



Use Case Modelling, DFD and UI Prototyping (CRM Systems)



BY:

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GROUP NUMBER: 6

WEEKLY MEETING: WEDNESDAY 8:30 PM (ICE- BOX, HINDS HALL)



OVERVIEW

In today's world where businesses are competing with each other, customer relations and satisfaction plays an important role in growing and sustaining businesses. Healthcare industry is no different, where patients seek access to best healthcare at low costs. Providing best healthcare with affordability is a challenge for the entire industry. To overcome this challenge at GenNex, we have implemented a customer relationship management system (CRM) which helps us to reach our customers and business partners. Our CRM systems also help us analyze the customer satisfaction levels and helps us to identify the gaps between the business processes and market needs.

We believe that our teams have developed a highly customizable system which not only addresses the current requirements, but which also considers the future needs.

In today's healthcare scenario, when a customer who needs a curative care comes to a diagnostic laboratory. The diagnostic lab has a set of steps and procedures by which patient is provided the services. From scheduling an appointment, billing the customer, conducting the diagnostic test and confidentially sharing the information regarding the test results with healthcare provider.

Once healthcare provider updates his insight with the CRM system, our system helps the care patient to reach the Pharmacies.

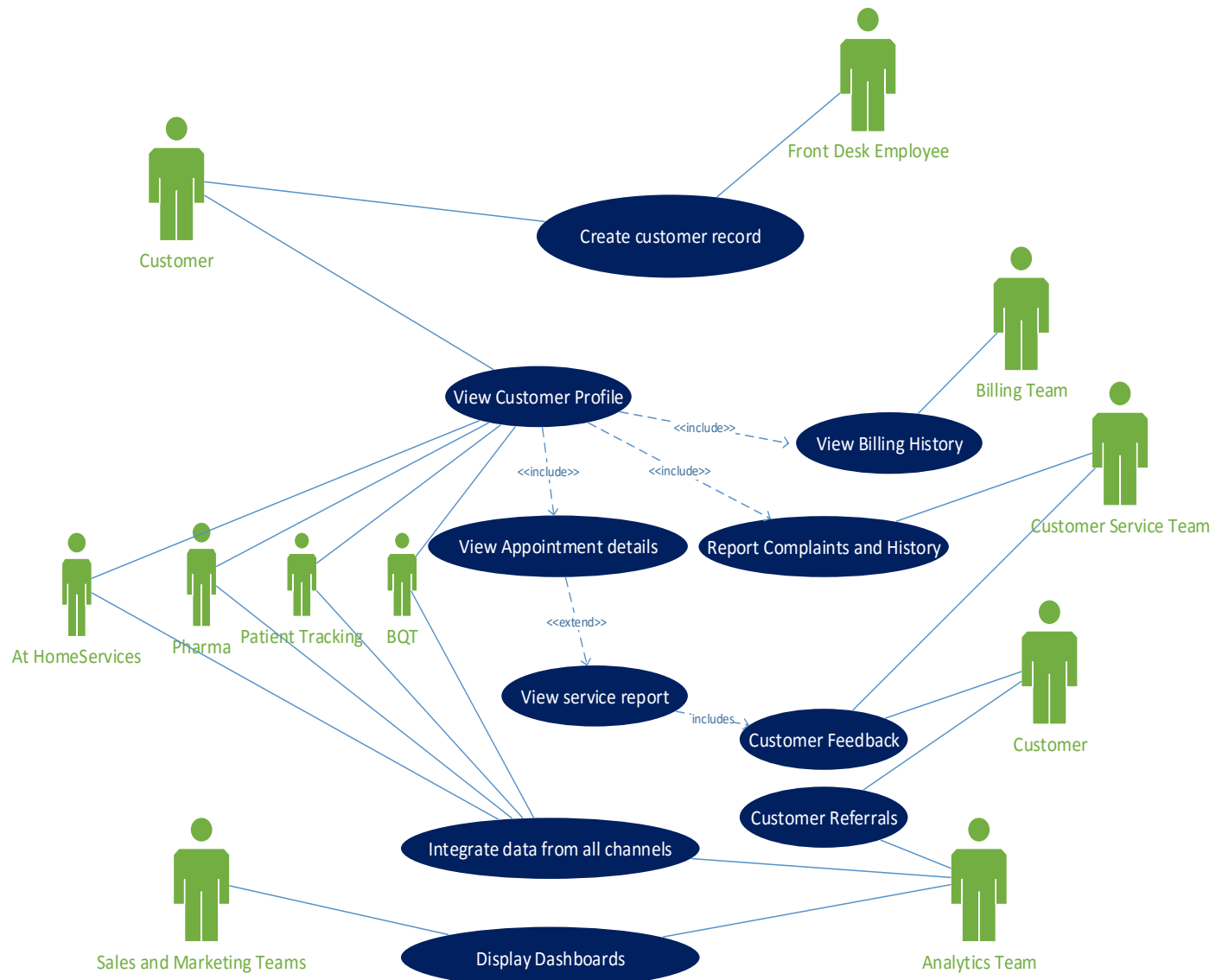
Our CRM system not only helps our traditional customers, but it also helps our new customer base i.e. people who seek preventive care patients. We provide personalized health care recommendations, special discounts and offers through our CRM systems.

The value proposition of our CRM system is the interoperability of our system, interoperability of our CRM system allows us to interact with systems of our partners in a much more efficient and exchange information in much more better way.

Various functionalities of GenNex CRM system is listed as under:

- Scheduling appointments
- Billing information
- Diagnostic test submission and analysis
- Drug delivery
- Customer feedback integrator (Integrating various channels)
- Providing special discounts and incentives
- Customer record integrator

USE CASE DIAGRAM:



ACTOR GLOSSARY

Customer	The customer seeks for diagnostic at GenNex, he comes to the front desk or registers for a test through an online channel
Front Desk Employee	The front desk employee helps the organization to schedule appointments and assist in billing for patients and manage calendars of laboratory professionals
Billing Teams	The billing teams generate invoices for the sales happening at GenNex
At Home Services Team	The “At home service” team is a specialized team which provides diagnostic services at door-step to our customer
Benefit Quoting System (BQT) Team	The BQT is an online and autonomous tool that would cover any claim related doubts the consumer may have before or after using any service or benefit provided by GenNex
Patient Tracking System Team	The Patient Tracking system maintains medical records, maintain claims, provides medical assistance and schedules appointment for our customers
Pharmacies	Pharmacies are GenNex business partners who access the customer insight reports and offers customers drugs at an attractive pricing options.
Sales and Marketing Teams	Sales and Marketing Teams will be tracking sales through
Customer Support Teams	Customer support teams use the integrated data coming from various sources of data and provide support to GenNex customers
Analytics Teams	Analytics teams use the clean data and provides useful business insights to GenNex customers

USE CASE GLOSSARY

USE CASE	USE CASE DESCRIPTION	PARTICIPATING ACTORS
Create customer record	A customer who seeks diagnostic test for his/her curative care comes to GenNex and submits the request through front desk /online / IVRS channels	Customers, Front Desk Employee
View customer Profile	Stakeholders want to see a particular customer profile. When a stakeholder is a customer (he/she) is just able to see his/her profile	Home Service team, Pharma team, Patient Tracking team, BQT, Customer
View Billing History	Billing team charges the customer for the services provided	Billing team, Customer
View appointment details	This use case scenario will assist customers to view scheduled appointment with different teams	Home Service team, Pharma team, Patient Tracking team, BQT, Customer
Reports Complaint and History	This use case scenario will assist customers to report any disputes or complaints along with an option to view complain history	Customer, Customer Service Teams
View Service history	Service History is a dashboard which assists customers to view their interactions with GenNex	Customer, Home Service team, Pharma team, Patient Tracking team, BQT
Customer Feedback	Customer Support Teams strategically provides with assistance to dissatisfied customers	Customer Support Teams, Customers
Integrate data from various sources	Analytics teams will access the integrated data coming from different teams and provide insights	Analytics Teams, Customer, Home Service team, Pharma team, Patient Tracking team, BQT
Referral	Use Case Handling customer referrals	Analytics , Customers

USE CASE TABLE

Actor/External Agent	Event	Trigger	Dependency	Responses
Customer / Front Desk Employee	Fills and Submits personal data	Patient requests for new account creation via online channel or through front desk	Patient credentials must be enter all data correctly on the CRM platform	Patient is successfully able to create a new record
Customer / Internal Stakeholders	Viewing the scheduled appointments	Patient Clicks on View Scheduled appointments button from dashboard	Customer must be login into the CRM system	Customer is successfully able to see his scheduled appointments
Customer / Internal Stakeholders	Viewing Customer Profile	Patient enters the correct login credentials	Customer must be login into the CRM system	Customer is successfully able to see his dashboard
Customer / Billing Teams	Billing Teams upload the bills on customer dashboard and Customer is able to retrieve bills	Invoice is uploaded by billing team and customer clicks on View bills	Customer must be login into the CRM system	Customer is successfully able to see his bills
Customer / Customer Service Teams	Customers report complaints which are sent to customer service teams	Patient Clicks on report complaint button from dashboard	Customer must be login into the CRM system	Customer is successfully able to report complaints and see complaint history
Customer / Internal Stakeholders	Internal Stakeholder upload the service report on customer dashboard	When internal stakeholder uploads data on CRM	None	Customer is able to see service report and feedback is triggered

Actor/External Agent	Event	Trigger	Dependency	Responses
Customer/ Customer Service Team	Feedback forms are sent via email channels	When internal stakeholder uploads data on CRM, it triggers feedback form	Service Forms must be uploaded on CRM	Feedback forms are sent
Customer/ Internal Stakeholders	Merging of all communication and sales channel data on CRM	When internal stakeholder selects desired data and presses merge button	Stakeholder Databases must be connected	All communication and sales data are connected and merged in a recommended format
Customer/ Analytics Teams	Referral Codes and Bonuses	When one customer refers prospective customer	None	Discounts are applied on final bill
Sales and Marketing Teams/ Analytics Teams	Displaying Analytical Report sent by analytics teams	When Internal Teams requests for a particular report or wants to look at sales figures	Stakeholder Databases must be connected	Charts and Graphs of Sales Data with future prediction are displayed

USE CASE NARRATIVE

Author: Kalpana Balani

Use Case Name	Create Customer Record	
Use Case ID	CRM.001	
Priority	High	
Primary Business Actor	<ul style="list-style-type: none">• Customer	
Other Participating Actors	<ul style="list-style-type: none">• Front Office Employee	
Other Interested Stakeholders	<ul style="list-style-type: none">• At-home Services• Patient Tracking System• Third Party Testing• Analytics• Benefit Quoting Tool System• Insurance Companies	
Description	This use case describes the event of registering and maintaining records of all customers in the CRM system. This includes adding, updating data entries from the CRM.	
Precondition	The actor should have clicked on create a new customer record button on webpage	
Trigger	<ul style="list-style-type: none">• A new customer entering the CRM system• The need to edit or update an existing customer's data	
Typical course of Events	Actor Action	System Response
	<p>Step 1: Customer opens the online CRM portal</p> <p>Step 2: If it is a new customer, he selects 'New User' option and fills in all details required to set up a new customer record in the CRM system. If it is an existing customer, customer enters the unique registration ID to update details.</p>	<p>Step 3: The system verifies if all the details are filled in by the actor</p> <p>Step 4: The system validates the data entry format of each detail</p> <p>Step 5:</p> <p>Add Record: The system stores the entered information in its database</p> <p>Step 6: The system saves the action that took place in Step 5 and sends a confirmation pop-up of the action</p>

Alternate Courses	<p>Alt Step 1: If all details for a new user are not filled in by the customer, he cannot move forward. The system will pop up a message asking the user to fill all details</p> <p>Alt Step 2: If the unique ID of the existing customer is not found, then the system prompts the actor to enter the correct ID of the customer</p> <p>Alt Step 3: If all the required details are not provided by the customer, then the details cannot be saved or the system cannot proceed. The system will prompt the front office employee, who will ask the customer to provide all required details and go back to Step 2</p> <p>Alt Step 4: If the format of data entered does not match required data entry, system will generate an error and prompt the front office employee to enter data in the required format</p> <p>Alt Step 5, 6: If the data could not be updated/saved due to any technical failure, the system will generate an alert</p>
Conclusion	The use case concludes when the actor receives a confirmation from the system regarding add of record
Post-condition	Changes are made in the backend about the customer record
Business Rules	<ul style="list-style-type: none"> • Data of only any of the customers of GenNex can be stored in the CRM system • Actor is not allowed to share the data with any other entity except the actors involved • Customer record details will be sent and available to all participating actors, but they cannot make any changes to the data
Implementation Constraints and Specifications	All necessary information has to be entered for a record to be created
Assumptions	<ul style="list-style-type: none"> • Customer provides all details for addition of a record
Open Issues	Access constraints about customer details between the different actors

Author: Aditya Joshi

Use Case Name	View Customer Profile	
Use Case ID	CRM.002	
Priority	Critical	
Primary Business Actor	<ul style="list-style-type: none">• Customer	
Other Participating Actors	<ul style="list-style-type: none">• CRM team• Benefit Quoting Teams• Patient Tracking Teams• Third Party Testing Teams• Pharma Teams• At Home Teams• Analytics Teams	
Other Interested Stakeholders	All other employees with relevant authentication and authorization	
Description	This use case describes the event of logging in to access the CRM Database's Customer Profile	
Precondition	Actor should have appropriate login credentials	
Trigger	Actor enters login button to view the login page	
Typical course of Events	Actor Action	System Response
	<p>Step 1: Actor enters the customer ID and password to access the login page</p> <p>Step 4: Actor clicks on the View Profile button on the Homepage.</p> <p>Step 6: User selects the detail he wishes to view on the profile.</p>	<p>Step 2: The system verifies the login credentials and access domain of the actor</p> <p>Step 3: After validating the information, the system allows user to access the database and redirects to CRM Dashboard/Homepage</p> <p>Step 5: System redirects the user to the concerned customer's profile page.</p> <p>Step 7: The System shows the relevant details to the user.</p>

	<p>Step 8: User may also go back to the main profile page/Homepage.</p> <p>Step9: When finished, the user can either log out, or go back to the Homepage.</p>	
Alternate Courses	<p>Alt Step 1: Actor forgot his password and requests access via changing his login credentials via email or phone number.</p> <p>Alt Step 3: If the login data entered does not match in the database, error message will be generated and actor will be prompted to go to Step 1 or request a access from the Administrator via his/her employee ID</p>	
Conclusion	The use case concludes when the user is able to view all his details on the profile page	
Post-condition	None	
Business Rules	<ul style="list-style-type: none"> • CRM has the database to cross-check all Customer ID to their respective passwords • Actor is not allowed to share the data with any other entity except the CRM 	
Implementation Constraints and Specifications	<ul style="list-style-type: none"> • All necessary information has to be entered for the log in process to begin. • This function will be carried out through a web based application. The information will be updated and accessed via the web application. 	
Assumptions	All relevant employees have necessary login credentials	
Open Issues	Ability of CRM to handle large traffic	

Author: Pratyush Kulwal

Use Case Name	View Appointment details	
Use Case ID	CRM.003	
Priority	High	
Primary Business Actor	<ul style="list-style-type: none">• Customer	
Other Participating Actors	<ul style="list-style-type: none">• Benefit Quoting Teams• Patient Tracking Teams• Third Party Testing Teams• Pharma Teams• At Home Teams	
Other Interested Stakeholders	None	
Description	This use case describes the event of integrating all the customer appointment data from the different data sources and displaying it into one single calendar. This module also redirects customers to book or modify an appointment	
Precondition	<ul style="list-style-type: none">• Customer should be login into the CRM system• Appointment data should be successfully stored in the recommended format of databases of stakeholders and should be accessible for displaying the event	
Trigger	A) Customer clicks on Schedule Tab	
Typical course of Events	Actor Action	System Response
	<p>Step 3: User can change the calendar view by clicking on Day/Week/Month button</p> <p>Step 5: Customer can click on radio button and press book appointment button</p>	<p>Step 1: The system queries the stakeholder database and pulls the data to the login form</p> <p>Step 2: The form displays the data into the calendar for the user</p> <p>Step 4: The system changes the dashboard display</p> <p>Step 6: The system redirects customer to specific stakeholder i.e.(PTS, BQT, At Home, etc.) appointment booking system</p>

Alternate Courses	NONE
Conclusion	The use case concludes when the actor is able to view the appointment data and redirect to stakeholder specific appointment booking system
Post-condition	No Data changes are made in the Database of CRM
Business Rules	<ul style="list-style-type: none"> • Actor is not allowed to share the data with any other entity except the actors involved • CRM System is able to access all the appointment related data from the stakeholder databases
Implementation Constraints and Specifications	NONE
Assumptions	Databases is always functional and accessible
Open Issues	NONE

Author: Harsh Avlani

Use Case Name	View Billing History	
Use Case ID	CRM.004	
Priority	Medium	
Primary Business Actor	<ul style="list-style-type: none">• Billing Team	
Other Participating Actors	<ul style="list-style-type: none">• Customer	
Other Interested Stakeholders	<ul style="list-style-type: none">• CRM team• At-home Services• Patient Tracking System• Third Party Testing• Analytics• Benefit Quoting Tool System• Insurance Companies	
Description	The bill generated will be authenticated and then a copy of the bill will be passed on to the CRM team for customer viewing and maintenance purposes.	
Precondition	<ul style="list-style-type: none">• Customer should be logged in the system• An appointment has to be scheduled prior to bill generation	
Trigger	This event is triggered when the billing department sends CRM the billing info.	
Typical course of Events	Actor Action	System Response
	<p>Step 1: User enters login credentials to enter the CRM System.</p> <p>Step 4: The CRM employees/ customers enters the necessary information to view the bill</p>	<p>Step 2: The system verifies the login credentials.</p> <p>Step 3: Once verified, the system will ask the CRM user to enter details to extract the bill</p> <p>Step 5: If the billing credentials are entered correctly, then the system will output the bill in PDF format</p>

Alternate Courses	<p>Alternate step 1: If the login fails and the user is not authenticated, the system will stop and request the user for more information to enter the billing system.</p> <p>Alternate step 4: If the user enters incorrect information for billing, the system might throw an exception indicating the user to enter correct details.</p> <p>Alternate step 5: The system can fail even after the user has entered correct credentials for bill generation. In such a case, the user will have to logout of the system and report the issue to the technology team</p>
Conclusion	The use case concludes when the system sends a bill to the CRM system
Post-condition	Updates are made in the backend system that the bill has been generated
Business Rules	<ul style="list-style-type: none"> • All the customer communication data is stored in the data warehouse • Only the employees with sufficient access level can update the database after the payment by the client is made • CRM System is able to access all the customer related data from the warehouse
Implementation Constraints and Specifications	<ul style="list-style-type: none"> • All necessary information has to be entered for a record to be created
Assumptions	<ul style="list-style-type: none"> • The system will not fail while operating • The information provided to the billing department will be correct and error free
Open Issues	Access constraints about customer details between the different actors

Author: Daniel Fernandes

Use Case Name	Customer Feedback	
Use Case ID	CRM.005	
Priority	Medium	
Primary Business Actor	<ul style="list-style-type: none">• Customer	
Other Participating Actors	None	
Other Interested Stakeholders	<ul style="list-style-type: none">• CRM team• Benefit Quoting Teams• Patient Tracking Teams• Third Party Testing Teams• Pharma Teams• At Home Teams• Analytics Teams	
Description	This use case describes the feedback mechanism. The feedback forms are a useful insight into understanding the customer experience.	
Precondition	<ul style="list-style-type: none">• Customer should be logged in the system• Customer should have availed of any service from GenNex	
Trigger	The respective department sends a sales receipt of the service or product given to the customer as an indicator that the service is complete.	
Typical course of Events	Actor Action	System Response
	<p>Step 1: User selects the report/ invoice sent by the department and clicks on feedback link</p> <p>Step 3: The user answers the questions relevant to him and rates the service.</p> <p>Step 4: The user navigates to consecutive pages clicking on Next.</p> <p>Step 6: User clicks on Save after completing the form.</p>	<p>Step 2: The system navigates to the feedback screen specific for that department (identified from invoice source)</p> <p>Step 5: The system validates the form and moves to next page</p> <p>Step 7: The system saves the form in database and sends a copy to respective department.</p>

Alternate Courses	<p>Alt Step 5: The system generates an error message if there are any errors in form.</p> <p>Alt Step 6: If User clicks on cancel then the system resets form and comes to report/ invoice page.</p>
Conclusion	The use case concludes when the system saves feedback and user is navigated back to report page.
Post-condition	Data changes are made in the Data warehouse
Business Rules	<ul style="list-style-type: none"> • All the customer communication data is stored in the data warehouse • Actor is not allowed to share the data with any other entity except the actors involved • CRM System is able to access all the customer related data from the warehouse
Implementation Constraints and Specifications	All necessary information has to be entered for a record to be created
Assumptions	Data Warehouse is always functional and accessible
Open Issues	Access constraints about customer details between the different actors

Author: Richa Malhotra

Use-Case Name	View service history	
Use-Case ID	CRM.006	
Priority	High	
Primary Business Actor	<ul style="list-style-type: none">Customer	
Other Participating Actors	<ul style="list-style-type: none">CRM Team	
Other Interested Stakeholders	<i>No other stakeholders</i>	
Description	Using CRM the customer will be able to view his service history which includes all the transactional history the customer has had with GenNex.	
Precondition	Customers have taken a service from GenNex	
Trigger	This use case is initiated when a customer clicks on “View Transaction” history.	
Typical Course of Events	Actor Action	System Response
	Step 3: The customer enters request for viewing his transactional history (entering customer ID, period, invoice history)	Step 1: An update procedure is called which refreshes the database Step 2: A trigger is called which sends data to the feedback system Step 4: CRM validates that search transaction history is within one year Step 3: CRM searches for the history

		Step 4: The service history is displayed to the customer
Alternate Courses	Alt Step 4: If the history requested is older than a year the an error message notification is displayed to the customer and prompted to Step 1	
Conclusion	This use case concludes when the customer views the desired transactional history.	
Post-condition	<ul style="list-style-type: none"> • History is viewed by the customer • A trigger is sent for the feedback 	
Business Rules	<ul style="list-style-type: none"> • History older than a year is not been generated • History will be generated only if the patient information is stored in the database 	
Implementation Constraints and Specifications	None	
Assumptions	Stakeholders regularly updates the database which consists the information about the service history	
Open Issues	A User Friendly GUI that suits all screen sizes, devices and their operating systems	

Author: Pratyush Kulwal

Use Case Name	Integrate Data from All Channels	
Use Case ID	CRM.007	
Priority	Critical	
Primary Business Actor	<ul style="list-style-type: none">• Benefit Quoting Teams• Patient Tracking Teams• Third Party Testing Teams• Pharma Teams• At Home Teams	
Other Participating Actors	<ul style="list-style-type: none">• Analytics Teams	
Other Interested Stakeholders	None	
Description	This use case describes the event of integrating all the customer communication data from the different data sources and integrate into one standard format. This module is used for handling communication during Point in Time sales.	
Precondition	Raw data should be successfully stored in the recommended format of databases of stakeholders and should be accessible for file transfer	
Trigger	B) A new data merge request has been made by stakeholder teams	
Typical course of Events	Actor Action	System Response
	<p>Step 1: Actor needs to enter his login credentials before making a request</p> <p>Step 4:</p> <p>Merge Record:</p> <p>The system prompts user to select two or more data ware houses name to be merged</p> <p>Step 5: User Selects the database name/names to be pulled or merge</p>	<p>Step 2: The system verifies the login credentials and access domain of the actor</p> <p>Step 3: The system displays the dashboard and welcome message</p> <p>Step 6: The system validates the request and pulls/merge the request</p> <p>Step 7: The system displays the OK report</p>

Alternate Courses	<p>Alt Step 2: If the login data entered does not match in the database, error message will be generated and actor will be prompted to go to Step 1 or cancel the transaction</p> <p>Alt Step 6: If two or more requests are not submitted on the merge request, error message will be generated and actor will be prompted to go to Step 4 or cancel the request</p>
Conclusion	The use case concludes when the actor is able to integrate the data from two or more data sources
Post-condition	Data changes are made in the Database of CRM and data is deleted after 1 year
Business Rules	<ul style="list-style-type: none"> • All the customer communication data is stored in the databases of stakeholders • Actor is not allowed to share the data with any other entity except the actors involved • CRM System is able to access all the customer related data from the stakeholder databases
Implementation Constraints and Specifications	All necessary information has to be entered for a record to be created
Assumptions	Databases is always functional and accessible
Open Issues	Access constraints about customer details between the different actors

Author: Richa Malhotra

Use-Case Name	Analytics dashboard
Use-Case ID	CRM.008
Priority	High
Primary Business Actor	Customer
Other Participating Actors	<i>No actors</i>
Other Interested Stakeholders	<ul style="list-style-type: none">• CRM Team• At Home Services• Pharmacy System• Benefit Quoting Tool (BQT)• Analytics• Patient Tracking System• CRM• Billing and Payment System• Third party testing
Description	<p>This use case describes the event of displaying the dashboards for the CRM (customer relationship management) solution. The customers can include both the internal and the external GenNex customers.</p> <p>Internal: At Home Services, Pharmacy System, Benefit Quoting Tool (BQT), Analytics, Patient Tracking System, CRM, Billing and Payment System, Third party testing</p> <p>External: Insurance companies, hospitals, patients, pharmacies), IT, Analytics, R&D, Restaurants.</p> <p>This use case allows customers to view dashboards only 1 month old. For dashboards older than a months' period, a request gets generated to the Analytics team.</p>
Precondition	Assuming that after the registration of customers, the data is recorded, then only these reports or dashboards can be generated.

Trigger	This use case is initiated when the customer requests for a report or a dashboard.	
Typical Course of Events	Actor Action	System Response
	Step 1: The customer requests for a report or a dashboard to be generated (type of report, details)	Step 2: Online portal of CRM stores customer's data Step 3: CRM searches for the report Step 4: For reports dated less than 1 month, it gets displayed to the customer
Alternate Courses	Alternate Step 4: If the report requested is older than a month, the report generation request is raised with the Analytics team Alternate Step 4.a: If report requested is not in scope of GenNex's offerings, the customer is notified and asked for some other search strings Alternate Step 1,3,4,5,6,7: If system issues, the customer is notified and the IT Team is contacted	
Conclusion	This use case concludes when the customer views the desired report.	
Post condition	Report or dashboard will be viewed by the customer and this activity gets updated in the database.	

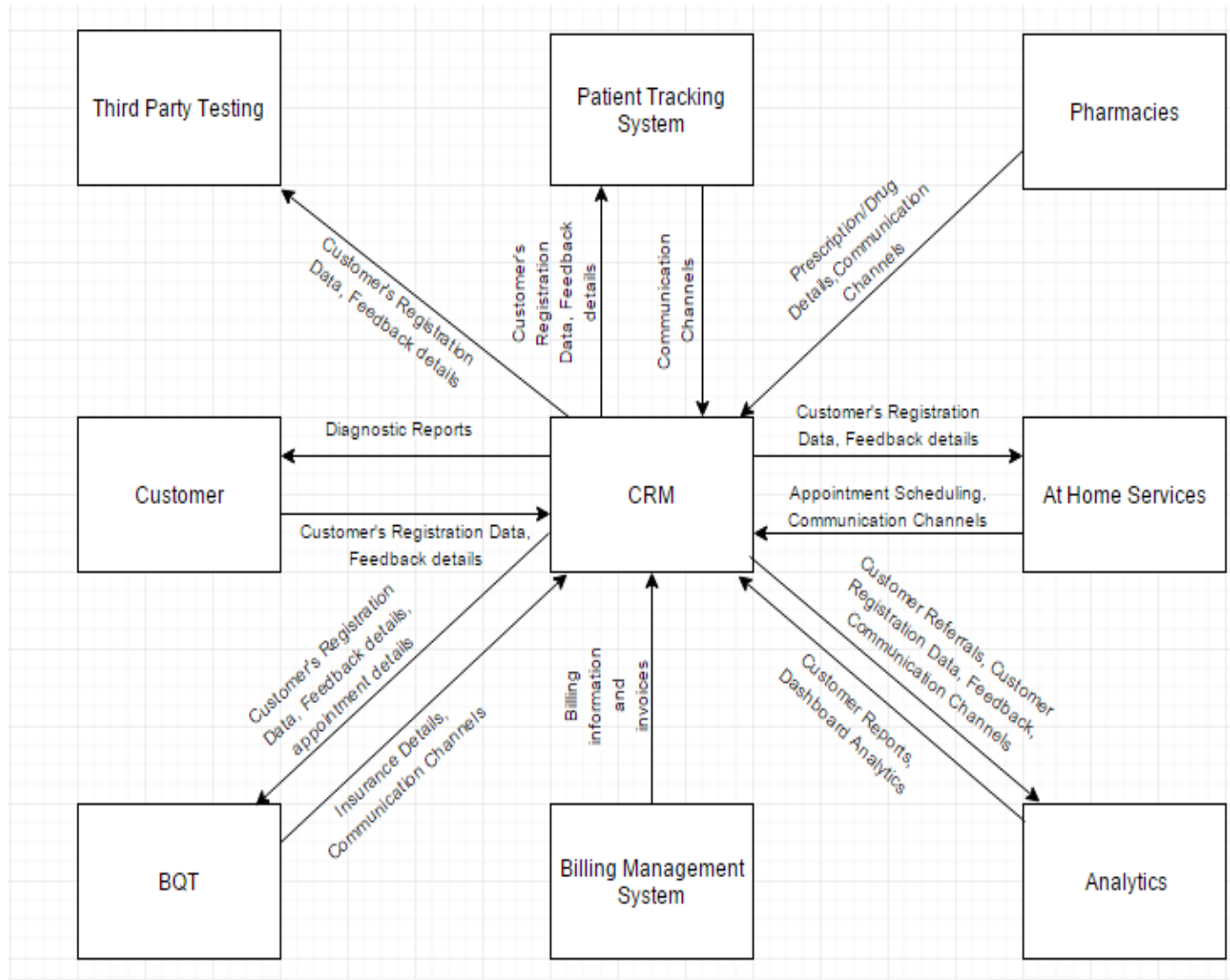
Author: Daniel Fernandes

Use-Case Name:	Customer Referral	
Use-Case ID:	CRM.009	
Priority:	Medium	
Primary Business Actor	Customer	
Other Participating Actors:	Analytics Team	
Other Interested Stakeholders:	<ul style="list-style-type: none">• Sales team• Key partners : Hospitals, pharmacies	
Description:	<p>A CRM system is the tool for an organization to drive its business. And a lot of strong business leads are generated from connections/ networking. The customer referral tool is a tangible way for customers to recommend GenNex to other potential customers.</p> <p>The front office employee can create a referral mandatorily linked to an existing customer. Each customer can have multiple referrals. Each referral will be identified with the phone number so that multiple referrals by different customers can also be linked.</p>	
Precondition:	The customer must be logged in. He must have a referral that the customer is willing to share and be associated with.	
Trigger:	The customer needs to enter a new referral data	
Typical Course of Events:	Actor Action	System Response
	<p>Step 1: The user clicks on customer referral icon</p> <p>Step 3: The user clicks on add new customer referral</p> <p>Step 5: The user enters customer details like customer ID, first name last name to search for the existing customer</p>	<p>Step 2: The customer referral page opens</p> <p>Step 4: Add new customer referral form opens up</p>

	<p>Step 7: User selects the customer the referral needs to be linked to.</p> <p>Step 9: User enters referral mandatory details : first name, last name, phone number, relation to referral</p> <p>Step 10: User enters optional details: address, email, occupation/Business, age(if applicable)</p> <p>Step 11: User clicks on Save.</p>	<p>Step 6: Customer detail row is displayed (in case of multiple match list of rows are displayed)</p> <p>Step8: Customer ID is displayed at top of form</p> <p>Step 12: System displays a saved icon on the top of form. Page focus moves to top.</p>
Alternate Courses:	<p>Alt- Step 5a: If no customer exists with that information an empty list shows up</p> <p>Alt- Step 9 a: If any of the mandatory fields are empty then an error pop-up will be displayed.</p> <p>9b: If any of the characters in mandatory fields are invalid then an error pop-up will be displayed.</p> <p>9c1: If the referral already exists (identified by duplicate phone number) then a pop-up will be displayed asking if referral needs to be linked.</p> <p>9c2: If user selects Yes then rest of the data is auto populated</p> <p>9c3: If user selects No then form is reset.</p> <p>Alt-Step 10 a: If incorrect email id is given then error pop-up will be displayed.</p>	
Conclusion:	This use case concludes when the referral data is saved.	
Postcondition:	A non-editable referral form will be displayed with all the fields that the user has entered. Back button will be displayed which will take user back to customer referral page. Edit button will edit the referral data.	

	Delete button will delete the referral data after a prompt.
Business Rules:	<ul style="list-style-type: none"> • There has to be an existing customer against whom the referral needs to be made. Without the link to existing customer no referral data can be stored. • At a time only one referral detail can be added per form.
Implementation Constraints and Specifications:	Phone number is the primary identifier of a new referral. System will not allow to enter a referral with same phone number (No way to override this, to reflect number re-circulation).
Assumptions:	Customer provides genuine and valid details about referral.
Open Issues:	-

DFD Diagram:



Wireframes:

Login Dashboard:



[Homepage](#) | [Profile](#) | [Logout](#)

Profile


Schedule

History

Feedback

Billings

Settings



★★★★☆

Name:

Age:

Address:

Customer Recent Activity:

03/01/2016: Scheduled a Blood Test for General Health Checkup.

01/24/2016: Viewed

◀ April 22, 2012 ▶

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

View Scheduled Appointments:

View Appointments



January 2010

Day Week Month 4 Days Agenda

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 New Year's Day	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18 ML King Day	19	20	21	22	23
24	25	26	27	28	29	30
31		Notes				

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Schedule a new appointment

At Home Services ☐

Benefit Quoting Services ☐

Diagnostic Testing ☐

Book

Back

Feedback Form:

Feedback



Customer ID

How was your experience booking a schedule / ordering an item from At Home Service?

☐ Very bad ☐ Bad ☐ Neutral ☐ Good ☐ Very Good

Did the product / service reach you on time?

☐ Yes ☐ No

Submit

Cancel

Feedback



Customer ID

In case of a product/device, how was the quality of product/service?

- ☐ N/A ☐ Below standards / defective ☐ Below expectations ☐ Neutral ☐ Good product ☐ Exceeded standards/ expectation

In case of a service, was the nurse/ instructor professional in their interactions?

- ☐ N/A ☐ Not at all professional ☐ Somewhat professional ☐ Very Professional

In case of a construction service, how satisfied are you with the construction?

- ☐ N/A ☐ Poor construction ☐ Satisfactory construction ☐ Excellent construction

In case of Case management, how satisfied are you with the managing service?

- ☐ N/A ☐ Bad service ☐ Satisfactory ☐ Excellent Service

Submit

Cancel

Feedback



Customer ID

Would you avail of services from this department again?

- ☐ Will not avail ☐ Will avail only if absolutely necessary ☐ Will definitely avail

Would you recommend these services to a friend?

- ☐ Will not recommend ☐ May/may not recommend ☐ Will definitely recommend

We value your suggestions and comments. Please feel free to write down your suggestions below.

Submit

Cancel

Feedback



Customer ID

Your valuable feedback has been forward to the concerned department
We thank you for taking the time to fill out the form!

View service history:

Customer service history

Enter customer ID



Enter password




Enter period

Month Date Year

Submit

Cancel

Channel Integrator:



Channel Integrator

Select Data Source

Select Data Source

Delete

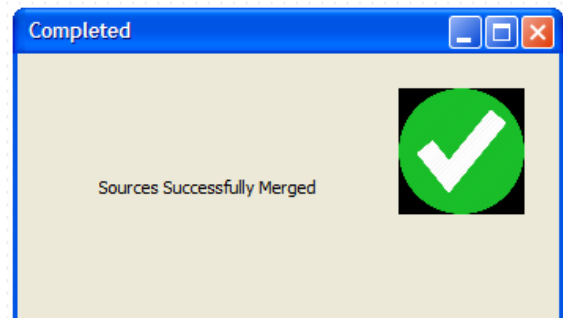
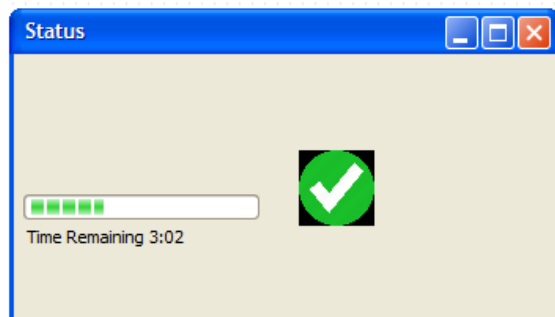
Select Data Source

Delete

Add Data Source

Merge Data

Cancel



Analytics dashboard:

Analytics dashboard

Enter customer ID

✓

Enter password

✓

Enter period

Month

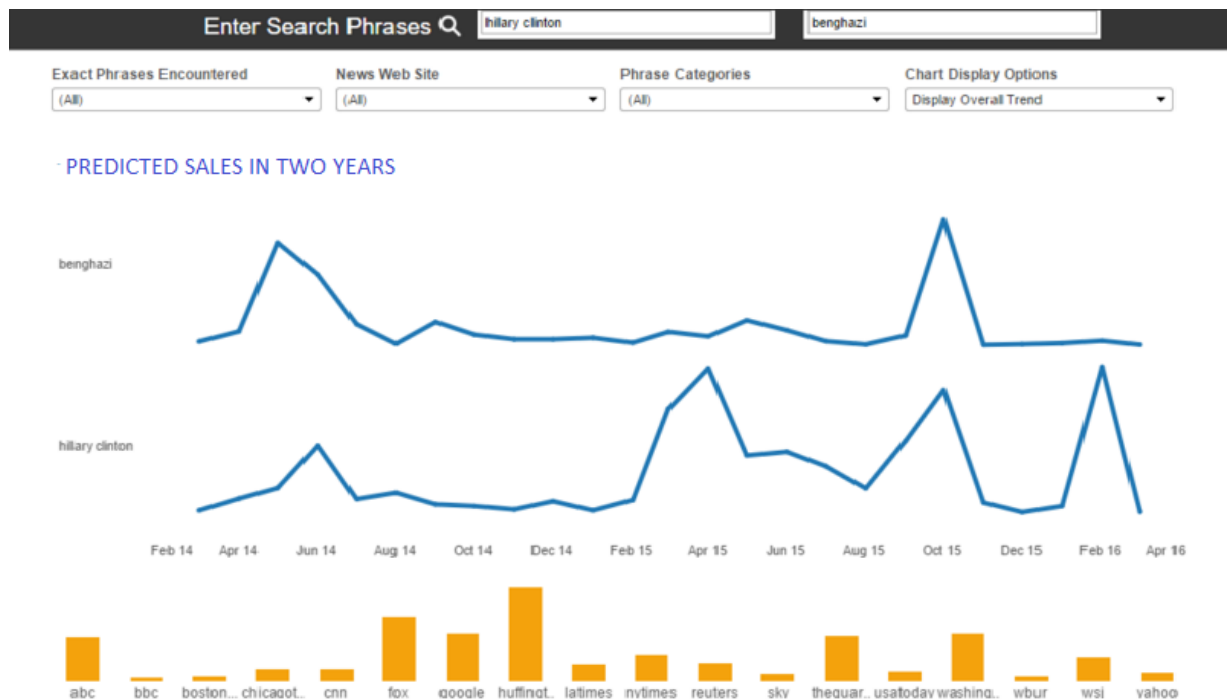
Date

Year

Enter report type

Submit

Cancel



Referral:

Referral

Add Referral

Search

Referral

Csustomer ID

First Name

Last Name

Customer ID	First Name	Last Name	Add Referral
12342	Lex	Luthor	
23422	Bruce	Wayne	

Referral

Customer ID

First Name	<input type="text"/>		
Last Name	<input type="text"/>		
Phone	<input type="text"/>		
Relation	<input type="text"/>		
Address line 1	<input type="text"/>	Email	<input type="text"/>
Address line 2	<input type="text"/>	Occupation	<input type="text"/>
Address line 3	<input type="text"/>	Age	<input type="text"/>
		<input type="button" value="Save"/>	<input type="button" value="Cancel"/>

Referral

Customer ID

Your referral has been saved in the system.
We thank you for taking the time to fill out the form!