CIDR notation (e.g. 192.168.1.0/24).

Address range *	Addresses	Overlap
<input type="checkbox"/> 10.9.0.0/16	10.9.0.0 - 10.9.255.255 (65536 addresses)	None
<input type="checkbox"/> (0 Addresses)	(0 Addresses)	None

Subnets

The subnet's address range in CIDR notation. It must be contained by the address space of the virtual network.

Subnet name	Address range	Addresses
<input type="checkbox"/> default	10.9.0.0/24	10.9.0.0 - 10.9.0.255 (256 addresses)

Network interface

When creating a virtual machine, a network interface will be created.

Virtual network *

Subnet *

Public IP

NIC network security group ☐ None ☒ Basic

[< Previous](#) [Next : Management >](#) [Review + create](#) [OK](#) [Discard](#)

Step 8: Check the checkbox Delete public IP and NIC when VM is deleted

Create a virtual machine

[Help me create a low cost VM](#) [Help me create a VM optimized for high availability](#) [Help me choose the right VM size for my workload](#)

☒ Allow selected ports

Select inbound ports *

Estimated monthly cost

₹3,985.52 / month

[View cost details](#)

Delete public IP and NIC when VM is deleted ☒

Enable accelerated networking ☐

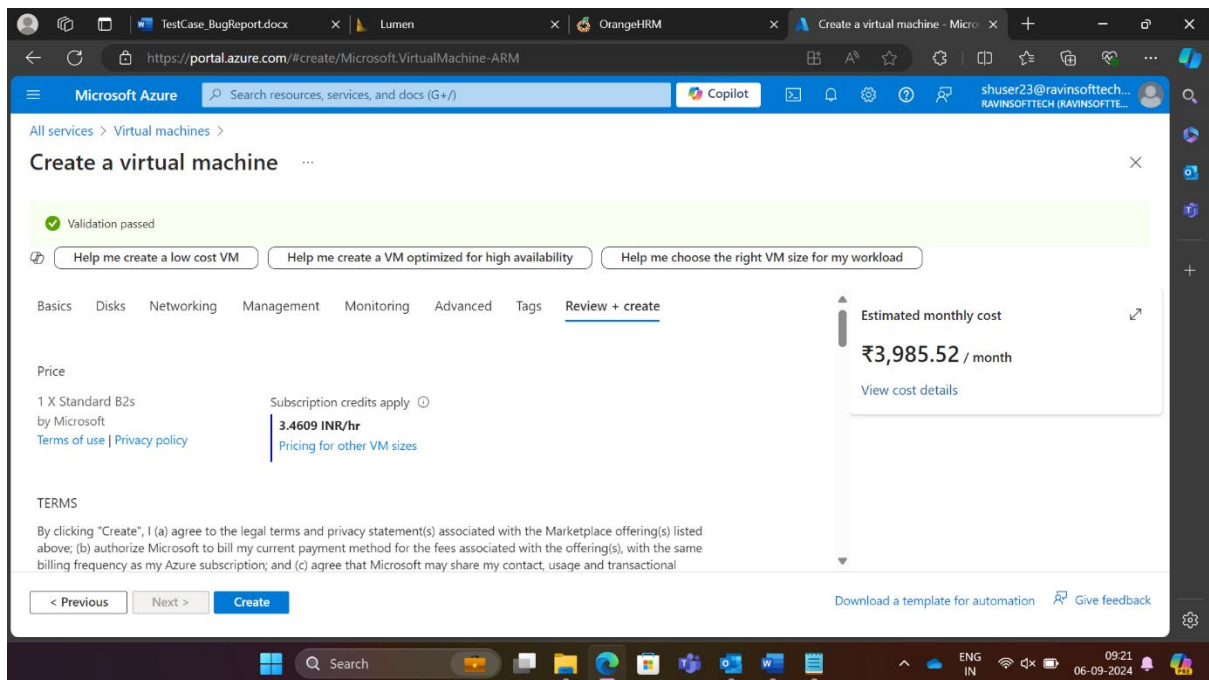
The selected VM size does not support accelerated networking.

Load balancing

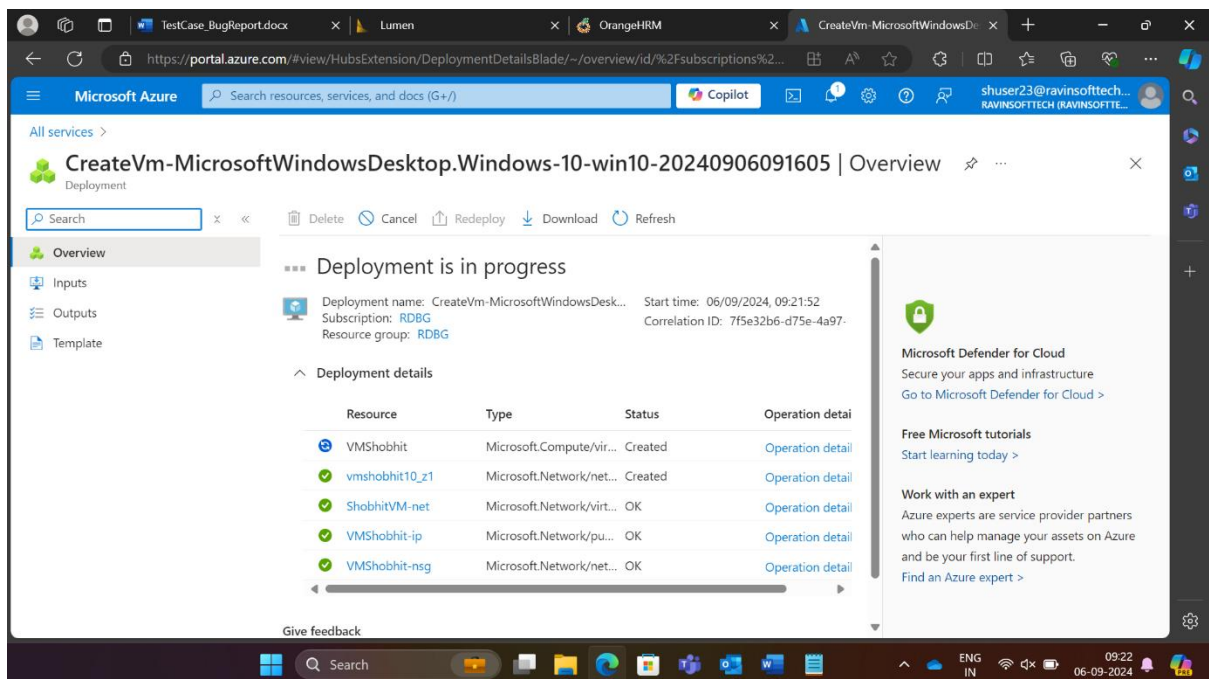
You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

[< Previous](#) [Next : Management >](#) [Review + create](#) [Give feedback](#)

Step 9: Then go to Review+Create and once the validation is complete, click on Create



Step 10: The deployment will be in progress



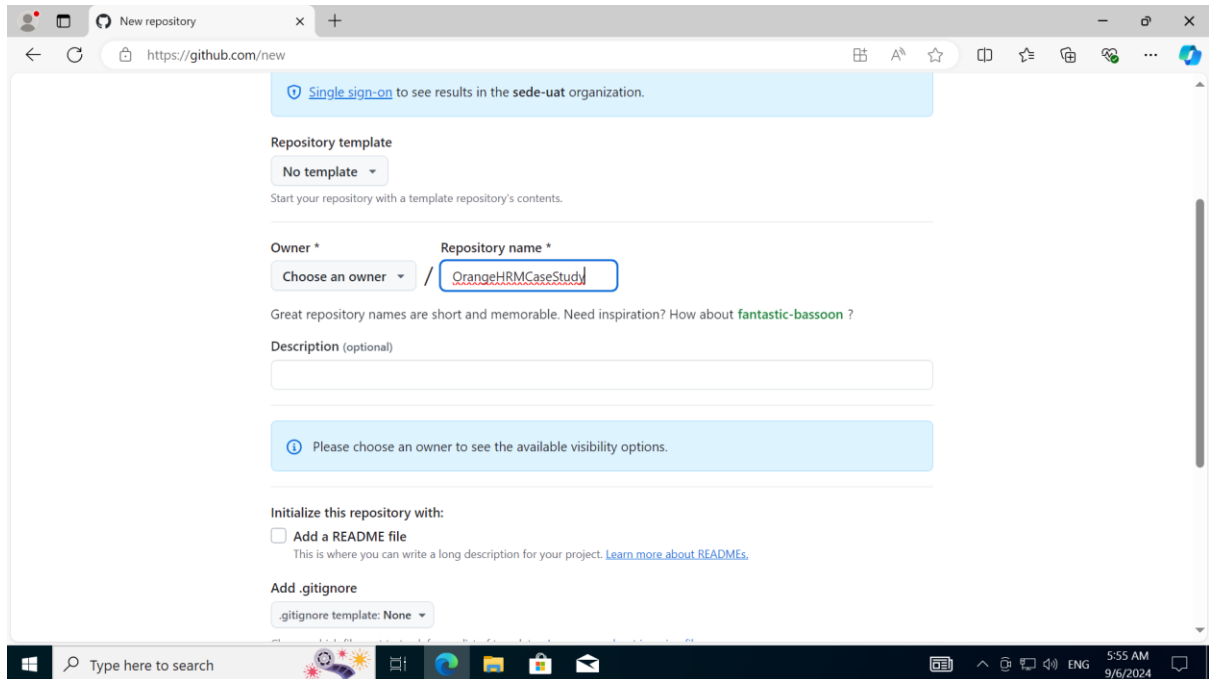
Step 11: Deployment successful

The screenshot displays the Microsoft Azure portal interface. The main heading is "CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20240906091605". Below this, a green checkmark icon indicates "Your deployment is complete". The deployment details show: Deployment name: CreateVm-MicrosoftWindowsDesk..., Subscription: RDBG, Resource group: RDBG, Start time: 06/09/2024, 09:21:52, and Correlation ID: 7f5e32b6-d75e-4a97. Under "Next steps", there are three recommended actions: "Setup auto-shutdown", "Monitor VM health, performance and network dependencies", and "Run a script inside the virtual machine". A "Go to resource" button is visible. A notification banner at the top right states "Deployment succeeded" for the deployment "CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20240906091605" to resource group "RDBG". The sidebar on the left shows "Overview", "Inputs", "Outputs", and "Template". The bottom of the screen shows the Windows taskbar with the search bar and various application icons.

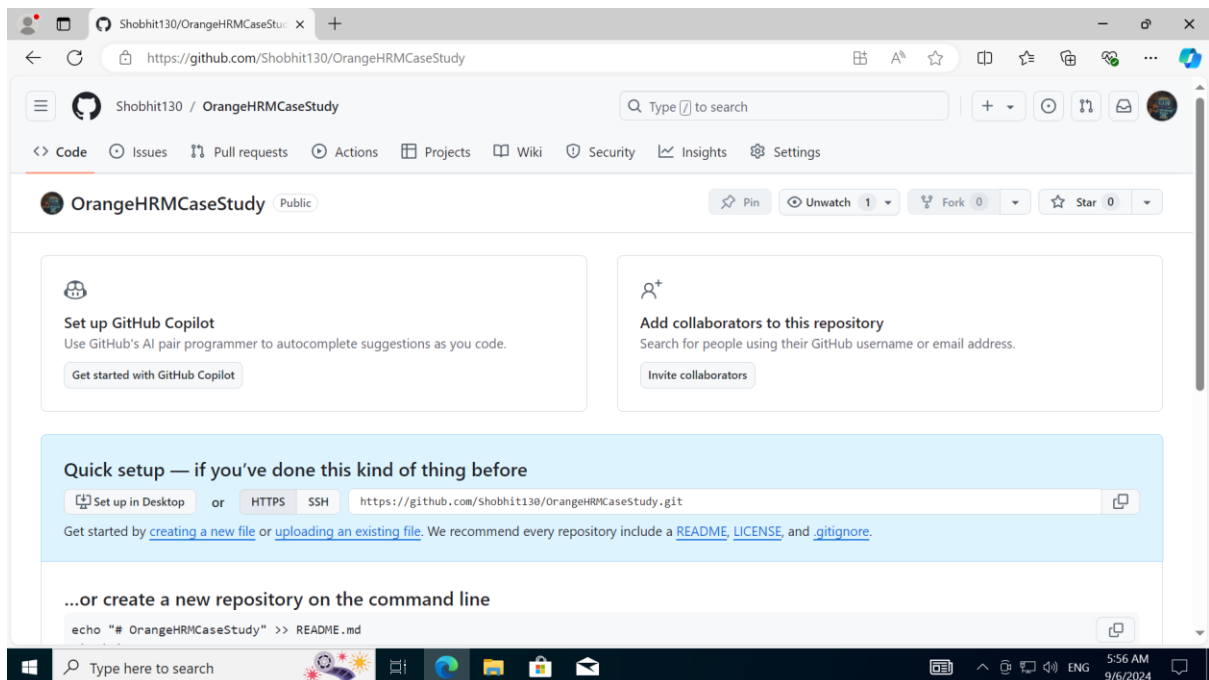
GitHub Action Workflow

After the VM creation, we make a GitHub Repository

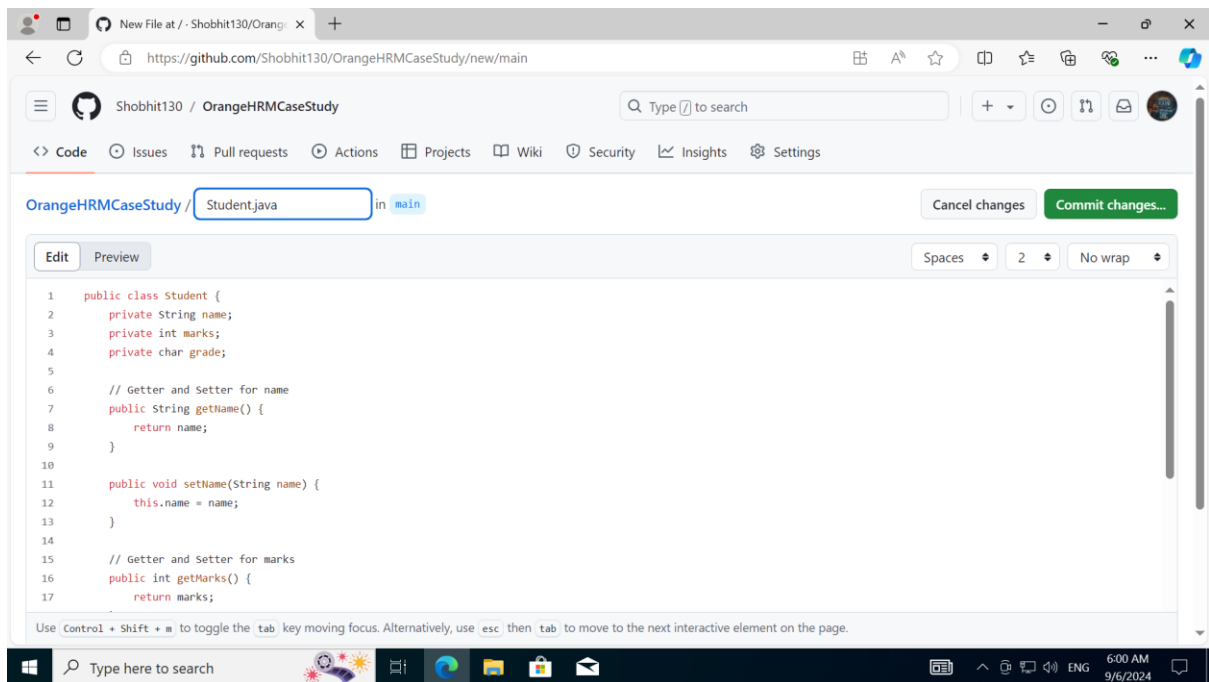
Step 1: Created a GitHub Repository “OrangeHRMCaseStudy”



Step 2: The repository



Step 3: Created a Java code “Student.java”

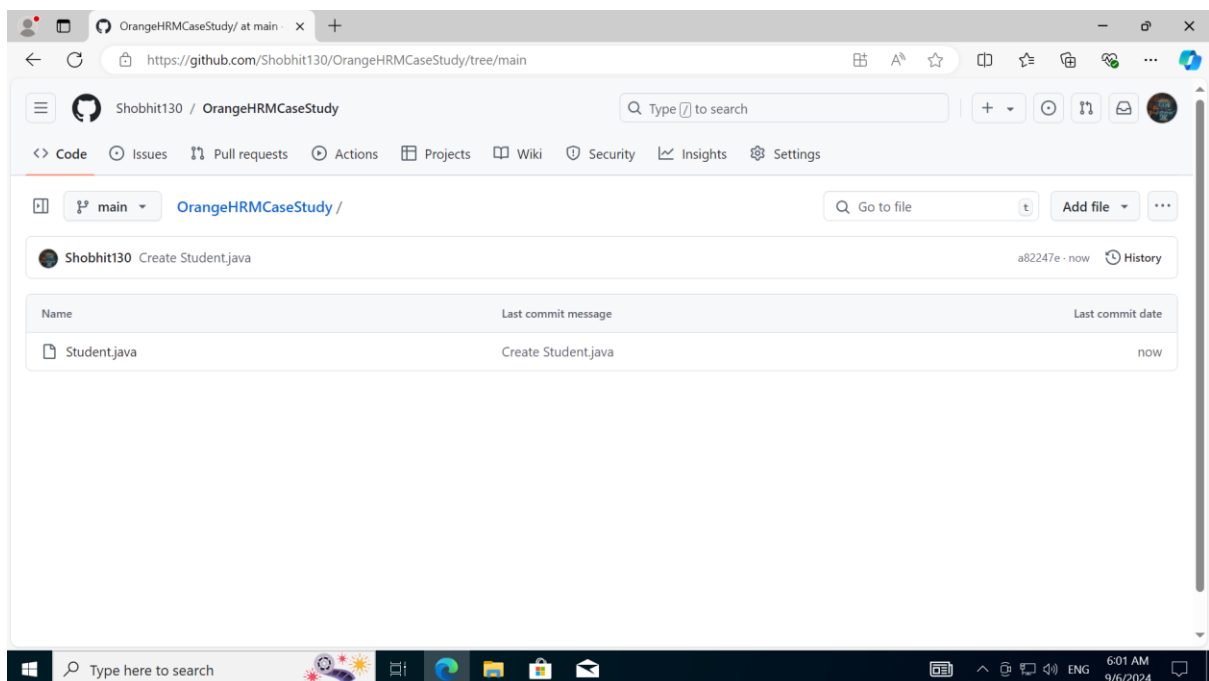


The screenshot shows the GitHub web interface for the repository 'Shobhit130 / OrangeHRMCaseStudy'. A new file named 'Student.java' is being created in the 'main' branch. The code is as follows:

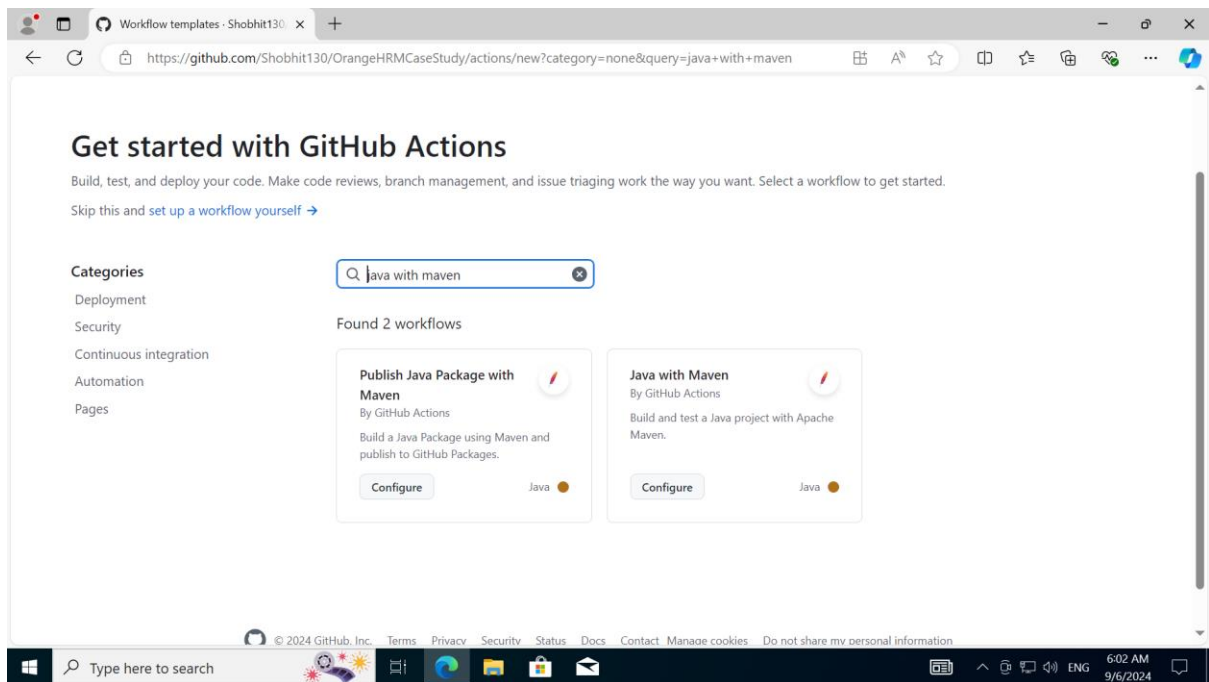
```
1 public class Student {
2     private String name;
3     private int marks;
4     private char grade;
5
6     // Getter and Setter for name
7     public String getName() {
8         return name;
9     }
10
11    public void setName(String name) {
12        this.name = name;
13    }
14
15    // Getter and Setter for marks
16    public int getMarks() {
17        return marks;
18    }
19 }
```

At the bottom of the editor, a message reads: 'Use Control + Shift + ⌘ to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.'

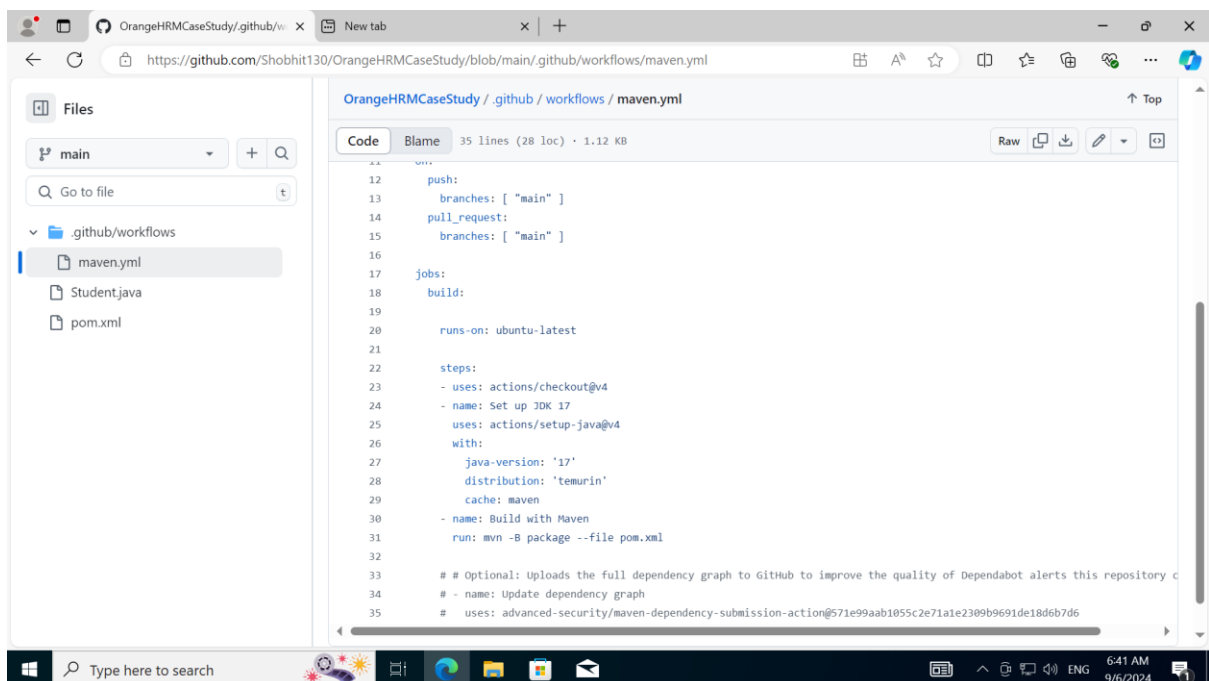
Step 4: The java code file in repository



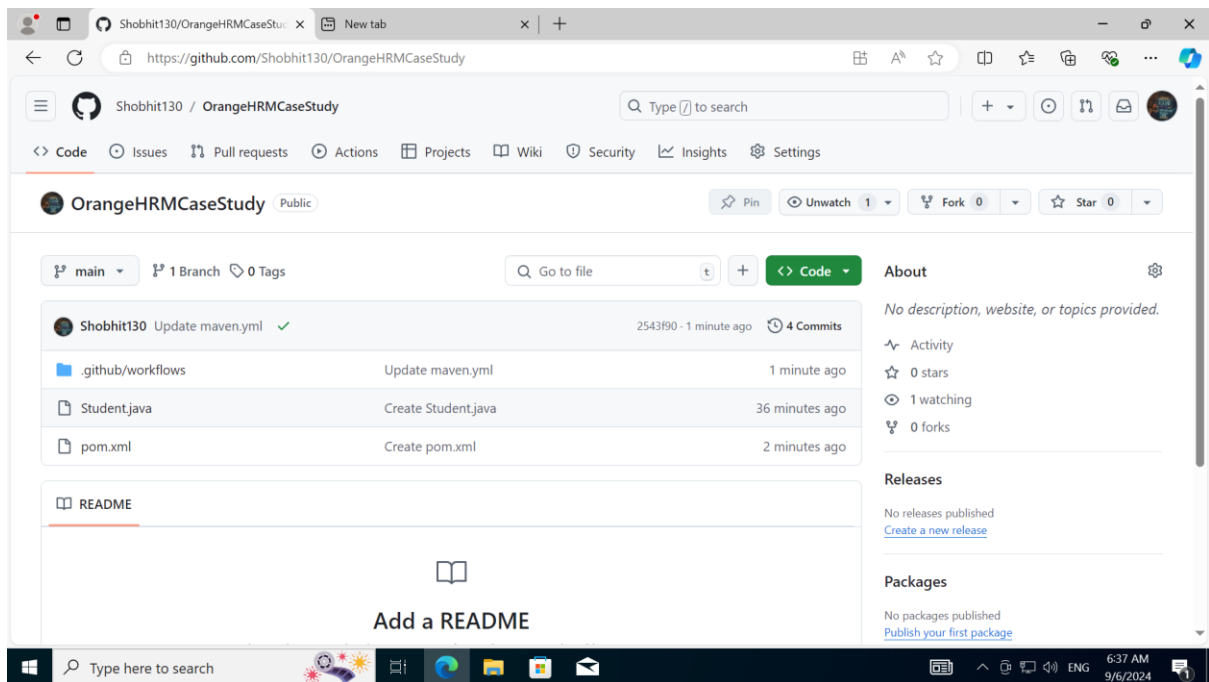
Step 5: Create a Java with Maven workflow in GitHub actions



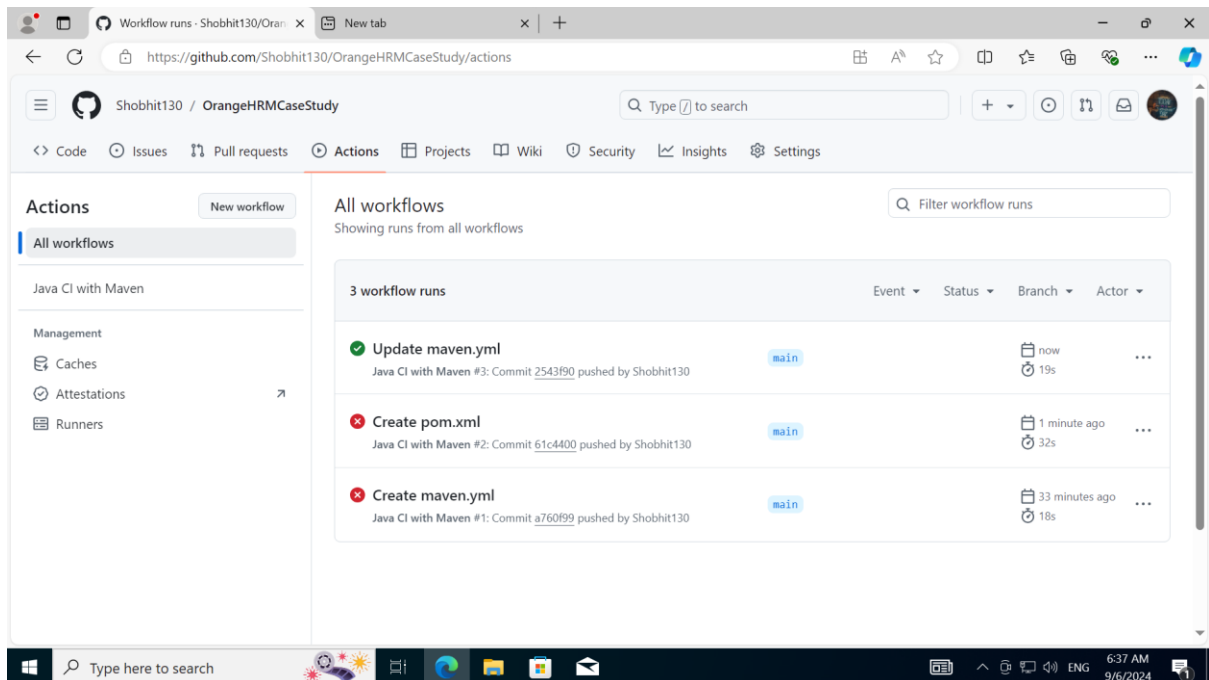
Step 6: A maven.yml file is created as shown below, we commented out the last 2 lines



Step 7: We created a pom.xml file

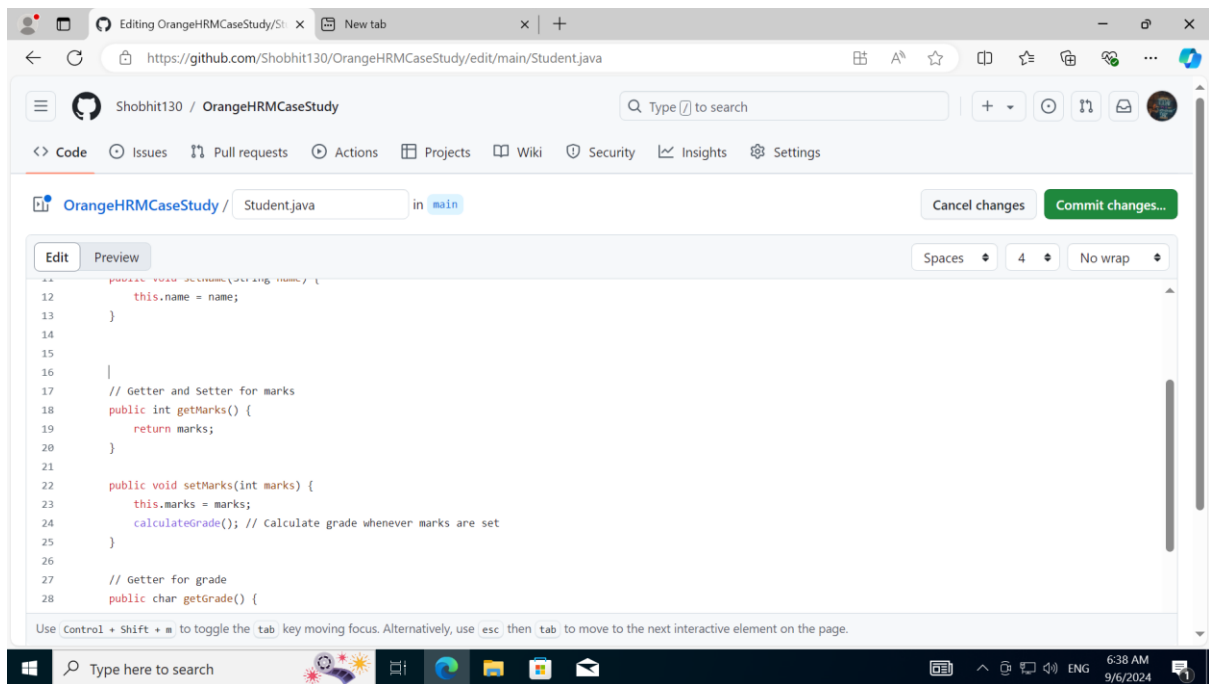


Step 8: We can see the initial build or workflow as the maven.xml file was updated previously (2 lines were commented out)



Step 9: Changes in the code file after the initial build

Changes : Gave some enters in the code file

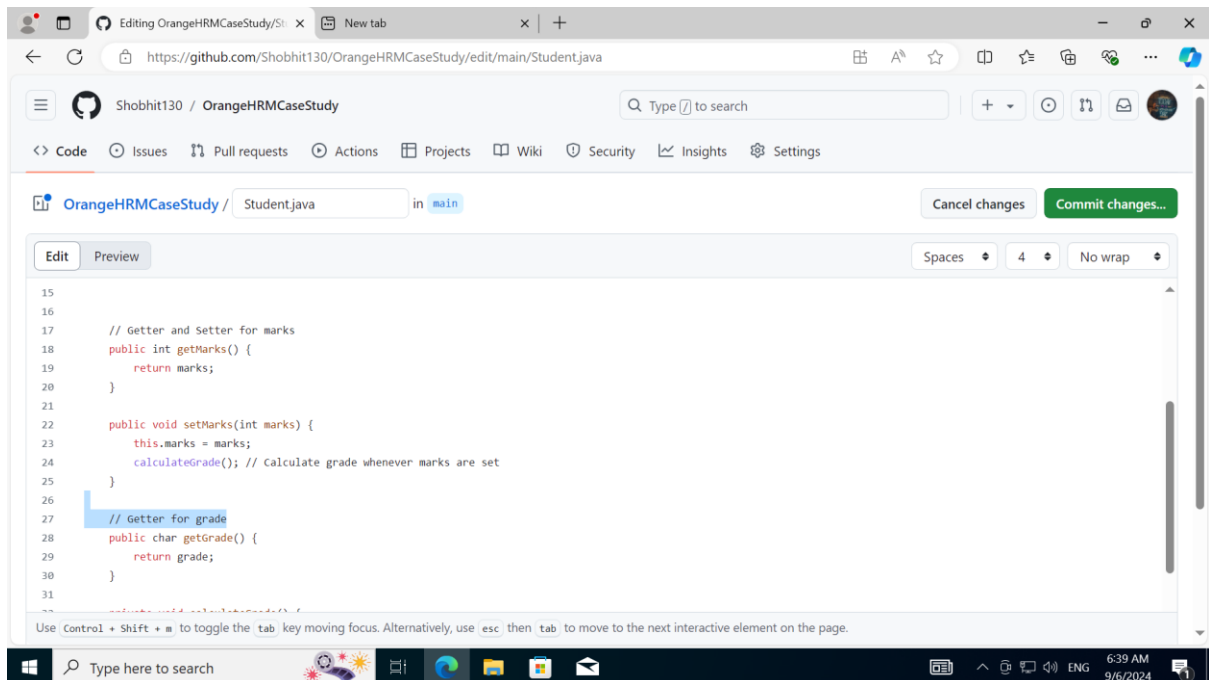


The screenshot shows a web browser window displaying the GitHub code editor for the file 'Student.java' in the 'OrangeHRMCaseStudy' repository. The code is as follows:

```
12     this.name = name;
13 }
14
15
16 // Getter and Setter for marks
17 public int getMarks() {
18     return marks;
19 }
20
21
22 public void setMarks(int marks) {
23     this.marks = marks;
24     calculateGrade(); // Calculate grade whenever marks are set
25 }
26
27 // Getter for grade
28 public char getGrade() {
```

The comment '// Getter for grade' on line 27 is highlighted in blue. The editor interface includes a search bar, navigation tabs (Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings), and buttons for 'Cancel changes' and 'Commit changes...'. The Windows taskbar at the bottom shows the time as 6:38 AM on 9/6/2024.

Removed the highlighted comment in blue as shown below

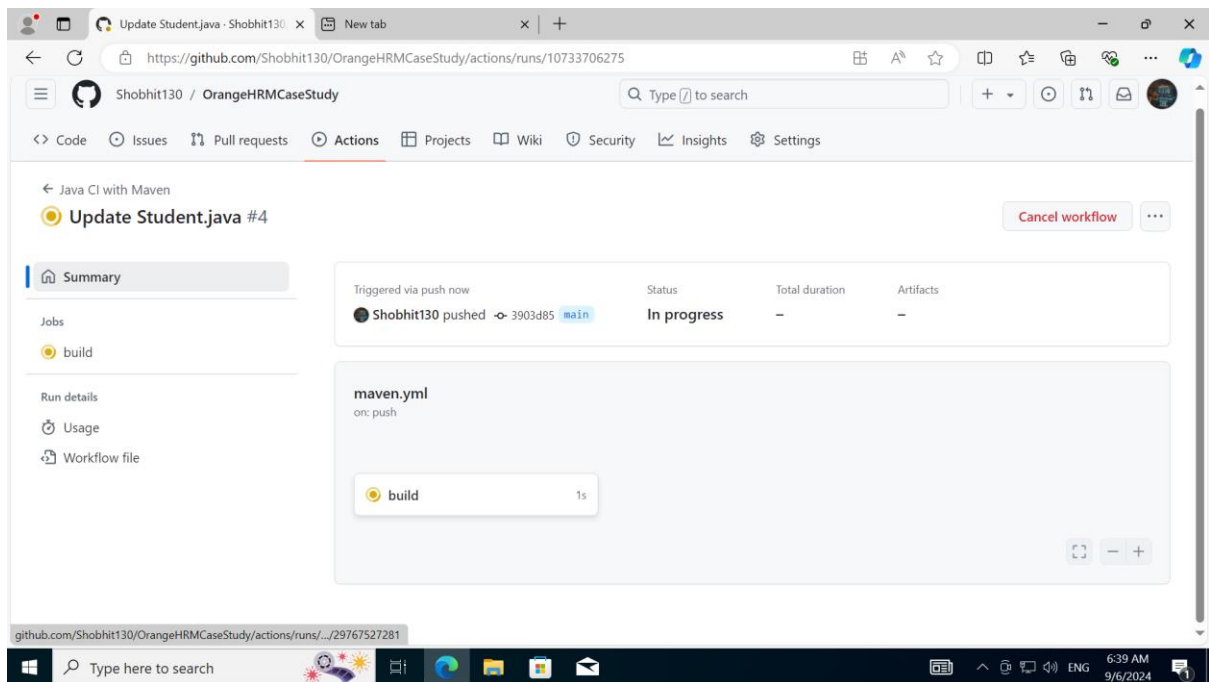


The screenshot shows the same GitHub code editor for 'Student.java', but the comment '// Getter for grade' has been removed. The code is now as follows:

```
15
16
17 // Getter and Setter for marks
18 public int getMarks() {
19     return marks;
20 }
21
22 public void setMarks(int marks) {
23     this.marks = marks;
24     calculateGrade(); // Calculate grade whenever marks are set
25 }
26
27
28 public char getGrade() {
29     return grade;
30 }
31
```

The code is now 31 lines long. The editor interface remains the same, with the 'Commit changes...' button visible. The Windows taskbar at the bottom shows the time as 6:39 AM on 9/6/2024.

Step 10: Now we can see the build is going on after the code updation



Step 11: We can see that the Update Student.java is successful

