

Project Title: Diagnostic Medicare Center Manager.

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Objectives:

Below are the objectives that shall be fulfilled post the execution of this project:

Diagnostic Medicare Center Management system will create and maintain Customer and Doctor Information.

- Create and maintain customer and doctor information.
- Search for the Medicare services.
- Customer applies for the Health Checkup.
- Customer can search for agent.
- Customer/Doctor will view the result.

Technologies:

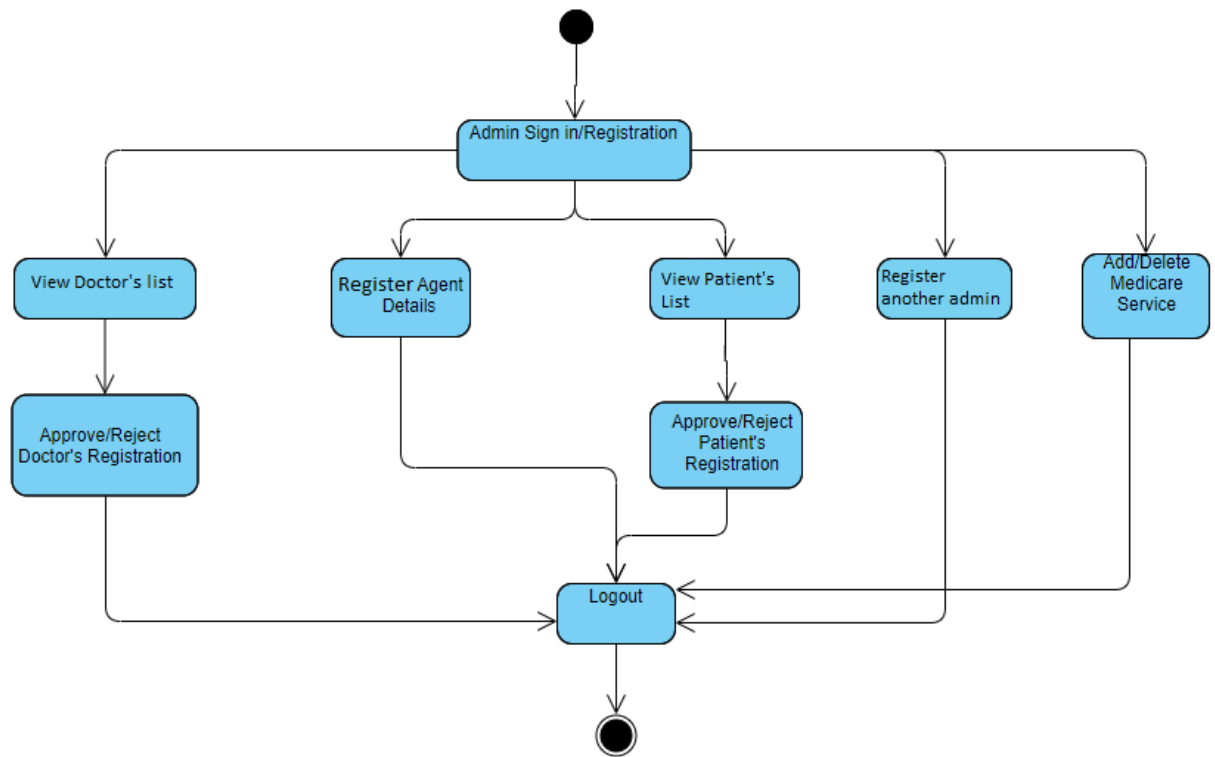
Front End	Java (HTML5,CSS3, JavaScript, Angular)
Middleware	Java (Spring Data JPA, Spring MVC, Spring Boot, Hibernate , JWT)
Backend	SQL

Hardware and Software Requirements:

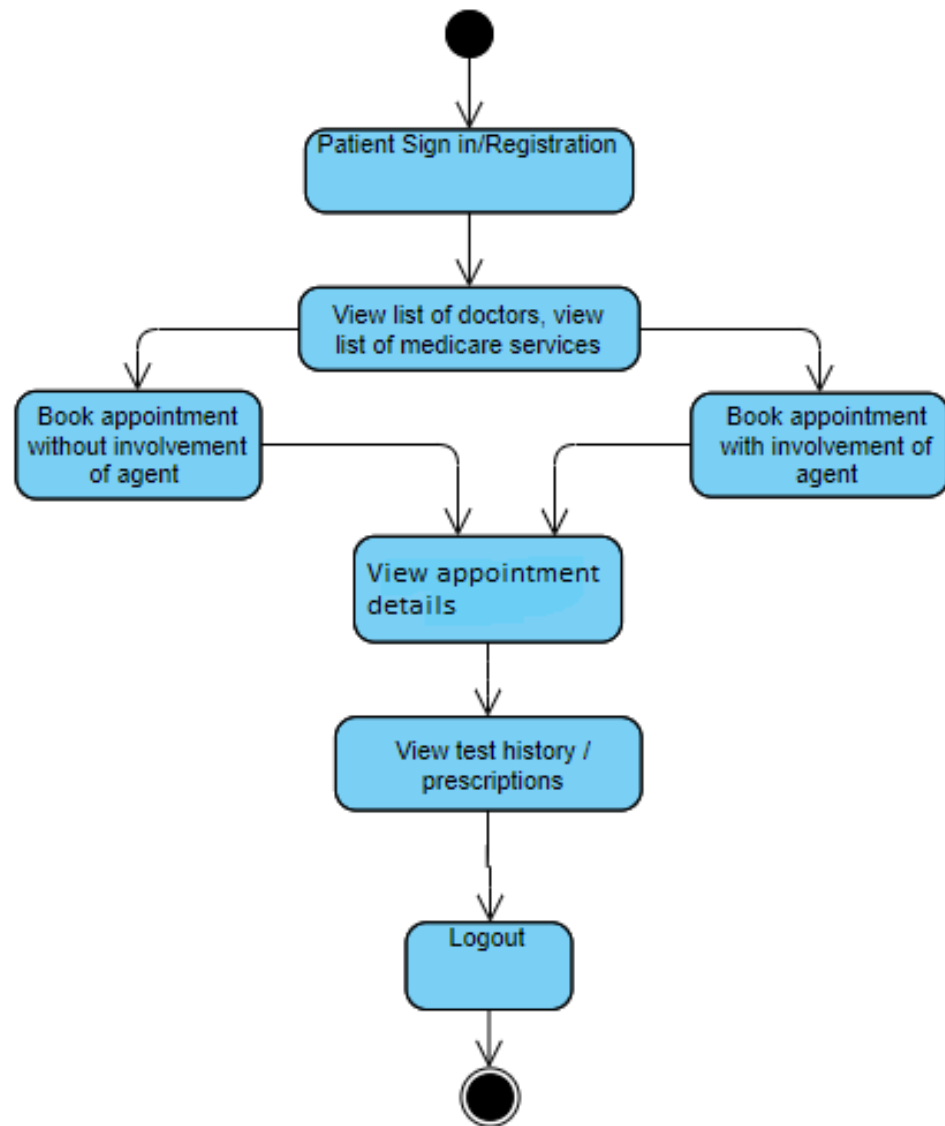
Technology	Hardware	Software
Java 1.8 Angular 6 Maven 3.6.0 Spring Hibernate	Desktop PC with 8GB RAM	1. Visual Studio Code 1.30 2. Eclipse IDE f or Java EE Developers (Oxygen) 3. Tomcat 8.5 4. MySQL Workbench 8.0.14 5. Postman 6. NodeJS 10

SYSTEM FLOW:

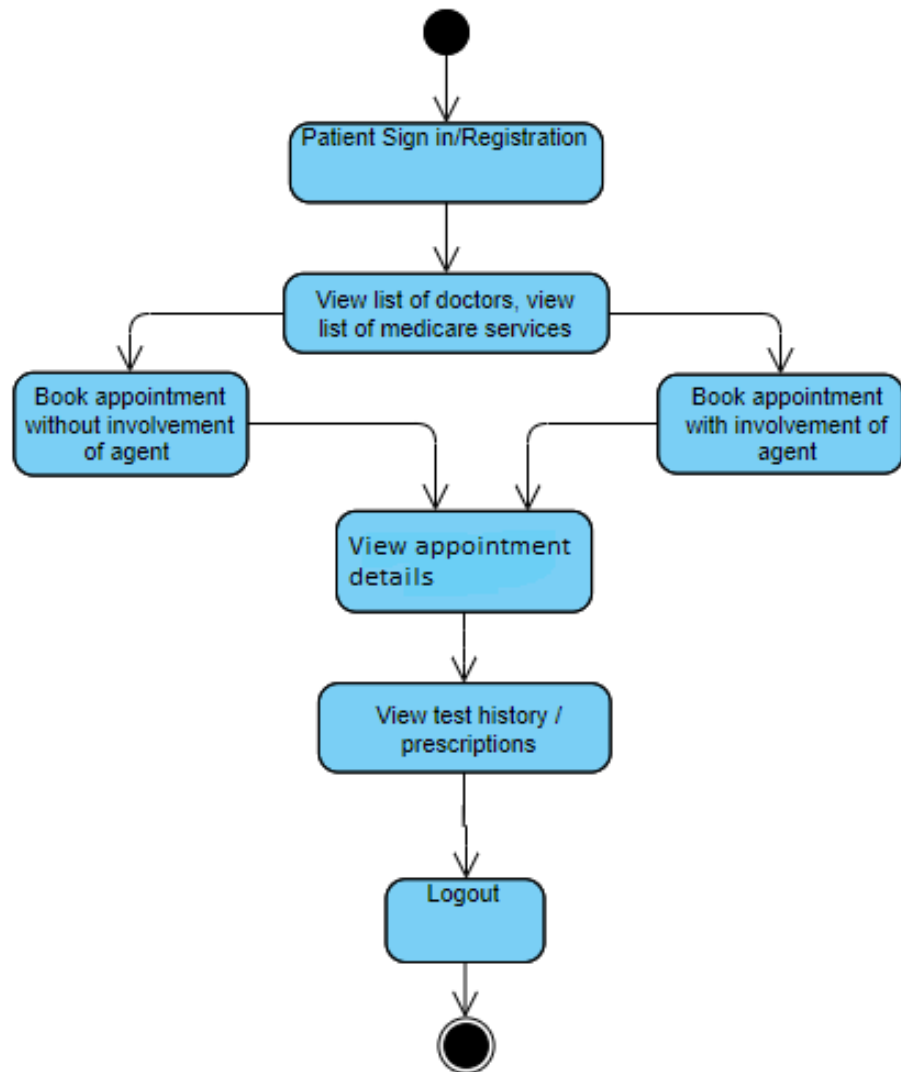
ADMIN:



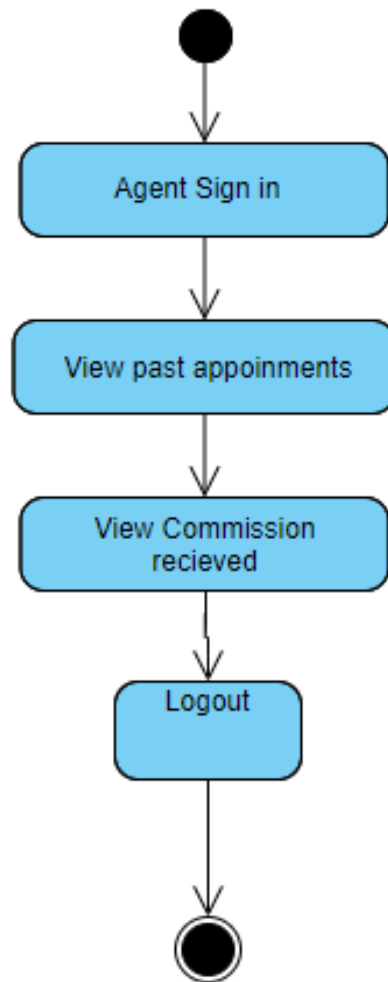
PATIENT:



DOCTOR:



AGENT:



ER DIAGRAM:

Please refer the attached document in the mail for ER Diagram.

BUSINESS REQUIREMENTS:

Note - Primary focus is to complete developing the critical requirements (highlighted in Yellow) and then to proceed with the remaining requirements.

US : User Stories.

REQ: Requirements/sub-tasks.

User Story ID	User Story Description	Sub tasks details.		Dependency of User Story
US_1	The objective of this requirement is to allow the user to Register/ login as Customer / Doctor / Admin / Agent	ID	SHORT DESCRIPTION	No dependency
		REQ_1	Initial Selection: Ability of the system to allow to Customer to choose Admin/Customer/ Doctor Login/Registration	
		REQ_2	Customer Registration: Ability of the system to procure the fundamental details of the Customer	
		REQ_3	Customer Authentication: Ability of the system to authenticate the Customer credentials of the registered Customer	
		REQ_4	Doctor Registration Ability of the system to procure the fundamental details of the Doctor	
		REQ_5	Doctor Authentication: Ability of the system to authenticate the Doctor credentials of the registered Doctor	
		REQ_6	Agent Registration: Ability of the system to procure the fundamental details of the Agent	
		REQ_7	Agent Authentication: Ability of the system to authenticate the Agent credentials of the registered Agent	
		REQ_8	Admin Registration: Ability of the system to procure the fundamental details of the Admin	
		REQ_9	Admin Authentication: Ability of the system to authenticate the credentials of the registered Admin	
US_2	The objective of this requirement is to allow doctor to update the Medicare service Details	ID	SHORT DESCRIPTION	Has a dependency with FS_1
		REQ_10	Add / Update Medicare Service Details: Ability of the system to allow doctor to add / update the Medicare service Details	

US_3	The objective of this requirement is to allow Admin to update Agent Details	<table><tr><th>ID</th><th>SHORT DESCRIPTION</th></tr><tr><td>REQ_11</td><td>Update Agent details: Ability of the system to allow Admin to update Agent Details</td></tr></table>	ID	SHORT DESCRIPTION	REQ_11	Update Agent details: Ability of the system to allow Admin to update Agent Details	Has a dependency with FS_1						
ID	SHORT DESCRIPTION												
REQ_11	Update Agent details: Ability of the system to allow Admin to update Agent Details												
US_4	The objective of this requirement is to allow the customer to have the list Medicare service / Doctor / Agent details displayed.	<table><tr><th>ID</th><th>SHORT DESCRIPTION</th></tr><tr><td>REQ_12</td><td>View Medicare Service/ Doctor details : Ability of the system to list Medicare service / Doctor details to the Customer / Agent.</td></tr></table>	ID	SHORT DESCRIPTION	REQ_12	View Medicare Service/ Doctor details : Ability of the system to list Medicare service / Doctor details to the Customer / Agent.	Has a dependency with FS_1, FS_2, FS_3						
ID	SHORT DESCRIPTION												
REQ_12	View Medicare Service/ Doctor details : Ability of the system to list Medicare service / Doctor details to the Customer / Agent.												
US_5	The objective of this requirement is to allow Customer to raise Checkup request	<table><tr><th>ID</th><th>SHORT DESCRIPTION</th></tr><tr><td>REQ_13</td><td>Book appointment : Ability of the system to allow Customer / agent to book appointment</td></tr><tr><td>REQ_14</td><td>Approval / Denial for appointment: Ability of the system to allow Doctor / Admin to approve / deny the</td></tr><tr><td>REQ_15</td><td>View Appointment status: Ability of the system to allow Customer / agent to view appointment status.</td></tr><tr><td>REQ_16</td><td>Send reminders: Ability of the system to send remainder messages to Doctor / Patient upon the Appointment approval.</td></tr></table>	ID	SHORT DESCRIPTION	REQ_13	Book appointment : Ability of the system to allow Customer / agent to book appointment	REQ_14	Approval / Denial for appointment: Ability of the system to allow Doctor / Admin to approve / deny the	REQ_15	View Appointment status: Ability of the system to allow Customer / agent to view appointment status.	REQ_16	Send reminders: Ability of the system to send remainder messages to Doctor / Patient upon the Appointment approval.	Has a dependency with FS_1, FS_2, FS_3, FS_4
ID	SHORT DESCRIPTION												
REQ_13	Book appointment : Ability of the system to allow Customer / agent to book appointment												
REQ_14	Approval / Denial for appointment: Ability of the system to allow Doctor / Admin to approve / deny the												
REQ_15	View Appointment status: Ability of the system to allow Customer / agent to view appointment status.												
REQ_16	Send reminders: Ability of the system to send remainder messages to Doctor / Patient upon the Appointment approval.												
US_6	The objective of this requirement is to allow the Doctor to update the Test result and treatment history	<table><tr><th>ID</th><th>SHORT DESCRIPTION</th></tr><tr><td>REQ_17</td><td>Add / Update Medicare Service Details: Ability of the system to allow doctor to add / update the Medicare service Details</td></tr><tr><td>REQ_19</td><td>Update Treatment / prescription details: Ability of the system to allow Doctor to update Treatment / prescription details</td></tr><tr><td>REQ_20</td><td>Maintain treatment history: Ability of the system to allow doctor to maintain the treatment history of the patient</td></tr></table>	ID	SHORT DESCRIPTION	REQ_17	Add / Update Medicare Service Details: Ability of the system to allow doctor to add / update the Medicare service Details	REQ_19	Update Treatment / prescription details: Ability of the system to allow Doctor to update Treatment / prescription details	REQ_20	Maintain treatment history: Ability of the system to allow doctor to maintain the treatment history of the patient	Has a dependency with FS_1, FS_5		
ID	SHORT DESCRIPTION												
REQ_17	Add / Update Medicare Service Details: Ability of the system to allow doctor to add / update the Medicare service Details												
REQ_19	Update Treatment / prescription details: Ability of the system to allow Doctor to update Treatment / prescription details												
REQ_20	Maintain treatment history: Ability of the system to allow doctor to maintain the treatment history of the patient												
US_7	The objective of this requirement is to allow customer / doctor to view the updated test result, treatment history	<table><tr><th>ID</th><th>SHORT DESCRIPTION</th></tr><tr><td>REQ_18</td><td>View Test Result : Ability of the system to allow customer / doctor to view the updated test result.</td></tr><tr><td>REQ_21</td><td>View treatment history: Ability of the system to allow patient to view the treatment history</td></tr></table>	ID	SHORT DESCRIPTION	REQ_18	View Test Result : Ability of the system to allow customer / doctor to view the updated test result.	REQ_21	View treatment history: Ability of the system to allow patient to view the treatment history	Has a dependency with FS_1, FS_5				
ID	SHORT DESCRIPTION												
REQ_18	View Test Result : Ability of the system to allow customer / doctor to view the updated test result.												
REQ_21	View treatment history: Ability of the system to allow patient to view the treatment history												

US_8	The objective of this requirement is to allow customer to chat with doctor	ID	SHORT DESCRIPTION	Has a dependency with FS_1, FS_5
		REQ_22	Chat with Doctors: Ability of the system to allow Patients to chat with Doctors	
US_9	The objective of this requirement is to allow customer to get technical help	ID	SHORT DESCRIPTION	Has a dependency with FS_1
		REQ_23	Help: Page to assist the Customers to report technical issues	
US_10	The objective of this requirement is to allow customer to get other validations like forget user id, password	ID	SHORT DESCRIPTION	Has a dependency with FS_1
		REQ_24	Other validations: Ability of the system to allow add on validations like Forget Customer ID, Forget Password	
US_11	The objective of this requirement is to allow customer to provide reviews, admin to update review questions, system to trigger for review	ID	SHORT DESCRIPTION	Has a dependency with FS_1, FS_5
		REQ_25	Reviews : Ability of the system to allow the Customer to provide feedback / reviews for Doctor / Service	
		REQ_26	Review Questionnaire: Ability of the system to allow admin to create review questionnaire for the Doctor / Service	
		REQ_27	Trigger Review: For an appointment, once the treatment / follow up is completed, on the next log trigger message to the Customer for Review.	
US_12	The objective of this requirement is to allow system to calculate Agent commission, agent to view commission and admin to update commission	ID	SHORT DESCRIPTION	Has a dependency with FS_1, FS_5
		REQ_28	Agent commission: Ability of the system to calculate agent commission based on the service	
		REQ_29	Agent commission: Ability of the system to allow Agent to view Commission details.	
		REQ_30	Update Commission details : Ability of the system to allow admin to update commission details for the services.	
US_13	The objective of this requirement is to allow admin to pull report	ID	SHORT DESCRIPTION	Has a dependency with FS_1, FS_5
		REQ_31	Admin reporting : Ability of the system to pull report for any service, agent, doctor.	

US_14	The objective of this requirement is to allow the user to Log off upon completion of the required activity	ID	SHORT DESCRIPTION	Has a dependency with FS_1
		REQ_32	Customer / Admin logoff : Ability of the system to enable Customer / Admin to logoff	

DATABASE DESIGN:

Table 1

Patient / User

Field Name	Field Type	Data Type	Mandatory	Possible Values
Patient / User ID	Text(10)	Alphabetic	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	Yes	
Gender	Drop Down	NA		Male, Female
DoB	Text(10)	Alphanumeric	No	
Contact Number	Text(10)	Numeric	Yes	
Alt Contact Number	Text(10)	Numeric	No	
Email ID	Text(50)	Alphanumeric	Yes	
Password	Text(15)	Alphanumeric	Yes	
Address Line 1	Text(100)	Alphanumeric	Yes	
Address Line 2	Text(100)	Alphabetic	No	
City	Text(50)	Alphabetic	Yes	
State	Text(50)	Alphabetic	Yes	
Zip Code	Text(10)	Numeric	Yes	

Table 2

Doctor

Field Name	Field Type	Data Type	Mandatory	Possible Values
Doctor ID	Text(10)	Alphabetic	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	Yes	
Gender	Drop Down	NA		Male, Female
DoB	Text(10)	Alphanumeric	No	
Contact Number	Text(10)	Numeric	Yes	
Alt Contact Number	Text(10)	Numeric	No	
Email ID	Text(50)	Alphanumeric	Yes	
Password	Text(15)	Alphanumeric	Yes	
Address Line 1	Text(100)	Alphanumeric	Yes	
Address Line 2	Text(100)	Alphabetic	No	
City	Text(50)	Alphabetic	Yes	
State	Text(50)	Alphabetic	Yes	
Zip Code	Text(10)	Numeric	Yes	
Degree	Text(50)	Alphabetic	Yes	
Specialty	Text(50)	Alphabetic	Yes	
Work hours	Drop down	NA	Yes	
Hospital/Clinic Name	Text(100)	Alphanumeric	Yes	
Medicare Service ID	Numeric(10)	Numeric	Yes	System Generated

Table 3

Admin

Field Name	Field Type	Data Type	Mandatory	Possible Values
Admin ID	Text(10)	Alphabetic	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	Yes	
Gender	Drop Down	NA		Male, Female
DoB	Text(10)	Alphanumeric	Yes	

Contact Number	Text(10)	Numeric	Yes	
Alt Contact Number	Text(10)	Numeric	No	
Email ID	Text(50)	Alphanumeric	Yes	
Password	Text(15)	Alphanumeric	Yes	

Table 4

Medicare services

Field Name	Field Type	Data Type	Mandatory	Possible Values
Medicare Service ID	Numeric(10)	Numeric	Yes	System Generated
Medicare Service	Text 50	Alphabetic	Yes	
Service Description	Text(200)	Alphabetic	Yes	
Amount	Numeric(10)	Numeric	Yes	

Table 5

Agent

Field Name	Field Type	Data Type	Mandatory	Possible Values
Agent ID	Text(10)	Alphabetic	Yes	System Generated
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	Yes	
Gender	Drop Down	NA		Male, Female
DoB	Text(10)	Alphanumeric	No	
Contact Number	Text(10)	Numeric	Yes	
Alt Contact Number	Text(10)	Numeric	No	
Email ID	Text(50)	Alphanumeric	Yes	
Password	Text(15)	Alphanumeric	Yes	
Address Line 1	Text(100)	Alphanumeric	Yes	

Address Line 1	Text(100)	Alphabetic	Yes	
City	Text(50)	Alphabetic	Yes	
State	Text(50)	Alphabetic	Yes	
Zip Code	Text(10)	Numeric	Yes	

Table 6

Medical Test History

Field Name	Field Type	Data Type	Mandatory	Possible Values
Report ID	Numeric(10)	Numeric	Yes	System Generated
Customer ID	Text(10)	Alphabetic	Yes	System Generated
Doctor ID	Text(10)	Alphabetic	Yes	System Generated
Medicare Service ID	Numeric(10)	Numeric	Yes	System Generated
Agent ID	Text(10)	Alphabetic	Yes	System Generated
Service date	Text(10)	Alphanumeric	Yes	
Test Result date	Text(10)	Alphanumeric	Yes	
Diag 1 – Actual Value	Numeric(10)	Numeric	Yes	
Diag 1 – Normal Range	Numeric(10)	Numeric	Yes	
Diag 2 – Actual Value	Numeric(10)	Numeric	No	
Diag 2 – Normal Range	Numeric(10)	Numeric	No	
Diag 3 – Actual Value	Numeric(10)	Numeric	No	
Diag 3 – Normal Range	Numeric(10)	Numeric	No	
Diag 4 – Actual Value	Numeric(10)	Numeric	No	

Diag 4 – Normal Range	Numeric(10)	Numeric	No	
Diag 5 – Actual Value	Numeric(10)	Numeric	No	
Diag 5 – Normal Range	Numeric(10)	Numeric	No	
Diag 6 – Actual Value	Numeric(10)	Numeric	No	
Diag 6 – Normal Range	Numeric(10)	Numeric	No	
Doctors Comments	Text(300)	Alphabetic	Yes	
Other info	Text(300)	Alphabetic	No	

Table 7

Feedback

Field Name	Field Type	Data Type	Mandatory	Possible Values
Assessment id	number	numeric	Yes	
Question 1	Text(200)	Alphabetic	Yes	
Question 2	Text(200)	Alphabetic	Yes	
Question 3	Text(200)	Alphabetic	Yes	
Question 4	Text(200)	Alphabetic	Yes	
Question 5	Text(200)	Alphabetic	Yes	
Question 6	Text(200)	Alphabetic	Yes	
Question 7	Text(200)	Alphabetic	Yes	
Question 8	Text(200)	Alphabetic	Yes	
Question 9	Text(200)	Alphabetic	Yes	
Question 10	Text(200)	Alphabetic	Yes	

Table 8

User Feedback

Field Name	Field Type	Data Type	Mandatory	Possible Values
User ID	Text(10)	Alphanumeric	Yes	
Assessment id	number	numeric	Yes	
Rating Que 1	Text(200)	Alphabetic	Yes	
Rating Que 2	Text(200)	Alphabetic	Yes	

Rating Que 3	Text(200)	Alphabetic	Yes	
Rating Que 4	Text(200)	Alphabetic	Yes	
Rating Que 5	Text(200)	Alphabetic	Yes	
Rating Que 6	Text(200)	Alphabetic	Yes	
Rating Que 7	Text(200)	Alphabetic	Yes	
Rating Que 8	Text(200)	Alphabetic	Yes	
Rating Que 9	Text(200)	Alphabetic	Yes	
Rating Que 10	Text(200)	Alphabetic	Yes	
Assessment date	Date	Date	Yes	