Project Documentation

Project Title: Online Autism Skill Care

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We hereby declare that we have taken this thesis under the supervision of **Shikha Anirban, Assistant Professor, Department of Software Engineering, Daffodil International University.** We also declare that neither this thesis nor any part of this has been submitted elsewhere for award of any degree.

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ABSTRACT

Online Autism Skill Care is web based software where it has three types of users - autism patient, doctor and system admin. Mainly this system will help to know or identify autism patient's skills. However the autism spectrum disorder will not be able to access this system directly. So on behalf of the patient someone else will be able to operate this system by log into the system as patient. The test is designed based on several symptoms that have been notified in an autistic patient. Patient will fill up all of the question answer and will get a test report which will be automatically generated by the system. A valid registered doctor in this system will analyze this report and gives a prescription to the patient. System admin and doctor upload relevant video which help autistic patient to improve their mental skills. To join as doctor in this system, every doctor needs to create 100% profile creation for further authentication by the system admin to allow in doctor list.

Finally it can be observed from the above scenario, by maintaining this system regular basis, this system can meet to identify autism patient skill and improve patient performance by analyzing symptom identification test report.

Chapter 1: Introduction

1.1 Background

This System will be benefited from several ways. This system helps anyone to remotely access the system of online in any location. Patients are mostly benefited by giving test in this system and by watching learning videos.

1.2 Purpose

The purpose of this project is to provide treatment to autism patient regularly through online autism skill care system. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This project is intended for both the stakeholders and the developers of the system and for its approval.

1.3 Project Goals

The goals of autism skill care system are to identify autistic patient skill and to develop their skill through the continuous giving intellectual test, which generates report variation day by day and doctor can analyzing this report for giving treatment properly as well as patient can get treatment 24/7 basis. Thus it is possible to overcome patient mental weakness and increase patient moral, social skills and intellectuals gradually.

1.4 Scope of Project

The web application of “Autism Skill Care” System will be designed for autistic people. Autism people will determine through some specific symptoms and these symptoms are remaining in autistic people. This system will able to measure the possibility of being autistic based on the symptoms that have been selected by the end user. The system will provide some video clips for find out the workability of humor sense. More especially this system will designed to learn the basic knowledge from surrounding environment.

After completing the basic learning stage could able to attend the test based on the learning subject.

There is few symptom identification test category. Symptom identification test results are keeping into the system according to patient id and patient can see last 4 symptom identification test report with date wise when they need as well as they can print the result from the patient user panel. Doctor will create prescription for their current patient by analyzing symptom identification test report.

1.5 Related work

On the primary research phase; to get empirical research methods, ideas and research paper; we have found related project “centerforautism” this system is basically static web site. It just shows static information about autism detection. Mainly this web site is maintaining under “Center for Autism” institution. Mainly they have been provided autism patient skill development service since 1990 to yet into their institution. This is manual process treatment. Still we had not found any application which has able to detect automatically autism by inputs symptoms. We have design our system to detect autism case automatically through some symptoms input and provide care this type of patient through online. Which is fully automatic process.

1.6 Idea and Motivation

Many of the children with autism known to have outgrown their diagnosis received intense behavioral therapy for long periods of time during childhood. The term recovery this type of patient may overcome by applying intensive therapy. So the system is designed based on this therapy which contains the intensive therapy features which motivate the autism spectrum patient upgrade their behavior and intellectuals.

1.7 System Features

Features are designed based on patient symptom category because this kind of patients is performing different activities in their daily life compare with their mental condition. However usually different age refers different conditions skills of the patients.

- Age Selection
- Gender Selection
- Performance chart
- Intellectuals test stages
- Stage Categories
- Physiologist marking
- Learning Video clips
- Performance Result record.
- Certification for expert diagnosis the patient present condition.

1.8 Development Process

During the development period, it's essential to test each and every phase of software development life cycle, depends on the system specification 'Scrum meetings' is preferable by us for implementation the idea. Because we have to discuss with our scrum master about every functionality and will gather the specific domain knowledge of specific features. So the field of the 'Scrum meeting' helps to develop the system under the supervision.

1.9 Scrum Methodology

The Scrum approach to agile software development marks a dramatic departure from waterfall management. Scrum and other agile methods were inspired by its shortcomings. Scrum emphasizes collaboration, functioning software, team self-management, and the flexibility to adapt to emerging business realities.

Scrum has only three roles: Product Owner, Team, and Scrum Master.

1.9.1 Product Owner

- Single person responsible for maximizing the return on investment (ROI) of the development effort
- Responsible for product vision

- Constantly re-prioritizes the Product Backlog, adjusting any long-term expectations such as release plans
- Final judge of requirements questions
- Accepts or rejects each product increment
- Decides whether to ship
- Decides whether to continue development
- Considers stakeholder interests
- May contribute as a team member

1.9.2 Scrum Development Team

- Cross-functional (e.g., includes members with testing skills, and often others not traditionally called developers: business analysts, domain experts, etc.) Self-organizing / self-managing, without externally assigned roles
- Negotiates commitments with the Product Owner, one Sprint at a time
- Has autonomy regarding how to reach commitments
- Intensely collaborative
- Most successful when located in one team room, particularly for the first few Sprints
- Most successful with long-term, full-time membership. Scrum moves work to a flexible learning team and avoid moving people or splitting them between teams.
- 3-9 members (originally 7 ± 2 members)

1.9.3 Scrum Master

- Facilitates the Scrum process
- Helps resolve obstacles
- Creates an environment conducive to team self-organization
- Captures experimental data to adjust forecasts
- Protects the team from external interference and scattering to keep it in group flow (a.k.a. the zone)
- Enforces time boxes
- Keeps Scrum artifacts visible

- Promotes improved engineering practices
- Has no management authority over the team (anyone with authority over the team is by definition not its Scrum Master)

1.9.4 Scrum Meetings

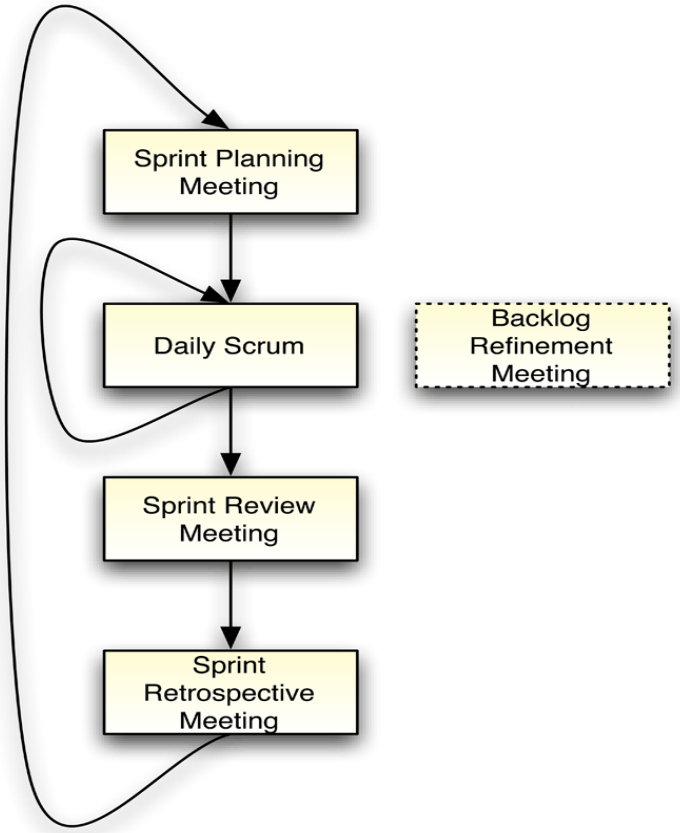


Fig: 1.1 Scrum Methodology Diagram

1.10 Project Difficulties

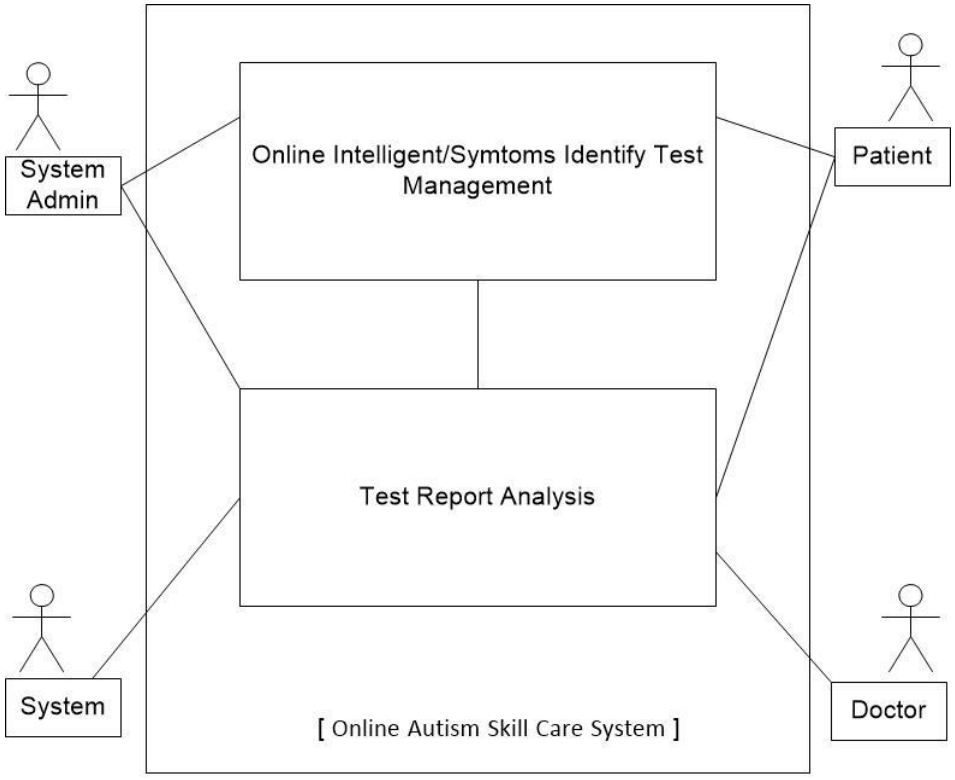
There are huge paper exist that we can find through the internet but major problem is developed system in this fields are not open source so we will not help from another existing system. That's why the system will designed based on intensive therapy which resources are collected from the

internet. And we will develop it depending on intensive therapy techniques which are most popular successful method overcomes the “Autistic behavior”.

- Existing systems are not open sources
- Limitation of ‘Autism Spectrum’ for the testing purpose during the developing period.
- Limitation of meet in real life ‘Autism Spectrum’ experts for the testing purpose during the developing period.

Chapter 2: Software Requirement Specification (SRS)

2.1 System Environment



[Fig: 1 System Environment]

Fig: 2.1 Overall System Environments

The online autism skill care system has four active actors. The Patient, System admin, Doctor access the “”autism skill care” system trhough the internet. Another actor system itself which generates reports. System admin access entire system directly.

The division of the “autism skill care” system into two component parts, the symptom identification test management and the report generation.

2.2 Functional Requirements Specification

This section outlines the use cases for each of the active user separately.

2.2.1 Patient Use Case

Use case: User Registration

Registration required for patient to access the system by patient account. Once patient account created, patient can log into their system by using user name and password.

Diagram:

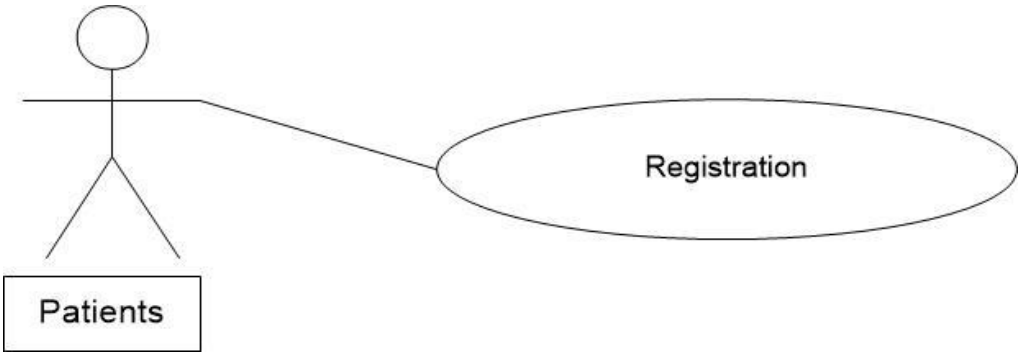


Fig: 2.2 Patient Use Case Registration

2.2.1.1 Initial Step-By-Step Description

Before this use case can be initiated, the Patient has already accessed the online autism careWebapplication.

1. For registration as patient need to provide information as bellow.
    - User Name
    - Age
    - Gender
    - Email address
    - Password

2.2.1.2 Functional Requirement

Table: 2.1 User Registrations

Use Case Name	Registration
Trigger	The System admin,Doctor,Patients access the Online autism care web application Website
Precondition	The Web is displayed with User Registration form for Registration.
Basic Path	1. Patient provide information for log into the system 2. Doctor provide information for log into the system 3. System admin registration not required.
Alternative Paths	In steps 1. System admin log into the system using user name and password that has been provided for log into the syetm as system admin. 2. After registration process complete doctor need to send join request for account activaton as doctor. 3. After validation doctor account doctor can get into the system using user name and password that has provided by doctor during registration process. 4.For patient no need to account verification. 5.Patient can get into the system using user name and password that has provided by patient during registration process.
Post condition	End user get access into the system by login policy.
Exception Paths	End user account recovery option using forgot password.
Other	Without being registration no user can access the system.

2.2.2 **Use case:** Information seen and update

By successful login as patient type, patient can change their previus information that has provide during account creation process.

Diagram:

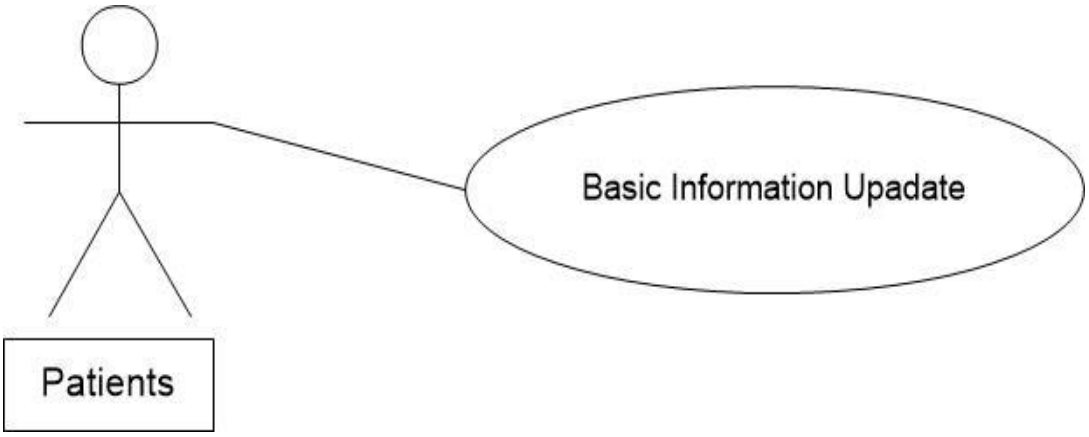


Fig: 2.3 Patient Use Case Basic Information Update

2.2.2.1Initial Step-By-Step Description

From the patient profile update option they can update and see their given informaton.

- User Name
- Age
- Gender
- Email address
- Password

2.2.2.2 Functional Requirement

Table: 2.2 User Information Update

Use Case Name	Information seen and update
Trigger	The System admin,Doctor,Patients able to seen and update their information from the Online autism care web application Website
Precondition	The Web is displayed with User information for see and update.
Basic Path	1. Patients will see basic information from their profile. 2. Doctors will see basic information from their profile.
Alternative Paths	1. Patients can update their password from log in panel by clicking forgot password option. 2. Doctors can update their password from log in panel by clicking forgot password option.
Post condition	After update information new informaiton will show on system.
Exception Paths	End user account recovery option using forgot password.
Other	End user can update their registration information single time for a month.

2.2.3 **Use case:** Give Intellectual Test/ Symptom Identification

By successfull login as patient type, patient can give symptom identification test. In fact our intended patient are autistic as a result they can not give symptom identification test[2] directly because autistic patient do not have sufficient intelligence to correct input into the system and predict expected outpur from the system.

Diagram:

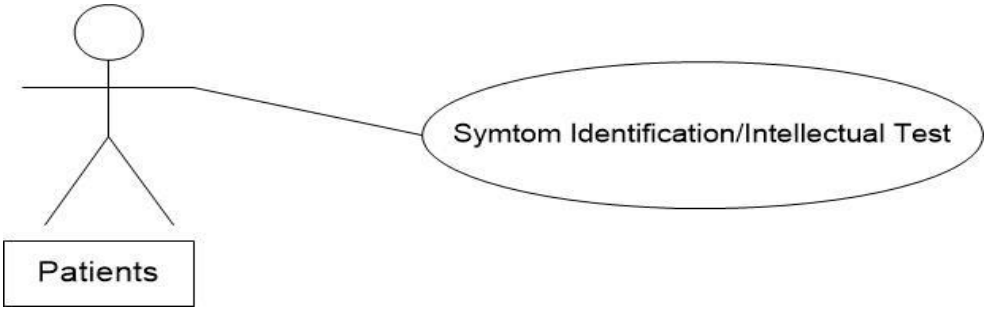


Fig: 2.4 Patient Use Case Give Intellectual Test

2.2.3.1Initial Step-By-Step Description

This stage requires some symptom input about patient nature.

- Behaviour of patient[2]
- Generally like to do.[3]
- Habbit[4]

2.2.3.2 Functional Requirement

Table: 2.3 Symptom Identification, Intellectual Test

Use Case Name	Symtom Identification/Intellectual test
Trigger	Symtom Identification form will be fill up by the patient parents or relatives.
Precondition	The Web applications displayed with symtom identification from.
Basic Path	1. Check mark option of each question. 2. Each question leads to identify the system about present condition. 3. There is multiple selection option for fetting acurate report. 4. Based on check mark system generating a report.
Alternative Paths	In steps 1. If wrong option select can able to reselect option for correct marking.
Post condition	After check mark submission all the question with proper marking can see the test report .
Exception Paths	Before final submission system will notify agre or not..
Other	Before marking the option present age is required for getting acurate report.

2.2.4 **Use case:** Patient Repors History Seen by Patient

Once a full symptom identification test completed, patient can see test report as three different angel. These are the previous test report, current report and report comparison.

Diagram:

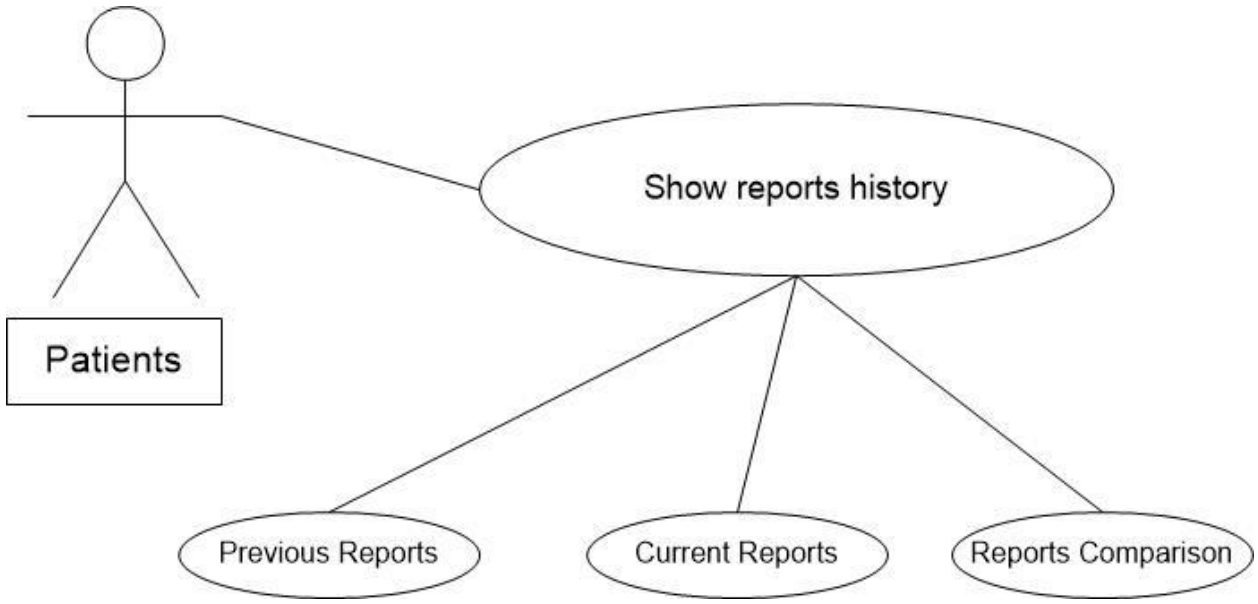


Fig: 2.5 Patient Use Case Patient Report History Seen By Patient

2.2.4.1Initial Step-By-Step Description

By analysing the previous reports of a patient can realise patient development progress.

- Patient can see patient individuals test report.
- Last five test reports.
- Previous and current doctor prescribtions.

2.2.4.2 Functional Requirement

Table: No: 2.4 Test Report with Comparison

Use Case Name	Show test report with comparison
Trigger	Generates test report comare with previous reports.
Precondition	The Web applications displayed with previous test reports.
Basic Path	1. From view repot option able to see test indivusual report and and comparison with previous 5 test reports.
Alternative Paths	In steps 1. can see the report as graph.
Post condition	After click specific view port will show the report or graph.
Exception Paths	If no test has given report will show blank.
Other	Report and dashboard both can see for specific patient indivisuals and last 5 report comparison at a time.

2.2.5 **Use case:** Doctor Manage by patient

After symptom identification test report generated, patient can show this report to a doctor by adding into the system with the doctor. When doctor accept request that has initiated from the patient, from that time doctor will be assign as current doctor of that patient.

Diagram:

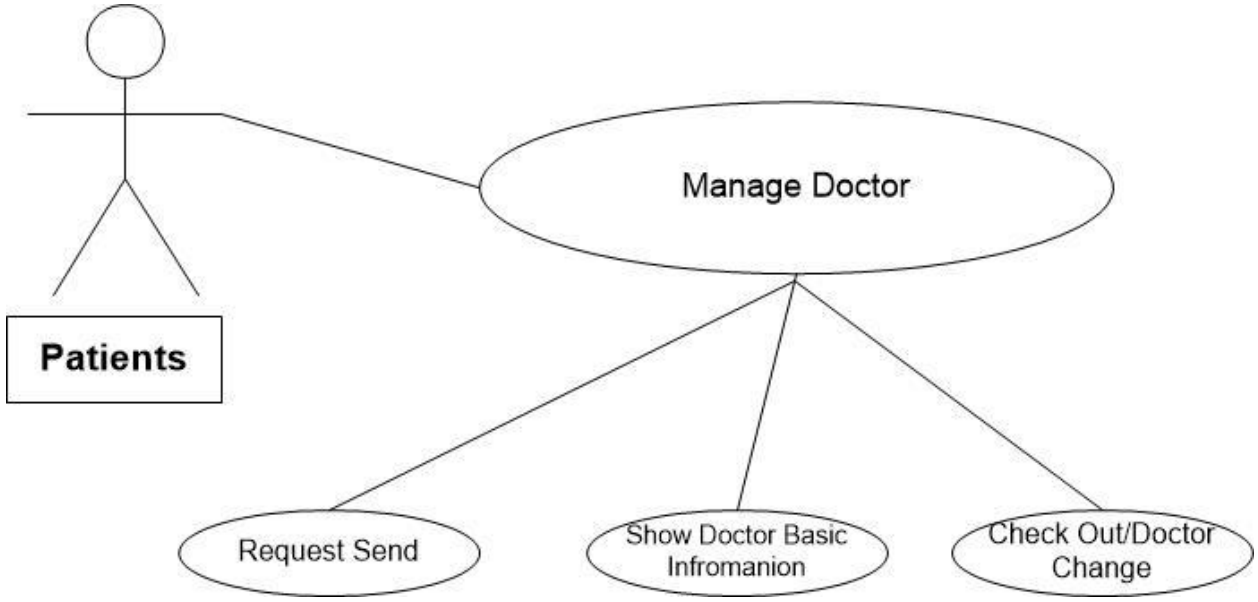


Fig: 2.6 Patient Use Case Doctor Manage By Patient

2.2.5.1Initial Step-By-Step Description

After sending request to a doctor, Doctor will unable to see the patient previous report untill request accept by the doctor.

- After accept request by the doctor can see patient report history.
- Doctor can prescrib medicine.
- Patient can check out the intendent doctor after check up.
- Patient can download the prescribtion as pdf fromate.

2.2.5.2 Functional Requirement

Table: 2.5 Doctor Manage By Patient

Use Case Name	Doctor manage by patients
Trigger	Patient can manage all the procedure for check up their intendent doctor.
Precondition	The Web applications displayed with Doctor manage module.
Basic Path	1. Patient can see the doctor information. 2. patients can select their intendent doctor from available doctor list. 3. Patient can check out doctor after prescribe received.
Alternative Paths	In steps 1.Patients will send request to their selected doctor. Doctor can see the patients basic information. After request accept by doctor can see information details like previous history of the patients.
Post condition	Doctor will ablel to create a prescribtion for patient.
Exception Paths	Until the selected doctor accept the patient request patients will unable to see their doctor information status from their profile.
Other	Single patient can check for single doctor at the same time.

2.2.6 Doctor Use Case

Use case: Doctor Registration

Registration required for doctor to access the system by using doctor account. Once doctor account is created, doctor can log into their system by using user name and password.

Diagram:

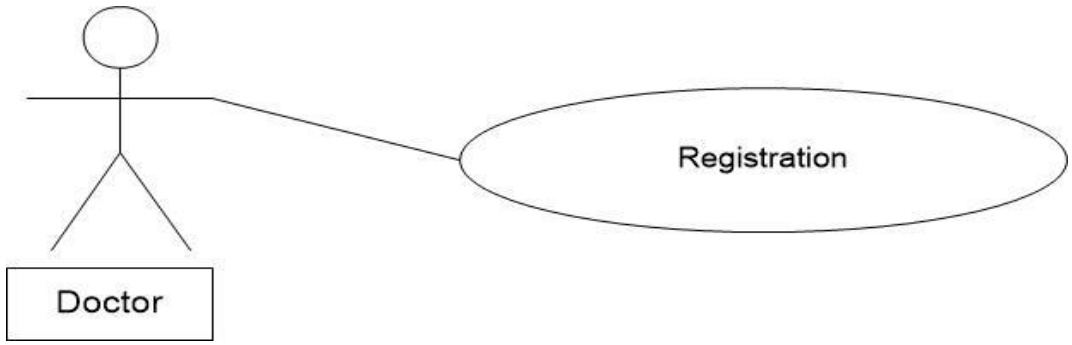


Fig: 2.7 Doctor Use Case Doctor Registration

2.2.6.1Initial Step-By-Step Description

Before this use case can be initiated, the Doctor has already accessed the online autism careWebapplication.After registration need to request to add as doctor then after system admin aproval doctor can access his account.

For registration as doctor need to provide information as bellow.

- User Name
- Qualification
- Institution Name
- Age
- Gender
- Email address
- Password

2.2.6.2 Functional Requirement

Table: 2.6 Doctor Registrations

Use Case Name	Registration
Trigger	The System admin,Doctor,Patients access the Online autism care web application Website
Precondition	The Web is displayed with User Registration form for Registration.
Basic Path	Patient provide information for log into the system Doctor provide information for log into the system System admin registration not required.
Alternative Paths	In steps1. System admin log into the system using user name and password that has been provided for log into the syetm as system admin. 2. After registration process complete doctor need to send join request for account activaton as doctor. 3. After validation doctor account doctor can get into the system using user name and password that has provided by doctor during registration process. 4. For patient no need to account verification. 5. Patient can get into the system using user name and password that has provided by patient during registration process.
Post condition	End user get access into the system by login policy.
Exception Paths	End user account recovery option using forgot password.
Other	Without being registration no user can access the system.

2.2.7 **Use case:** Doctor Information seen and update

By successful login as doctor type, doctor can change their previus information that has provide during account creation process.

Diagram:

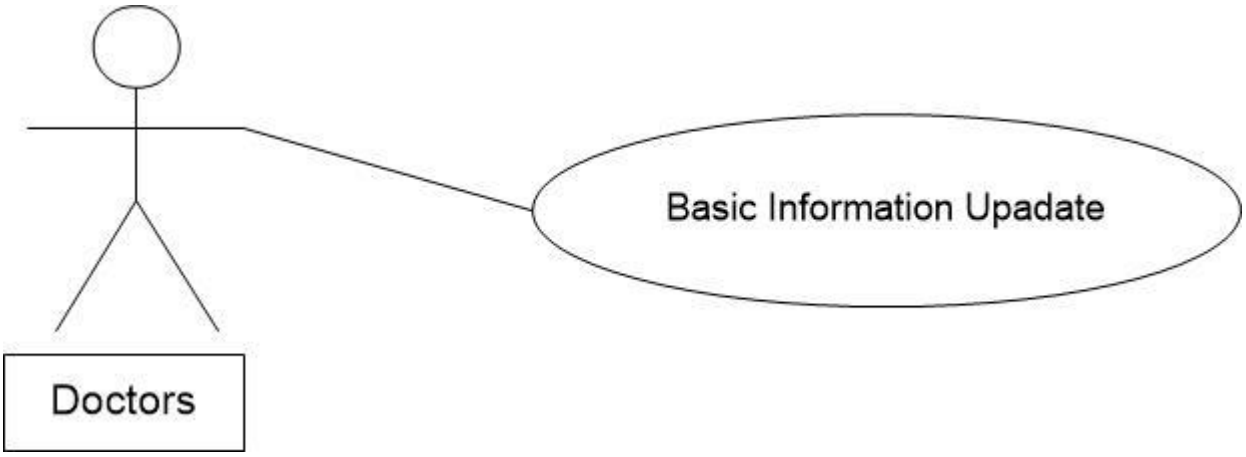


Fig: 2.8 Doctor Use Case Doctor Basic Information Seen and Update

2.2.7.1Initial Step-By-Step Description

From the doctor profile update option they can update and see their given informaton.

- User Name
- Qualification
- Institution Name
- Age
- Gender
- Email address
- Password

2.2.7.2 Functional Requirement

Table: 2.7 Doctor Information Update

Use Case Name	Doctor can update their information that they have provided during registration.
Trigger	Doctor can manage all the procedure for manage their profile information.
Precondition	The Web applications displayed with Doctor manage module.
Basic Path	1. Doctor can see their basic information. 2. Doctor can update their basic information. 3. Doctor can see current patient status like number of patients lists.
Alternative Paths	In steps 1.Once a request has created by a patient doctor will accept the request. Doctor can see the patients basic information. After request accept by doctor can see information details like previous history of the patients.
Post condition	Doctor will ablel to create a prescribtion for patient.
Exception Paths	Until the selected doctor accept the patient request patients will unable to see their doctor information status from their profile.
Other	Single doctor can check for multiple patients at the same time.

2.2.8 **Use case:** Patient reports history seen by doctor

Doctor can see test report as three different angel. These are the previous test report, current report and report comparison. As a result doctor can analyze patient condition properly.

Diagram:

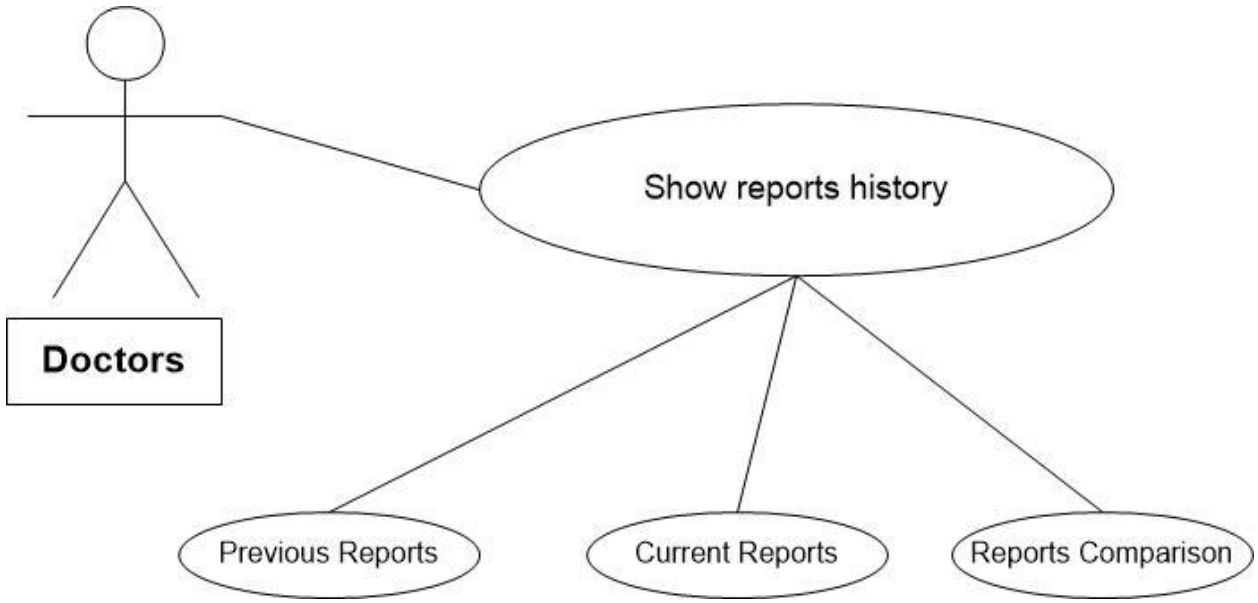


Fig: 2.9 Doctor Use Case Patient Report Histories Seen By Doctor

2.2.8.1Initial Step-By-Step Description

Doctor analysing the previous reports of a patient that will help doctor to provide proper treatment.

- Doctor can see patient individuals test report.
- Last five test reports.
- Previous doctor prescribtions.

2.2.8.2 Functional Requirement

Table: 2.8 Doctor Show test report

Use Case Name	Show test report with comparison
Trigger	Generates test report comare with previous reports.
Precondition	The Web applications displayed with previous test reports.
Basic Path	1.From view repot option able to see test indivusual report and and comparison with previous 5 test reports.
Alternative Paths	In steps 1. can see the report as graph.
Post condition	After click specific view port will show the report or graph.
Exception Paths	If no test has given report will show blank.
Other	Report and dashboard both can see for specific patient indivisuals and last 5 report comparison at a time.

2.2.9 **Use case:** Create Prescription

Doctors can able to create prescription based on analysis the patient all symptom identification test reports. As a result patient will get treatment on daily basis.

Diagram:

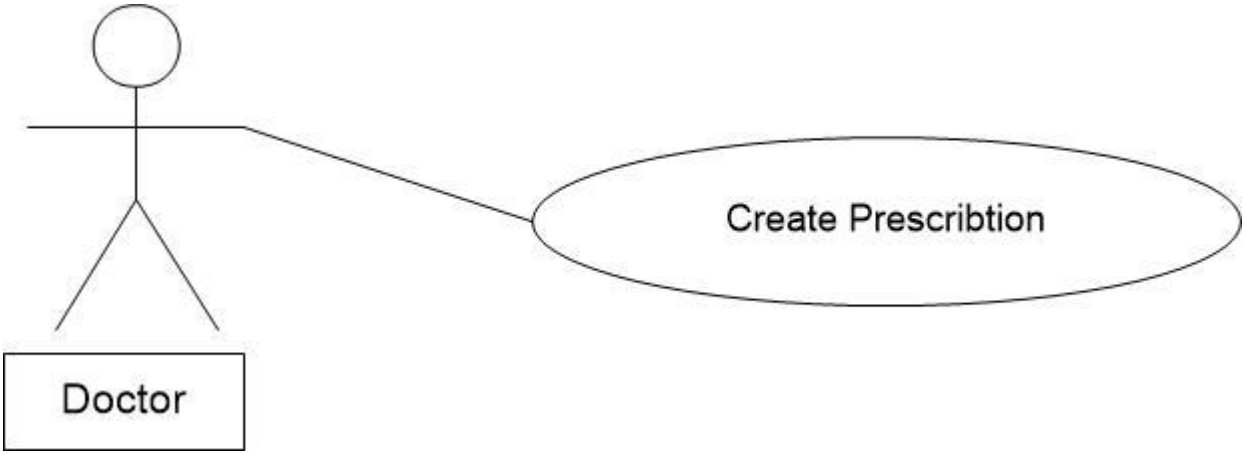


Fig: 2.10 Doctor Use Case Doctor Create Prescribe for Patient

2.2.9.1Initial Step-By-Step Description

Doctor analysing the previous reports of a patient that will help doctor to provide proper treatment as follows.

- Doctor can see patient individuals test report.
- Last five test reports.
- Previous doctor prescribtions.

2.2.9.2 Functional Requirement

Table: 2.9 Doctor Creates Prescription

Use Case Name	Doctor Creates Prescription.
Trigger	Doctor will create a presciption for intended patient and patient will see this prescription.
Precondition	The Web applications displayed with Create Prescription button.
Basic Path	1.From view repot option able to see create prescription button.
Alternative Paths	In steps 1. Enter into the report and can create prescription.
Post condition	After click specific view port will show the prescription.
Exception Paths	If doctor never create presciption for intended patient it will show blank.
Other	All the previous prescription can see any patient as well as doctor when required.

2.2.10 System Use Case

Use case: Generates and comparison Test report

System will show the report indivisually where we can find the percentage of patient normality and abnormality. In the details option we can see the details report that has notified into a patient.

Diagram:

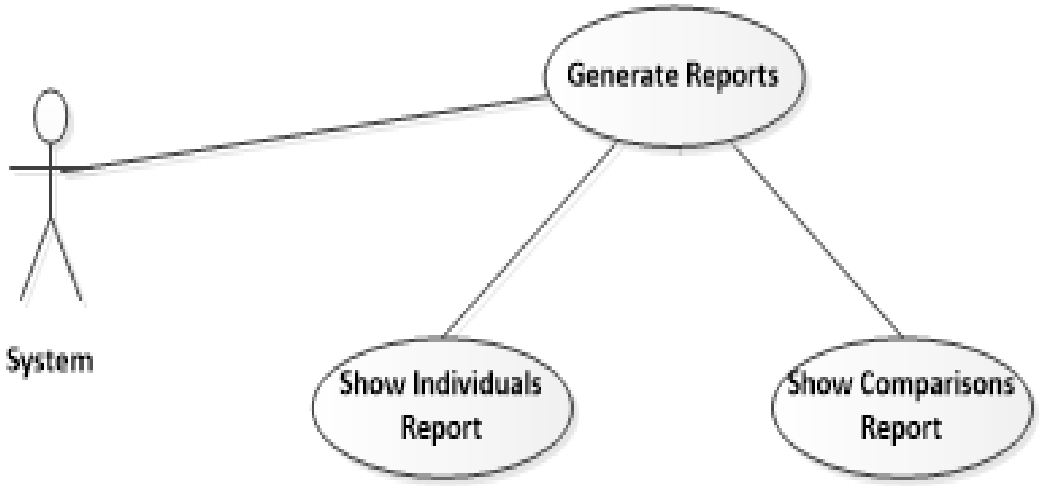


Fig: 2.11 System Use Case Generate and Compare Test Report

2.2.10.1Initial Step-By-Step Description

System analysing the previous all reports of a patient that will help the system to generates and comparison of patient develpment progress.

- Generates individuals symtom identification reports.
- Last five test reports.

2.2.10.2 Functional Requirement

Table: 2.10 System Generates Comparison test report

Use Case Name	Generates comparison test reports.
Trigger	System will generates comparison test report comparing with differnt level test and age.
Precondition	The Web applications displayed with comparison test reports.
Basic Path	1. System will analysis the test. 2. System will analysis the age. 3. System will analysis the different level of test. 4. System will compare previous report. 5. Finally generates a new report.
Alternative Paths	In steps 1. Each question has fixed value depending question answare option. 6. By manipulating this fixed value system will able to generates new report.
Post condition	System will calculate and analysis the previous report for generates new report.
Exception Paths	If no value fixed system does not meet to show the desired report.
Other	Maximum 3 option will be for a single question.

2.2.11 **Use case:** Check validation

Basically validation needs for authorized doctor aproval and check for multiple doctor existancy for same patient.

Diagram:

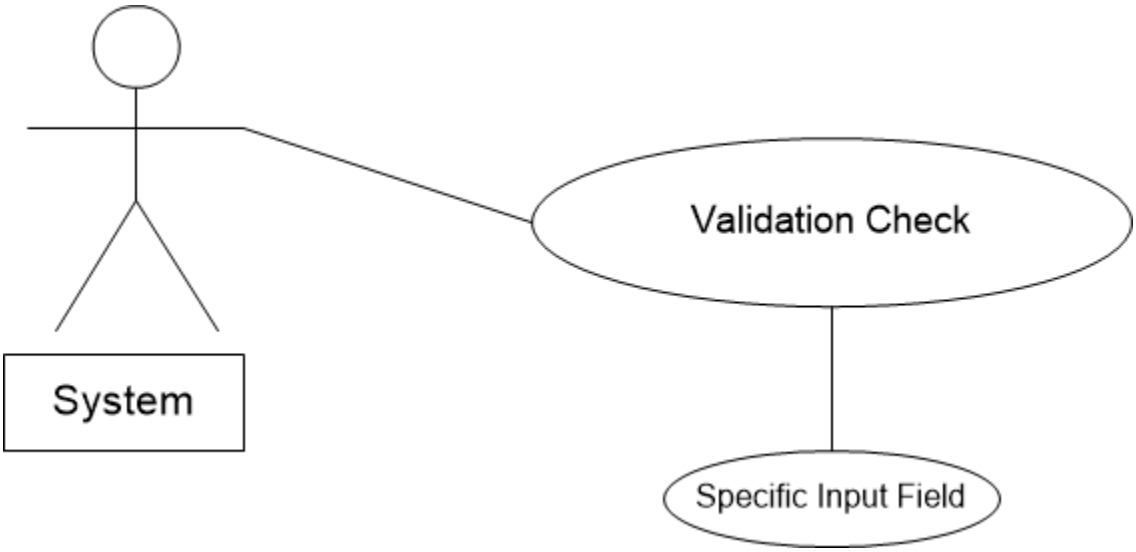


Fig: 2.12 System Use Case Check Validation

2.2.11.1Initial Step-By-Step Description

System will ensure all kind of security by validate doctor information and do not allow multiple doctor for a single patinet at the same time.

- Doctor must provide his contact details with institution.
- Check particular patient doctor status if doctor exist then others doctor will not be allowed.

2.2.11.2 Functional Requirement

Table: 2.11 Validation Check

Use Case Name	Validation check.
Trigger	System it self chek validaton for ensure end user security.
Precondition	The Web applications displayed with warning for check validation to its users.
Basic Path	1. Specific user input field required check validation. 2. Check for multiple doctor exist or not. 3. Check for authenticate users for log into the system.
Alternative Paths	In steps 1. Patient can create his profile by must submission basic information. 7. Doctor can create his profile by must submission basic information. 8. Single patient can not allow for check up multiple doctor same time for system checking.
Post condition	System will provide further access by ensure the security from the user.
Exception Paths	If no user provide required field system holds on that stage for 100 seconds.
Other	After complete the procces system allow a user for futher access unless when time period over system refers the user its registration page .

2.2.12 Use case: Learning Video Documentary

There is learnign vidieo documentary relavent to patient skill improvement. Patient can see this learning video documentary as they want.

Diagram:

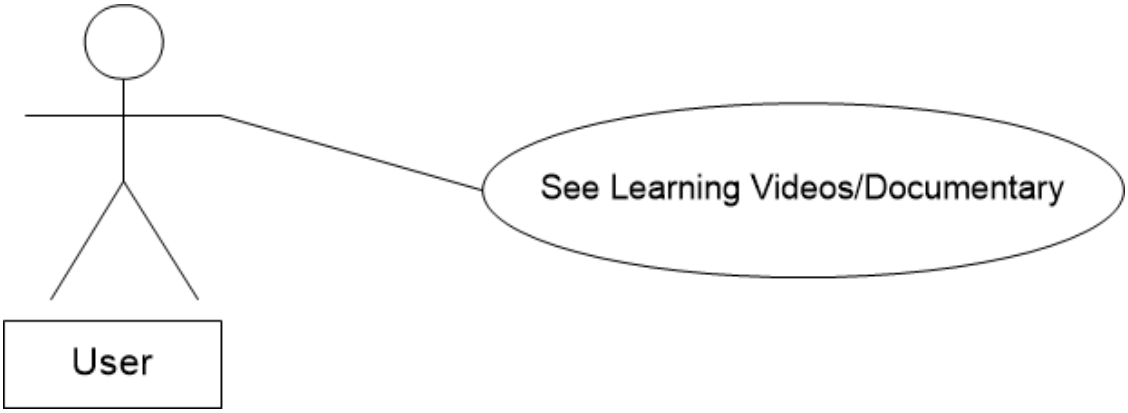


Fig: 2.13 Use Learning Video Documentary

2.2.12.1Initial Step-By-Step Description

Video documentary will helps a patient to avoid abnormal behaviour and upgrade intelligence. Documentary will be as follows.

- Funny documentary.
- Sad documentary.
- Horrible documentary.

2.2.12.2 Functional Requirement

Table: 2.12 Learning Videos/Documentary for patients

Use Case Name	Learning Videos/Documentary for patients.
Trigger	System has reserved some learning videos/Documentary for the patients intellecual upgradation.
Precondition	The Web applications displayed some learning videos/Documentary for the patient's intellecual upgradation.
Basic Path	1. Any User can see this documentary. 2. For see this documentary no need to registration.
Alternative Paths	In steps 1. Parents or relatives of the patient basically operate this system. 2. Patients just show videos and documentaries. 3. Parents or relatives of the patient can realize reaction and behavior of the patient during documentary showing.
Post condition	User can see any documentary they want to see.
Exception Paths	This videos and documentary will be category wise. User can write their opinion for upgrade the system to its admin.
Other	Nessary videos and documentary will be uploaded by the system admin.

2.2.13 Use Case System Admin

Use case: Login, Request aproval, Entire system access

System admin is the super user of this web application and posses all access rights. The entire system will be maintain by the system admin.

Diagram:

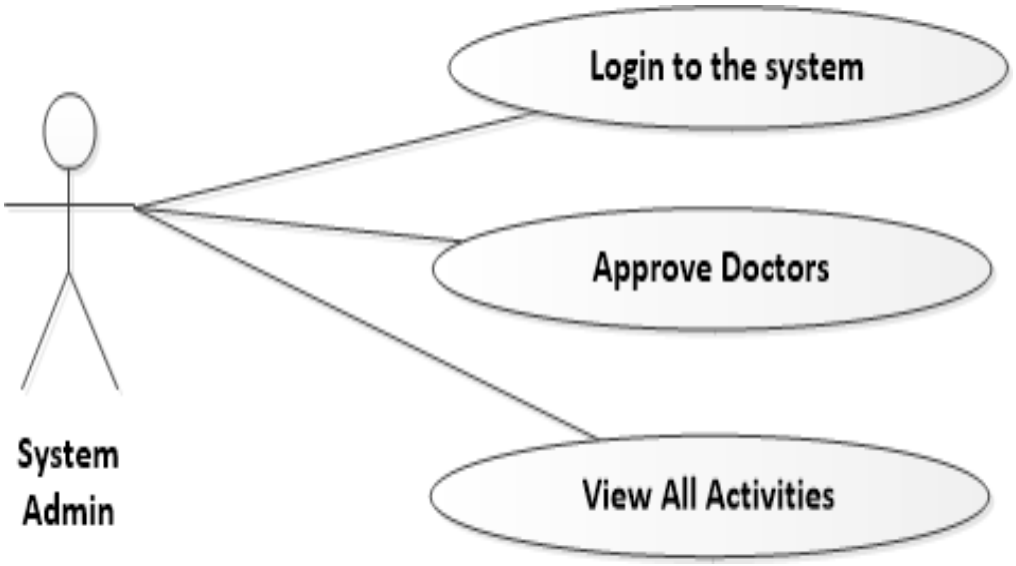


Fig: 2.14 Use Case Login, Request aproval, Entire system access

2.2.13.1Initial Step-By-Step Description

System Admin have to log in using system admin username and password if validate admin can approve all doctor request, system admin can access entire system.

- Doctor join request will be approved by the system admin
- System admin able to see others users information.

2.2.13.2 Functional Requirement

Table: 2.13 Adminactivities

Use Case Name	System admin.
Trigger	System admin can access entire system.
Precondition	The Web applications displayed to entire as system admin panel.
Basic Path	1. System admin will log into the system using system admin user id and password. 2. Admin will aprove doctor join request. 3. Admin can see patients and doctor basic intormation. 4. System admin can see the comment for system upgradation from the user.
Alternative Paths	In steps 1. System admin can chance any change required in the system. 2. System admin can see all the avail able and patients lists.
Post condition	Login as admin will get super user permission.
Exception Paths	System admin can block any user account if gets complene.
Other	System admin will be responsible for control the system.

2.3 Non-Functional Requirements Specification

- Autism detection level accuracy
- Quality learning materials
- Accessibility
- Report accuracy
- Performance of taking test
- Report generation for all panel

Chapter: 3 Designs

3.1 Introduction

Software design creates an effective communication medium between a human and a computer. The interface has to be right because it modules a user's perception of the software. As we know that a key tenet of all software engineering process models is "understand the problem before you attempt to design a solution", we analysis the interface before starting the design steps.

3.2 Interface Analysis

We divide interface analysis into following parts:

1. User Analysis
2. Task Analysis

3.2.1 User Analysis

In this part we follow two steps:

1 Identify Users

2 User Ability.

3.2.1.1 Identify Users

From the requirements specification we have identified following four user categories.

1. Patient
2. Doctor
3. System Admin

3.2.1.2 User Ability

All user of this system needs some ability to successful operate this system.

3.2.1.2.1 Patient

Here a user who perform on behalf of a patient because of patient himself/herself unable to operate this system.

Age: Any

Work Type: Give Exam, Communicate with doctor.

General Computer Experience: Yes

Language Skill: International English

Relationship with Patient: Any Relationship.

Frequency of give exam: Based on Doctor Suggestion.

3.2.1.2.2 Doctor

Degree: MBBS in Domain Sector.

Experience: 5 years

Work at: Renounced Institute.

Work Type: Patient Care, Communicate with Patient.

Skills: Moderate

Provide Prescription: Yes

General Computer Experience: Yes

Language Skill: International English

3.2.1.2.3 System Admin

Age: Any

Work Type: System Maintenance.

General Computer Experience: Yes

Language Skill: International English

3.2.2 Task Analysis

In this step we identify and analyze the tasks of every user separately.

3.2.2.1 Patient

One of the person who has performed on behalf of patient following tasks.

a. Patient Id Registration.
b. Log into the system.
c. Patient Profile Up gradation.
d. Give Exam.
e. Seen Exam Result.
f. Send Request to the Doctor.
g. Take Prescription from the Doctor.
h. Regularly Patient Id Maintains.

3.2.2.2 Doctor

Following Activities will be Perform by a Doctor.

a. Doctor Id Registration with valid Documents.
b. Log into the system.
c. Doctor Profile Up gradation.
d. Sent Join Request to the System Admin.
e. Accept Patient Check Up Request.
f. Seen Patient Profile.
g. Patient Exam Report Analysis.
h. Previous Prescription Analysis.
i. Give New Prescription.

3.2.2.3 System Admin

Following Activities will be performed by a System Admin.

a. Log into the system.
b. Verify New Doctor Information.
c. Profile Up gradation.
d. Accept Doctor Joining Request.
e. See All Doctors Profile.
f. Seen All Patient Profile.
g. Over all system maintains.

3.3 Physical Design (Prototype) GUI

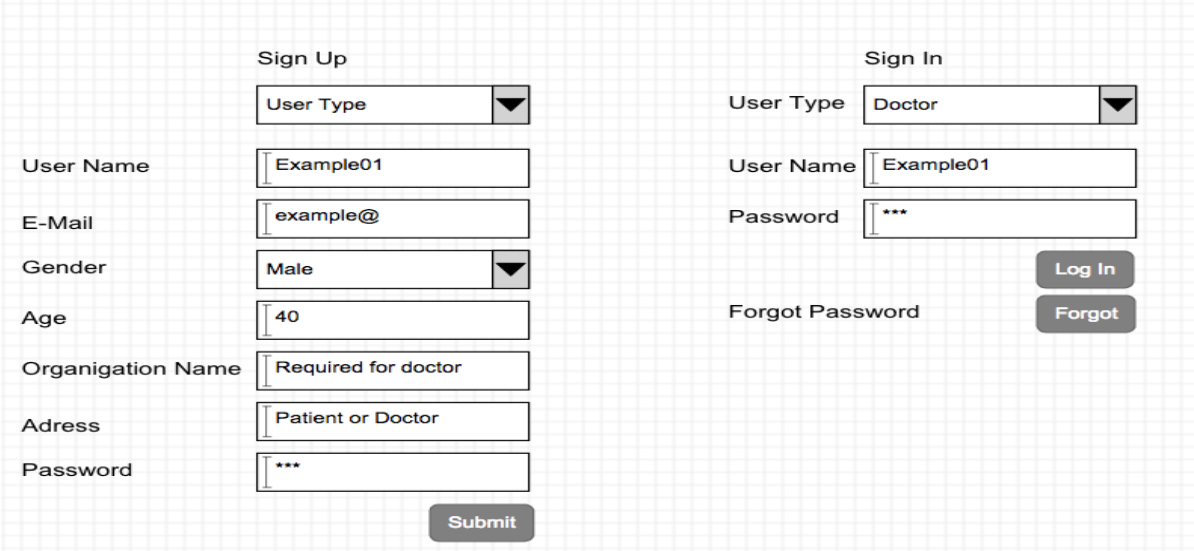


Fig: 3.1 Prototype: User Registration Page

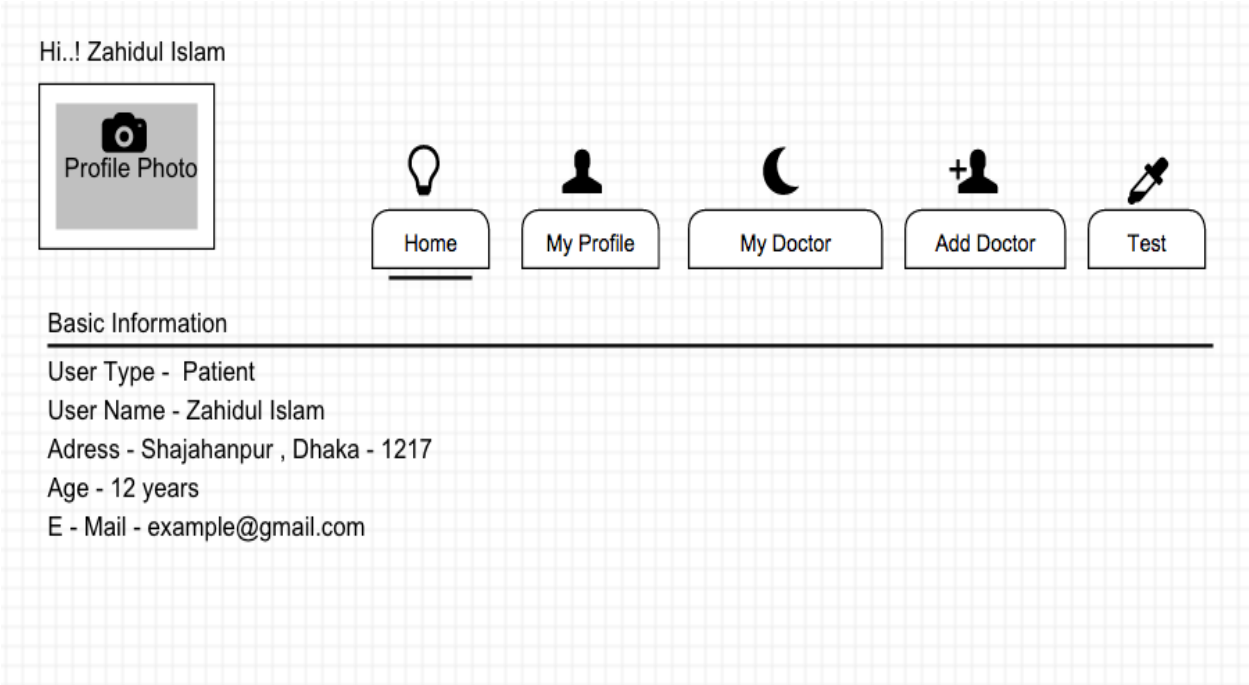


Fig: 3.2 Prototype: Patient Profile

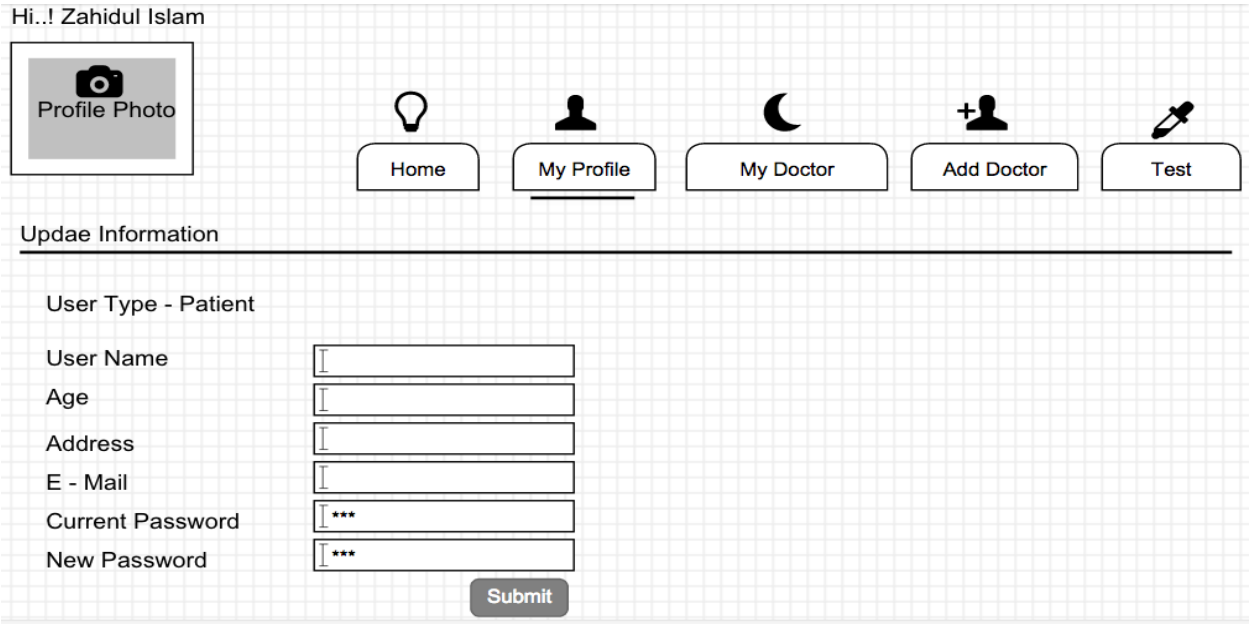


Fig: 3.3 Prototype: Patient Profile Information Update Form

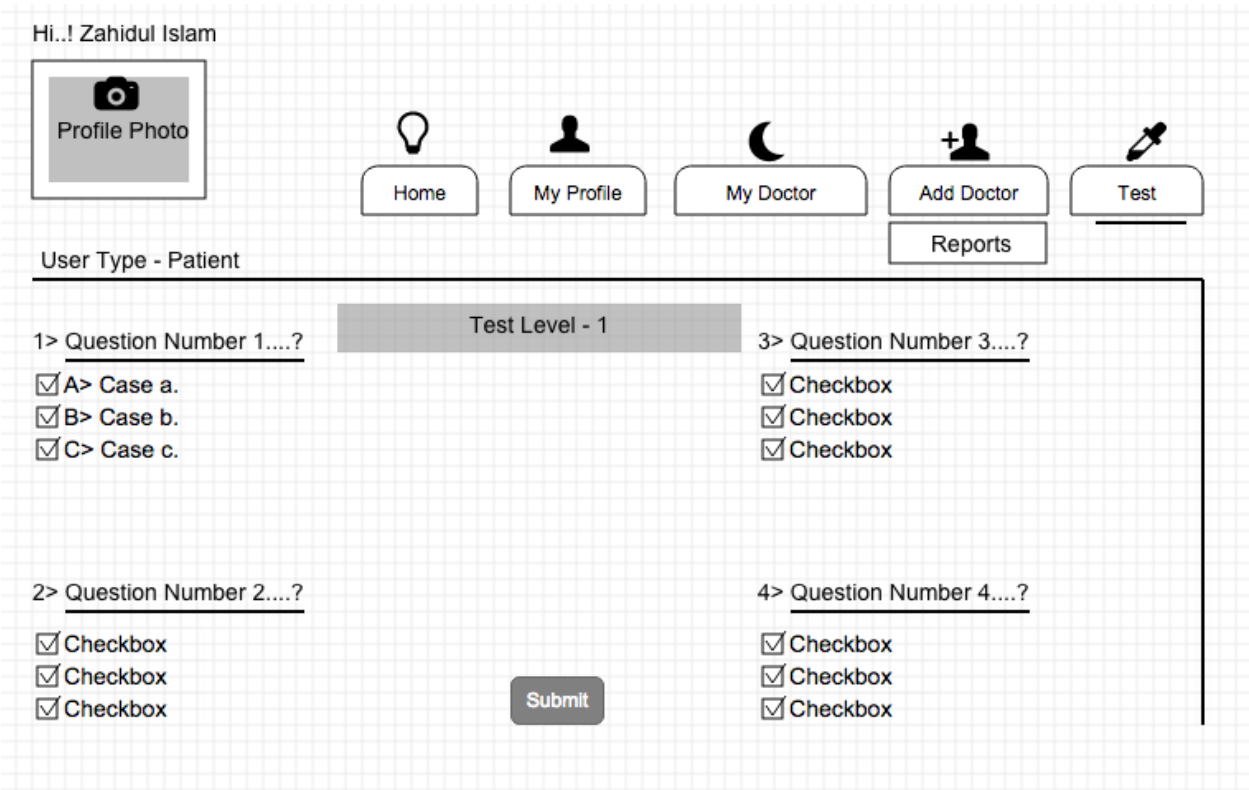


Fig: 3.4 Prototype: Patient Symptom test form

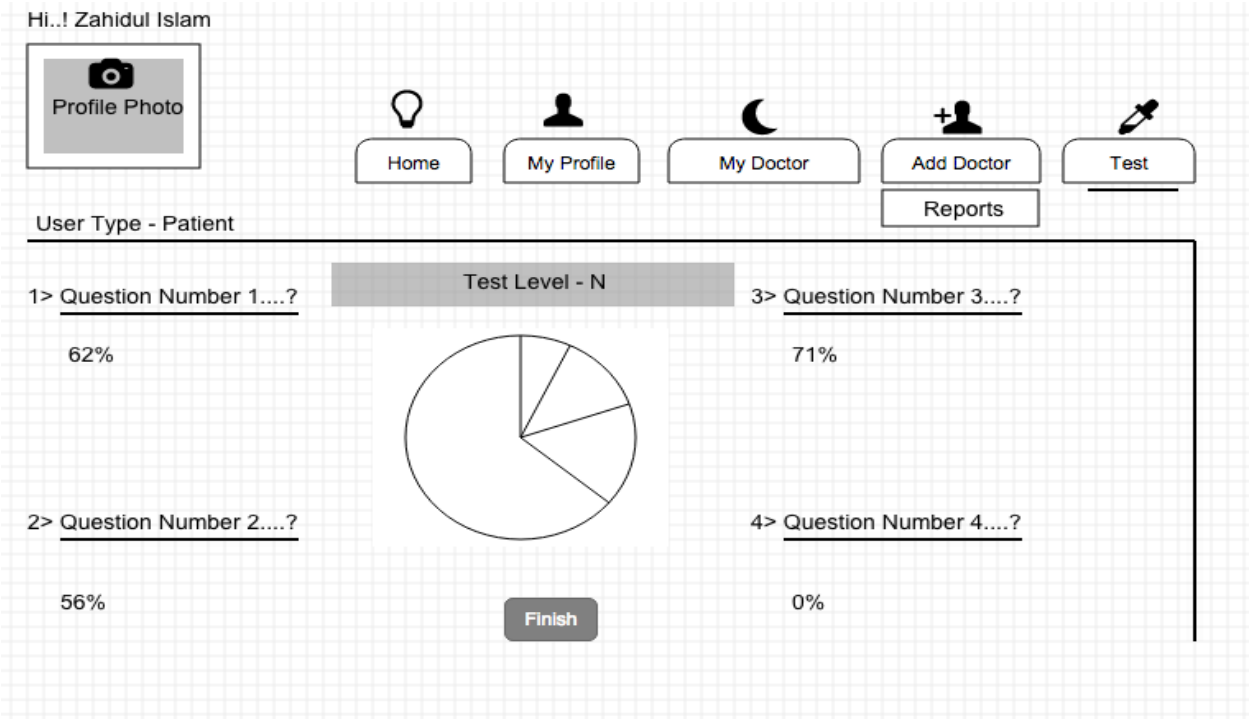


Fig: 3.5 Prototype: Patient Symptom Result Dashboard

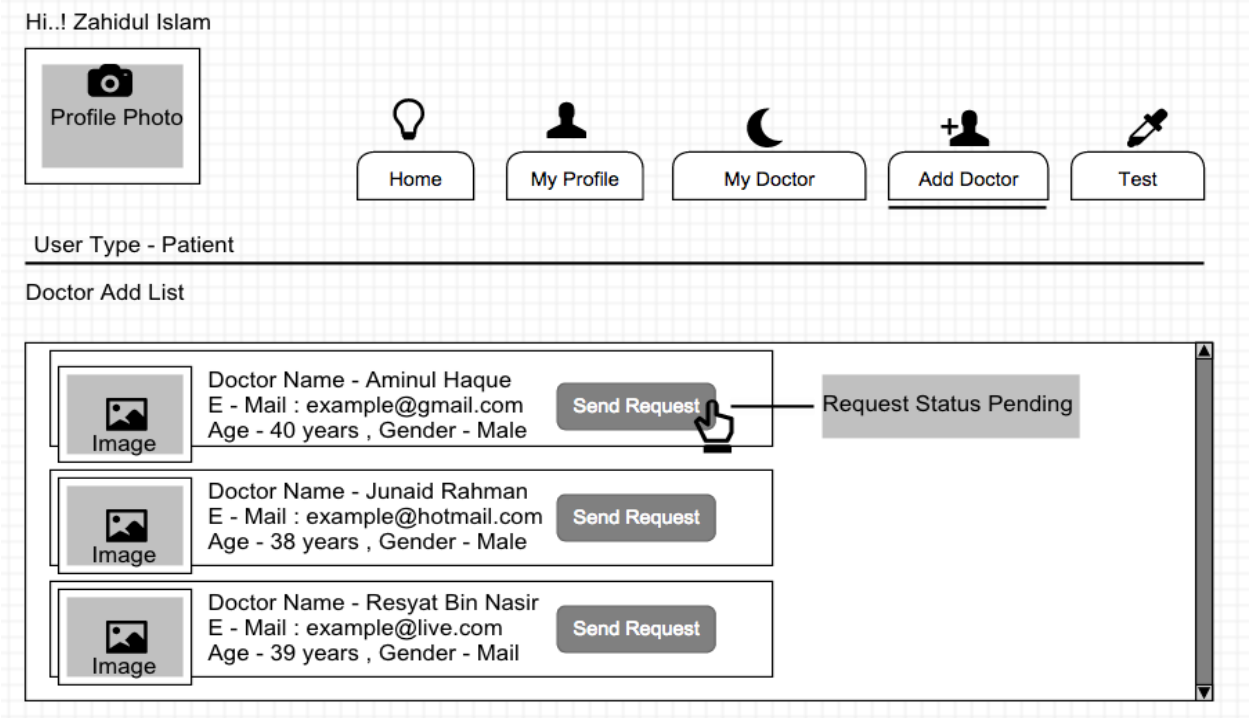


Fig: 3.6 Prototype: Patient send request to doctor

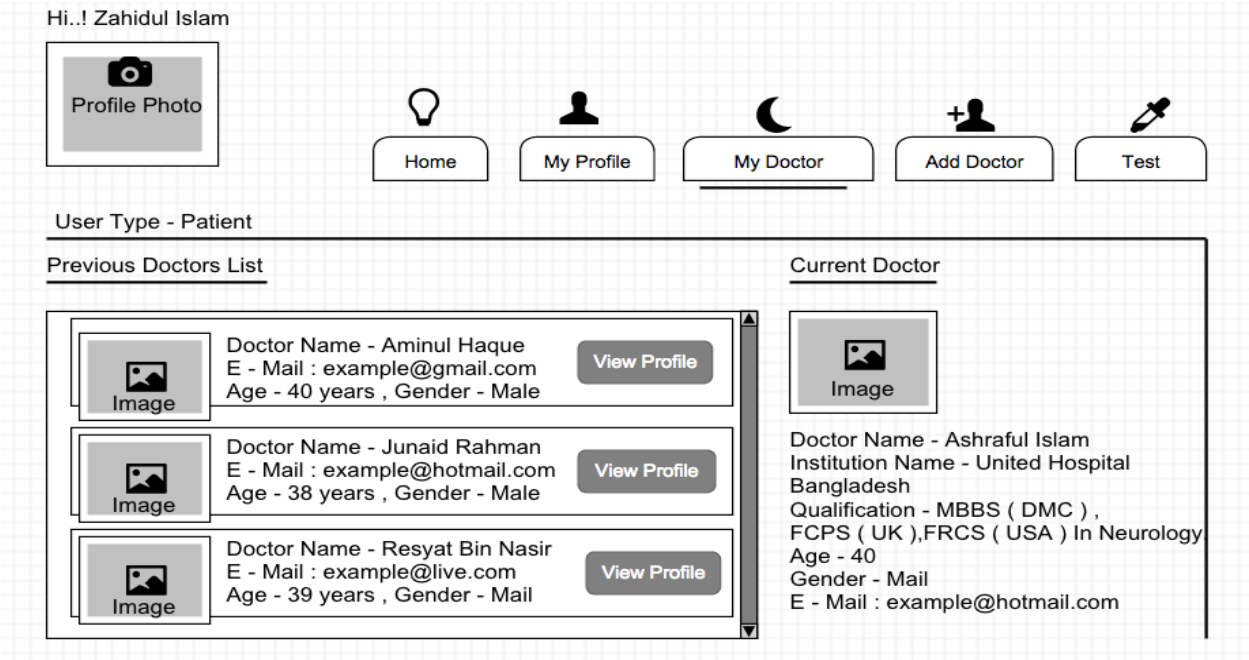


Fig: 3.7 Prototype: Current and previous Doctor List seen by patient

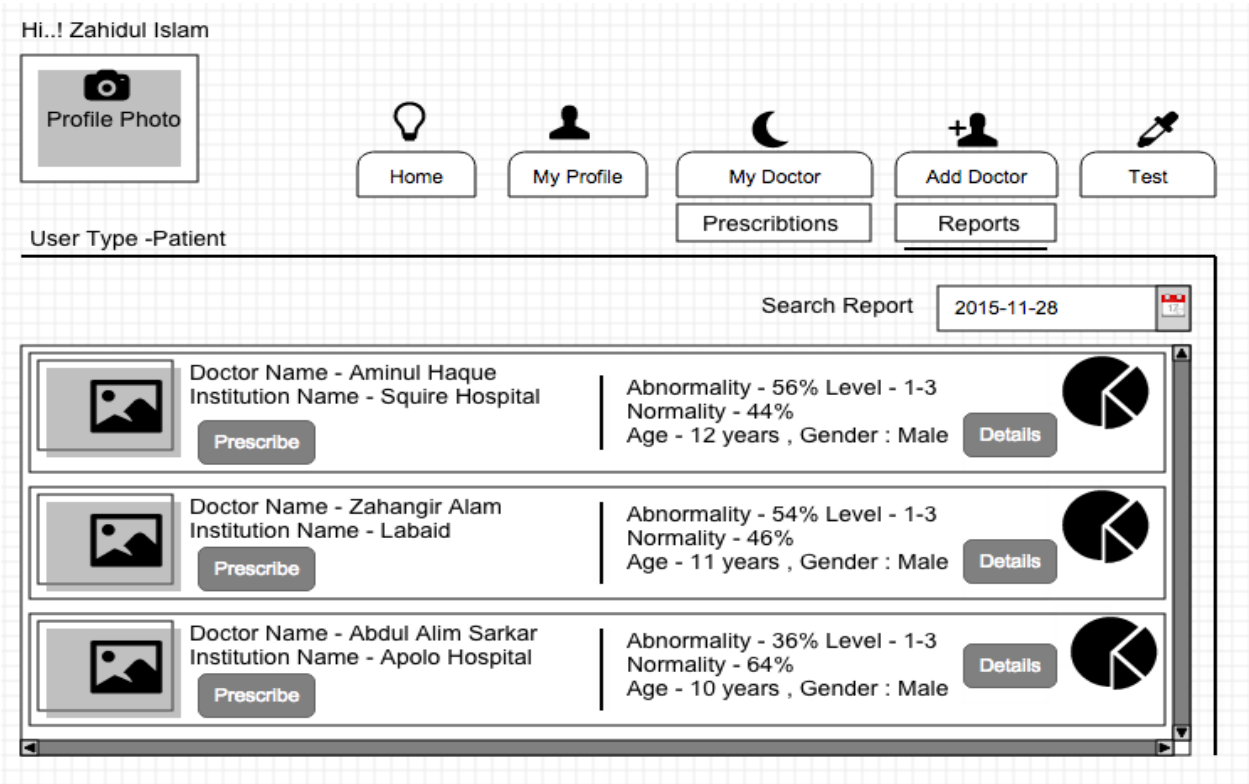


Fig: 3.8 Prototype: Exam Report Seen by Patient

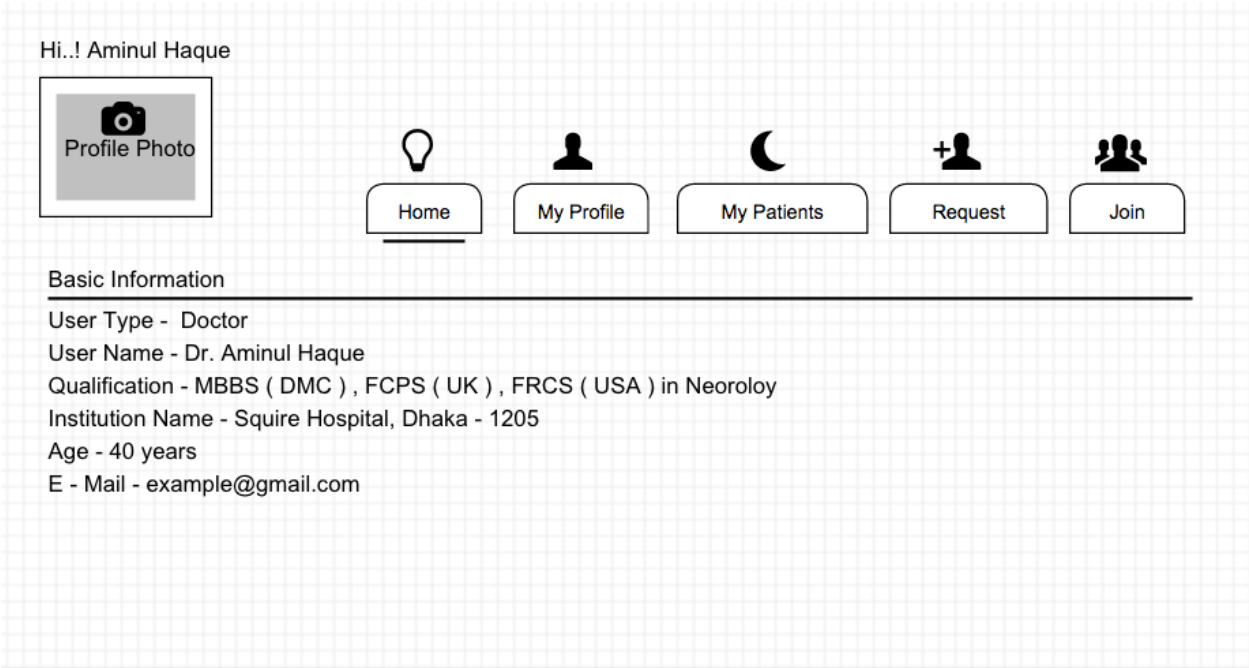


Fig: 3.9 Prototype: Doctor Profile

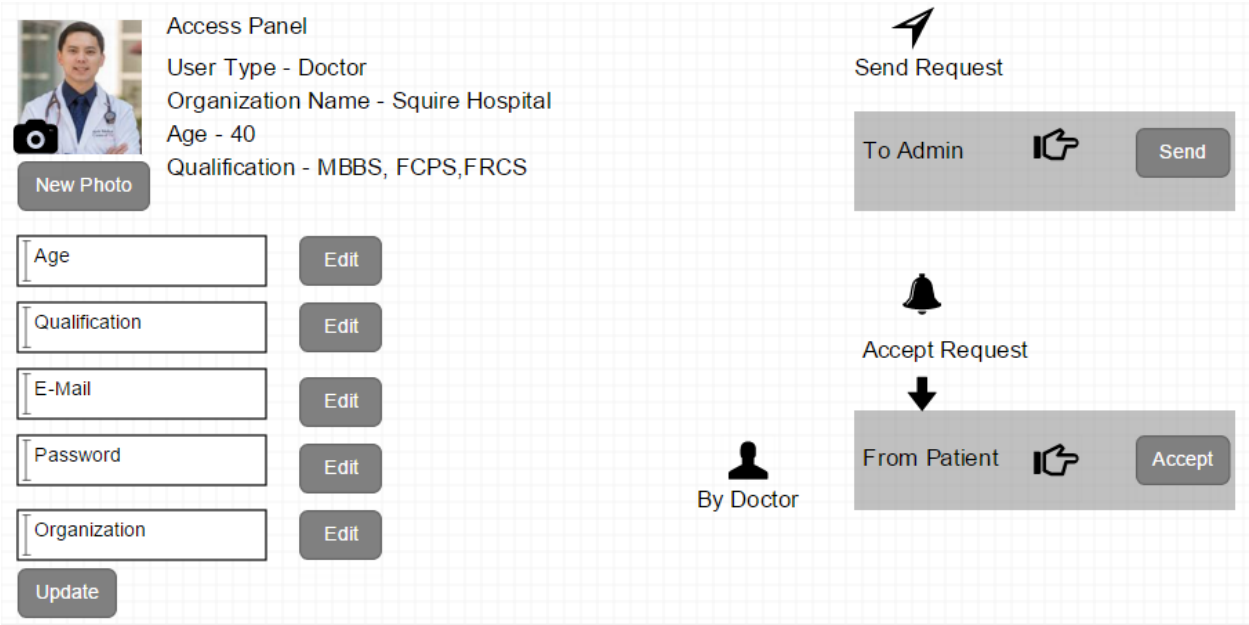


Fig: 3.10 Prototype: Doctor Profile Information Update

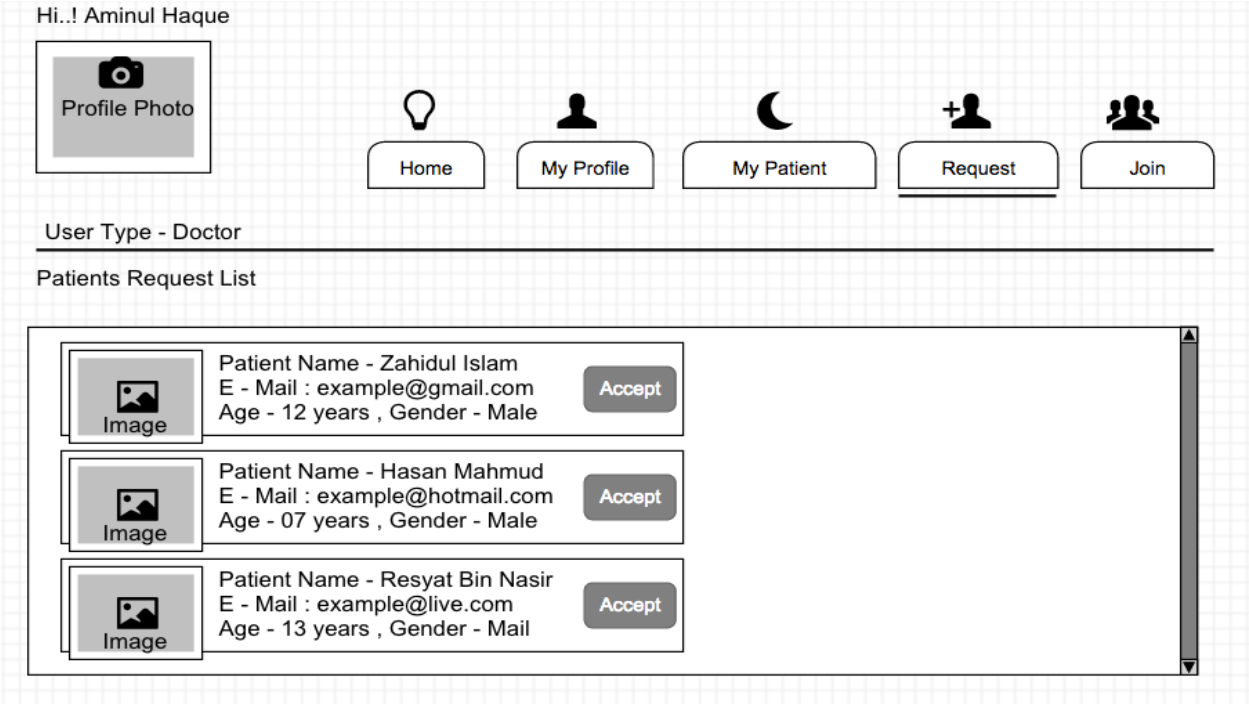


Fig: 3.11 Prototype: Patient Request Accepted By Doctor

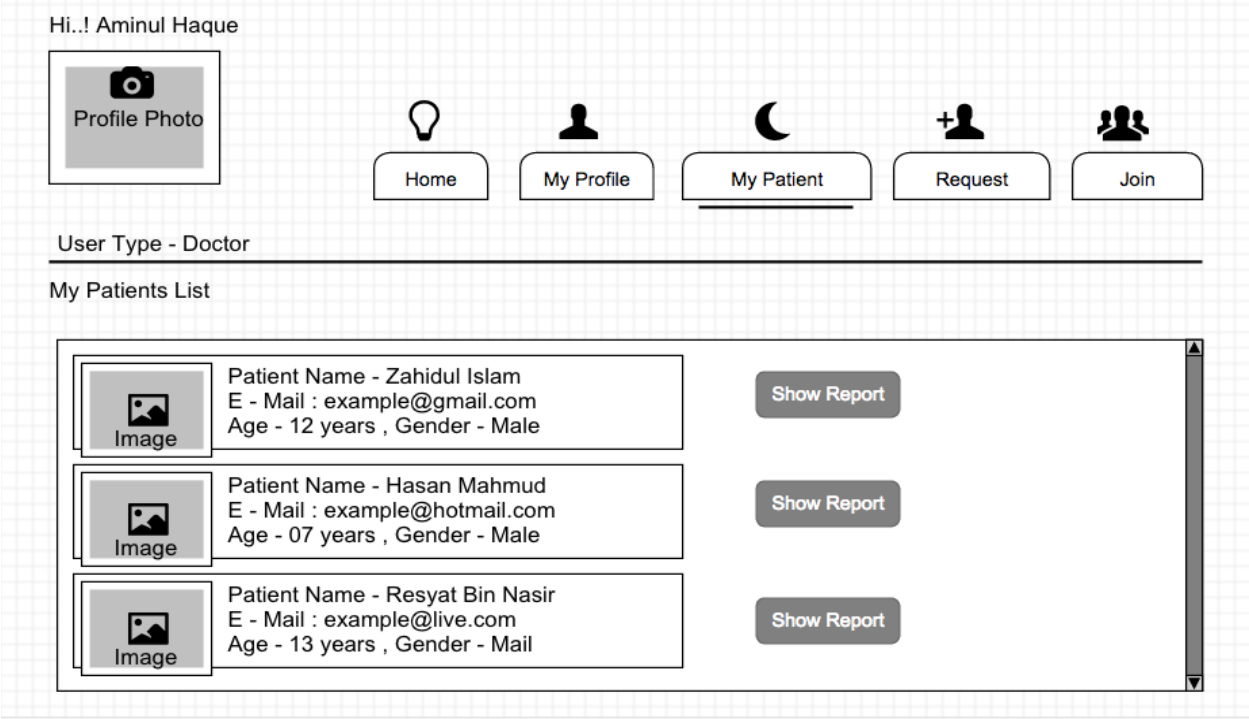


Fig: 3.12 Prototype: Patient List Seen By Doctor

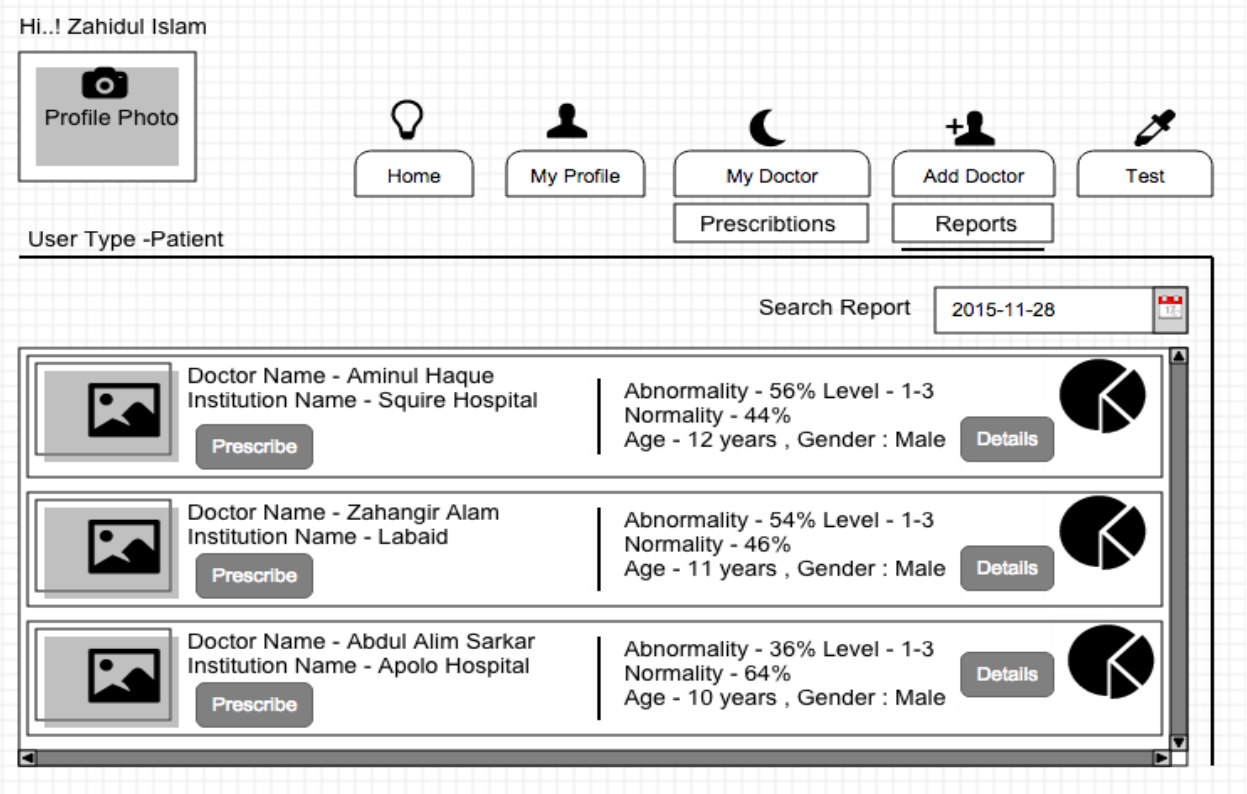


Fig: 3.13 Prototype: Patient Report Seen By Doctor

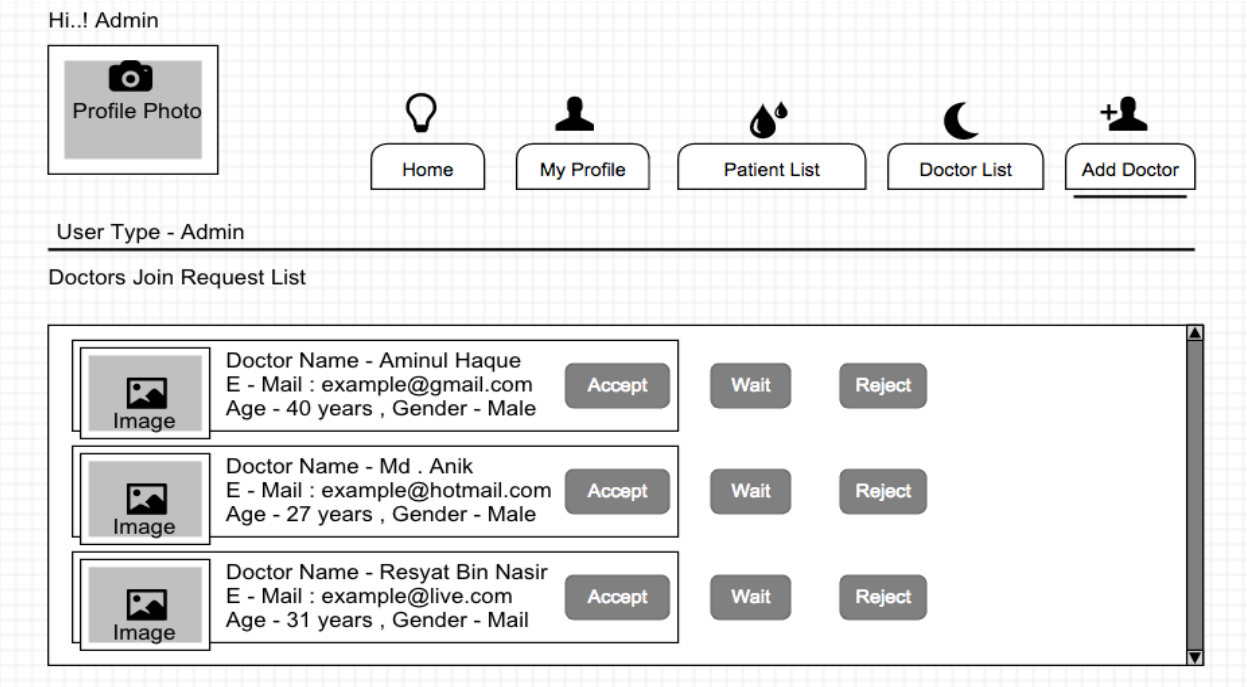


Fig: 3.14 Prototype: System Admin accept doctor join request

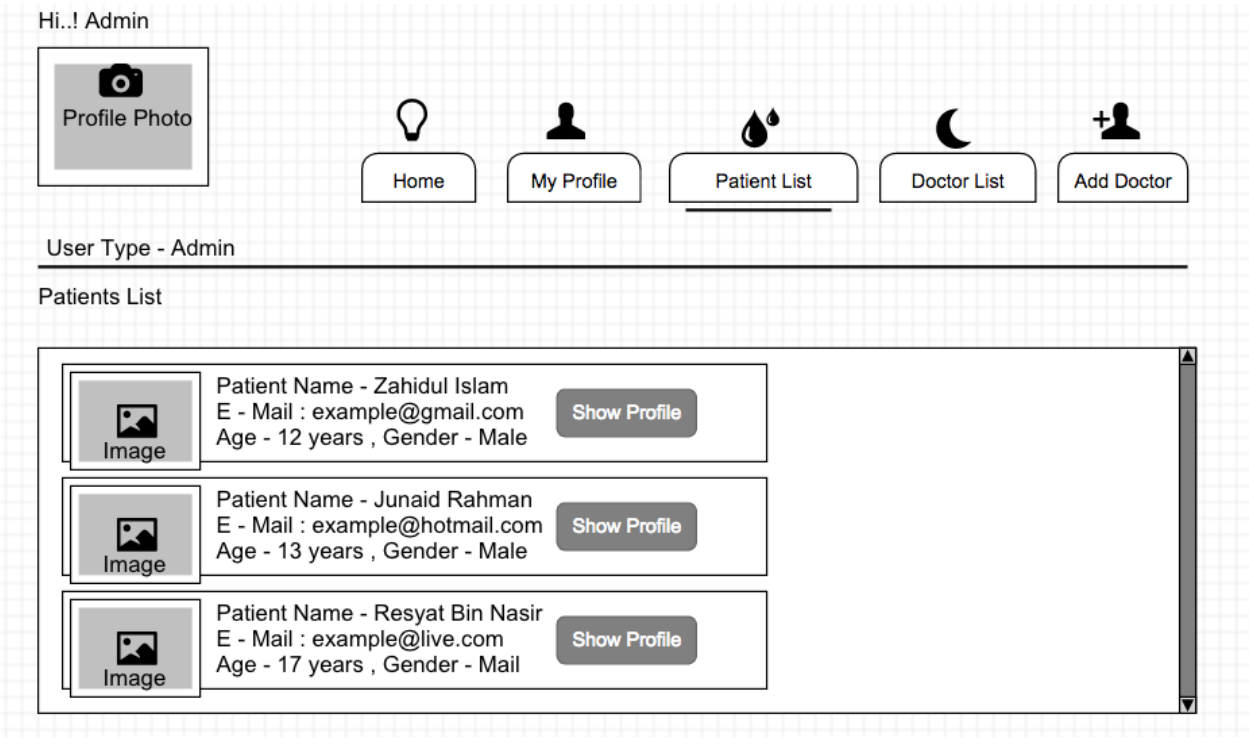


Fig: 3.15 Prototype: System Admin see all patient profile

3.4 System Design Environment

We have used HTML5.0, CSS3, JavaScript, J Query and Bootstrap for our front end interface design.

We have used HTML5.0, Bootstrap, and CSS3 for Admin, Doctor, and Patient User panel Design. We have user C# Programming Language (OOP) using Model View Controller (MVC Version - 5) Platform as coding. In Backend Database we used MS SQL Database.

3.5 System Running Environment

This system is tested and running in windows operation system. This is completely ok for Mozilla Firefox, Google Chrome, Opera, Safari and also definitely Internet explorer browser.

3.6 Logical System Design

3.6.1 Data Flow Diagram (DFD – LEVEL – 0)

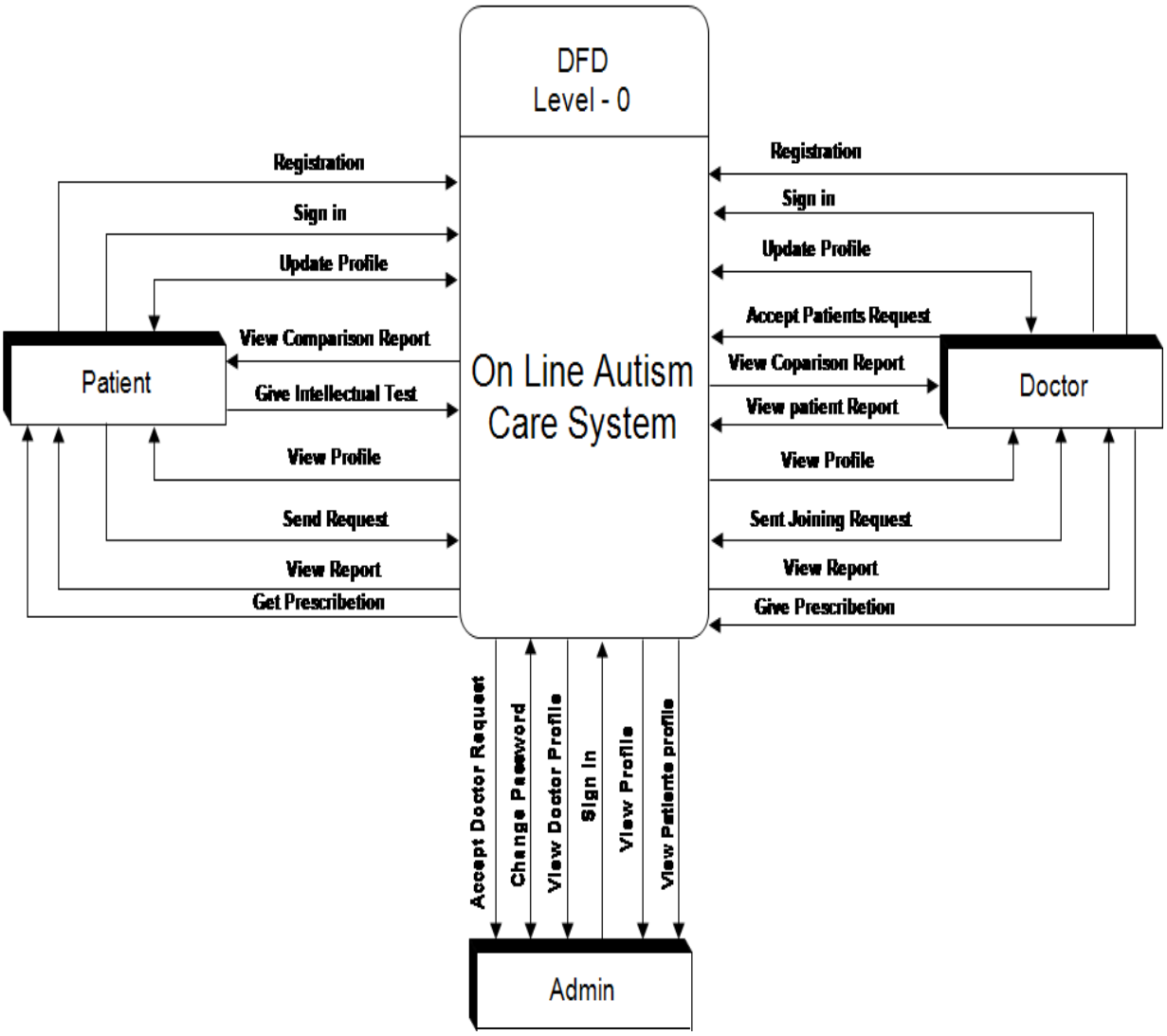


Fig: 3.16 Diagram: Data Flaw Diagram (DFD – Level: 0)

3.6.2 Data Flow Diagram (DFD – LEVEL – 1)

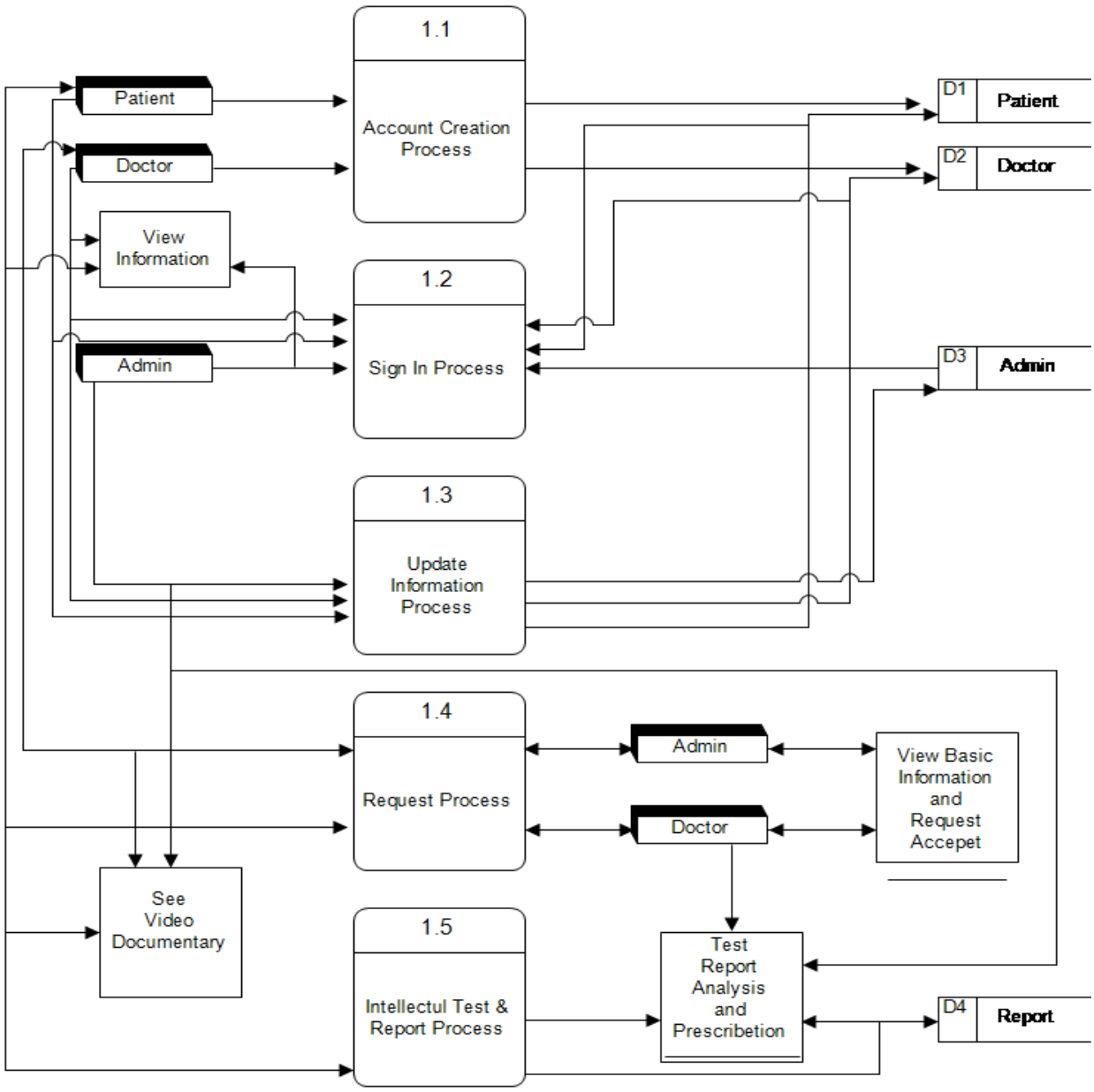


Fig: 3.17 Diagram: Data Flaw Diagram (DFD – Level: 1)

3.6.3 Entity Relationship (ER) Diagram

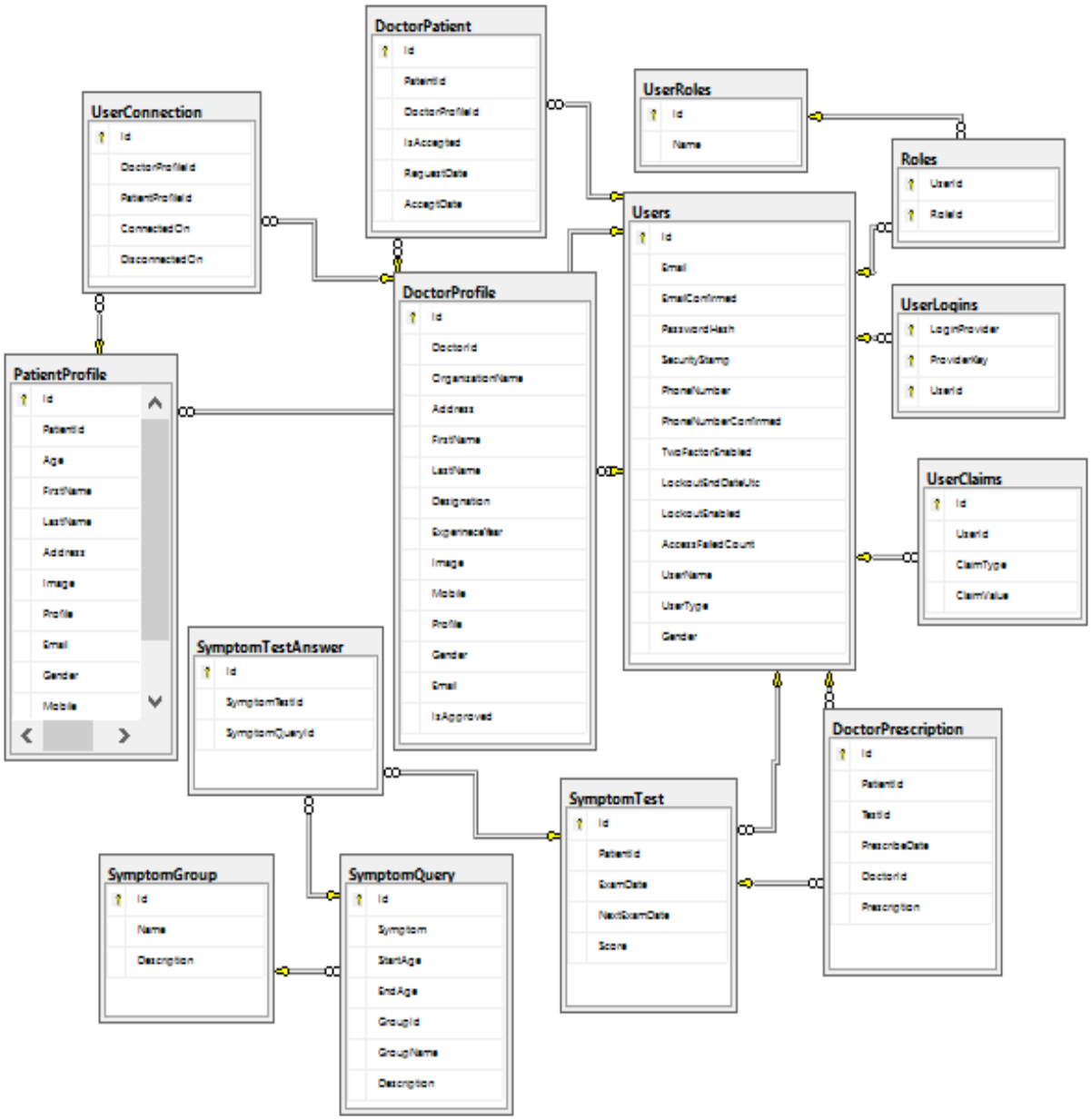


Fig: 3.18 Diagram: Entity Relationship (ER) Diagram

Chapter: 4 Implementation & Deployment

4.1 Introduction

Any kind of software related project become successful after its implementation and deployment. So in this project, we have deployed version: asc1.100. We will collect customer feedback through this version. We have plan to robust this system in future based on beta testing report of this version.

4.2 Depict each interface state as it looks to end user

We identified following objects and actions for the user interface. This is not the prototype of our system. This is the real interface what the end user will see.

Figure: 4.1 Screen Shot User Registration and Sign In

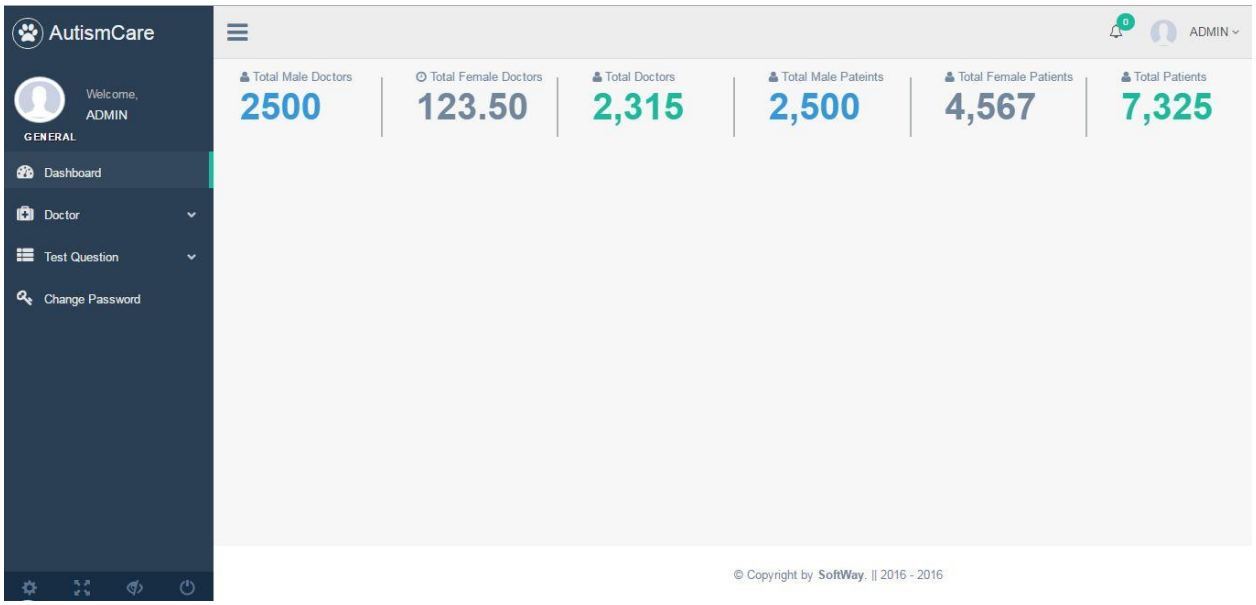


Figure: 4.2 Screen shot Admin Dashboards

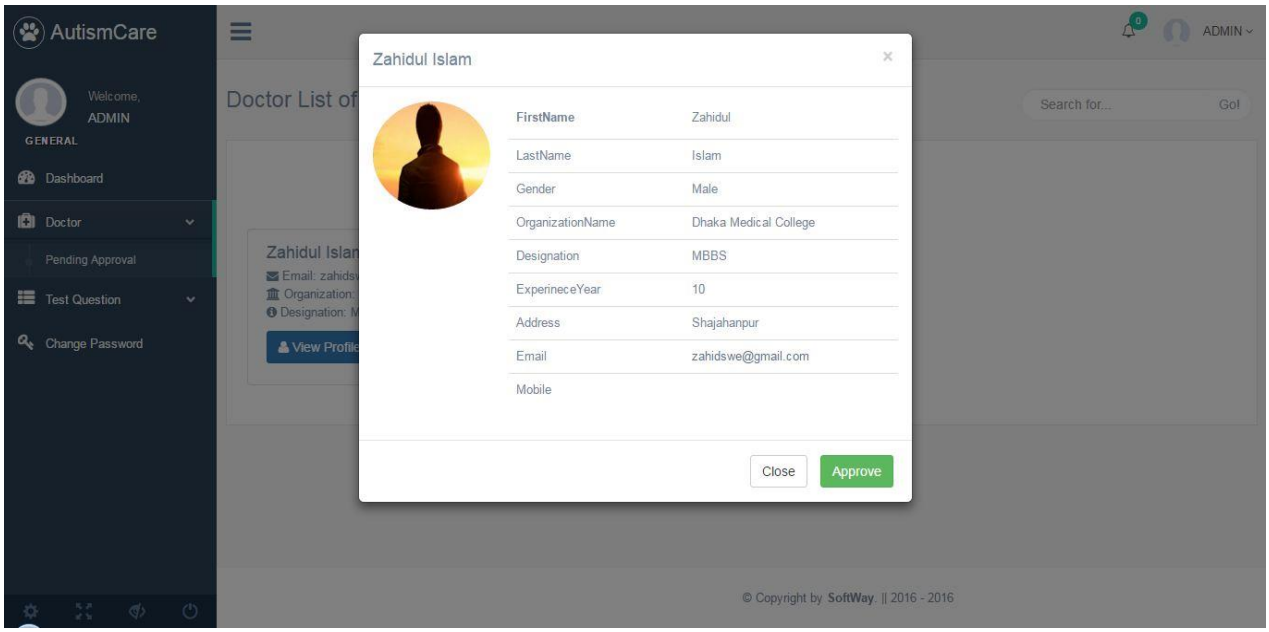


Figure: 4.3 Screen shot Doctor Approvals by Admin

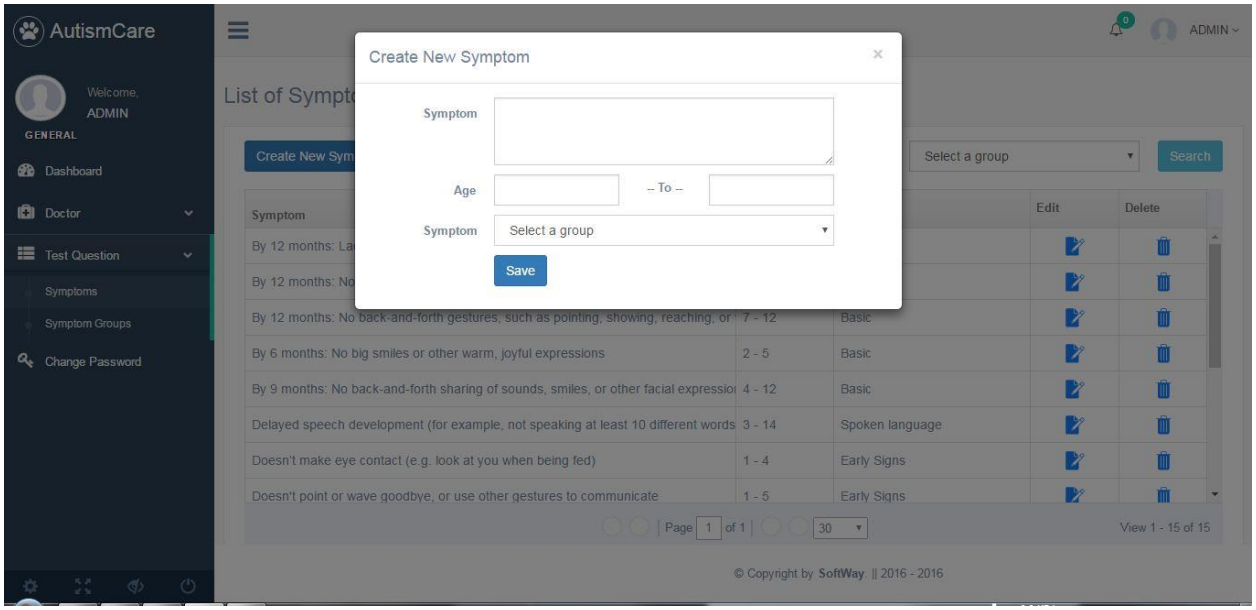


Figure: 4.4 Screen shot Admin Create New Symptoms

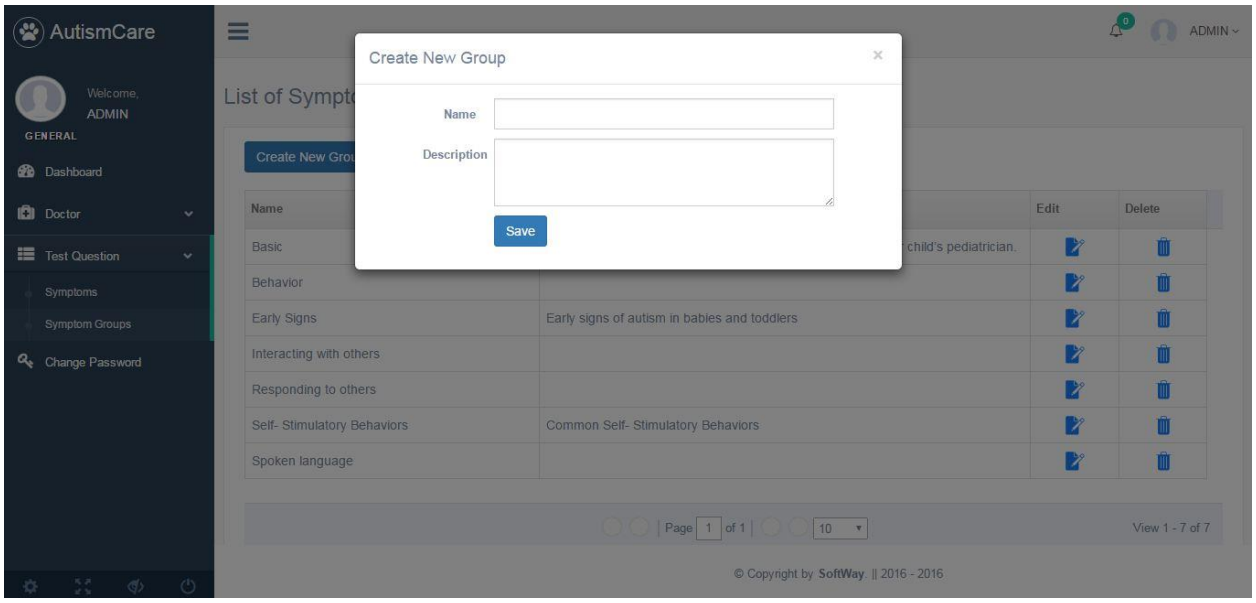


Figure: 4.5 Screen shot Admin Create New Symptoms Group

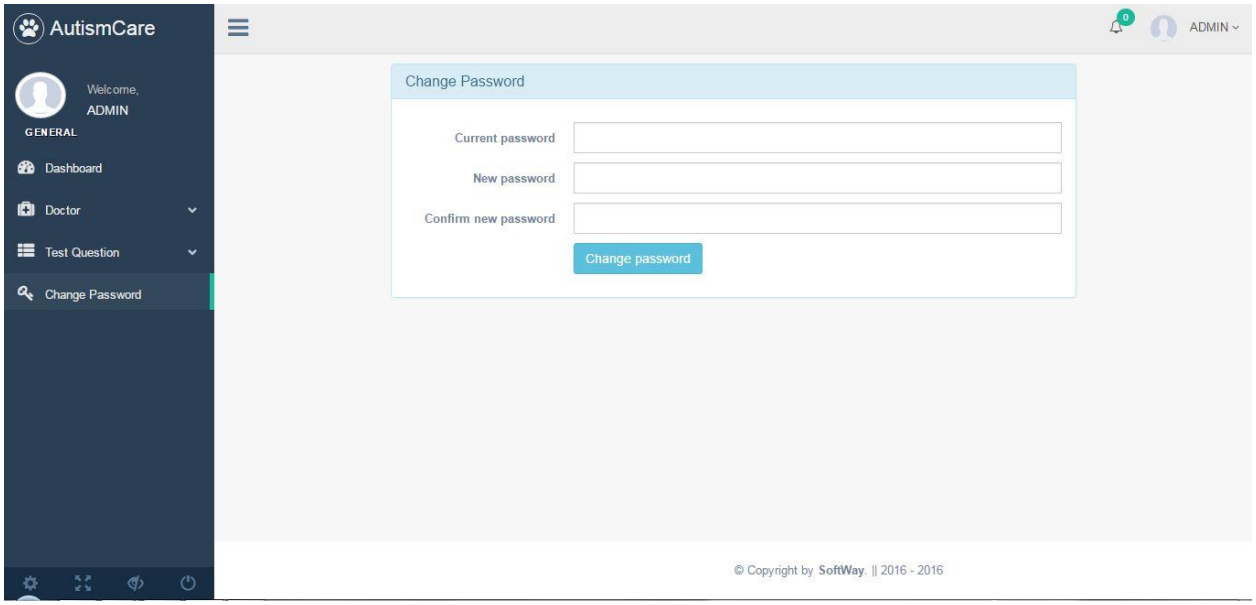


Figure: 4.6 Screen shot Password Change

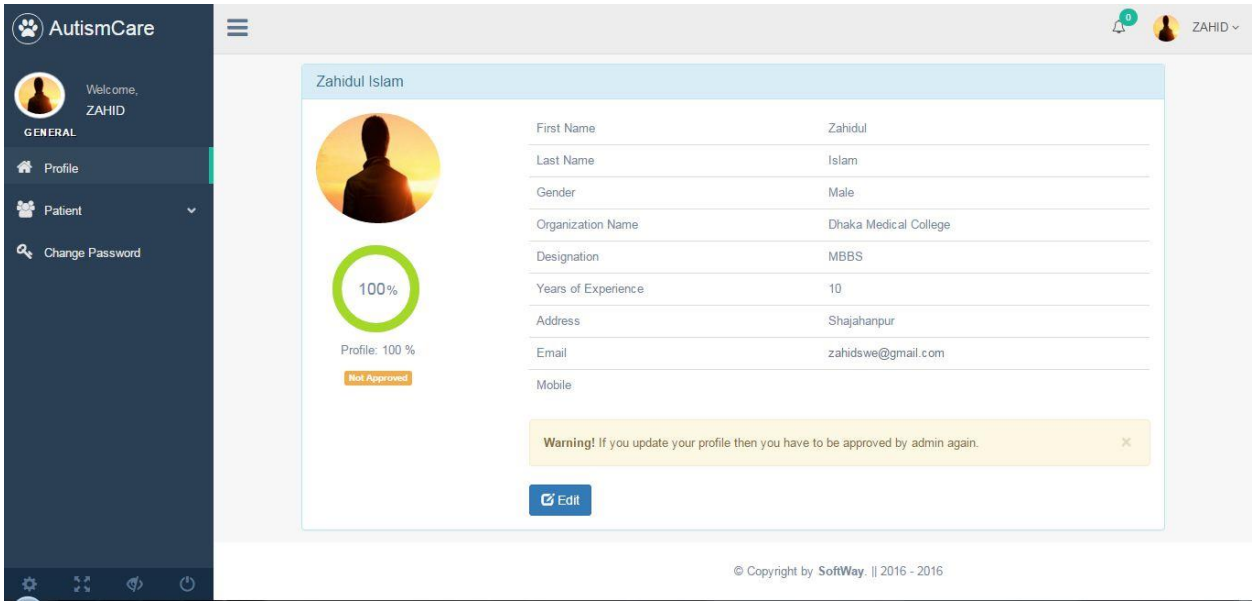


Figure: 4.7 Screen shot Information Update

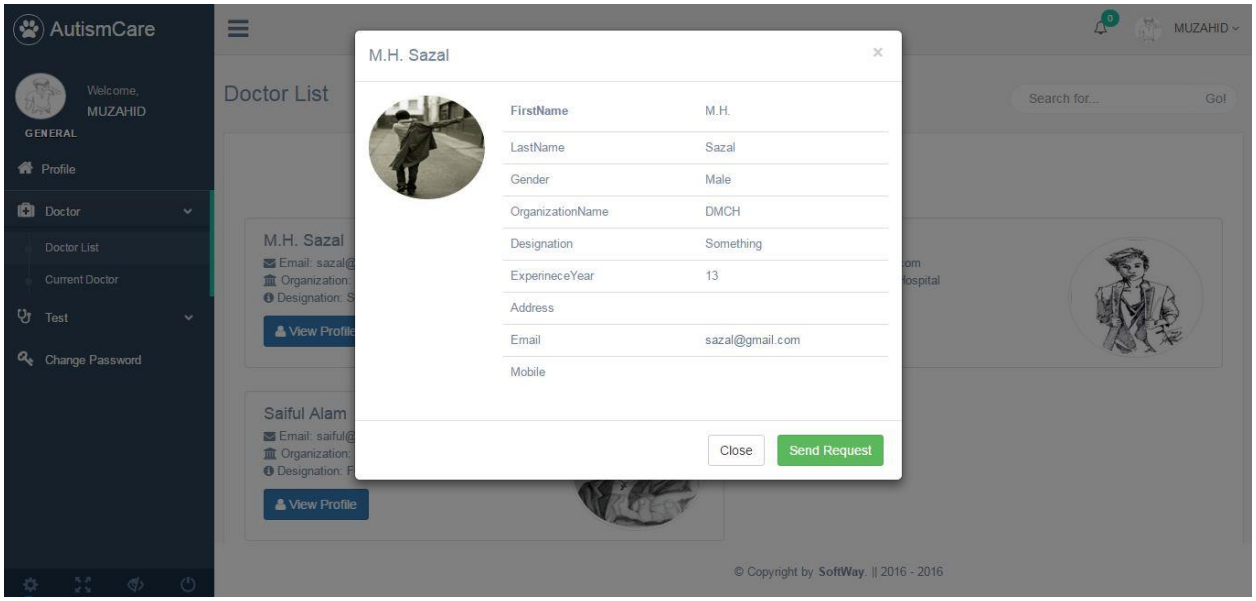


Figure: 4.8 Screen shot Doctor Lists and Send Request

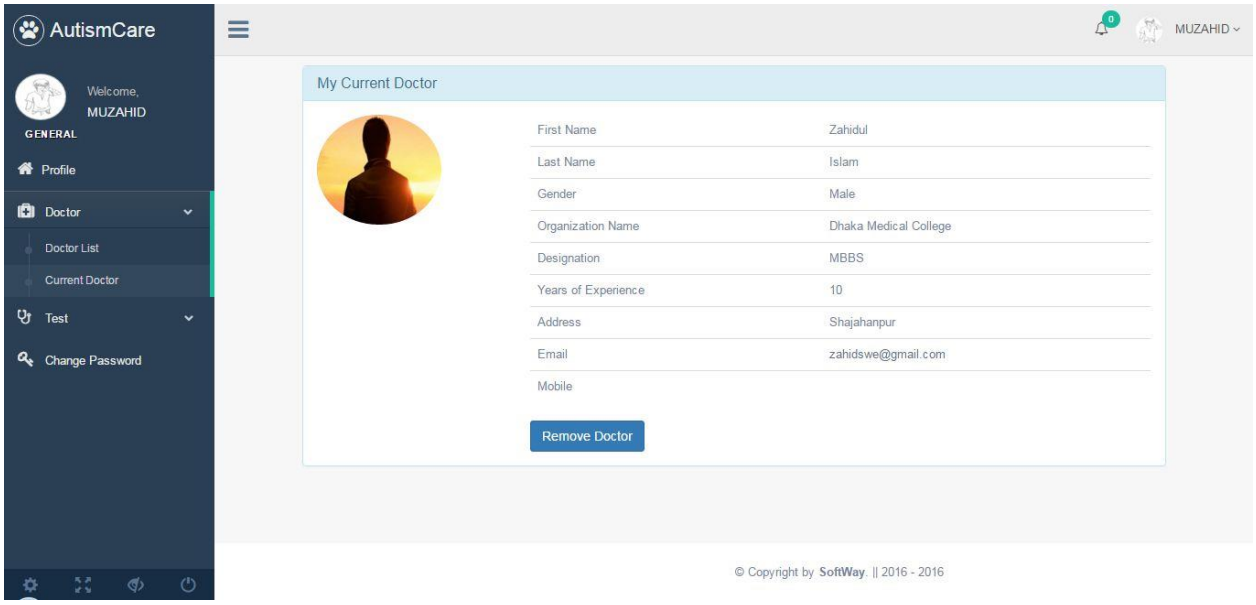


Figure: 4.9 Screen shot Remove Current Doctor

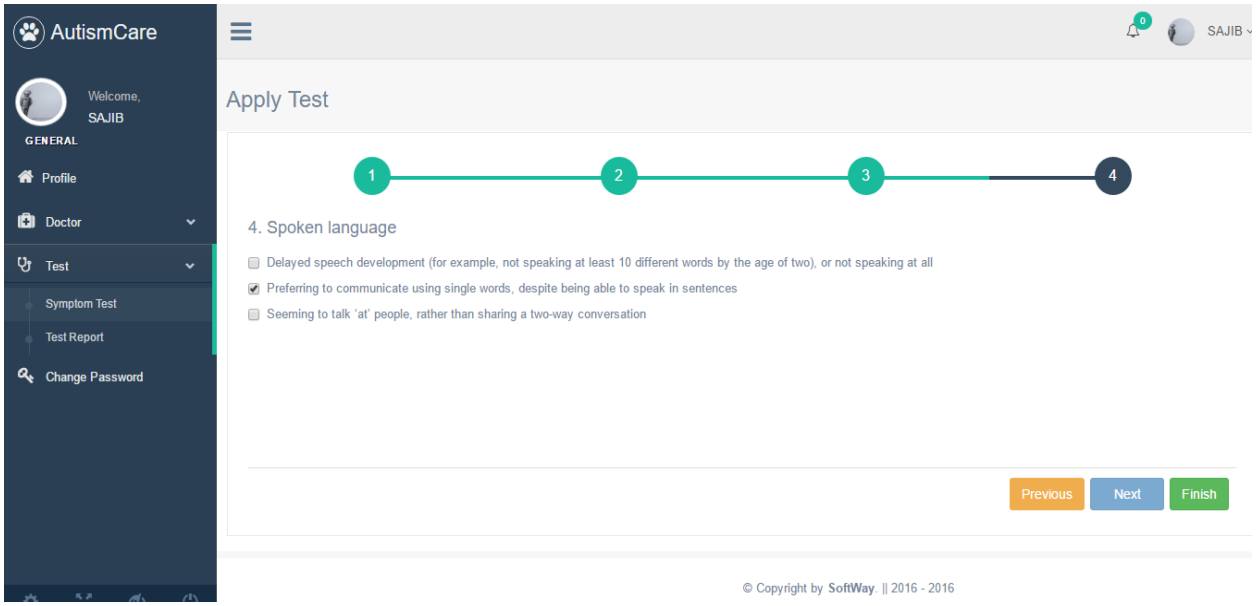


Figure no: 4.10 Screenshot Apply Symptom Identification Test by the patient

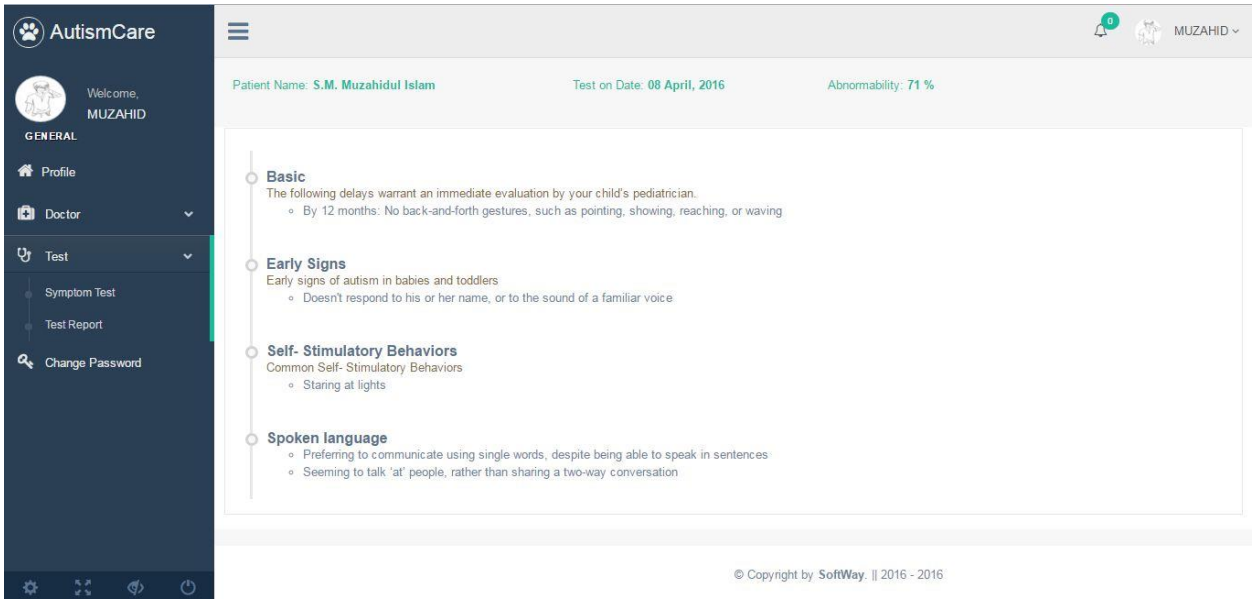


Figure no: 4.11 Screen shot Show Test Report

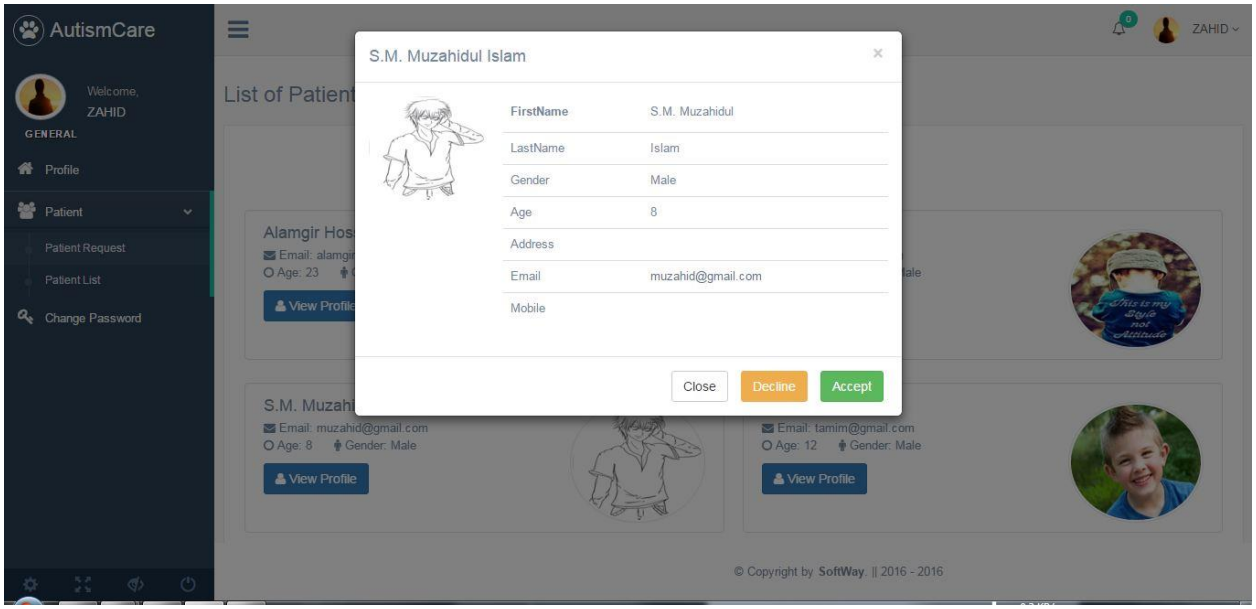


Figure no: 4.12 Screen shot Doctor Show patient request

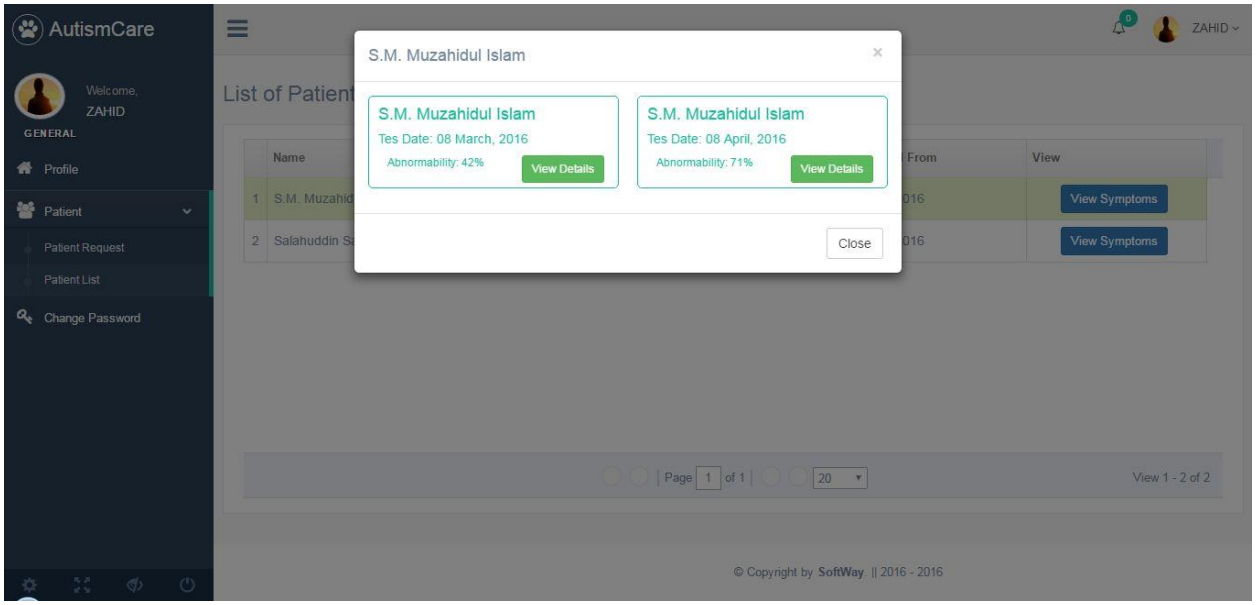


Figure no: 4.13 Screen shot Doctor Show patient Lists

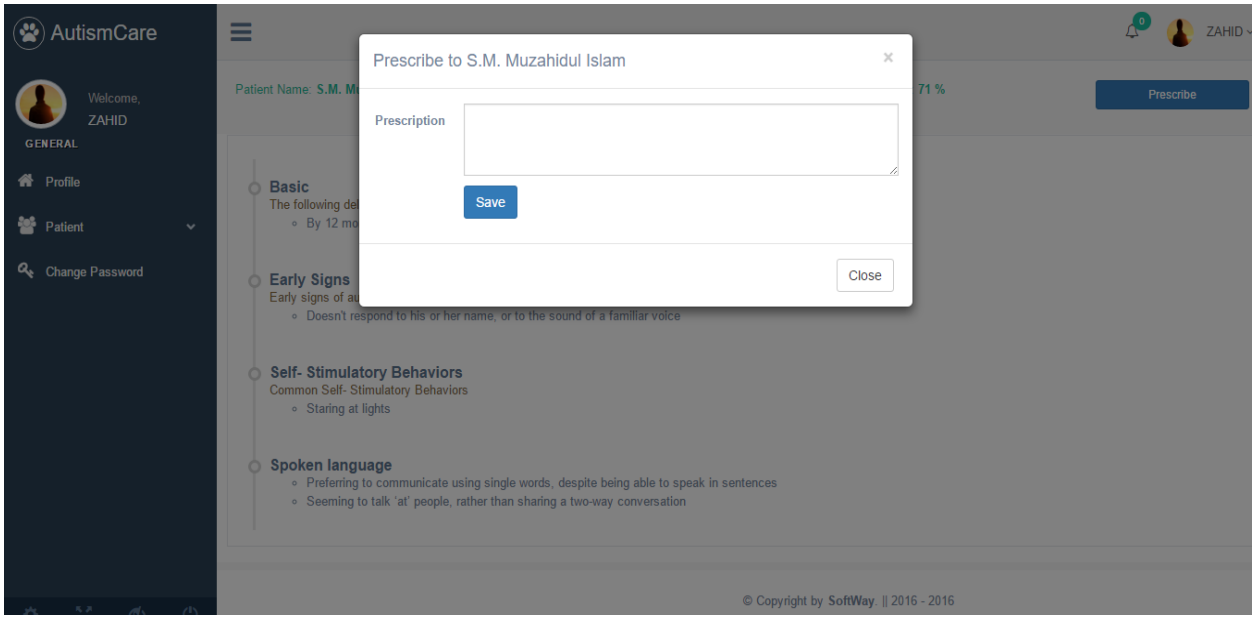


Figure no: 4.14 Screen Shot Doctor Create Prescription for the patient

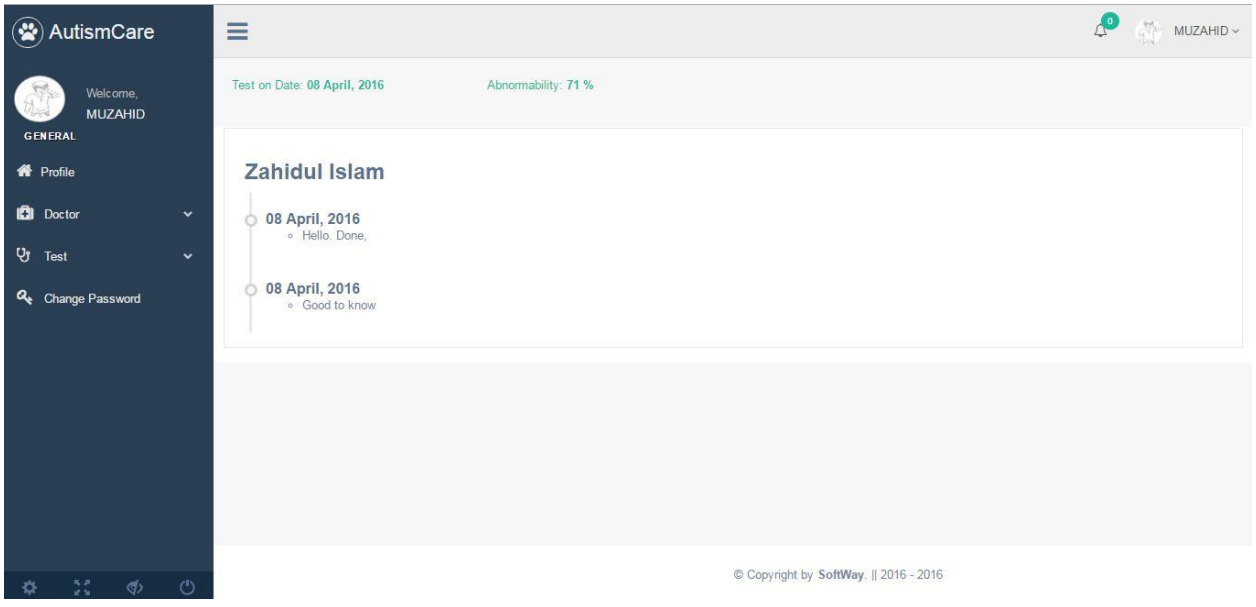


Figure no: 4.15 Screen Shot Patient View Prescription

Chapter 5: Testing

5.1 Main Activity of Software Testing

5.1.1 Plan the testing process

Create a test plan specific to a level of testing (e.g. system testing, unit testing, etc.).Test levels should emphasize on how the testing schema and project test plan apply to different levels of testing and state exceptions if present. A test plan must contain scope of the testing and all the assumptions that are made. Completion criteria need to be specified to determine when the specific level of testing is complete.

5.1.2 Involve QA from the beginning

QA Engineers should be involved in the project from the initial stage of the Software Development Life Cycle (SDLC) i.e., Requirement gathering. This helps identify the possible bug prone areas and design the software so that these areas are properly and efficiently managed. Later stage involvement of the tester may affect the quality of the software as the design may not allow the changes which are required to remove the bugs forcing you to compromise in certain areas.

5.1.3 Document, Document, Document

Documentation is a major step of the testing process. Documentation always helps the testers to get into the project detail in-depth. To understand the project, documenting the project requirements is a very useful exercise. Most companies do not take documentation very seriously at the early stages of the project which results in critical problems in the later phase. Especially if a new tester joins any ongoing project, proper documentation of that project will help him/her to get on top of the project very easily.

5.1.4 Acquire domain knowledge

QA is the user's proxy in the development organization. For a QA person it is critical that he: Acquires good domain knowledge. He needs to quickly grasp as many concepts as he can review online resources about the domain on which the test application is based. If possible, get training on the domain or meet the domain experts to advice. Ideally, organizations should arrange for formal domain training sessions for the QA team.

5.1.5 Communicate to bridge the Developer-QA gap

Developers and QA come from different planets – developers are happy if a software works once, QA is happy if it breaks once. So a communication gap is to be expected. However, this gap will result in lack of in-depth knowledge of the testing application and which in turn will create unidentified defects in the application. Communication between Development and QA affects the overall productivity of the project more knowledge, more transparency of an ongoing project always helps the testing process. Regular meetings can be beneficial to track the status of the project. To get the in-depth knowledge of a project, one should not have any communication gap between the testers and the business team as well. Implementing these Quality Assurance activities will help ensure deliverables of high quality software that enhances the confidence, trust and positive perception for the company. Improving testing processes in order to get good quality-bug free software is an ongoing activity. The testing process must be reviewed in all the phases of the project development life cycle. The above 5 steps are crucial to build in and review on a periodic basis by a learning organization.

5.2 Black box testing

Black box testing is a method of software testing that examines the functionality of an application without peering into its internal structures or workings. This method of test can be applied to virtually every level of software testing: unit, integration, stem and acceptance.

We have designed our test case into two different sectors

5.2.1 Boundary value test.
5.2.2 Functionality test.

5.2.1 User Input Boundary Test

5.2.1.1 User Registration Process

Patient

Table: 5.1 Test Case Patient Registration Process

Pre-Condition: User should provide valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to Registration Page	Provide Valid user name and password for successful registration into the system as patient …	User Should be able to successful registration .	User is navigated to...	Pass	To get into the system as patient, patient should **keep remembert heir accurate user name and password** which they have provided during registration .
2	Provide Valid User Name & email	User:Mr.Tanvirexample_16@gmail.com	Input successful	Successful	Pass	Can use any kind of e-mail account or user name start with alphabetic character.
3	Provide Valid Password	Password: P1234	Input successful	Successful	Pass	At least 6 character Required include a

						single alphabet. Special character for password supported.
4	Click On Submit Button …	Submit	Registration Successful	Registration Successful	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an exception error message** during wrong submission.

Post Condition: User (Patient) registration records will be successfully store into the patient table in the database.

5.2.1.2 User Registration Process

Doctor

Table: 5.2 Test Case Doctor Registration Process

Pre-Condition: User should provide valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to Registration Page	Provide Valid user name and password for successful registration into the system as patient …	User Should be able to successful registration.	User is navigated to	Pass	To get into the system as patient, patient should **keep remembertheir accurate user name and password** which they have provided during registration.
2	Provide Valid User Name & email	User: Dr. Safin example_16@gmail.com	Input successful	Successful	Pass	Can use any kind of e-mail account or user name **start with alphabetic** character.
3	Provide Valid Password	Password: P1234	Input successful	Successful	Pass	At least 6 character Required include a single alphabet. Special character for password supported.
4	Click On Submit Button …	Submit	Registration Successful	Registration Successful	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an exception error message** during wrong submission.

Post Condition: User (Doctor) registration records will be successfully store into the patient table in the database.

5.2.1.3 User Registration Process

Admin

Table: 5.3 Test Case System Admin Registration Process

Pre-Condition: User should provide valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to Registration Page	Provide Valid user name and password for successful registration into the system as patient …	User Should be able to successful registration.	User is navigated to	Pass	To get into the system as patient, patient should **keep remembertheir accurate user name and password** which they have provided during registration.
2	Provide Valid User Name & email	User: super user example_16@gmail.com	Input Successful	Successful	Pass	Can use any kind of e-mail account or user name **start with alphabetic** character.
3	Provide Valid Password	Password: P1234	Input Successful	Successful	Pass	At least 6 character Required include a single alphabet.

						Special character for password supported.
4	Click On Submit Button …	Submit	Registration Successful	Registration Successful	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an exception error message** during wrong submission.

Post Condition: User (Admin) registration records will be successfully store into the patient table in the database.

5.2.1.4 User Login Process

Patient

Table: 5.4 Case Patient Login Process

Pre-Condition: User has valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to Login Page	Input Valid user name and password for successful log in into the system as patient …	User Should be able to login.	User is navigated to	Pass	To log into the system as patient, patient should **input their accurate user name and password** which they have provided

						during user registration.
2	Provide Valid User Name or email	User: Mr. Tanvir example_16@gmail.com	Valid	Valid	Pass	Log into the system as patient.
3	Provide Valid Password	Password: P1234	Valid	Valid	Pass	Valid
4	Click On Log in Button …	Submit	Login Successful	Login Successful	Pass	Navigated to User Panel.

Post Condition: User (Patient) is validated with database and successfully login to account. The account session details are logged in database.

5.2.1.5 User Login Process

Doctor

Table: 5.5 Doctor Login Process

Pre-Condition: User has valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to Login Page	Input Valid user name and password for successful log in	User Should be able to login.	User is navigated to	Pass	To log into the system as patient, patient should **input their accurate user**

		into the system as patient …				**name and password** which they have provided during user registration.
2	Provide Valid User Name or email	User: Dr. Safin example_16@gmail.com	Valid	Valid	Pass	Log into the system as doctor.
3	Provide Valid Password	Password: P1234	Valid	Valid	Pass	Log into the system as doctor.
4	Click On Log in Button …	Submit	Login Successful	Login Successful	Pass	Navigated to User Panel.

Post Condition: User (Doctor) is validated with database and successfully login to account. The account session details are logged in database.

5.2.1.6 User Login Process

Admin

Table: 5.6 Test Case Admin Login Process

Pre-Condition: User has valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes

1	Navigate to Login Page	Input Valid user name and password for successful log in into the system as patient …	User Should be able to login.	User is navigated to	Pass	To log into the system as patient, patient should **input their accurate user name and password** which they have provided during user registration.
2	Provide Valid User Name or email	User: Dr. Safin example_16@gmail.com	Valid	Valid	Pass	Log into the system as super user.
3	Provide Valid Password	Password: P1234	Valid	Valid	Pass	Log into the system as super user.
4	Click On Log in Button …	Submit	Login Successful	Login Successful	Pass	Navigated to User Panel.

Post Condition: User (Admin or super user) is validated with database and successfully login to account. The account session details are logged in database.

5.2.1.7 User Information Update Process

Patient

Table: 5.7 Test Case Patient Information Update Process

Pre-Condition: User able to update valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to user information update Page	Provide Valid user name and password for successful update information into the system as patient …	User Should be able to update all the information successfully.	User is navigated to	Pass	To update information into the system as patient, patient should **keep remember their accurate user name and password** and other information field which they have provided during update process.
2	Provide Valid User Name & email	User: Mr.Tanvir example_16@gmail.com	User should be able to update user name and email.	Information updated	Pass	Can use any kind of e-mail account or user name start with alphabetic character.
3	Provide Valid Password	Password: P1234	User should be able to update password.	Password Updated.	Pass	At least 6 character Required include a single alphabet. Special character for password supported.
4	Click On Submit Button …	Submit	Information update Successfully.	Successfully Information Updated.	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an exception error message** during wrong submission.

Post Condition: User (Patient) Updated records will be successfully store into the patient table in the database.

5.2.1.8 User Information Update Process

Doctor

Table: 5.8 Test Case Doctor Information Update Process

Pre-Condition: User able to update valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to user information update Page	Provide Valid user name and password for successful update information into the system as patient …	User Should be able to update all the information successfully .	User is navigated to..	Pass	To update information into the system as patient, patient should **keep remembertheir accurate user name and password** and other information field which they have provided during update process.
2	Provide Valid User Name & email	User: Mr.Tanvir example_16@gmail.com	User should be able to update user name and email.	Information updated	Pass	Can use any kind of e-mail account or user name start with alphabetic character.
3	Provide Valid Password	Password: P1234	User should be able to update password.	Password Updated .	Pass	At least 6 character Required include a single alphabet. Special character for password supported.
4	Click On Submit Button …	Submit	Information update Successfully .	Successfully Information Updated .	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an**

						exception error message during wrong submission.

Post Condition: User (Doctor) Updated records will be successfully store into the patient table in the database.

5.2.1.9 User Information Update Process

Admin

Table: 5.9 Test Case Admin Information Update Process

Pre-Condition: User able to update valid username and password. **Dependencies:** High Speed Internet, Computer or, Smart Phone.

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Navigate to user information update Page	Provide Valid user name and password for successful update information into the system as patient …	User Should be able to update all the information successfully.	User is navigated to.	Pass	To update information into the system as patient, patient should **keep remember their accurate user name and password** and other information field which they have provided during update process.
2	Provide Valid User Name & email	User: Mr.Tanvir example_16@gmail.com	User should be able to update user name and email.	Information updated	Pass	Can use any kind of e-mail account or user name start with alphabetic character.

3	Provide Valid Password	Password: P1234	User should be able to update password.	Password Updated.	Pass	At least 6 character Required include a single alphabet. Special character for password supported.
4	Click On Submit Button …	Submit	Information update Successfully.	Successfully Information Updated.	Pass	System will resist all kind of invalid input and check required text field validation and able to **show auto fire an exception error message** during wrong submission.

Post Condition: User (Admin or super user) Updated records will be successfully store into the patient table in the database.

5.2.2 Functionality Test

Table: 5.10 Test Case System Functionality Test

Step	Test Steps/ Event	Test Data	Expected Result	Actual Result	Status (Pass/ Fail)	Notes
1	Dr. get Send Confirmation Message to admin	Doctor will click on send request button	Doctor should able to add in.	Get send notification.	Pass	Doctor will find add request button on his panel.
2	Dr. get accept confirmation Message from admin	Admin will click on accept request button.	Doctor should able to get accept confirmation	Added into the system as new doctor	Pass	Admin will find accept request button on his panel.

3	Add into Doctor List	User will click on doctor list	User will able to show doctor list	User can see doctor list	Pass	User will find doctor list of their specific user panel.
4	Admin See details about Doctor	Admin click on specific doctor from requested doctor list or only doctor list.	Admin will able to show doctor details.	Admin can see doctor details.	Pass	Admin will find doctor details from doctor panel.
5	Patient get Send Confirmation Message to Doctor	Patient will click on send request button	Patient should able to add in.	Get send notification.	Pass	Patient will find add request button on his panel.
6	Patient get accept confirmation Message from Doctor	Patient will click on accept request button.	Patient should able to get accept confirmation	Added into the patient list as new as a current patient.	Pass	Doctor will find accept request button on his panel.
7	Add into current patient List of requested Doctor	User will click on Patient list	User will able to show patient list	User can see patient list	Pass	User will find patient list of their specific user panel.
8	Check out from current requested Doctor	Patient will click on check out button.	Patient will able to check out from current doctor list.	User can get check out confirmation.	Pass	Patient will find check out button from current doctor list.
9	Patient give test step by step	Patient will click on test button and then click on next	Patient will able to give test.	Patient can get all the test level.	Pass	Patient will find test button on his panel.

		level sequentially.				
10	Accurate Test Result generate	User will click on test result button.	User will able to see test result.	User can see all the test result.	Pass	User will find test result button from patient profile.

Chapter 6: Conclusion

6.1 Conclusion

It can be observed from “Autism Skill Care” system, this system will able to provide proper care of its patient. To improve patient condition, patient can frequently doctor checkup. Patient can attend symptom identification test as they want any time anywhere. By providing report analysis this system will contribute a major part of instant treatment of its patient. It may not be possible for all patients to get frequently treatment from doctor and judge patient skill by manual or physical consultancy with doctor regularly. So this system will remain a major contribution than manually doctor checkup.

Chapter 7: User Manual

7.1 Admin Panel

7.1.1 Sign in as admin: Put user name and password in in required field then click on login button bellow.

Direction: Username and password ⇨ Login [Figure: 4.1, Page-49]

7.1.2 Admin Dashboard: Show on different view total number of male and female doctor and patient exist in this system by click on Dashboard from the left side bar menu.

Direction: Click on ⇨ Dashboard [Figure: 4.2, Page-50]

7.1.3 Doctor Approval: Click on Pending Approval menu from the left side bar then click on approve button for intended doctor. [Figure: 4.3, Page-50]

Direction: Click on ⇨ Pending Approval ⇨ View Profile ⇨ Approve

7.1.4 Add Symptom: Click on Test Question from the side bar menu. It shows two another sub menus. One is Symptom another one is Symptom Groups.

Direction: Click on ⇨ Test Question

7.1.4.1 Create new symptom: Click on Symptom menu then click on create new symptom. After completed the form of new symptom creation then click on save button. Edit or Delete any content each row basis click on edit or delete button.

Direction: Click on ⇨ Create New Symptom ⇨ Save [Figure: 4.4, Page-51]

7.1.4.2 Create new symptom groups: Click on Symptom groups sidebar sub menu then click on create new group. After completed the form of new symptom group then click on save button. Edit or Delete any content each row basis click on edit or delete button.

Direction: Click on ⇨ Create New Group ⇨ Save [Figure: 4.5, Page-51]

7.1.5 Password Change: Click on Password change menu from the left side bar. After completed the password change form then click on change password button.

Direction: Click on ⇨ Change Password ⇨ Change Password [Figure: 4.6, Page-52]

7.2 Patient Panel

7.2.1 Sign in as patient: Put user name and password in required field then click on login button bellow.

Direction: Username and password ⇨ Login [Figure: 4.1, Page-49]

7.2.2 Information Update: From the left side menu bar click on profile menu then click on edit. After completed update form then click on update button.

Direction: Click on ⇨ Profile ⇨ Edit ⇨ Update [Figure: 4.7, Page-52]

7.2.3 Show Doctor List: From the left side menu bar click on Doctor. It shows two another sub menus. One is Doctor list another one is Current Doctor.

Direction: Click on ⇨ Doctor

7.2.3.1 Doctor List: Click on doctor list submenu and show already exited doctor in this system then click on view profile button to see doctor information.

Direction: Click on ⇨ Doctor List [Figure: 4.8, Page-53]

7.2.3.2 RemoveDoctor: Click on Current Doctor Submenu and show by which doctor you are taking treatment right now. To remove current doctor click on Remove doctor button.

Direction: Click on ⇨ Current Doctor ⇨ Remove Doctor [Figure: 4.9, Page-53]

7.2.4 Symptom Identification Test: From the left side menu bar click on Test menu. In this menu it shows two submenus. One is Symptom Test other one Test Report submenus.

Direction: Click on ⇨ Test

7.2.4.1 Symptom Test: To attend a test click on symptom test submenu then click on Start Test Button then continue your test with fill up the check box.

Direction: Click on ⇨ Symptom Test ⇨ Start Test [Figure: 4.10, Page-54]

7.2.4.2 Show Test Report: To view the test report click on submenu Test Report then click on view symptoms button to see symptom that has existed in patient and then click on view prescription button to see all prescription that has provided from doctors.

Direction: Click on ⇨ Test Report ⇨ View Symptoms ⇨ View Prescription

[Figure: 4.11, Page-54]

7.2.4.3 View Prescription: Click on view prescription.

Direction: Click ⇨ View Prescription [Figure: 4.15, Page-56]

7.2.5 Password Change: Click on Password change menu from the left side bar. After completed the password change form then click on change password button.

Direction: Click on ⇨ Change Password ⇨ Change Password [Figure: 4.6, Page-52]

7.3 Doctor Panel

7.3.1 Sign in as patient: Put user name and password in required field then click on login button bellow.

Direction: Username and password ⇨ Login [Figure: 4.1, Page-49]

7.3.2 Information Update: From the left side menu bar click on profile menu then click on edit. After completed update form then click on update button.

Direction: Click on ⇨ Profile ⇨ Edit ⇨ Update [Figure: 4.7, Page-52]

7.3.3 Approve Patient Request: From the left side menu bar click on patient menu. It shows two submenus. One is patient request other one is patient list.

Direction: Click on ⇨ Patient

7.3.3.1 Patient Request: Click on patient request submenu then click on view profile then click on any button among close, decline accept as you want.

Direction: Click on⇨ Patient Request⇨ View Profile ⇨ Accept⇨ Decline⇨Close

[Figure: 4.12, Page-55]

7.3.3.2 Patient List: Click on patient list submenu then click on view symptoms then click on view details button then click on prescribe button to create prescription then click on save button.

Direction: Click on⇨ Patient List⇨View Symptoms⇨ View Details

[Figure: 4.13, Page-55]

7.3.3.3 Create Prescription: Click on Prescribe button.

Direction: Click on⇨Prescribe [Figure: 4.14, Page-56]

7.3.4 Password Change: Click on Password change menu from the left side bar. After completed the password change form then click on change password button.

Direction: Click on ⇨ Change Password Change ⇨Password [Figure: 4.6, Page-52]

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Appendix

Project Selection

Table: Appendix-A Project Selection

Primary Phase				
SL	**Job Description**	**Start Date**	**End Date**	**Total Days**
1	Idea Searching.	14-May-2015	17-May-2015	3
2	Domain Knowledge Gathering.	18-May-2015	21-May-2015	3
3	Resource Availability Checking.	22-May-2015	25-May-2015	3
4	Brain Storming.	26-May-2015	06-Jun-2015	11
5	Feasibility Study.	07-Jun-2015	17-Jun-2015	10
			Total Days	30

Idea Proposal

Table: Appendix-B Idea Proposals

Advanced Phase				
SL	**Job Description**	**Start Date**	**End Date**	**Total Days**
1	Idea Sharing with Supervisor.	18-June-2015	21-Jun-2015	3
2	Advanced Domain Knowledge Gathering.	22-June-2015	25-Jun-2015	3
3	Advanced Resource Gathering from Supervisor and from online open resources.	2-Jun-2015	12-Jun-2015	10
4	Advanced Brain Storming with Supervisor.	13-Jun-2015	18-Jun-2015	5
5	Advanced Feasibility Checking with Supervisor.	19-Jun-2015	25-Jun-2015	6
6	SDLC Model Selection for System Development.	26-Jun-2015	29-Jun-2015	3
			Total Days	30

Requirement Collection

Table: Appendix-C Requirement Collections

SL	Job Description	Start Date	End Date	Total Days
1	Develop System Scenario.	30-Jun-2015	5-Jul-2015	5
2	Requirement Identify from System Scenario.	6-Jul-2015	11-Jul-2015	5
3	Row Requirement Collection from Identified Requirement.	12-Jul-2015	22-Jul-2015	10
4	Functional Requirement Collection.	23-July-2015	2-Aug-2015	10
5	Software Requirement Specification (SRS).	3-Aug-2015	23-Aug-2015	20
6	Manage All Requirement and Arrange all Information.	24-Aug-2015	29-Aug-2015	5
7	Non-Functional Requirement Specification.	30-Aug-2015	4-Sep-2015	5
			Total Days	60

System Design

Table: Appendix-D System Designs

Physical System Design				
SL	**Job Description**	**Start Date**	**End Date**	**Total Days**
1	Graphical User Interface (GUI) UX Modeling.	5-Sep-2015	10-Sep-2015	5
2	System Prototype Designing.	11-Sep-2015	21-Sep-2015	10
			Total Days	15
Logical System Design				
1	System Environment Designing.	22-Sep-2015	27-Sep-2015	5
2	Use Case Diagram Designing.	28-Sep-25	1-Oct-2015	3
3	Detail Flow Diagram DFD-Level: 0 Designing.	2-Oct-2015	5-Oct-2015	3
4	Detail Flow Diagram DFD-Level: 1 Designing.	6-Oct-2015	10-Oct-2015	4
			Total Days	15
			Total Days	30

System Implementation

Table: Appendix-E System Implementation

Technology Used				
SL	**Job Description**	**Start Date**	**End Date**	**Total Days**
1	Language: Object Oriented Programming C#	11-Oct-2015	21-Oct-2015	10
2	ASP.Net Frame Work MVC-5	22-Oct-2015	1-Nov-2015	10
3	Bootstrap Web Designing Frame Work	2-Nov-2015	12-Nov-2015	10
4	HTML – 5, CSS - 3	13-Nov-2015	23-Nov-2015	10
5	Database MS-Sql Server -2014	24-Nov-2015	4-Dec-2015	10
6	Proto Type Design Tool https://pidoco.com (Pidoco)			
			Total Days	50

System Testing

Table: Appendix-F System Testing

Black Box Testing				
SL	**Job Description**	**Start Date**	**End Date**	**Total Days**
1	Boundary Value Testing.	5-Dec-2015	9-Dec-2015	5
2	System Functionality Testing.	10-Dec-2015	15-Dec-205	5
			Total Days	10
			Total Days	210

System Deployment

Date: 09-April-2016