Use Case Title:
Sign Up

Actor:
Patient

Scenario:
1. Patient needs to go to the web application and click sign up.
2. Patient needs to put his/her name, age, date of birth, gender, blood group, address, occupation, email, password and contact number.
3. Patient can also sign up with his/her Facebook or Google account.
4. System will verify newly added Patient through email.
5. Patient account is stored into the database.

Pre-Condition:
1. URL of the web application from the web browser.
2. Patient required to have an email.
3. To sign up with Facebook or Google, Patient needs to be logged in there.

Post-Condition:
1. Successful: Account created successfully.
2. Unsuccessful: "You must fill up the required field" or "Please try again" or message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Internet connection lost.
3. Server traffic.

Use Case Title:
Log In

Actor:
Doctor, Patient

Scenario:
1. Doctor and Patient needs to put his/her email, password.
2. Check ID and password (User Authentication).
3. Save ID and password. (Cookies).
4. Remember password.
5. Doctor, Patient can also log in with his/her Facebook or Google account if he/she had signed up with any of those.
6. Doctor, Patient can recover his/her password by clicking on forget password.
7. Doctor, Patient can recover password from the sent link on email.

Pre-Condition:
1. URL of the web application from the web browser.
2. Patient needs to be signed up into the system.

Post-Condition:
1. Successful: Log in successfully.
2. Unsuccessful: "You must fill up the required field" or "Invalid email/password" or message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Internet connection lost.
3. Server traffic.

Use Case Title:
Chatbot

Actor:
Admin, Patient

Scenario:
1. Admin, Patient needs to open the chatbot.
2. Admin, Patient can type message in the textbox and send message.
3. Patient will be asked about his/her symptoms by chatbot.
4. Patient will be suggested one or more doctor's names according to his/her disease.
5. Patient will also be suggested with health-related guidelines according to his/her disease.
6. Patient will be displayed an invalid message if he/she sends inappropriate texts.

Pre-Condition:
1. Admin, Patient must need to have internet connection on the device.
2. URL of chatbot from web browser.
3. Admin, Patient must need to be logged into the system.

Post-Condition:
1. Successful: Successfully sent and received messages.
2. Unsuccessful: "Sorry, I did not get that" will appear on the screen when the chatbot fails to decipher the symptoms and match a doctor based on it.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Internet connection lost.

Use Case Title:
View Profile

Actor:
Admin, Doctor and Patient

Scenario:
1. Admin, Doctor and Patient needs to click on the view profile button.
2. Doctor and Patient can edit his/her profile.
3. Doctor and Patient can input his/her height and weight to have a calculated BMI.
4. Doctor and Patient can change his/her password from their profile.
5. Doctor and Patient can upload/remove his display picture.
6. Doctor and Patient can also delete his/her account.
7. Doctor can upload a medical license for system verification.
8. Patient can upload NID for system verification if they want to rate a doctor.
9. Admin, Patient can remove uploaded reports.
10. Admin, Doctor and Patient can turn off notifications from his/her profile.
11. Patient can add his/her reference on his/her profile.

Pre-Condition:
1. URL of the web application from the web browser.
2. Doctor and Patient needs to be logged in to the system.

Post-Condition:
1. Successful: View profile page appeared successfully.
2. Unsuccessful: Couldn't open view profile.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Internet connection lost.

Use Case Title:
Make Appointment

Actor:
Patient

Scenario:
1. Patient browses to the make appointment page.
2. Patient selects the doctor he/she wants to take appointment based on availability.
3. Patient puts the date of appointment.
4. Patient selects a preferable time for appointment from the available slots.
5. Patient confirms the selections.
6. Patient will get an OTP verification code for the confirmation of the appointment.
7. Patient will put the OTP code in the code field.
8. Patient confirms the appointment.

Pre-Condition:
1. Patient must need to have an internet connection on the device.
2. URL of this page from the web browser.
3. Patient must need to have a valid phone number.
4. Patient must need to log into the system.

Post-Condition:
1. Successful: Appointment is confirmed.
2. Unsuccessful: A "Please fill up the required field" message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. User input error.
4. Server traffic.

Use Case Title:
View Appointments

Actor:
Doctor, Patient

Scenario:
1. Doctor, Patient browse to the view appointment page.
2. Doctor, Patient view his/her upcoming appointments.
3. Doctor, Patient can cancel any appointment.
4. Doctor, Patient will get an email about the cancellation.
5. Patient can reschedule any cancelled appointments.

Pre-Condition:
1. Doctor, Patient need to have an internet connection on the device.
2. URL of this page from the web browser.
3. Doctor, Patient must need to log into the system.
4. Doctor, Patient must need to have an email.

Post-Condition:
1. Successful: Successfully viewed appointment.
2. Unsuccessful: Couldn't open view appointment and "Please try again" message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. Server traffic.

Use Case Title:
Add Doctor

Actor:
Admin

Scenario:
1. Admin needs to go to specialties page.
2. Admin needs to put the doctors' name, age, contact number, email, specialized field, work place name, work place address, designation, fees, working hours.
3. Information will be stored in the database.

Pre-Condition:
1. URL of this page from the web browser.
2. Admin must have to be a valid member of the organization.

Post-Condition:
1. Successful: Doctor is added successfully.
2. Unsuccessful: "You must fill up the required field" message will appear on the screen when any field is empty.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Server traffic.

Use Case Title:
Verify doctor

Actor:
Admin

Scenario:
1. Admin will check the medical license of the doctor.
2. Admin will verify the doctor by confirming the doctors' medical license valid.

Pre-Condition:
1. URL of this page from the web browser.
2. Admin must have to be a valid member of the organization.

Post-Condition:
1. Successful: Verified doctor successfully.
2. Unsuccessful: Couldn't verify the doctor.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Server traffic.

Use Case Title:
Search

Actor:
Patient

Scenario:
1. Patients enter the search criteria in the search box.
2. Patients search by a doctor's name.
3. Patients search by a doctor's specialty.
4. Patients search by a doctor's availability.
5. Patients search by doctor's ratings.
6. Patients search by a doctor's working place.
7. Patients search by a doctor's e-mail.
8. Patients search by fees of doctors.
9. Patients are provided with a customized list of doctors upon entering the search criteria.

Pre-Condition:
1. Patients must have a stable internet connection.
2. Patients must log in to the system with valid ID and password.
3. Patients must have the URL of the page from web browser.

Post-Condition:
1. Successful: Patient can successfully find their desired doctors.
2. Unsuccessful: Patient cannot search for the doctors. A task failure message will pop up in the same page.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Database failure.
3. User input error.
4. Server traffic.

Use Case Title:
About Us

Actor:
Patient/Doctor

Scenario:
1. Patients/doctors view various information about the website including contact information.
2. Patients/doctors can make a donation to the web application.
3. Patients/doctors can pay via bank account/bkash/rocket/nagad.
4. Patients/doctors receive an email notification after the successful transaction of money along with a thank you message.

Pre-Condition:
1. Patients/doctors must have a stable internet connection.
2. Patients/doctors must log in to the system with valid ID and password.
3. Patients/doctors must have the URL of the page from web browser.
4. Patients/doctors must have valid transaction mode.

Post-Condition:
1. Successful: Patients/doctors can successfully view website information and make a donation.
2. Unsuccessful: Patients/doctors cannot view website information and/or make a donation. A task failure message will pop up in the same page.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Database failure.
3. User input error.
4. Server traffic.
5. Insufficient bank/bKash/Rocket/Nagad balance.

Use Case Title:
Medication Schedule

Actor:
Patient/Doctor

Scenario:
1. Patients/doctors open the medication schedule page.
2. Patients/doctors manually enter their medication schedule with dosage and duration.
3. Patients/doctors can set a reminder before every scheduled dosage.
4. Patients/doctors can remove the medicine from the schedule upon completion.
5. Patients/doctors can keep notes of any side effects they may have been facing for use during the next scheduled appointment with a doctor.

Pre-Condition:
1. Patients/doctors must have a stable internet connection.
2. Patients/doctors must log in to the system with valid ID and password.
3. Patients/doctors must have the URL of the page from web browser.

Post-Condition:
1. Successful: Patients/doctors can successfully track their medication schedule.
2. Unsuccessful: Patients/doctors cannot view medication schedule. A task failure message will pop up in the same page.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. Database failure.
3. Server traffic.

Use Case Title:
Specialties

Actor:
Patients

Scenario:
1. Patient needs to click "Specialties" to open page.
2. Patient can view detailed information of all the doctors.
3. Patient can find and select his/her doctor of the specialized field.
4. Patient will be notified via email if a new doctor is added on the list.
5. Patient will be notified via email if a doctor is reassigned/shifted.

Pre-Condition:
1. Patient must have internet connection on the device.
2. URL of this page from web browser.
3. Patient must stay logged into the system to view the page.
4. Patient must have a valid account.

Post-Condition:
1. Successful: Specialties page has been successfully viewed.
2. Unsuccessful: Couldn't open Specialties page and "Please try again" message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. Server traffic.

Use Case Title:
Add Ratings

Actor:
Patients

Scenario:
1. Patient needs to click "Add Ratings" to open page.
2. Patient can upload his medical prescription in order to add ratings (out of 5 stars).
3. Patient can upload his/her NID/Birth Certificate which is needed to verify the ratings.
4. Patient can rate a doctor based on his/her service.
5. Patient can rate a doctor based on his/her behavior.
6. Patient can rate a doctor based on accurate diagnosis.
7. Patient can rate a doctor based on waiting time (if the doctor was not able to see him/her at the given time).
8. Patient can make comments about the service of a doctor.

Pre-Condition:
1. Patient must have internet connection on the device.
2. URL of this page from web browser.
3. Patient must stay logged into the system to view the page.
4. Patient must be an NID card holder or must possess a Birth Certificate.
5. Patient must possess medical prescriptions.

Post-Condition:
1. Successful: Rating has been successfully added.
2. Unsuccessful: "You must fill up the required field" message will appear on the screen if any field is empty.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. Server traffic.
4. User input error.

Use Case Title:
View Ratings

Actor:
Patients, Doctors

Scenario:
1. Doctors can view his/her ratings (out of 5 stars) given by each patient.
2. Doctors can view his feedback/comments given by each patient.
3. Patient can view ratings given by other patients and compare each doctor's service, behaviour, diagnosis and waiting time.

Pre-Condition:
1. Patient must have internet connection on the device.
2. Patient must have a valid account.
3. URL of this page from web browser.
4. Patient must stay logged into the system to view the page.

Post-Condition:
1. Successful: Ratings have been successfully viewed.
2. Unsuccessful: Couldn't open View Ratings page and "Please try again" message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. Server traffic.
4. Database failure.

Use Case Title:
Remove Doctor

Actor:
Admin

Scenario:
1. Admin can remove Doctor/Patient when required.
2. Admin will notify the Doctor/Patient via email after removing him/her.
3. Admin can remove a patient if his/her comments regarding a doctor on ratings page is vulgar or hateful.
4. Admin can remove a Patient/Doctor if his/her account gets caught as a fraud.

Pre-Condition:
1. Admin must have internet connection on the device.
2. Admin must be a valid member of the organization.
3. URL of this page from web browser.

Post-Condition:
1. Successful: Patient/Doctor has been successfully removed.
2. Unsuccessful: Couldn't open Remove User page and "Please try again" message will appear on the screen.
3. Exception: Stay on the same page if possible.

Exception:
1. Required page not found.
2. No internet connection.
3. Server traffic.
4. Database failure.
5. User input error.