



**American International University-Bangladesh (AIUB)**  
**Department of Computer Science**  
**Faculty of Science & Technology (FST)**

**Project Title:**  
**AI Health Navigator: Global Symptom Analysis, Image**  
**Diagnostics, and Doctor Consultations**


**Supervised by:**  
**TONNY SHEKHA KAR**

A Software Engineering Project Submitted  
By

| Semester: Summer_23_24 |                        | Section: H | Group Number:             |                     |
|------------------------|------------------------|------------|---------------------------|---------------------|
| SN                     | Student Name           | Student ID | Contribution<br>(CO3+CO4) | Individual<br>Marks |
| 1                      | RAFSAN MAHMUD          | 22-46207-1 |                           |                     |
| 2                      | ISHTIAK BILLAH EMON    | 22-46229-1 |                           |                     |
| 3                      | AKID MAHMUD            | 22-46211-1 |                           |                     |
| 4                      | M SHAHRIAR ALAM SHAJID | 22-46242-1 |                           |                     |
| 5                      | MS SHARIFUL ISLAM      | 21-45701-3 |                           |                     |

# **AI Health Navigator: Global Symptom Analysis, Image Diagnostics, and Doctor Consultations**

# MAIN DASHBOARD FORM



WELCOME

Analyze Symptoms

Image Diagnosis

Consultation


Lab Test

Order Medicine

User Profile

Settings

Log Out

AI HEALTH NAVIGATOR

Daily Health Tips

- Featured Article 1  
[\[Read More\]](#)
- Featured Article 2  
[\[Read More\]](#)

User's Recent Activity

- Symptom Analysis: [Date]
- Uploaded Image: [Date]
- Consultation: [Doctor Name], [Date]

Personalized Recommendations

- Health Tip: Drink more water!
- Event: Free Health Check-Up Camp

Health Dashboard

- Steps Walked: [Value]
- Calories Burned: [Value]
- Goals: [Goal Title], [Status]

Promotions and Offers

- Discount on Medicines: [Details]
- Partner Services: [Details]

Community and Support

- Forum: [Recent Post Title] [\[Read More\]](#)
- Live Chat Support

# SYMPTOMS ANALYSIS AND FEEDBACK FORM

## Symptoms Analysis and Feedback

- BASIC INFO
- DETAILS
- SYMPTOM DETAILS
- DIAGNOSIS
- TRETEMENT PLAN
- BOOK DOCTORS



### Describe your Symptoms

Type your problems  
Feeling pain in the head for last 2 days  
also recurrent vomiting.

### Your Symptoms

- Nausea
- Headache

Back

Skip

Next



### Diagnosis Result

Possible Causes:  
Migraines, Infection,  
Hypertension, Tumor



### Suggested Doctors

Dr. Sandip Kumar  
Dash. MBBS(DMC)

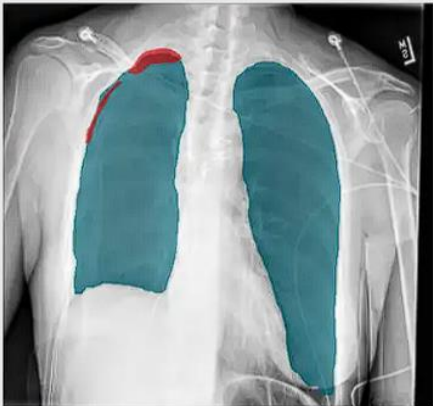
BOOK

Dr. Shahpar Nahrir.  
MBBS (DU)

BOOK

# IMAGE DIAGNOSIS FORM

IMAGE DIAGNOSIS



Pneumothorax

Probability level : 30%

Show in the image ☒

Pneumonia

Probability level : 70%

Show in the image ☐


Fibrosis


Probability level : 40%

Show in the image ☒

Lung Segments

Show in the image ☒

 Upload an Image (CT scan, MRI, X-ray)

 [EXPORT RESULTLS](#)



# Login

Doesn't have an account yet ? [Sign up](#)

Email Address or Phone Number

your@example.com

Password

[Forgot Password?](#)

Enter your password

☐ Remember me

Login



## Forgot Password?

No worries, We'll send you **reset instructions**

eg.example@gmail.com

Cancel

Reset Password

Need Help? 





## Customer Signup


☐ Show Password


Signup


Already have an account ? [Login](#)

 July 30, 2024

Ishtiak 





Upload Prescription 



Antibiotics ▾



Antipyretics ▾



Antacids ▾



Antivirals ▾



Diuretics ▾


  
Nebanol Plus  
 


  
Famotack 50ml  
 

  
Glysup 2.30  
 

  
Seclo 20 mg  
 

  
Brofe  
syrup  
 

 Select Your Nearest Pharmacy





# PROFILE

NAME :

Shahriar Shajid

EMAIL :

shuvo09sa@gmail.com

CONTACT :

01952398633

ADDRESS :

Cantonment

ABOUT :

N/A







First Name

Shahriar

Last Name

Shajid

Password

\*\*\*\*\*

[Change Password](#)

Email

shuvo09sa@gmail.com

Phone

01952398633

Address

Cantonment

Gender

Male

Language

English

Date of Birth

20

August

2002

Notification

Enable

Facebook

<https://www.facebook.com/shuvo09sa>

Payment Method



[Remove](#)



[Remove](#)

Change Payment Method

[Add Payment Method](#)

[Save changes](#)

# TEST CASE

## LOGIN FORM



### Login

Doesn't have an account yet ? [Sign up](#)

Email Address or Phone Number

Password [Forgot Password?](#)

☐ Remember me

## Test Planning for Login Form

|  |  |   |  |                |                    |
|--|--|---|--|----------------|--------------------|
| Project Name: AI Health Navigator  |  |   | Test Designed by: Ishtiak Billah Emon            |                |                    |
| Test Case ID: FR_01  |  |   | Test Designed date: 14 September, 2024           |                |                    |
| Test Priority (Low, Medium, High): High  |  |   | Test Executed by: Ishtiak Billah Emon            |                |                    |
| Module Name: Login Sessions  |  |   | Test Execution date: 13 September, 2024          |                |                    |
| Test Title: Verify login with valid email or phone number and password   |  |   |  |                |                    |
| Description: Test the login page   |  |   |  |                |                    |
| Precondition (If any): User must have valid username and password  |  |   |  |                |                    |
| Test Steps   |  | Test Data   | Expected Results                                 | Actual Results | Status (Pass/Fail) |
| 1. Go to the website<br>2. Enter valid email address/ phone nu<br>3. Enter valid password<br>4. Click the Login button |  | Email: <a href="mailto:ishtiak@gmail.com">ishtiak@gmail.com</a><br>Password: Emon1234!@ | User should successfully Login into the website. | As Expected    | Pass               |
| Click Signup link  |  | Click ‘signup link’   | It will take to the signup page                  | As Expected    | Pass               |

|   |                               |  |             |      |
|---|-------------------------------|--|-------------|------|
| Click Forgot password link  | Click 'Forgot Password?' Link | It will take to the Forgot password page | As Expected | Pass |
| Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database |                               |  |             |      |

## SIGNUP FORM



### Customer Signup

☐ Show Password

Already have an account ? [Login](#)

## Test Planning for Signup Form

|  |   |
|--|---|
| Project Name: AI Health Navigator                                | Test Designed by: Ishtiak Billah Emon   |
| Test Case ID: FR_02  | Test Designed date: 14 September, 2024  |
| Test Priority (Low, Medium, High): High                          | Test Executed by: Ishtiak Billah Emon   |
| Module Name: Signup Sessions                                     | Test Execution date: 13 September, 2024 |
| Test Title: Verify signup with name, email or phone and password |   |
| Description: Test the signup page                                |   |

| Precondition (If any): User must not have an existing account (username and password must not be registered)  |   |   |                           |                    |
|---|---|---|---------------------------|--------------------|
| Test Steps  | Test Data   | Expected Results                                      | Actual Results            | Status (Pass/Fail) |
| 1. Go to the website<br>2. Enter the name<br>3. Enter email address/<br>phone number<br>4. Enter password<br>5. Re-type password<br>6. Click the Signup button                    | Name: Emon<br>Email: <a href="mailto:ishtiak@gmail.com">ishtiak@gmail.com</a><br>Password: Emon1234!@<br>Re-type Password: Emon1234!@ | User should successfully create an account and log in | As Expected               | Pass               |
| Click Login   | Click 'Login'   | It will take to the Login page                        | It took to the login page | Pass               |
| Click Show Password   | Click 'Show password' checkbox  | It will show the typed password                       | The password is showed.   | Pass               |
| Post Condition: User is registered, validated with the database, and successfully logged into their account. The account creation and session details are logged in the database. |   |   |                           |                    |

## FORGOT PASSWORD

?

### Forgot Password?

No worries, We'll send you **reset instructions**

eg.example@gmail.com


Cancel Reset Password


Need Help?


## Test Planning for Forgot password Form


|  |   |  |   |                    |
|--|---|--|---|--------------------|
| Project Name: AI Health Navigator  |   |  | Test Designed by: Ishtiak Billah Emon   |                    |
| Test Case ID: FR_03  |   |  | Test Designed date: 14 September, 2024  |                    |
| Test Priority (Low, Medium, High): High  |   |  | Test Executed by: Ishtiak Billah Emon   |                    |
| Module Name: Forgot Password   |   |  | Test Execution date: 13 September, 2024 |                    |
| Test Title: Verify Forgot Password functionality with valid email or phone number  |   |  |   |                    |
| Description: Test the forgot password functionality  |   |  |   |                    |
| Precondition (If any): User must have a valid registered email or phone number   |   |  |   |                    |
| Test Steps   | Test Data   | Expected Results   | Actual Results                          | Status (Pass/Fail) |
| 1. Go to the website<br>2. Click ‘Forgot Password’<br>3. Enter valid Email / Phone number<br>4. Click ‘Reset password’ Button    | Email: <a href="mailto:ishtiak@gmail.com">ishtiak@gmail.com</a> | User should receive a password reset email / message with instruction. | As Expected                             | Pass               |
| 5. Click on ‘Cancel’ button  | Click on ‘Cancel’ button  | Process is canceled and user is redirected to the login page.          | As Expected.                            | Pass               |
| 6. Click Hamburg Icon  | Click on ‘Hamburg’ button                                       | It will open user settings   | As Expected                             | Pass               |
| 7. Use the "Help" button for assistance  | Click "Help"  | Help window should appear with available assistance options            | As Expected.                            | Pass               |
| Post Condition: Password reset instructions are sent to the user's email or phone number. The process is logged in the database. |   |  |   |                    |


# MEDICINE ORDER FORM

 July 30, 2024

Ishtiak 





[Upload Prescription](#) 


Antibiotics ▾


Antipyretics ▾


Antacids ▾


Antivirals ▾


Diuretics ▾












Nebanol Plus


Famotack 50ml


Glysup 2.30


Seclo 20 mg


Brofe syrup


Add to Cart 


Add to Cart 

Add to Cart 

Add to Cart 

Add to Cart 

 Select Your Nearest Pharmacy




## Test Planning for Medicine Ordering Form

|  |                            |   |                |                    |
|--|----------------------------|---|----------------|--------------------|
| Project Name: AI Health Navigator  |                            | Test Designed by: Ishtiak Billah Emon                               |                |                    |
| Test Case ID: FR_04  |                            | Test Designed date: 14 September, 2024                              |                |                    |
| Test Priority (Low, Medium, High): High  |                            | Test Executed by: Ishtiak Billah Emon                               |                |                    |
| Module Name: Medicine Ordering   |                            | Test Execution date: 13 September, 2024                             |                |                    |
| Test Title: Test the process of ordering medicines   |                            |   |                |                    |
| Description: Test the signup page  |                            |   |                |                    |
| Precondition (If any): User must have an active account, valid payment method, and must be logged in |                            |   |                |                    |
| Test Steps   | Test Data                  | Expected Results  | Actual Results | Status (Pass/Fail) |
| 1. Search for a specific medicine  | Medicine Name: Paracetamol | The expected medicine appeared or a text of unavailability appeared | As Expected    | Pass               |

|  |                          |  |              |      |
|--|--------------------------|--|--------------|------|
| 2. Add medicine to the cart  | Quantity: 2 units        | Medicine should be added to the cart successfully                                    | As Expected. | Pass |
| 3. Select a category (e.g., Antibiotics)   | Category: Antibiotics    | Medicines related to the selected category should be displayed                       | As Expected  | Pass |
| 4. Click the "Upload Prescription" button  | Upload: Prescription.pdf | Prescription should be uploaded successfully   | As Expected  | Pass |
| 5. Click the user icon   | Click the user icon      | User profile should open, displaying user details (name, email, order history, etc.) | As Expected  | Pass |
| 6. Use the "Help" button for assistance  | Click "Help"             | Help window should appear with available assistance options                          | As Expected. | Pass |
| Post Condition: Password reset instructions are sent to the user's email or phone number. The process is logged in the database. |                          |  |              |      |

## MAIN DASHBOARD FORM



WELCOME

Analyze Symptoms

Image Diagnosis

Consultation


Lab Test

Order Medicine

User Profile

Settings

Log Out

AI HEALTH NAVIGATOR

Daily Health Tips

- Featured Article 1  
[\[Read More\]](#)
- Featured Article 2  
[\[Read More\]](#)

User's Recent Activity

- Symptom Analysis: [Date]
- Uploaded Image: [Date]
- Consultation: [Doctor Name], [Date]

Personalized Recommendations

- Health Tip: Drink more water!
- Event: Free Health Check-Up Camp

Health Dashboard

- Steps Walked: [Value]
- Calories Burned: [Value]
- Goals: [Goal Title], [Status]

Promotions and Offers

- Discount on Medicines: [Details]
- Partner Services: [Details]

Community and Support

- Forum: [Recent Post Title] [\[Read More\]](#)
- Live Chat Support

## Test Planning For Main Dashboard Form

|   |   |
|---|---|
| Project Name: AI Health Navigator       | Test Designed by: Rafsan Mahmud         |
| Test Case ID: FR_05                     | Test Designed date: 13 September, 2024  |
| Test Priority (Low, Medium, High): High | Test Executed by: Rafsan Mahmud         |
| Module Name: Login                      | Test Execution date: 13 September, 2024 |




| Test Title: Verify the functionality of the main dashboard form                                    |                                      |   |  |                    |
|--|--------------------------------------|---|--|--------------------|
| Description: Validate the display and functionality of the AI Health Navigator dashboard sections. |                                      |   |  |                    |
| Precondition (If any): User must login first to get access to this dashboard                       |                                      |   |  |                    |
| Test Steps   | Test Data                            | Expected Results  | Actual Results   | Status (Pass/Fail) |
| 1. Navigate through the dashboard sections Enter username  | User is logged in.                   | Each section should display correct data                      | The system displays the welcome section with the user's avatar and name correctly. | Pass               |
| 2. Click on "Analyze Symptoms"   | Click the "Analyze Symptoms" button. | Displays the symptom analysis Form.                           | The system navigates to the Symptom Analysis section                               | Pass               |
| 3. Click on Image Diagnosis  | Click the "Image Diagnosis" button.  | Displays the Image diagnosis form.                            | Image diagnosis form successfully open   | Pass               |
| 4. Consultation  | Click the "Consultation" button.     | A form list of Doctors for consultation will open up.         | Consultation form successfully loaded.   | Pass               |
| 5. Lab Test  | Click the "Lab Test" button.         | Form for scheduling lab test will open                        | The system navigates to the Lab Test scheduling form.                              | Pass               |
| 6. Order Medicine  | Click the "Order Medicine" button.   | Online medicine store form will open                          | The system navigates to the Medicine Ordering section.                             | Pass               |
| 7. User Profile  | Click the "User Profile" button.     | User profile form will open to show all the user information. | The system navigates to the User Profile section.                                  | Pass               |
| 8. Settings  | Click the "Settings" button.         | A button to access application settings.                      | The system navigates to the Settings section.                                      | Pass               |
| 9. Log Out   | Click the "Log Out" button.          | A button to log out of the application.                       | The system successfully logs the user out and redirects to the                     | Pass               |

|   |   |  |   |      |
|---|---|--|---|------|
|   |   |  | login screen.   |      |
| 10. Daily Health Tips   | Verify the section displays health articles.                                | Displays featured health articles with links to read more.                                       | The system displays featured health articles with links to read more.                                       | Pass |
| 11. User's Recent Activity  | Check for recent activities related to symptoms, images, and consultations. | Shows recent activities such as symptom analysis, uploaded images, and consultations with dates. | The system shows recent activities such as symptom analysis, uploaded images, and consultations with dates. | Pass |
| 12. Personalized Recommendations  | Review personalized tips and health event listings.                         | Displays featured health articles with links to read more.                                       | The system provides personalized health tips and upcoming event details.                                    | Pass |
| 13. Health Dashboard  | View metrics related to user health (steps, calories, goals).               | Displays user health metrics including steps walked, calories burned, and goal status.           | The system displays user health metrics, including steps walked, calories burned, and goal statuses.        | Pass |
| 14. Promotions and Offers   | Look for current promotions like discounts on medicines.                    | Lists current promotions, such as discounts on medicines and partner services.                   | The system lists promotions, including discounts on medicines and partner services.                         | Pass |
| 15. Community and Support   | Check access to forums and chat support.                                    | Offers access to a forum for community discussions and live chat support.                        | The system provides access to the community forum and live chat support options.                            | Pass |
| 16. Notification  | Click on the notification icon.   | A notification box will pop up to show notifications   | As Expected   | Pass |
| Post Condition: The system navigates correctly and displays accurate content for each button and section. |   |  |   |      |

## SYMPTOMS ANALYSIS AND FEEDBACK FORM

Symptoms Analysis and Feedback

BASIC INFO  
DETAILS  
SYMPTOM DETAILS  
DIAGNOSIS  
TREATMENT PLAN  
BOOK DOCTORS




BackSkipNext

Describe your Symptoms


Type your problems  
Feeling pain in the head for last 2 days  
also recurrent vomiting.

Your Symptoms

- Nausea
- Headache

Diagnosis Result

Possible Causes:  
  
Migraines, Infection,  
Hypertension, Tumor



Suggested Doctors

Dr. Sandip Kumar  
Dash. MBBS(DMC)

BOOK

Dr. Shahpar Nahrir.  
MBBS (DU)

BOOK

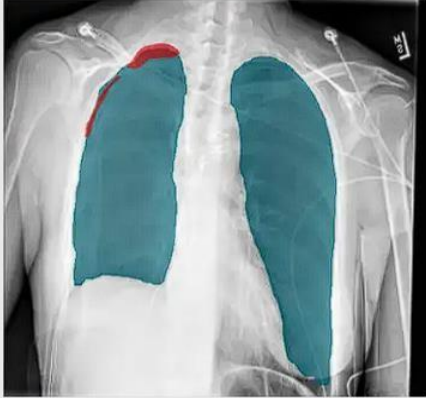
## Test Planning for Symptoms analysis and Feedback Form

|   |           |                  |   |                    |
|---|-----------|------------------|---|--------------------|
| Project Name: AI Health Navigator   |           |                  | Test Designed by: Rafsan Mahmud         |                    |
| Test Case ID: FR_06   |           |                  | Test Designed date: 13 September, 2024  |                    |
| Test Priority (Low, Medium, High): High                                       |           |                  | Test Executed by: Rafsan Mahmud         |                    |
| Module Name: Symptom Entry and Feedback                                       |           |                  | Test Execution date: 13 September, 2024 |                    |
| Test Title: Verify symptom submission and diagnosis feedback                  |           |                  |   |                    |
| Description: Test the user interface for symptom input and diagnosis feedback |           |                  |   |                    |
| Precondition (If any): User has access to the symptom analysis interface.     |           |                  |   |                    |
| Test Steps  | Test Data | Expected Results | Actual Results                          | Status (Pass/Fail) |

|  |                              |  |  |      |
|--|------------------------------|--|--|------|
| 1. Enter symptoms: Nausea, Headache  | Symptoms: Nausea, Headache   | Symptoms are listed under 'Your Symptoms' section    | "Nausea" and "Headache" appeared under 'Your Symptoms'                               | Pass |
| 2. Click "Next" button   | N/A                          | System should display diagnosis result               | User successfully directed to the diagnosis results page                             | Pass |
| 3. Verify possible causes  | N/A                          | System should show possible causes based on symptoms | Possible causes (Migraines, Infection, Hypertension, Tumor) were displayed correctly | Pass |
| 4. Suggested doctors section   | N/A                          | System should list doctors related to symptoms       | Suggested doctors (Dr. Sandip Kumar, Dr. Shahpar Nahrir) were displayed              | Pass |
| 5. Book Doctor   | Click the book doctor button | A box with doctor booking schedule will be shown.    | Consultation form with doctor profile opened   | Pass |
| Post Condition: User's symptoms are correctly analyzed, diagnosis is provided, and doctor suggestions are displayed. |                              |  |  |      |

# IMAGE DIAGNOSIS FORM

IMAGE DIAGNOSIS





**Pneumothorax**  
Probability level : 30%  
Show in the image ☒

**Fibrosis**  
Probability level : 40%  
Show in the image ☒

**Pneumonia**  
Probability level : 70%  
Show in the image ☒

**Lung Segments**  
Show in the image ☒

 Upload an Image (CT scan, MRI, X-ray)

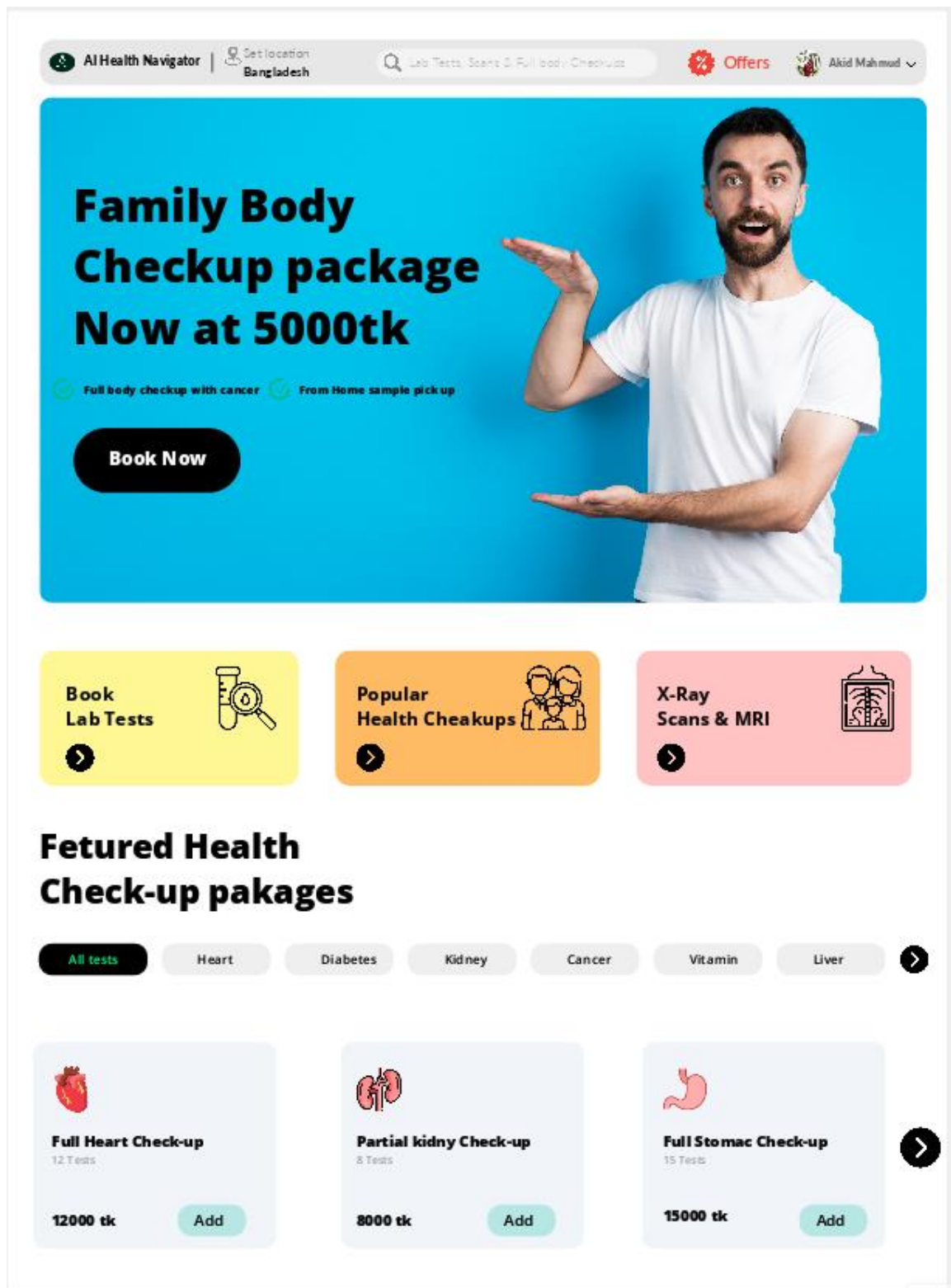
 **EXPORT RESULTS**

## Test Planning For Image Diagnosis Form

|   |           |   |                |                    |
|---|-----------|---|----------------|--------------------|
| Project Name: AI Health Navigator   |           | Test Designed by: Rafsan Mahmud         |                |                    |
| Test Case ID: FR_07   |           | Test Designed date: 13 September, 2024  |                |                    |
| Test Priority (Low, Medium, High): High   |           | Test Executed by: Rafsan Mahmud         |                |                    |
| Module Name: Image Diagnosis  |           | Test Execution date: 13 September, 2024 |                |                    |
| Test Title: Verify diagnosis from uploaded image (CT scan, MRI, X-ray)                    |           |   |                |                    |
| Description: Test the functionality of the image diagnosis system with probability levels |           |   |                |                    |
| Precondition (If any): The user must upload an image (CT scan, MRI, or X-ray)             |           |   |                |                    |
| Test Steps  | Test Data | Expected Results                        | Actual Results | Status (Pass/Fail) |

|  |   |  |  |      |
|--|---|--|--|------|
| 1. Upload a medical image (CT scan, MRI, X-ray).   | Image file format: JPG, PNG, DICOM              | The image should upload successfully and display on the screen.  | Image uploaded successfully and displayed correctly.         | Pass |
| 2. Click "Show in the image" toggle for each condition.  | Pneumothora, Fibrosis, Pneumonia, Lung Segments | The image should update, highlighting the respective areas for each condition with probability levels displayed. | Image updated and highlighted corresponding areas correctly. | Pass |
| 3. Click "Export Results" button.  | N/A   | A report with the diagnosis and probability levels should download successfully.                                 | Diagnosis report downloaded successfully.                    | Pass |
| Post Condition: The system successfully analyzes the image, highlights conditions, and exports the diagnosis report. |   |  |  |      |

# Test Planning for Lab Test Form



Project Name: AI Health Navigator  
Test Case ID: FR\_05  
Test Priority (Low, Medium, High): High  
Module Name: Lab Test Form

Test Title: Verify lab test selection, package booking, and price calculation

Test Designed by: Akid Mahmud

Test Designed Date: 14 September, 2024

Test Execution Date: 13 September, 2024

Test Executed by: Akid Mahmud

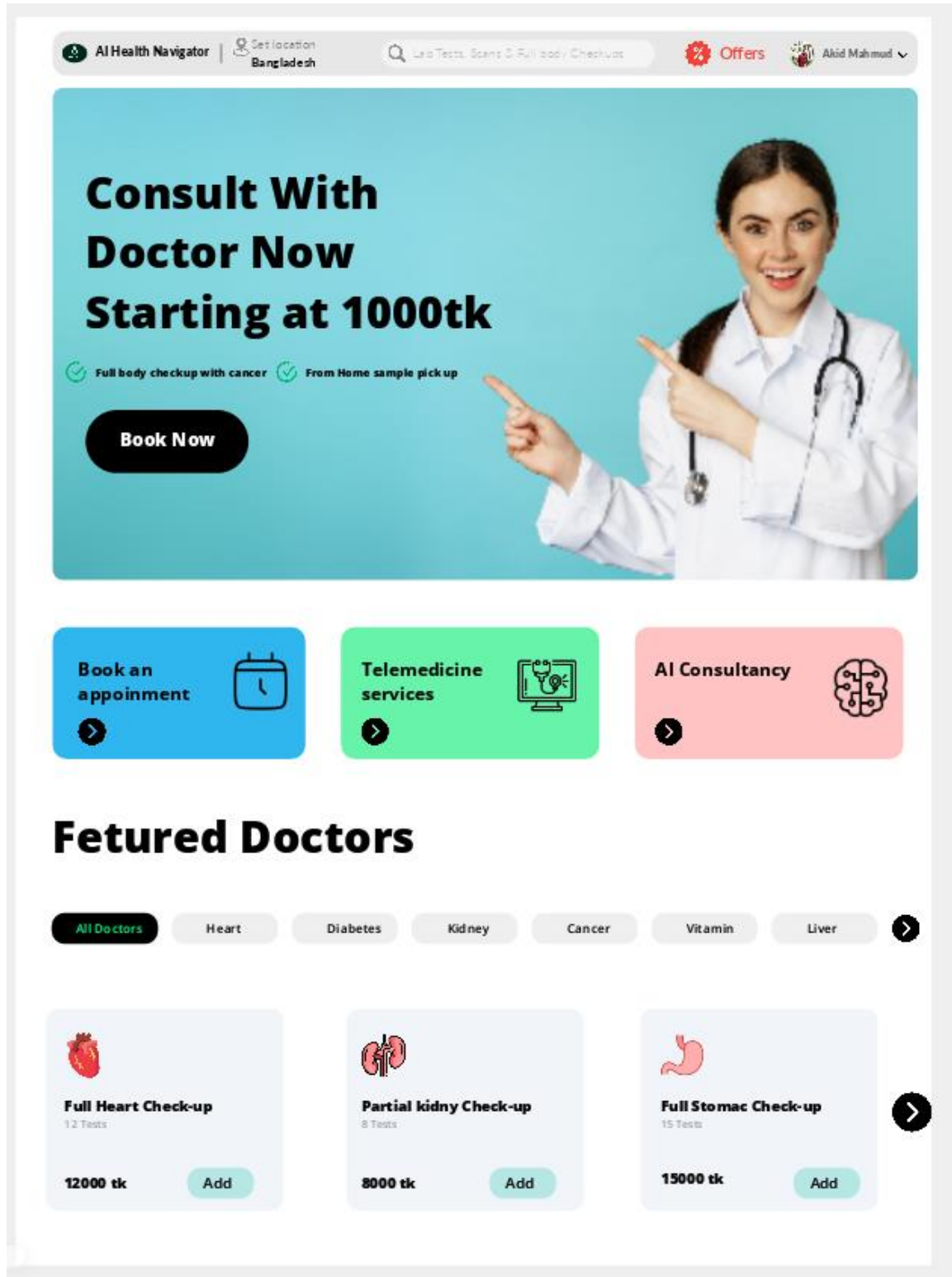
| Test Steps                                   | Test Data                    | Expected Results  | Actual Results | Status (Pass/Fail) |
|--|------------------------------|---|----------------|--------------------|
| Go to the website                            | N/A                          | Website should open successfully                        | As expected    | Pass               |
| Select a package (e.g., Full Heart Check-up) | Package: Full Heart Check-up | Package should be selected, price displayed as 12000 tk | As expected    | Pass               |
| Click Add                                    | N/A                          | Package added to cart                                   | As expected    | Pass               |
| Check total price in cart                    | N/A                          | Price should reflect the correct amount (12000 tk)      | As expected    | Pass               |
| Complete booking                             | N/A                          | Booking confirmation should appear                      | As expected    | Pass               |

Post Condition: User should be able to book a lab test package, see correct pricing, and receive confirmation.



# Test Planning for Doctor Appointment Form

Project Name: AI Health Navigator



Test Case ID: FR\_06


Test Priority (Low, Medium, High): High  
Module Name: Doctor Appointment Form  
Test Title: Verify doctor appointment booking and price calculation  
Test Designed by: Akid Mahmud  
Test Designed Date: 14 September, 2024  
Test Execution Date: 13 September, 2024  
Test Executed by: Akid Mahmud

| Test Steps   | Test Data                    | Expected Results  | Actual Results | Status (Pass/Fail) |
|--|------------------------------|---|----------------|--------------------|
| Go to the website                                      | N/A                          | Website should open successfully                        | As expected    | Pass               |
| Select doctor consultation (e.g., Full Heart Check-up) | Service: Full Heart Check-up | Service should be selected, price displayed as 12000 tk | As expected    | Pass               |
| Click Add  | N/A                          | Consultation added to cart                              | As expected    | Pass               |
| Check total price in cart                              | N/A                          | Price should reflect the correct amount (12000 tk)      | As expected    | Pass               |
| Complete booking                                       | N/A                          | Booking confirmation should appear                      | As expected    | Pass               |

Post Condition: User should be able to book a doctor appointment, see correct pricing, and receive confirmation.

## Test Planning For User Profile Form

|  |           |                  |  |                    |
|--|-----------|------------------|--|--------------------|
| Project Name: AI Health Navigator  |           |                  | Test Designed by: M Shahriar Alam Shajid |                    |
| Test Case ID: FR_08  |           |                  | Test Designed date: 13 September, 2024   |                    |
| Test Priority (Low, Medium, High): High  |           |                  | Test Executed by: M Shahriar Alam Shajid |                    |
| Module Name: User Profile  |           |                  | Test Execution date: 13 September, 2024  |                    |
| Test Title: Verify User profile by Modifying information.  |           |                  |  |                    |
| Description: Test user profile form captures valid inputs, triggers error messages for invalid data, and submits successfully. |           |                  |  |                    |
| Precondition (If any): The user profile form is accessible and the application is running.                                     |           |                  |  |                    |
| Test Steps   | Test Data | Expected Results | Actual Results                           | Status (Pass/Fail) |





## PROFILE



NAME : Shahriar Shajid

EMAIL : shuvo09sa@gmail.com


CONTACT : 01952398633

ADDRESS : Cantonment

ABOUT : N/A



|  |                     |   |  |      |
|--|---------------------|---|--|------|
| 1. Open the user profile form  | N/A                 | The form should be displayed properly   | Form displays correctly                            | Pass |
| 2. Enter valid name  | Shahriar Shajid     | The name field should accept the input  | Name field accepts input                           | Pass |
| 3. Enter valid email   | shuvo09sa@gmail.com | The email field should accept the input and show no error message                     | Email field accepts input                          | Pass |
| 4. Enter valid contact number  | 01952398633         | The contact field should accept the input   | Contact field accepts input                        | Pass |
| 5. Enter address   | Cantonment          | The address field should accept the input   | Address field accepts input                        | Pass |
| 6. Enter "N/A" in the about section  | N/A                 | The form should accept "N/A" in the about field                                       | About field accepts input                          | Pass |
| 7. Submit the form   | N/A                 | The form should be submitted successfully, showing a confirmation or success message. | Form submission successful, confirmation displayed | Pass |
| Post Condition: The user profile data is saved and displayed correctly after successful form submission. |                     |   |  |      |



First Name

Shahriar

Last Name

Shajid

Password

\*\*\*\*\*

Change Password

Email

shuvo09sa@gmail.com

Phone

01952398633

Address

Cantonment

Gender

Male

Language

English

Date of Birth

20

August

2002

Notification

Enable

Facebook

https://www.facebook.com/shuvo09sa

Payment Method

bKash

Payment

Remove

VISA

Remove

Change Payment Method

Add Payment Method

Save changes

# Test Planning For User Profile Form

|   |           |  |  |                    |
|---|-----------|--|--|--------------------|
| Project Name: AI Health Navigator   |           |  | Test Designed by: M Shahriar Alam Shajid |                    |
| Test Case ID: FR_09   |           |  | Test Designed date: 13 September, 2024   |                    |
| Test Priority (Low, Medium, High): High   |           |  | Test Executed by: M Shahriar Alam Shajid |                    |
| Module Name: Settings   |           |  | Test Execution date: 13 September, 2024  |                    |
| Test Title: User Profile Settings Form Validation and Functionality Test.   |           |  |  |                    |
| Description: This test verifies the functionality and validation of the user profile settings form, including input fields, payment methods, notifications, and password changes. |           |  |  |                    |
| Precondition (If any): The user is logged into their account and the settings form is accessible..  |           |  |  |                    |
| Test Steps  | Test Data | Expected Results                               | Actual Results                           | Status (Pass/Fail) |
| 1. Open the settings form   | N/A       | The settings form should be displayed properly | Form displays correctly                  | Pass               |

|                                      |                                    |   |                                    |      |
|--------------------------------------|------------------------------------|---|------------------------------------|------|
| 2. Enter valid first name            | Shahriar                           | The first name field should accept the input                      | First name field accepts input     | Pass |
| 3. Enter valid last name             | Shajid                             | The last name field should accept the input                       | Last name field accepts input      | Pass |
| 4. Enter valid email                 | shuvo09sa@gmail.com                | The email field should accept the input and show no error message | Email field accepts input          | Pass |
| 5. Enter valid phone number          | 01952398633                        | The phone number field should accept the input                    | Phone field accepts input          | Pass |
| 6. Enter valid address               | Cantonment                         | The address field should accept the input                         | Address field accepts input        | Pass |
| 7. Select gender                     | Male                               | The gender field should allow selection of an option              | Gender field allows selection      | Pass |
| 8. Enter date of birth               | 20 August 2002                     | The date of birth field should accept a valid date                | Date of birth accepted             | Pass |
| 9. Select language                   | English                            | The language field should allow selection of a language           | Language field allows selection    | Pass |
| 10. Enable notifications             | Enable                             | The notifications toggle should allow enabling                    | Notification toggled successfully  | Pass |
| 11. Enter valid Facebook profile URL | https://www.facebook.com/shuvo09sa | The Facebook field should accept a valid URL                      | Facebook field accepts valid URL   | Pass |
| 12. Add valid payment method         | bKash, VISA                        | The form should allow adding and displaying valid payment methods | Payment methods added successfully | Pass |

|   |                                      |  |   |      |
|---|--------------------------------------|--|---|------|
| 13. Remove payment method   | Click "Remove" next to bKash or VISA | The form should allow removing the selected payment method                       | Payment method removed successfully               | Pass |
| 14. Click "Change Password"   | N/A                                  | The form should allow changing the password after appropriate verification steps | Password change process initiated                 | Pass |
| 15. Click "Save changes"  | N/A                                  | All changes made to the form should be saved and a success message displayed     | Changes saved successfully, success message shown | Pass |
| Post Condition: All changes made in the settings form are successfully saved and reflected in the user's profile. |                                      |  |   |      |

# Risk Management Table

| Risks                                  | Category | Probability | Impact | RMMM  |
|--|----------|-------------|--------|---|
| Size estimate may be significantly low | PS       | 70%         | 2      | Revisit size estimation due to potential significant underestimation.                       |
| Larger number of users than planned    | PS       | 40%         | 2      | Adjust project scalability strategy to accommodate the unexpected increase in user volume.  |
| Less reuse than planned                | PS       | 50%         | 3      | Revise reuse strategy and explore alternative approaches to maximize resource utilization.  |
| Resistance from end-users              | BU       | 30%         | 2      | Train the users to use this new technology.   |
| Tightened delivery deadline            | BU       | 30%         | 3      | Prioritize must-have feature development to accelerate development.                         |
| Loss of funding                        | CU       | 50%         | 1      | Hold frequent meetings with shareholders to show them the value they will get from funding. |
| Changing customer requirements         | PS       | 60%         | 3      | Follow agile practices to be ready to accommodate quick changes.                            |
| Technology not meeting expectations    | TE       | 50%         | 2      | Import advanced technology to meet expected quality or                                      |



|                                       |    |     |   |  |
|---------------------------------------|----|-----|---|--|
|                                       |    |     |   | custom build from China.   |
| Lack of training on development tools | DE | 80% | 1 | Prepare documentation and training materials for the development tools.  |
| Inexperienced staff                   | ST | 70% | 2 | Train the staff with new technologies.   |
| High staff turnover                   | ST | 40% | 2 | Implement knowledge transfer mechanisms to mitigate the impact of high staff turnover on project continuity.               |
| Hardware might malfunction            | DE | 30% | 1 | Incorporate redundancy measures and establish contingency plans to address potential hardware malfunctions.                |
| Connectivity issues                   | DE | 25% | 3 | Develop backup communication protocols and establish troubleshooting procedures to mitigate potential connectivity issues. |
| Incompatibility with existing systems | DE | 30% | 2 | Assess system compatibility early and invest in necessary integration tools or custom development.                         |
| Lack of user training                 | CU | 30% | 2 | Develop comprehensive user training  |

|  |    |     |   |   |
|--|----|-----|---|---|
|  |    |     |   | programs and provide ongoing support to mitigate the impact of a lack of user training.   |
| Physical safety hazards                      | CU | 15% | 1 | Conduct regular safety inspections and implement precautionary measures to mitigate potential physical safety hazards.                        |
| Incompatibility with existing infrastructure | TE | 40% | 2 | Perform thorough compatibility testing and establish migration strategies to address any incompatibility issues with existing infrastructure. |
| High production costs                        | BU | 30% | 2 | Optimize resource allocation and explore cost-saving measures to mitigate the impact of high production costs.                                |
| Delays in developing or manufacturing        | PR | 25% | 2 | Implement agile project management techniques and establish contingency plans to address delays in development or manufacturing.              |

**Impact Values:**

1 – Catastrophic

2 – Critical

3 – Marginal

4 – Negligible

## 9. CoCoMo (Constructive Cost Model)

### The Reason Behind choosing semi-detached:

The project features both well-understood modules, such as web development, and more complicated and innovative parts, such as AI-driven healthcare consultancy, integration with medical services, lab test orders, and medicine delivery. Such a combination of quite prosaic and challenging functions makes it a semi-detached project in certain cases, where there can be complexity but not really anything new or research oriented. Also Semi-detached projects include both experienced and less experienced team compositions. Therefore, in the case of the current project that involves website development with standard features like ordering tests and medicines, it will be relatively simple and can be assigned to less experienced developers. However, the consultancy module on AI has more complexity as it requires skilled developers who have experience in AI and its adaptation in healthcare, therefore reflecting the semi-detached nature of the project.

### Constructive Cost Model (COCOMO):

Let's assume our source Line of Code is 15000

Here,

Coefficient = 3.0 (for semi-detached)

SLOC = 15000

P = 1.12

T = 0.35

SLOC = 100000

**We know,**

Effort E = PM = Coefficient<sub><Effort Factor></sub> \* (SLOC/1000) ^P

$$\begin{aligned} E = PM &= 3.0 \times \left( \frac{100000}{1000} \right)^{1.12} \\ &= 521.34 \text{ person-month} \end{aligned}$$

$$\begin{aligned} \text{Development time} = DM &= 2.50 * (PM)^T \\ &= 22.33 \\ &\approx 22 \text{ Months} \end{aligned}$$

$$\begin{aligned} \text{Required number of people} = ST &= PM/DM \\ &= 23.70 \\ &\approx 24 \text{ people} \end{aligned}$$

So the development time will take 22 months and required people is 24