

A project report on

V8 COMPILER FOR SERVER BASED DATA INTERACTION

Submitted in partial fulfillment of the requirement
For the award of the degree

MASTER OF COMPUTER APPLICATIONS

Of



Visvesvaraya Technological University
Belgaum, Karnataka

By

SHWETHA S

1CR18MCA94



CMR INSTITUTE OF TECHNOLOGY
132, IT Park Road, Kundalahalli, Bangalore-560037
2019-2020

A project report on

V8 COMPILER FOR SERVER BASED DATA INTERACTION

Submitted in partial fulfillment of the requirement for
the award of the degree

MASTER OF COMPUTER APPLICATIONS

Of



Visvesvaraya Technological University
Belgaum, Karnataka

By

SHWETHA S
1CR18MCA94



CMR INSTITUTE OF TECHNOLOGY
132, IT Park Road, Kundalahalli, Bangalore-560037
2019-2020

A project report on

V8 COMPILER FOR SERVER BASED DATA INTERACTION

Submitted in partial fulfillment of the requirement for
the award of the degree

MASTER OF COMPUTER APPLICATIONS

Of

Visvesvaraya Technological University
Belgaum, Karnataka

By

**SHWETHA S
1CR18MCA94**

Under the guidance of

Internal Guide

Mrs. Neha Agarwal
Assistant Professor, MCA Department
CMR Institute of Technology,
Bangalore

External Guide

Mr. Abinav Maniyambath
Team Lead,
EBiX.BiZ, Bangalore



CMR INSTITUTE OF TECHNOLOGY
132, IT Park Road, Kundalahalli, Bangalore-560037
2019-2020

CMR INSTITUTE OF TECHNOLOGY
Department of Master of Computer Applications
Bangalore - 560 037



CERTIFICATE

This is to certify that the project work entitled

V8 COMPILER FOR SERVER BASED DATA INTERACTION

*Submitted in partial fulfilment of the requirement
For the award of the degree of
Master of Computer Applications of the
Visvesvaraya Technological University, Belgaum, Karnataka
Bonafide work carried out by*

SHWETHA S
1CR18MCA94

During the academic year 2019-2020.

Signature of the Guide
Mrs. Neha Agarwal
Assistant Professor, MCA

Signature of the HOD
Mrs. Gomathi.T
HOD, MCA

Signature of the Principal
Dr. Sanjay Jain
PRINCIPAL, CMRIT

External Viva

Name of the Examiners

- 1.
- 2.

Signature with date

DECLARATION

I am **SHWETHA S** do hereby declare that the project Work entitled “**V8 COMPILER FOR SERVER BASED DATA INTERACTION**” submitted to the **EBiX.BiZ** Bangalore, is a record of an original Work done by me under the guidance of **Mrs. NEHA AGARWAL**, Department of Master of Computer Applications, CMR institute of technology, and this project work is submitted in the partial of the needed things for the award of the degree of Master of computer Applications. The results included in the project have not been submitted to any other University or Institute for the award of any degree of diploma.

Place: Bangalore

Date:

SHWETHA S
(1CR18MCA94)

ACKNOWLEDGEMENT

I would like thank to all those who are involved in this endeavor for their kind cooperation and for its successful completion. At the outset, I wish to express my sincere gratitude to all those people who have helped me to complete this project in an efficient manner.

I offer my special thanks to my external project guide **Mr. Abinav Maniyambath, EBiX.BiZ**, Bangalore, and to my internal project guide **Mrs. Neha Agarwal**, Department of MCA, CMR Institute of Technology, Bangalore without whose help and support throughout this project would not have been this success.

I am thankful to **Dr. Sanjay Jain**, Principal, CMRIT, and Bangalore for his kind support in all respect during my study. I would like to thank **Mr. Abinav Maniyambath, EBiX.BiZ**, Bangalore who gave opportunity to do this project at an extreme organization. Most of all and more than ever, I would like to thank my family members for their warmness, support, encouragement, kindness and patience. I am really thankful to all my friends who always advised and motivated me throughout the course.

SHWETHA S

(1CR18MCA94)



10/06/2020

Bangalore

PROJECT COMPLETION LETTER

This is to certify that **Ms. SHWETHA S(Roll No.1CR18MCA94)**, is a bonafide student of MCA from **CMR INSTITUTE OF TECHNOLOGY**, completed the project entitled **“V8 COMPILERFOR SERVER BASED DATA INTEGERATION”** successfully during the period from 06/01/2020 to 08/06/2020 at our organization **EBiX.BiZ**, Bangalore, under my guidance and she has completed the work to my satisfaction.


Abinav M
Team Lead
EBiX.BiZ

(Note: There are two purple diagonal stamps over the signature area, one reading "NO EBiX.BiZ" and another partially visible "EBiX.BiZ")

Sl.NO.	Contents	Page No.
1.	Introduction	1
	1.1 Project Description	1
	1.2 Company Profile	3
2.	Literature Survey	4
	2.1 Existing System and Proposed System	4
	2.2 Feasibility Study	5
	2.3 Tools and Technologies Used	6
	2.4 Hardware and Software Requirements	8
3.	Software Requirement Specification	9
	3.1 Users	9
	3.2 Functional Requirements	11
	3.3 Non- Functional Requirements	13
4.	System Design	15
	4.1 System Perspective	15
	4.2 Context Diagram	16
5.	Detailed Design	17
	5.1 Use Case Diagrams	17
	5.2 Sequence Diagrams	21
	5.3 Activity Diagrams	27
6.	Implementation	29
	6.1 Screen Shots	29
7.	Software Testing	45
8.	Conclusion	49
9.	Future Enhancements	50

CHAPTER 1

INTRODUCTION

1.1 PROJECT DESCRIPTION

The **V8 Compiler** is JavaScript based front end compiler used for the direct compilation during the application communication. Instead of the building the entire application the developers can use the features in V8 compiler which can build only the front end and thereby reduce the time and managing other intermediate code in the machine languages. This technology is created for the front end but we can use this property for the C# based middleware and the SQL data migrations through the server side scripting. Another property of the new system is the application also uses the middleware compiler for the direct building. Here depending on the middleware to be compile the application uses the JAVA compiler plug in or JIT / .net framework compiler too. The advantage of the technology is the developers can user only V8 compiler as well the intermediate is complier separately on request.

The application can be implemented in the area of multiple application interactions like banking and the payment gateway interactions. The developers can make the front end to front end based interactions between the web pages, to the security over the network access will be high since there is no direct interaction for the server and the remote systems. The application will be redesigned in the format for server to server access interaction and the middleware and the SQL server access will be functioning over the output generated.

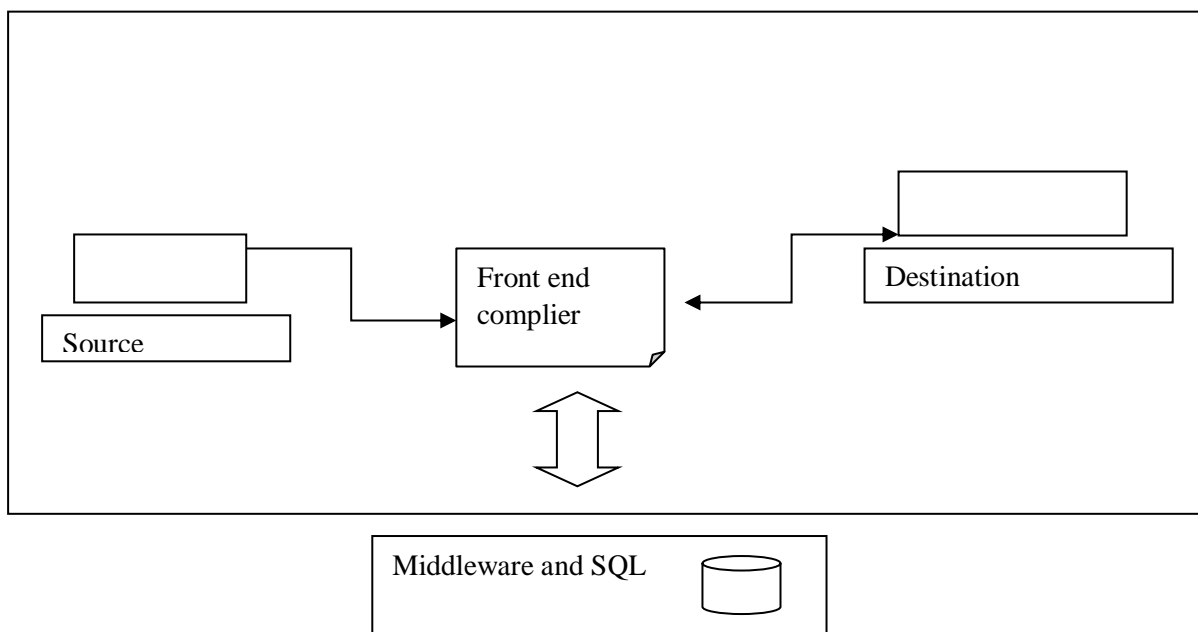


Fig 1: source and destination interaction with help of front end compiler.

In the above picture the destination machine will pass the details over the data to be fetched from the source machine where the compilation over the front end will be migrated and build in the V8 compiler (front end). The once the source machine got compiled the further process is made with middleware and SQL and no more interaction from the source machine. That is the reason why one side arrow from the source machine. But in result generated from the middleware and SQL source are collected and passed to the destination machine (two way interaction). The steps for the source and destination machine data communication with front end compiler V8 is explained in functional requirements.

1.2 COMPANY PROFILE

EBIX.BIZ is Bangalore based Software Company working over the E commerce based software developments. EBIX.BIZ has created the product for organisation to attracts more clients and increase their business. EBIX.BIZ offers a comprehensive suite of web services to fit your business. EBIX.BIZ works closely with clients to develop the best possible software solution for their company. From our extensive experience in web development, EBIX.BIZ has developed a wide range of software solutions for various businesses across numerous industries.

EBIX.BIZ is an IT Company Headquartered in Bangalore offerings include Testing on Cloud, Enterprise Mobility Testing, Functional, Automation, Security and Performance Testing services. The SRSS focuses on Software Development, Software Testing, Corporate Training and Resources Outsourcing. The company is committed to improving quality by providing superior solutions to customers as well as advancing QA and testing methodologies. SRSS offers a wide variety QA and testing services such as: Onshore testing, QA and testing outsourcing and flexible testing consulting & staffing.

At EBIX Software Technologies, we help define your requirements, write specifications and design, develop, test and integrate software across multiple platforms, including Internet technologies enabling your systems to function in new operating environments.

We are experienced in Web and Mobile application development providing high quality and cost effective services using latest technologies – java, .net, cloud computing, mobile technologies and web technologies. Our development services are custom-made specifically to meet client's requirement. We have experience of delivering high performance applications with complex functionality and have achieved commercial success.

CHAPTER 2

LITERATURE SURVEY

2.1 EXISTING SYSTEM AND PROPOSED SYSTEM

2.1.1 Existing system

In the existing system the application is created for entire application compilation and the building. There is no building for the separate the front end or middleware interactions. For example if the java an asp application needed to interact the visual studio is needed to use the JAVA complier for the interactions. There is not effective method for the data interaction and building for the third part software interactions. The developers needed to use separate machine for the communication and needed to give additional security parameters for the banking operations.

Limitation of the existing system

- Entire application building and the extra plug in is needed for the application building.
- The developers needed to get the other non-Microsoft application module in advance and the program according to operation.
- Front end, middleware and SQL server interactions are created in the one single panel.
- The algorithm for the security parameters are used for the confidential data migrations are needed.

2.1.2 Proposed system

In the proposed system the application used the V8 compiler where the front end server side scripts are run and build for the application interactions. Since the front end server users the same portable platform the application uses V 8complier .The application will automatically compile the java script code in the application even before the entire project is executed. The compiled code is optimised dynamically and the line cache memory and garbage collection etc are done routinely.

Advantages

- Application is build in front end separately and the middleware separately.

- Since the application is used for java script compilation in both ASP and JAVA there is not needed to use the middleware compiler or plug in software.
- The application permits the other tier interaction but instead of single unit all the interactions are made separately.
- Developers do not include the confidential data in the server side which will ensure the security of the operations like payment and bank operations.

2.2 FEASIBLE STUDY

The feasible study is carried to find changes in the application are bought by the V8 compiler implementation and the study over the afterwards impact in the new software implementations. The project analyst has to make sure that the software that is going to be developed will bring the more comfortable and stress free management for the client users. The areas where the feasibility study is carried is

- Technical feasibility study.
- Cost feasibility study.
- Operational feasibility study

Technical feasibility study

In the technical feasibility study the details with respect to the V8 compiler supporting tools are brought under the case study. The application used visual studio IDE interface for the software development and the tools regarding the server to server interactions, the use of other language compilers like java compiler etc to use in the software implementation. Through this technical feasibility the developers will decide architecture to be followed for the V8 implementation, the steps needed by alternative solution if any of the module is not moving with V8 compilation.

Cost feasibility study

The cost feasibility of the application is made over the cost of software needed for the V8 implementation, the supporting tools purchase and the cost of application and V8 implementation. The developers needed to filter out the set of modules where the V8 needed to implement and the units without v8 implementation.

The cost for alternative technology is verified and conducted the study for the software implementation. The total cost for the software domain maintenance charges is also included for the cost feasibility study.

Operational feasibility study

In this part the developer and the architectures will bring together to find how the domain and the technology of V8 can work together. It includes list of operations to be added in the technology, group the data which are needed more secure and steps for secure data process in the V2 implementation.

The storage units and auto delete the data which is stored in the V8 compiler cache after the use, the module wise data migration with v8 server page and without v8 server page are done in the operational feasibility study.

2.3 TOOLS AND TECHNOLOGY

The application uses the Microsoft based tools and the technologies and the V8 compiler supporting tools for the software development. The Microsoft oriented tools are used for the software domain development which includes

- Visual studio
- ASP.NET
- C#.NET
- SQL server

And supporting tools for the V8 compiler has following technologies used.

- VM ware
- SVN subversion
- Team build
- Intellitrace

Visual studio

The IDE used in the application development units is visual studio. The unit in the software development are front end design unit, the V8 compiler integration, the middleware and the SQL server management studio etc.

ASP.NET

The front end controls is managed in the ASP.NET application. All the server side integration units with front end designing tools and the business logic used for V8 building integrations are coded exclusively in the ASP.net unit.

C#.NET

The middleware programme is used by the developers for writing the code for the business logic or operations towards the V8 compiler building. The language used for the operation is in C# language. The algorithm the intermediate class and other logical implementation needed for the V8 is also coded in C# language.

SQL server

The back end data storage unit for the application transactions are handled with SQL server management studio. The details from the V8 compiled data, the third party application generated data, and application user's access data are connected with the SQL server studio data base. This application uses 1 TB server space initial stage.

VM ware

The software used for creating the virtual system setups for the V8 process supporting. If the application has module which is non Microsoft domain or operating system then the developers needed t use a virtual setup for the application migration with help of VMware software.

SVN subversion

The SVN subversion is the software used by the developer to save the changes happened coded in the V8 java scripts. For example if the developers write code and later if the code is changed or updated by the different users instead of deleting the existing cod the SVN subversion will help to save application alertly.

Team build

The software used for the building the V8 and the respective middleware is done with software of team build. When the application uses the traditional visual studio for the software building this may popup the errors over the V8 compilation so the developers will find difficulty to test the software application together and as the remedy the software of the team build is used for the software building.

Intellitrace

The software used for the tracking the error occurred in the front end and middleware. If the data has the server error the application will through exception regarding the server failure or server disconnected error etc. But actually the cause of the error could be logical error which failed to fill the data in the session. In order to fix this error it is better recommended to use the debugging software like IntelliTrace which can auto fix the run the software.

2.4 HARDWARE AND SOFTWARE REQUIREMENTS.

Hardware Requirements

RAM (without V8 COMPILER)	2 GB
Hard Disk (without V8 COMPILER)	250 GB
Server (without V8 COMPILER)	IIS, HTTP caching server
Processor (without V8 COMPILER)	Pentium 4

RAM (V8 COMPILER)	120 GB
Hard Disk (V8 COMPILER)	1 TB (extendable to 8 TB)
Server (V8 COMPILER)	IIS, TFS

Software requirements

Test (V8 COMPILER)	MTM
Front end (V8 COMPILER)	ASP.NET
Middleware (V8 COMPILER)	C#.NET
IDE (V8 COMPILER)	Visual studio
Back end (V8 COMPILER)	SQL server 2008 R2
Processor (V8 COMPILER)	Pentium 4

CHAPTER 3

SOFTWARE REQUIREMENTS SPECIFICATION

3.1 USERS

The users of the application are employees where the V8 compilation software is implemented and also the technical support engineers for network and data security management. The administration users are the other categorised users created for application domain managements.

- Domain user
- Network manager user
- Technical consultant user
- Admin user

Domain User

This application is web based project and the users of the respective domain department are authorised to operate their domain's modules. The admin level users from the domain organisations are not included in this domain user category

Module name	Data view	Data update	Date remove
The administration module.	No	No	No
The front end data migration.	Yes	Yes	Yes
The middleware migration.	Yes	No	No
The domain implementation.	Yes	Yes	Yes

Network Manager User

The user who are created for managing the remote system interactions. The users will program to control the security of the other software plug in interface. The data mining with the third

party application etc. The network based users interactions with software application is as follows.

Module name	Data view	Data update	Date remove
The administration module.	No	No	No
The front end data migration.	Yes	No	No
The middleware migration.	Yes	Yes	Yes
The domain implementation.	NA	NA	NA

Technical Consultant User

The users from the developer team to give the technical support for the domain flow. These users will be working through the administration module and can work only in the coding area. These users can view the content of the software application but are restricted to make the changes in the content.

Module name	Data view	Data update	Date remove
The administration module.	Yes	Yes	Yes
The front end data migration.	Yes	No	No
The middleware migration.	Yes	No	No
The domain implementation.	Yes	No	No

Admin User

The top level users from the domain unit and from the V8 compile technical supporting team are grouped in admin users. These users are created as default developers and each users has given authentication to each operation in the domain and the V8 technology to manage.

3.2 FUNCTIONAL REQUIREMENTS

The functional requirement for front end to middleware communication process is explained in the chapter.

Functional requirement number: 1

Functional requirement name: GUI input

Functional requirement description: Save the data values in the session which is generated from the manual user entry or drop down list of other auto generation event.

Input: Search ID

Process: Save the ID in the session since the value process are managed from the server page operations.

Output: Save the data in the session memory.

Functional requirement number: 2

Functional requirement name: Pass the session ID to the remote third party page.

Functional requirement description: the ID will be passed to the page to perform the operation like data fetching, data mining and migration.

Input: Search ID

Process: save the data in the session to string format, pass the string in the connection string to fetch the data from the SQL table. If the search ID find the attribute collect the data in the data set or generate the message item not found.

Output: Search data output: - Item found; Item not found;

Functional requirement number: 3

Functional requirement name: Middleware code for data migration

Functional requirement description: The C# coding to save the data migrations.

Input: Data fetched in the data set

Process: Save the ID in the string format, pass the attributes in the matrix format. The application will save the data in the table starting with column [0] [1], [0] [2] etc., in the first row and the [1] [0], [1] [1] in the second row etc.

Output: Save the data in the matrix format for temporary storage unit.

Functional requirement number: 4

Functional requirement name: Display the data in the front end GUI

Functional requirement description: The values in the matrix format will be saved in the front end GUI of the source machine.

Input: Search ID and the matrix row.

Process: The program can decide in which format the data are displayed. If the data are in the read only format, use data reader or save data in the label. If the data are displayed in the editable format, use grid view or save in textbox instead of label. This will varies over the customer requirement and the domain operations

Output: Display the data in the GUI

The modules involved:

- Administration module.
- Front end data migration.
- Middleware migration.
- Domain implementation.
- Report module.

Admin module

This administration panel management for the creating and controlling the software applications. Since the application is domain independent developers will code the program which is customisable for any business to implement the front end based compiler. The admin of the application has authorisation to manage the administration panel controls.

Front end data migration

In this module the pages for the front end design and the steps for the data migrations are managed. The GUI holds the control for the pass the data ID, use the front end compiler for the building the application, the details regarding the data selection, the attribute passing the security over the data migrations etc., are maintained in the this module

Middleware migration

This part deal with the operations instructed from the front end signs. This module has the units to display the grid view, the display the data migrated for the SQL etc. This middleware module will receive the parameters from the front end and the store procedures to perform the operations. The module also generates the report over the total signals received, the operation completed and the list of error if occurred during the data transactions.

Domain implementation

Each busies will have different requirements so developers has decide to keep a separate domain module which will be added to other modules of front end and the middleware after receiving the customer requirements This module is depended over the client where the software is purchased. The developers will customise the domain over the client provided instructions, business planning etc.

Report module

The report module is created with respect to the domains based instruction report. The details like the organisation registration, the sales activities, the bank or any other third party interaction over the module and respective V8 generated reports.

3.3 NON FUNCTIONAL REQUIREMENTS

The non-functional requirement is carried over the V8 completed application to find the future business possibilities and available changed to be made in V8 technology to improve the interface quality. The non-functional requirement is carried in the following areas: - security, reusability, the flexibility and reliability of the application.

Security

The application used the cookies bases application to store the data in the front end, this procedure will rise the question over the security of the data which is stored in cookies. So for

the better operational security the developers will find the possibility of the session bases storage in the V8 compilation and how to link the session with the server loaded page.

Reusability

The possibility application reusability in the other domain of business are checked in the format, the other areas of the hospital to hospital communication, the possibility of banking to web or standalone application communication etc., will be brought for the study of V8 compiler reusability study.

Flexibility

The application property to communicate with other third party application will shows the flexibility of the software. The particulars in the system configuration the architecture design; the software tools used will decide the flexibility of the software. The user friendly design module will also carry out for the better flexibility performance in the software.

Reliability

This part deals with the reliability of output generated from the programming coded by the developers. The application coded to create the value generated by fetching from the SQL and displayed in the user GUI. So the programmers will come to pass the respective particulars, the security measurements over the data passed, and the steps to erase the V8 data within the time period so no other users can hack the data store in cache etc., will increase the reliability of the software.

CHAPTER 4

SYSTEM DESIGN

4.1 SYSTEM PERSPECTIVE

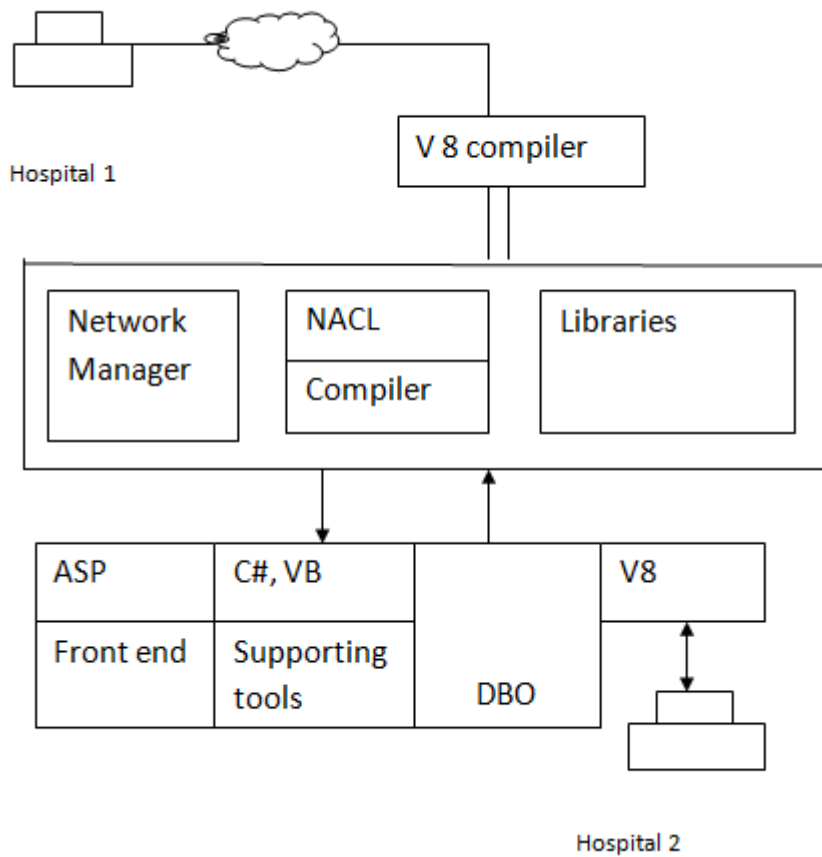


Fig 4.1: Architecture diagram for V8 compiler.

The V8 compiler act as intermediate over the different hospitals which allows the front end to front end communication and the data server accessing. The components for the application and the V8 operations are coded in the network based tier of the architecture.

4.2 CONTEXT DIAGRAM

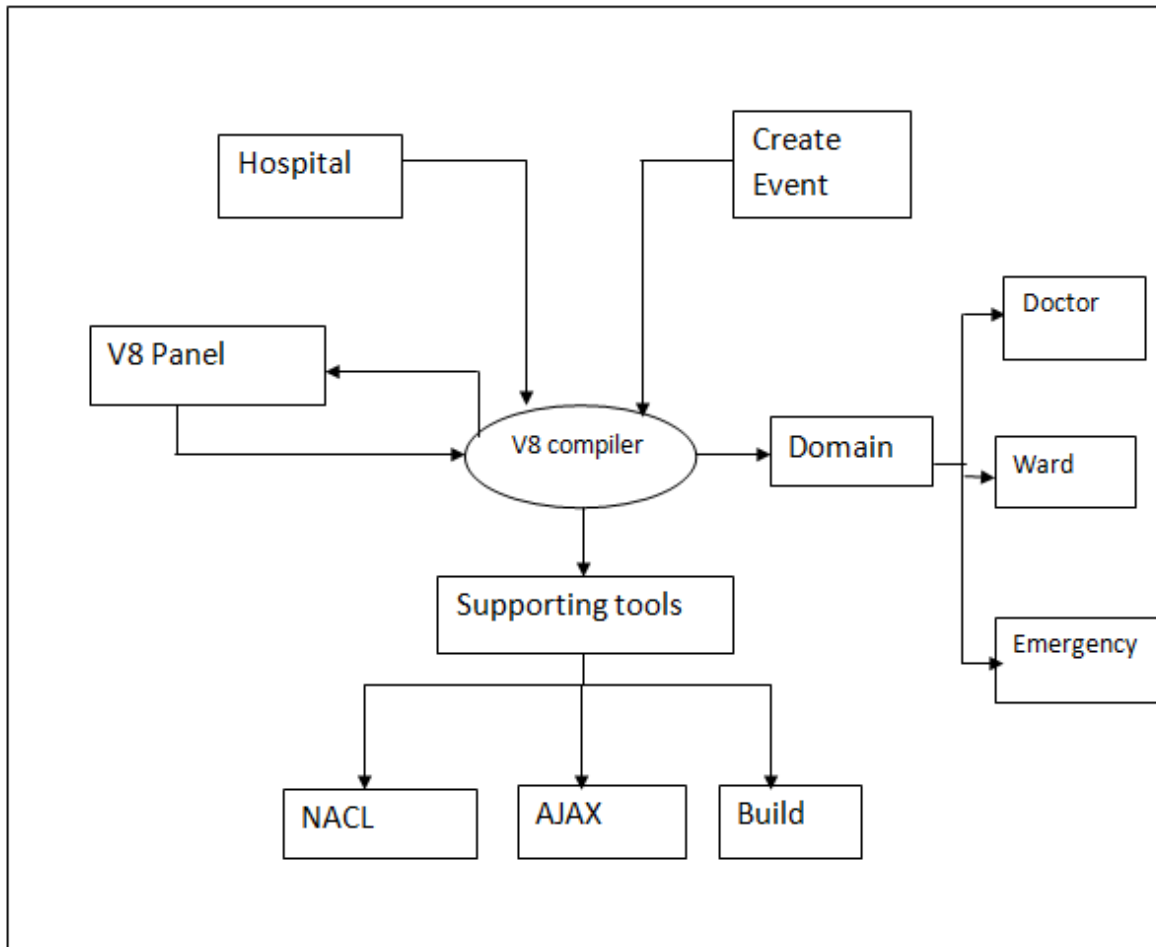


Fig 4.2 Context diagram of V8.

The V8 compiler has the intermediate objects for the third party hospital, the supporting tools and the domain development components. The NACL or native client technology is used for fetching the fresh data from the front end, the AJAX is used to avoid the post back when the data is loaded in the front end page.

CHAPTER 5

DETAILED DESIGN

5.1 USE CASE DIAGRAM

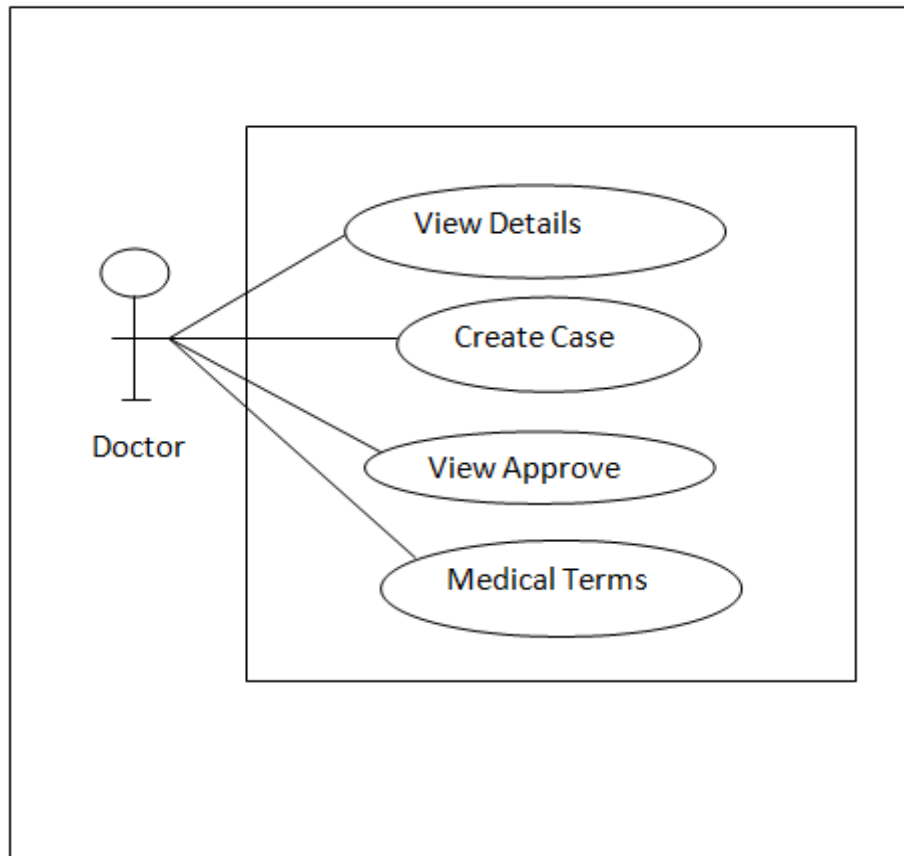


Fig 5.1.1 use case diagram for the doctor inputs in the application.

The users can view the data loaded from the V8 based data, the data fetched from the local server are also permitted to create the case directly to store in v8 compiler and also the cased to be save in the local server.

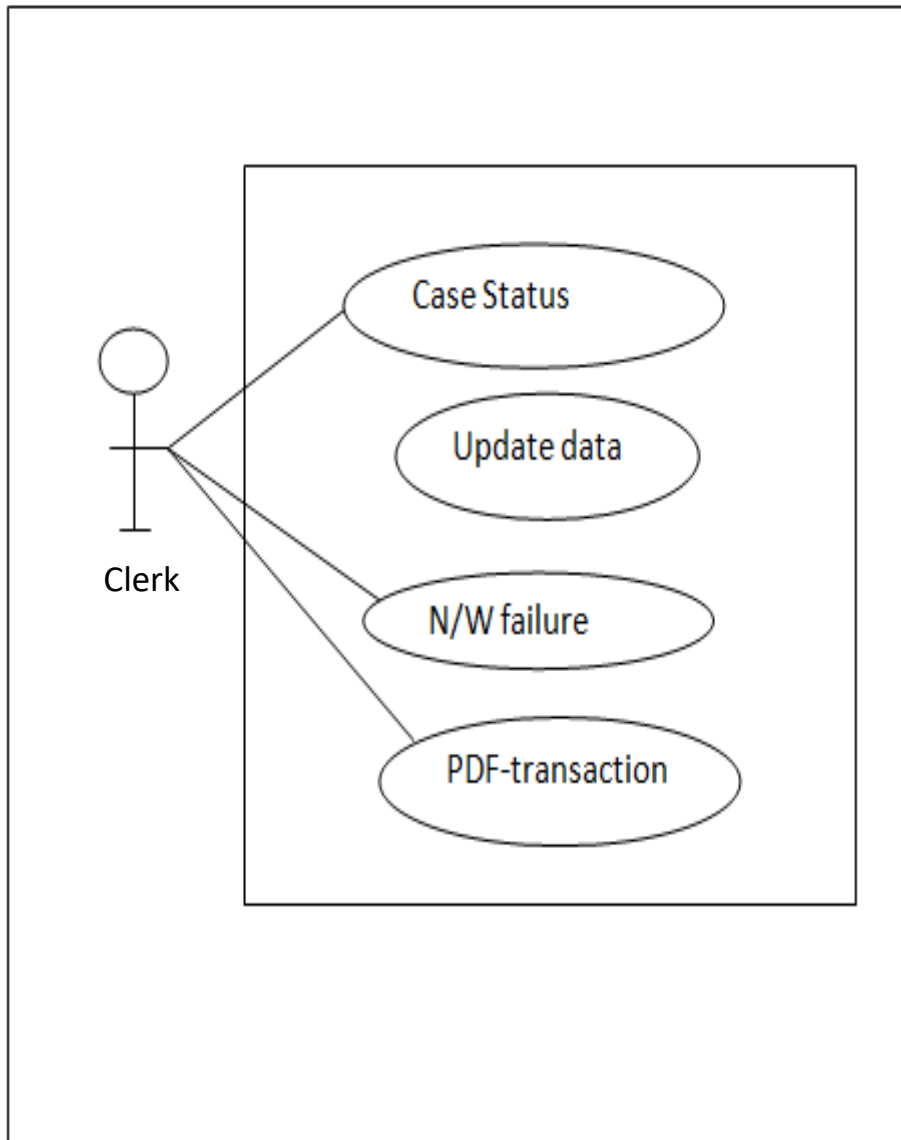


Fig 5.1.2 use case diagram for network failure. (Clerk user)

If the data created doctor cannot be send through the V8 compiler platform there must be an alternative method to increase the reliability of the software. So the clerk users needed to create PDF form of the data created by the doctor and send through E mail system and make the emergency situation active.

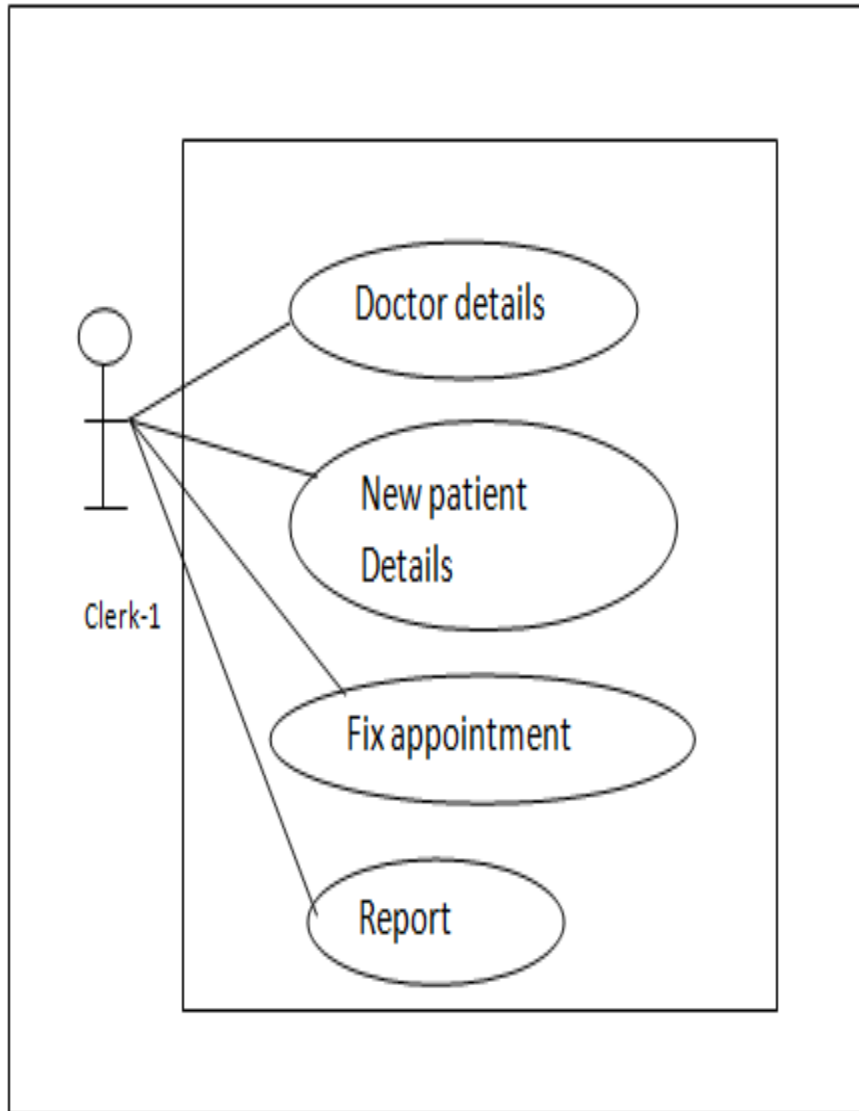


Fig 5.1.3 use case diagram for clerk 1

The user are created to manage the hospital activities lie doctor patient appointment, update the doctor made prescription and the patient data base in the serve for the future reference.

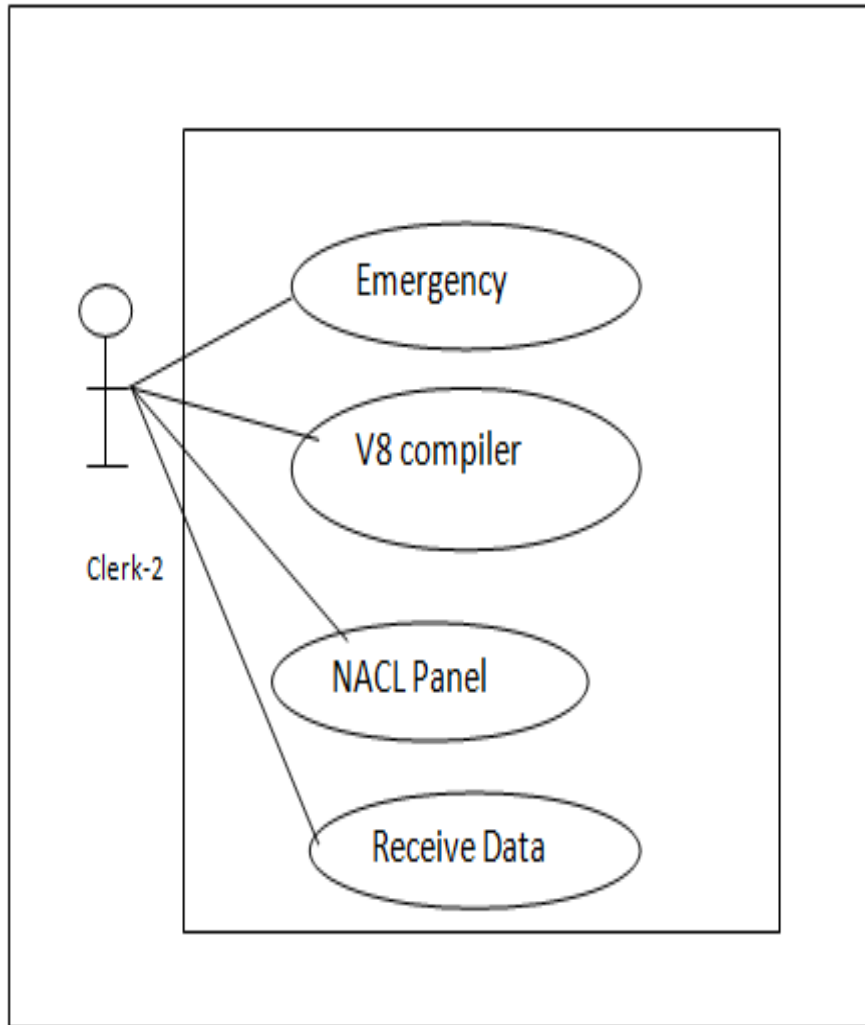


Fig 5.1.4 use case diagram for clerk 2 for the V8 operations

In this format the emergency data created by the doctor will be transferred to the V8 compiler where to pass the data to other hospital where the technology of v8 is implemented. NACL is the technology used to receive the data and store in the user GUI.

5.2: SEQUENCE DIAGRAM

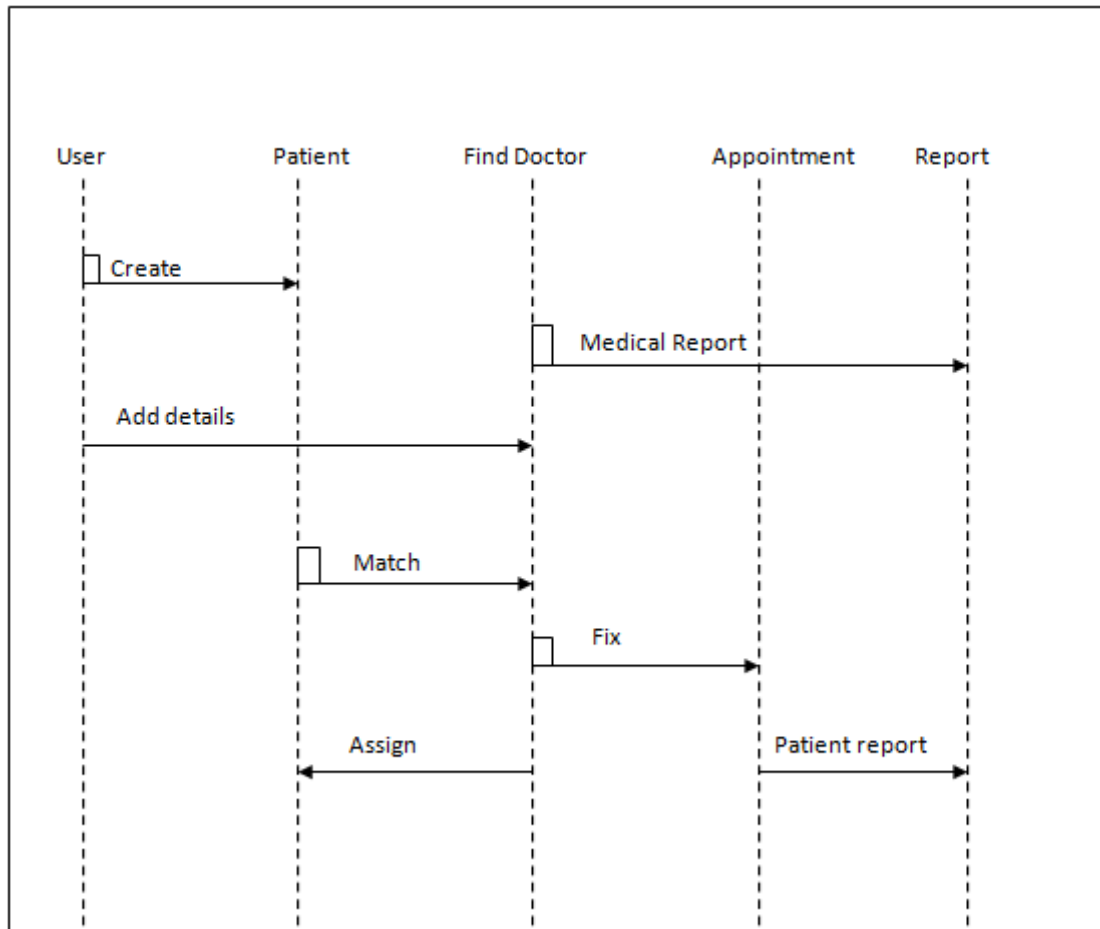


Fig 5.2.1: sequence diagram for hospital activities.

This sequence diagram does not have V8 based interactions since the commutations is made with in the hospital server and the modules. But the operations in this format are essential to control the v8 operations like medicine availably or update the medicine for the emergency case etc.

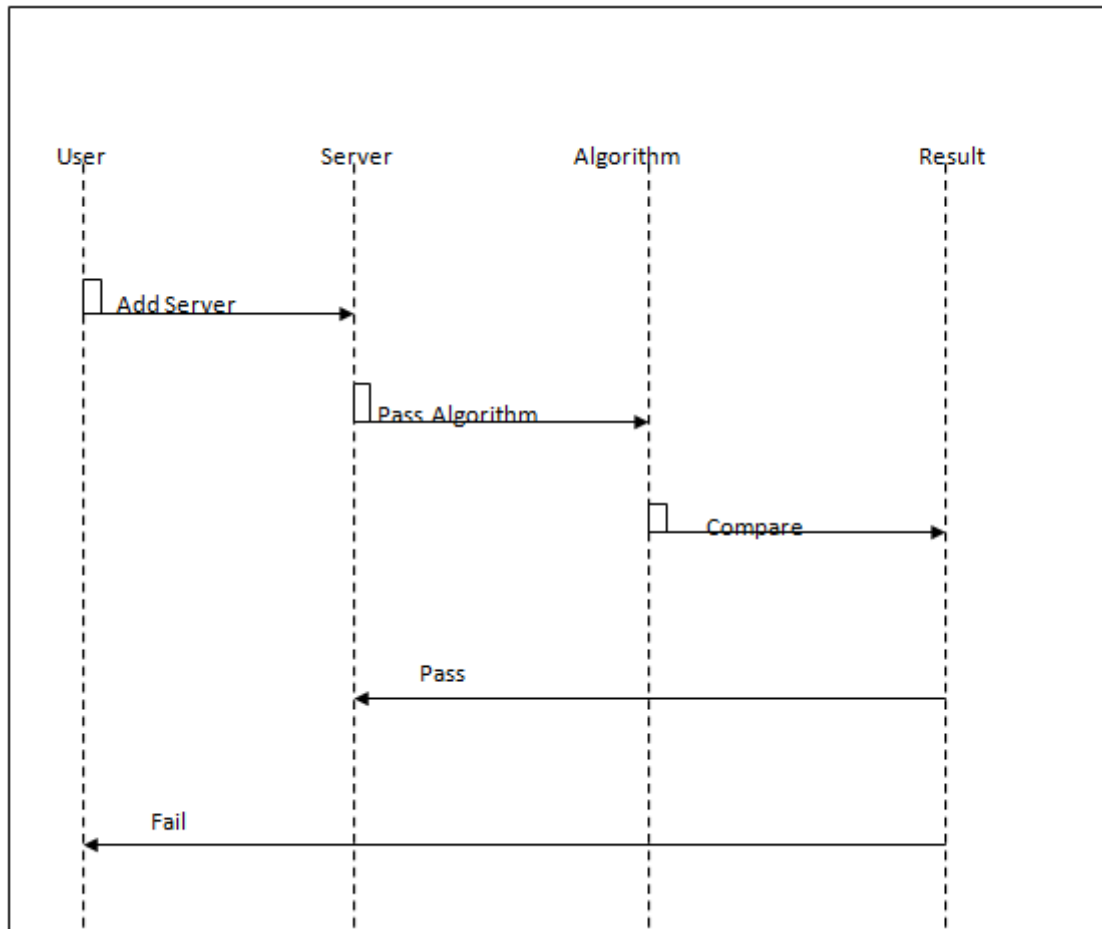


Fig 5.2.2: sequence diagram for v8 based algorithm is used.

The user will generate the data transaction details from the hospital to other hospital with V8 compiler, after the data is send the algorithm will compare the data at the receiver end and the source are same. Algorithm will compare the total character count and data size of the data in the source and destination end to check the data received is passed or not.

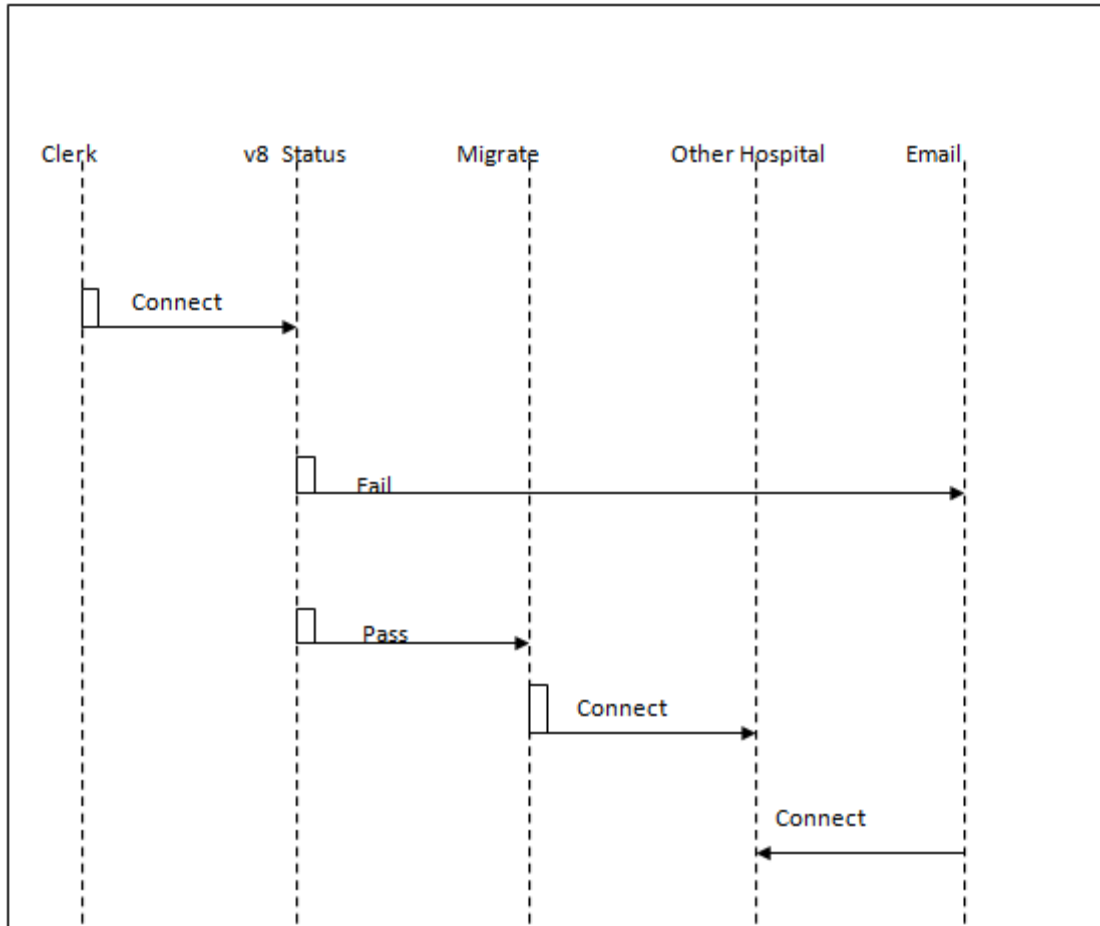


Fig 5.2.3: sequence diagram for V8 connection is failed.

If the v8 supporting algorithm is not used in the hospital or if the hospital use tradition method of data accessing the users are needed to go forward with other forms like use team view and access the server or by transferring the data through email. After the data is received the other steps will be as same with application operations.

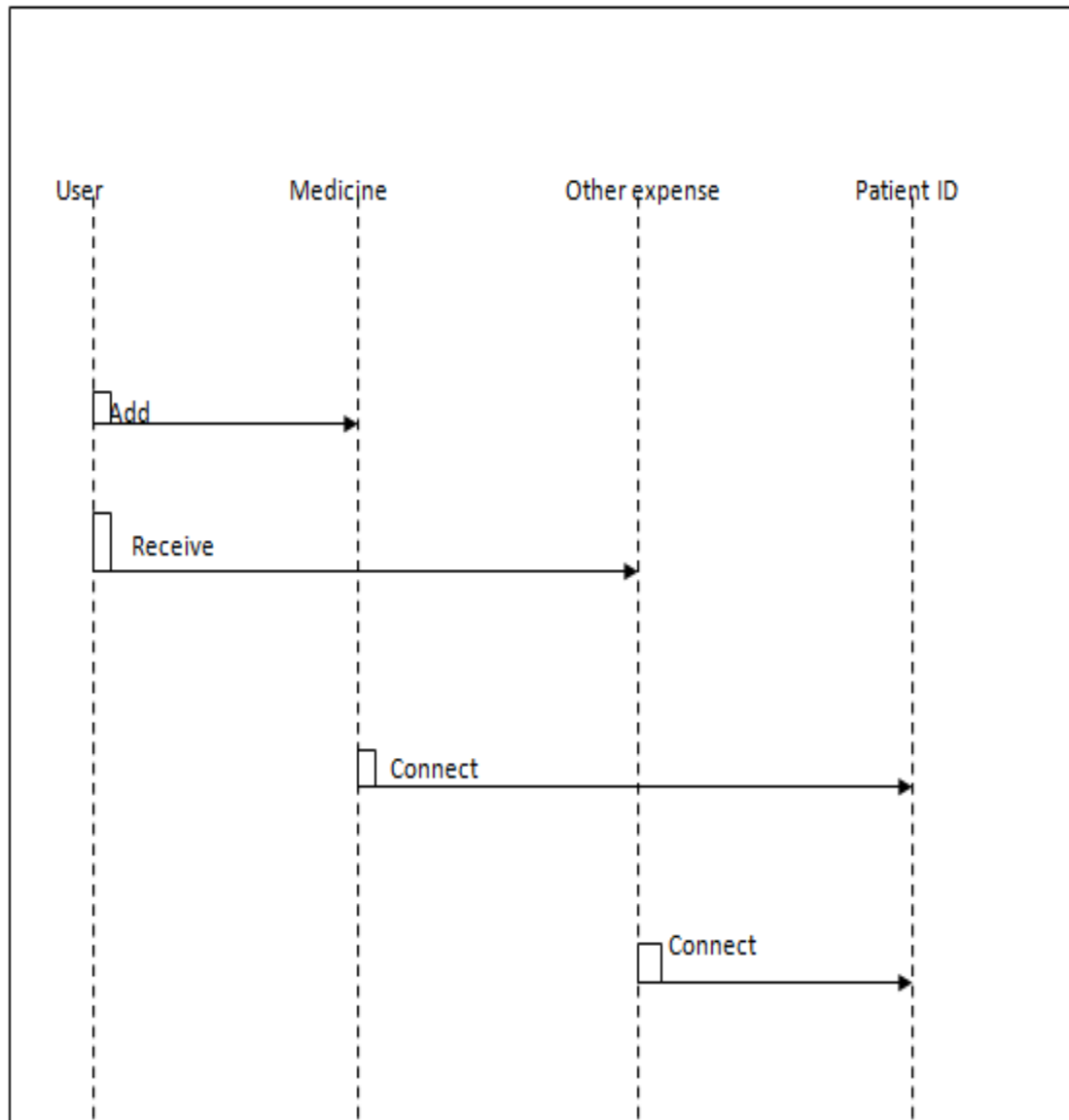


Fig 5.2.4: sequence diagram for non V8 operations.

After the data is received the further working like medicine giving, the stock of medicine updates and other expenses are connected with patient ID.

5.3 COLLABORATION DIAGRAM

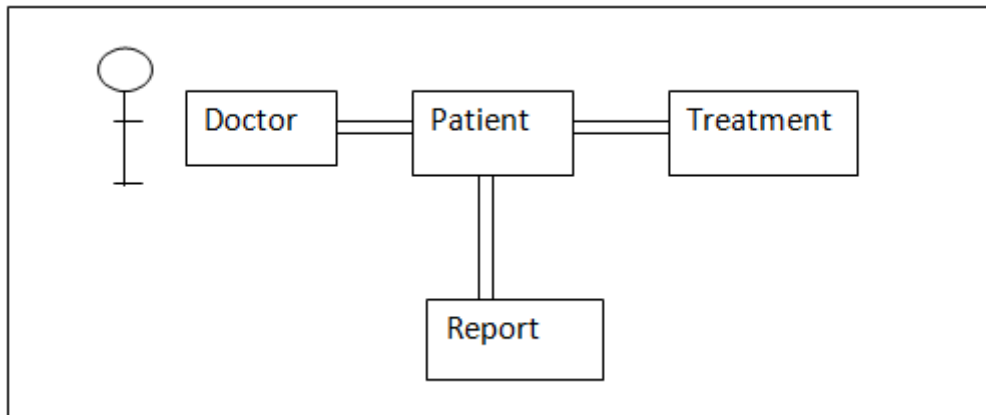


Fig 5.3.1: Collaboration diagram for treatment based data integrations

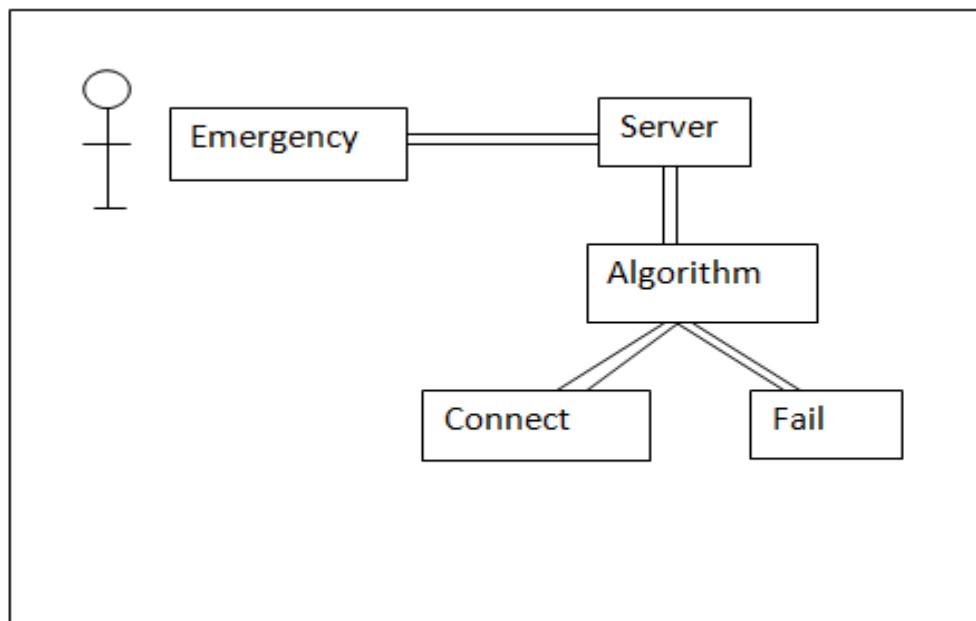


Fig 5.3.2: Collaboration diagram in the V8 algorithm interactions and output status.

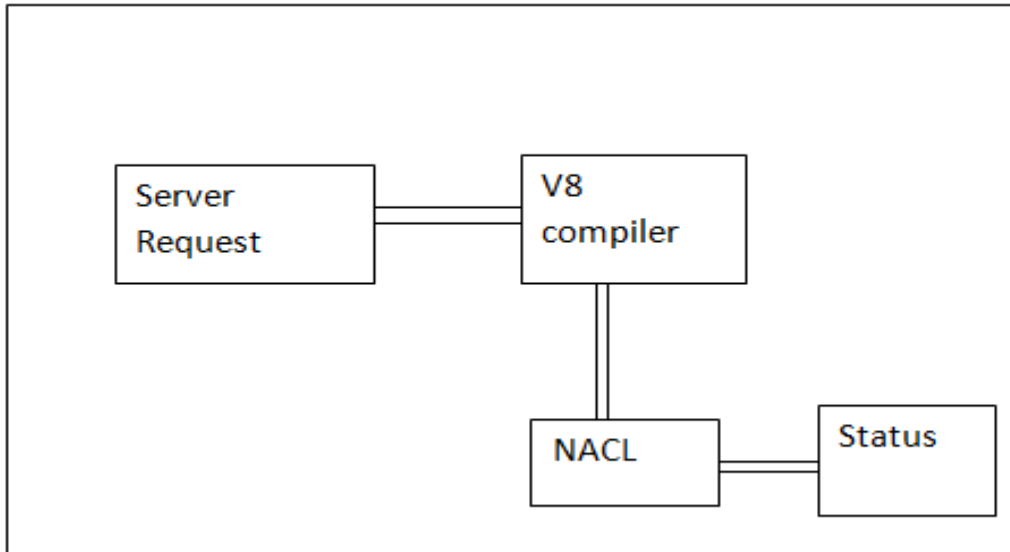


Fig 5.3.3: Collaboration diagram for server access with NACL technology.

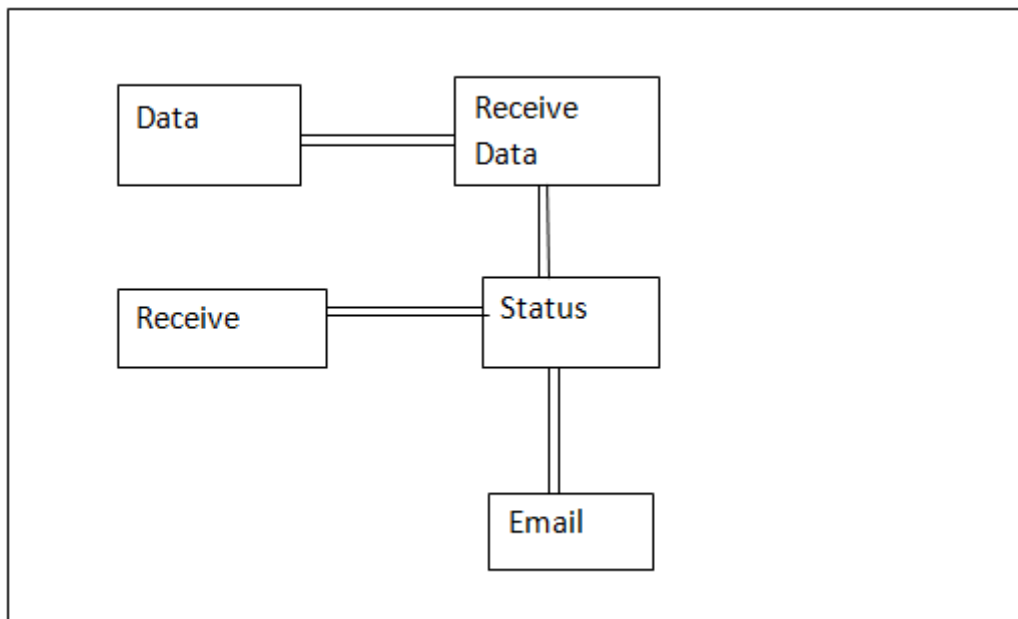


Fig 5.3.4: Collaboration diagram for data migration with respect to status of data received.

5.4 ACTIVITY DIAGRAM

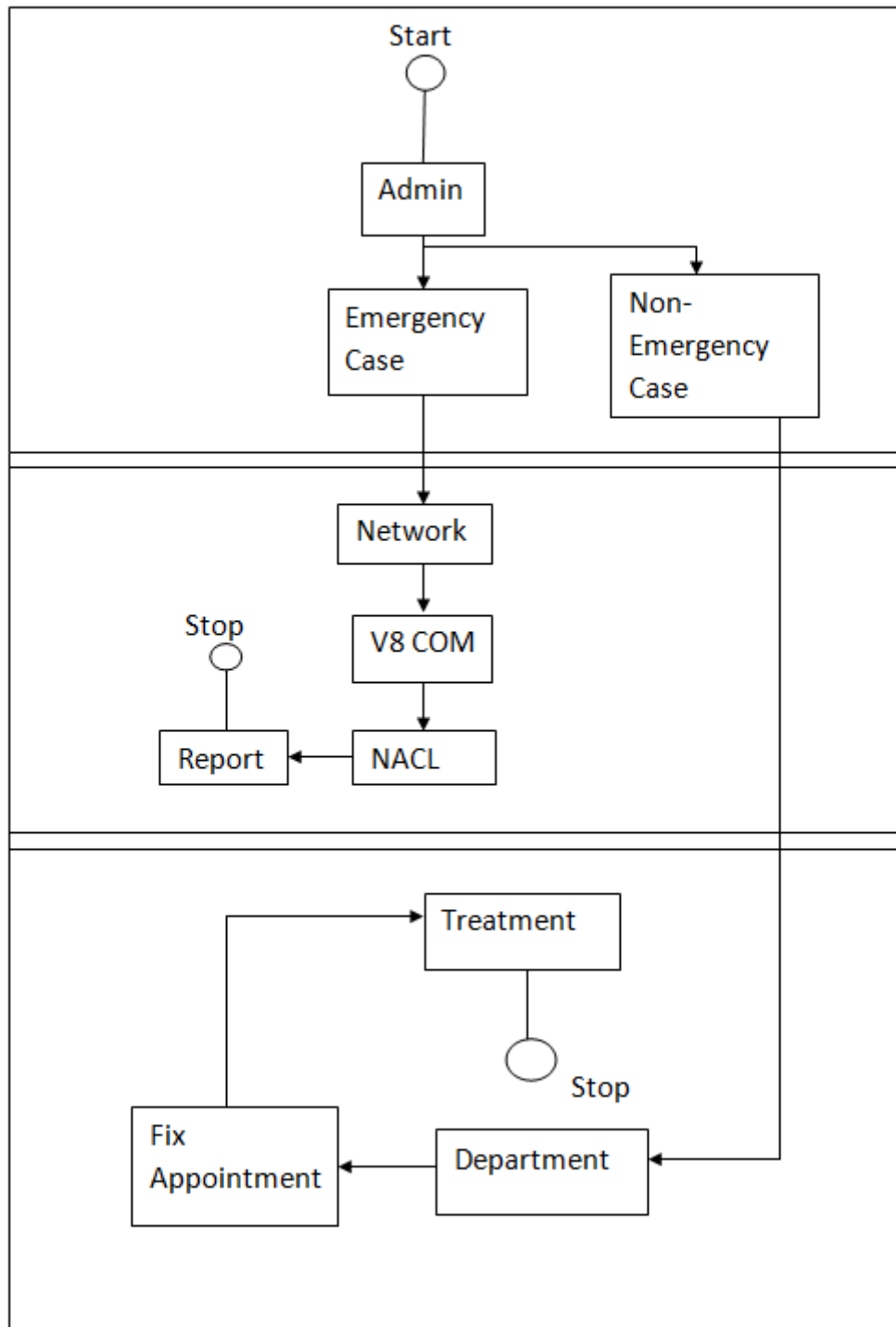


Fig 5.4.1: Activity diagram in v8 based emergency and non-emergency work management

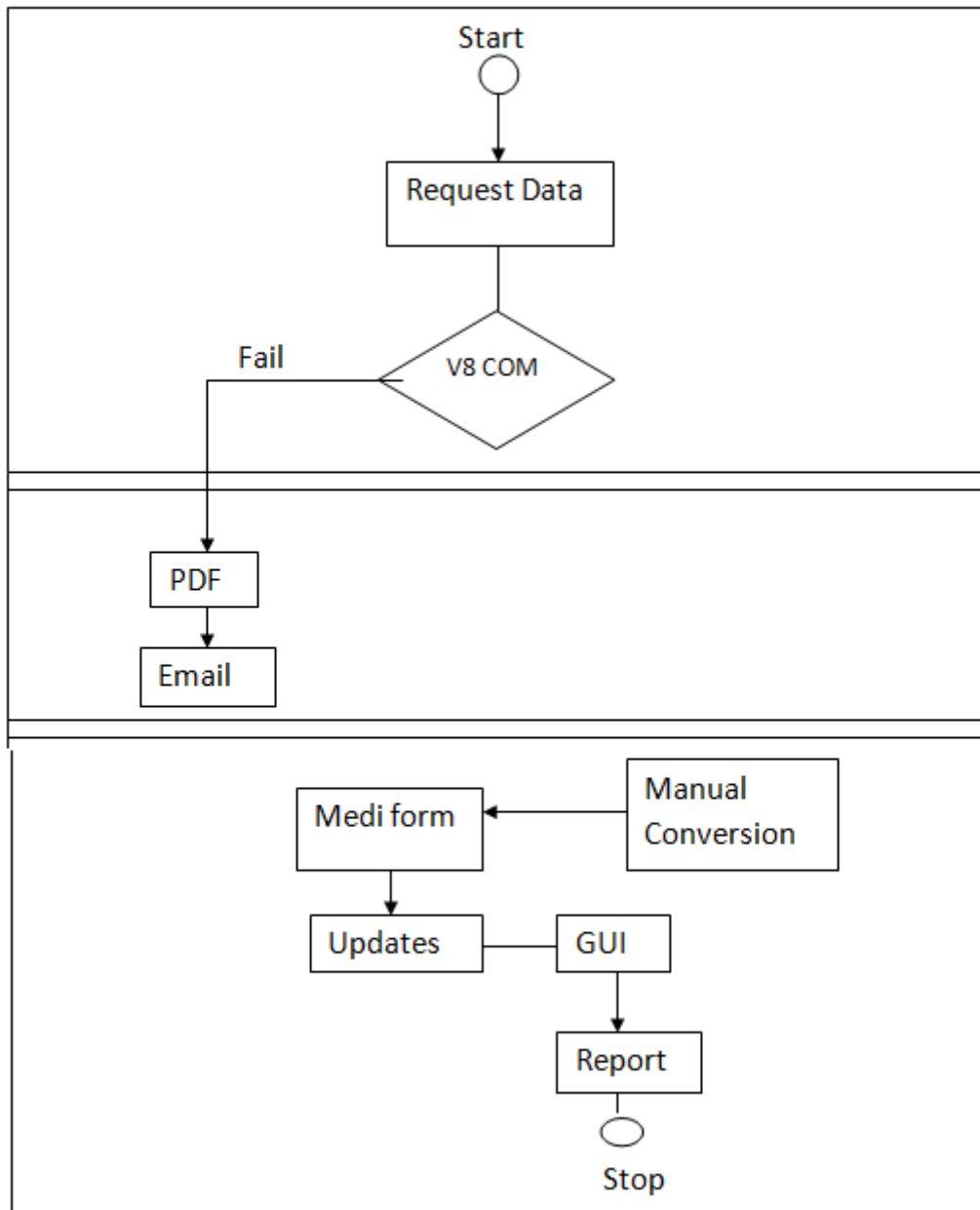


Fig 5.4.2: Activity diagram for the operation carried for non V8 data transactions,

CHAPTER 6

IMPLEMENTATION

6.1 SCREENSHOTS

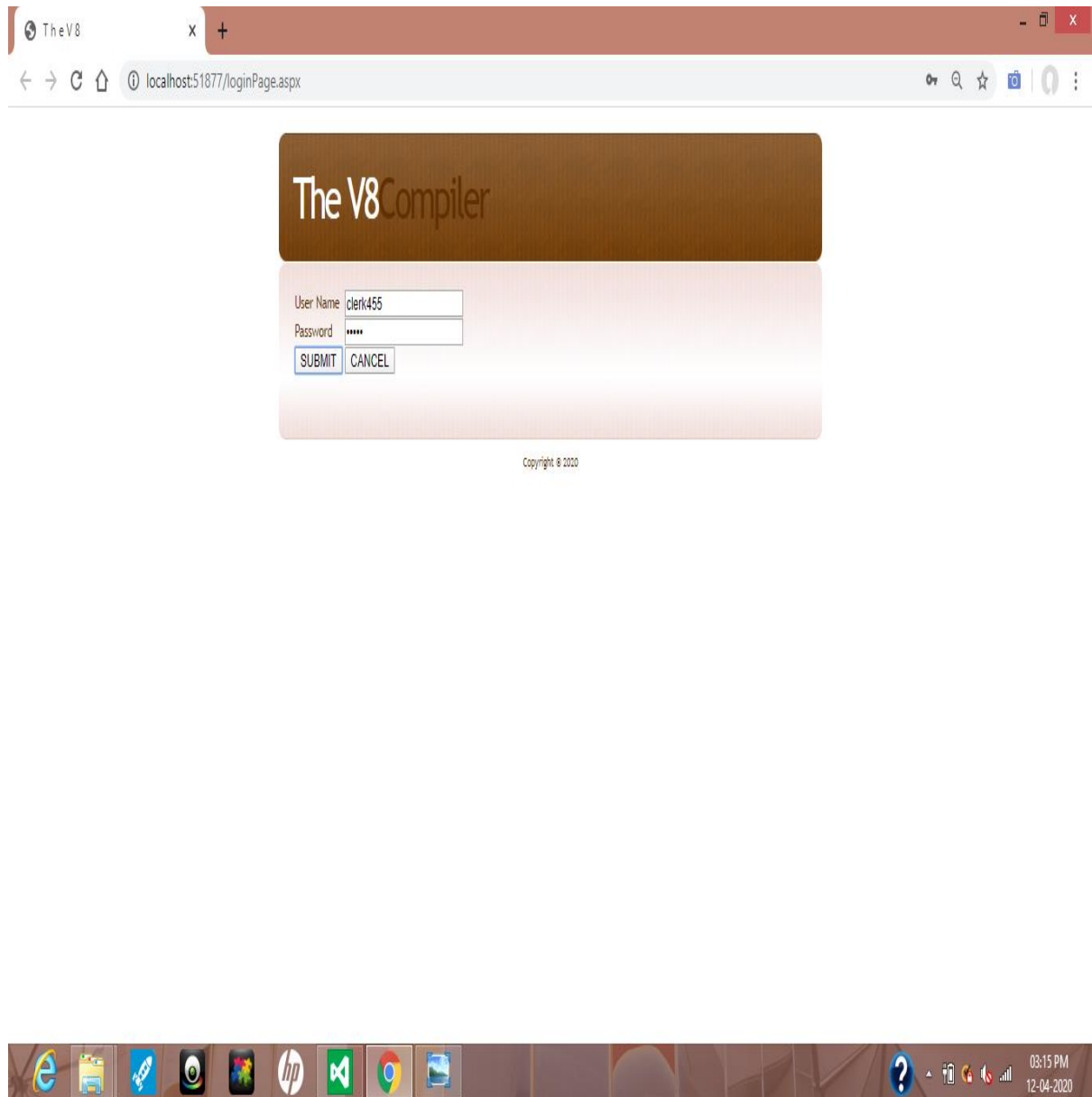


Fig 6.1.1: login page for the V8 compiler accessing by hospital user.

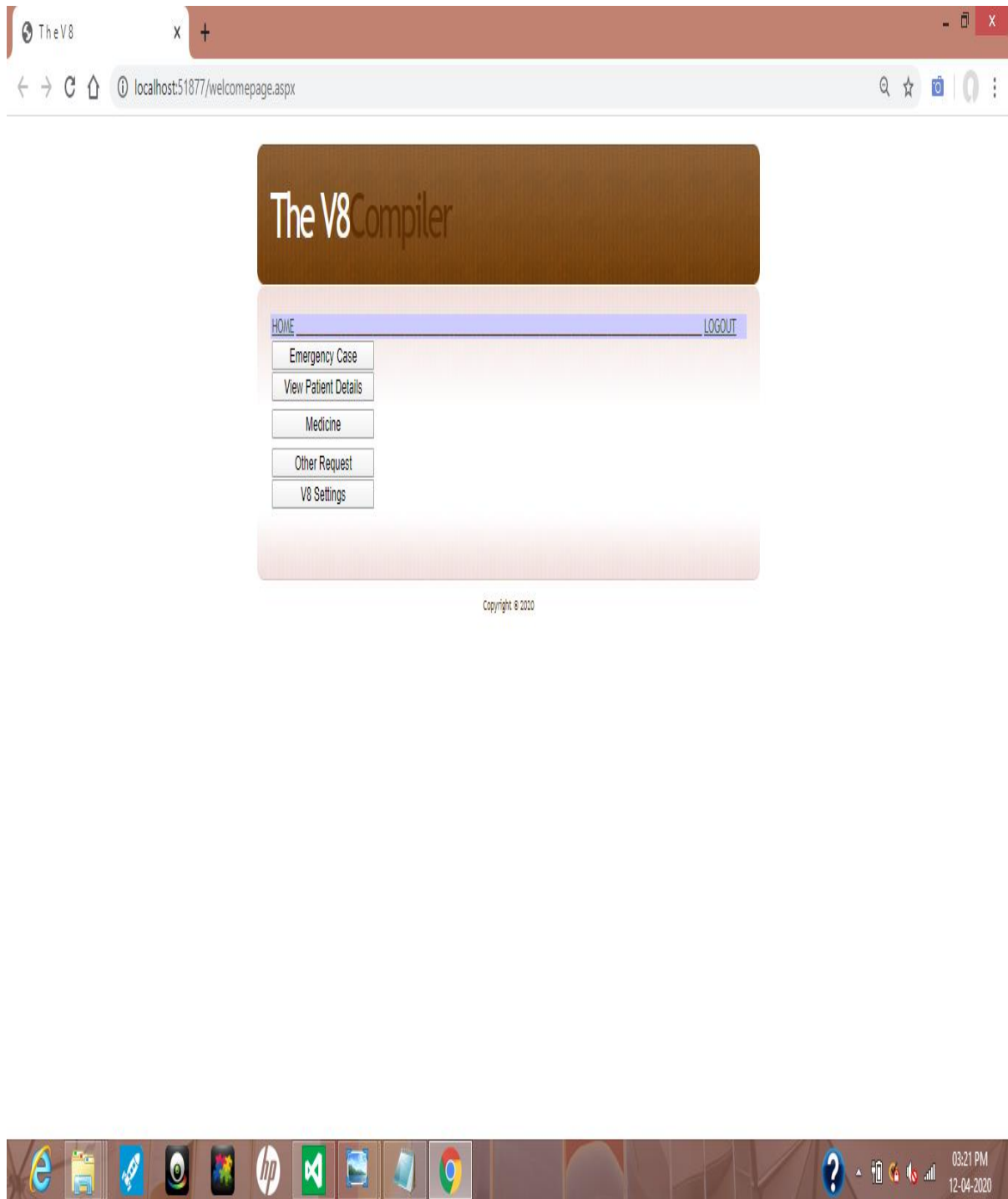


Fig 6.1.2: The welcome page for hospital activities and the V8 compiler settings.

The users with clerk category will be access to the all the page displayed in the welcome page. But the authorization to update the data will be limited. For example when doctor clicks the V8 setting page, the details like IP number, the name of the hospital connected are viewed. They do not have permission to edit any setting properties or change the password for the V8 connection

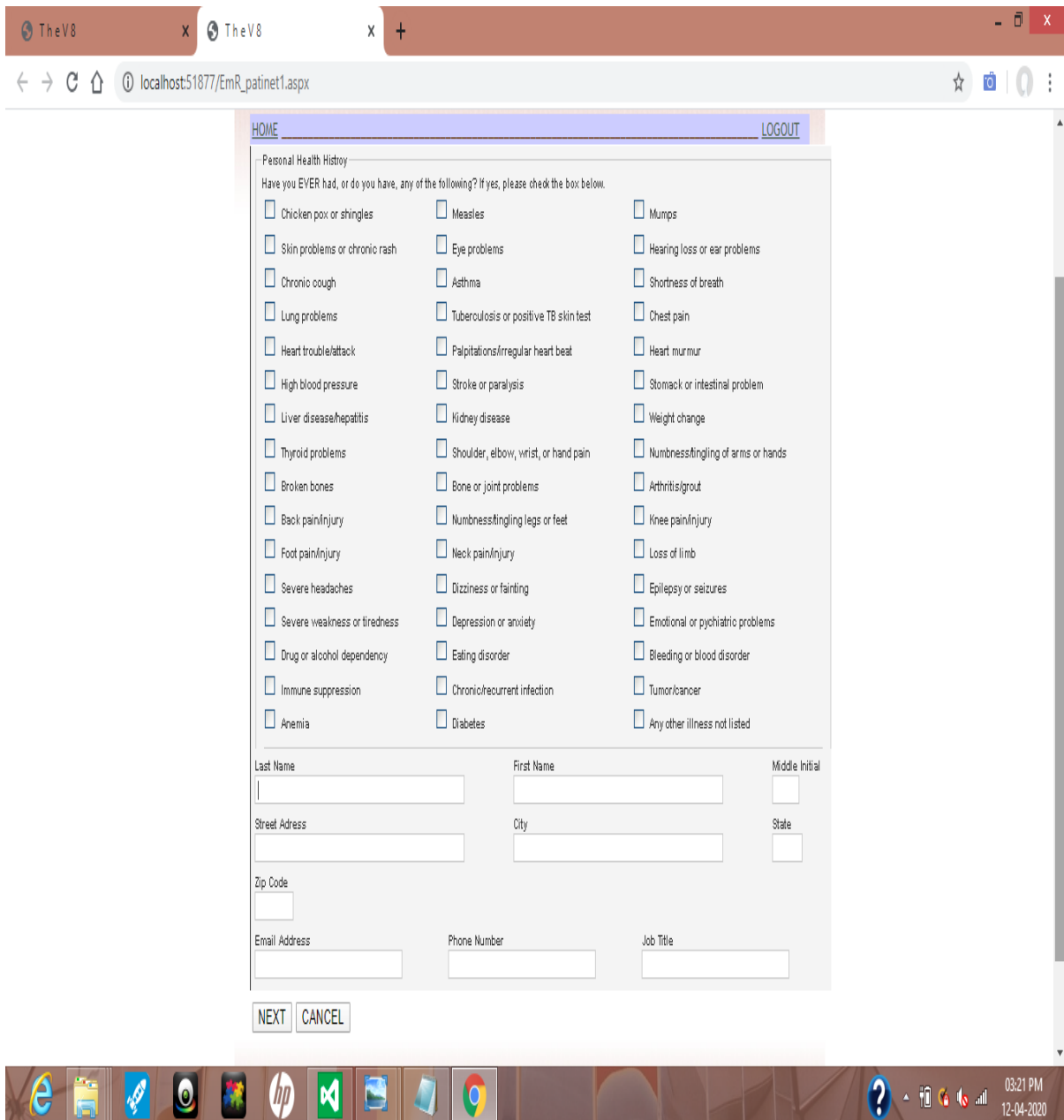


Fig 6.1.3: Creating transfer data before the data is transferred with V8 software.

Understanding the value of the time the developer made complete attribute in the check box name. So the users can select the health history details with a mouse click and do not need to spend time is typing any content.

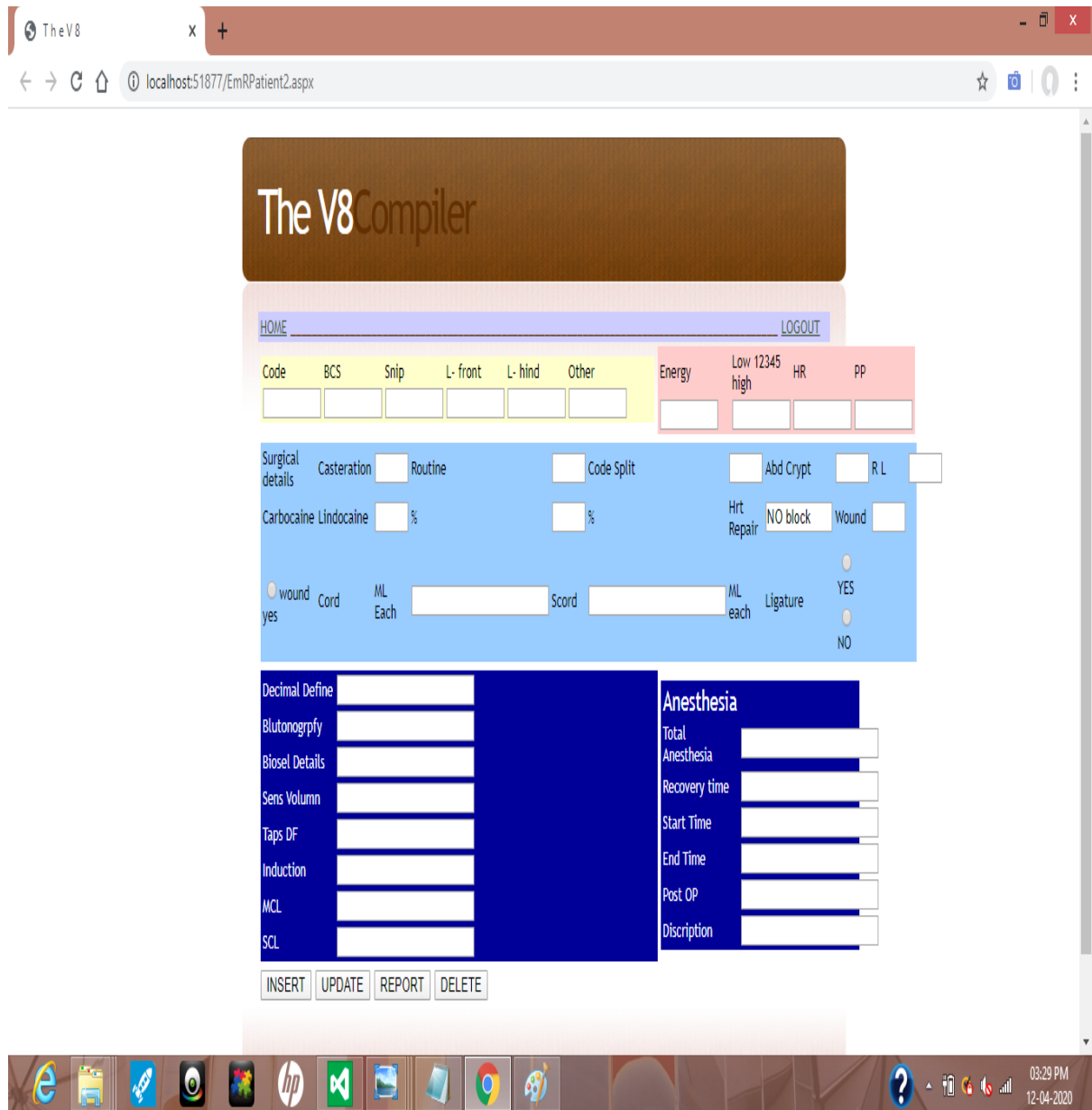


Fig 6.1.4: after the health history is send the further updates of the patient is also to be transfer through the V8 compiler software. These details are less important than the previous page of emergency data and the attributes are created manually.

The V8 Compiler

HOME LOGOUT

Code	BCS	Snip	L- front	L- hind	Other	Energy	Low high	12345 HR	PP
200	Spl BCS	Spl Snip	15	8	--	**	4.6	3.3	12.3

Surgical details

Casteration CD Routine CD Code Split CD Abd Crypt CD R L CD

Carbocaine Lindocaine 45 % 46 % Hrt Repair NO block Wound YES

wound Cord ML Each 2.63 Score 12. ML each Ligature YES NO

Decimal Define	Sample Details
Blutonogrfy	Sample Details
Biosel Details	Sample Details
Sens Volumn	Sample Details
Taps DF	Sample Details
Induction	Sample Details
MCL	Sample Details
SCL	Sample Details

Anesthesia

Total Anesthesia 6.3

Recovery time 4 days

Start Time 12:30 PM

End Time 12:30 PM

Post OP --

Discription Sample

INSERT UPDATE REPORT DELETE

Fig 6.1.5: Manually entered the data

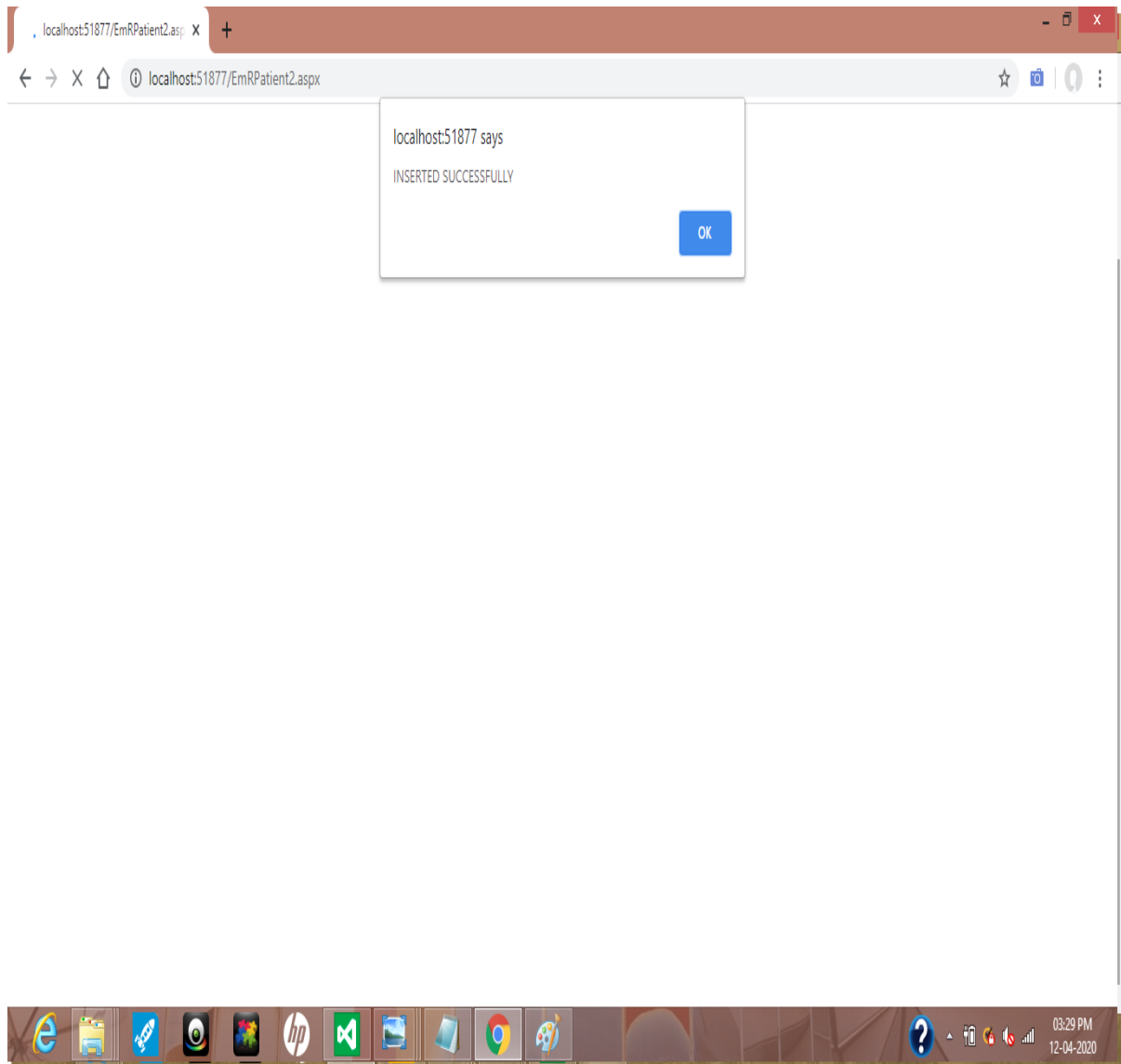


Fig 6.1.6: These values will also be sending along with V8 portal hospitals.

Application will use TCP/IP network where the data will be converted to packets and passed to all the hospitals which has V8 compiler software is installed. Also the updates made by each users will also be attached within the network packets and linked with previously send data.

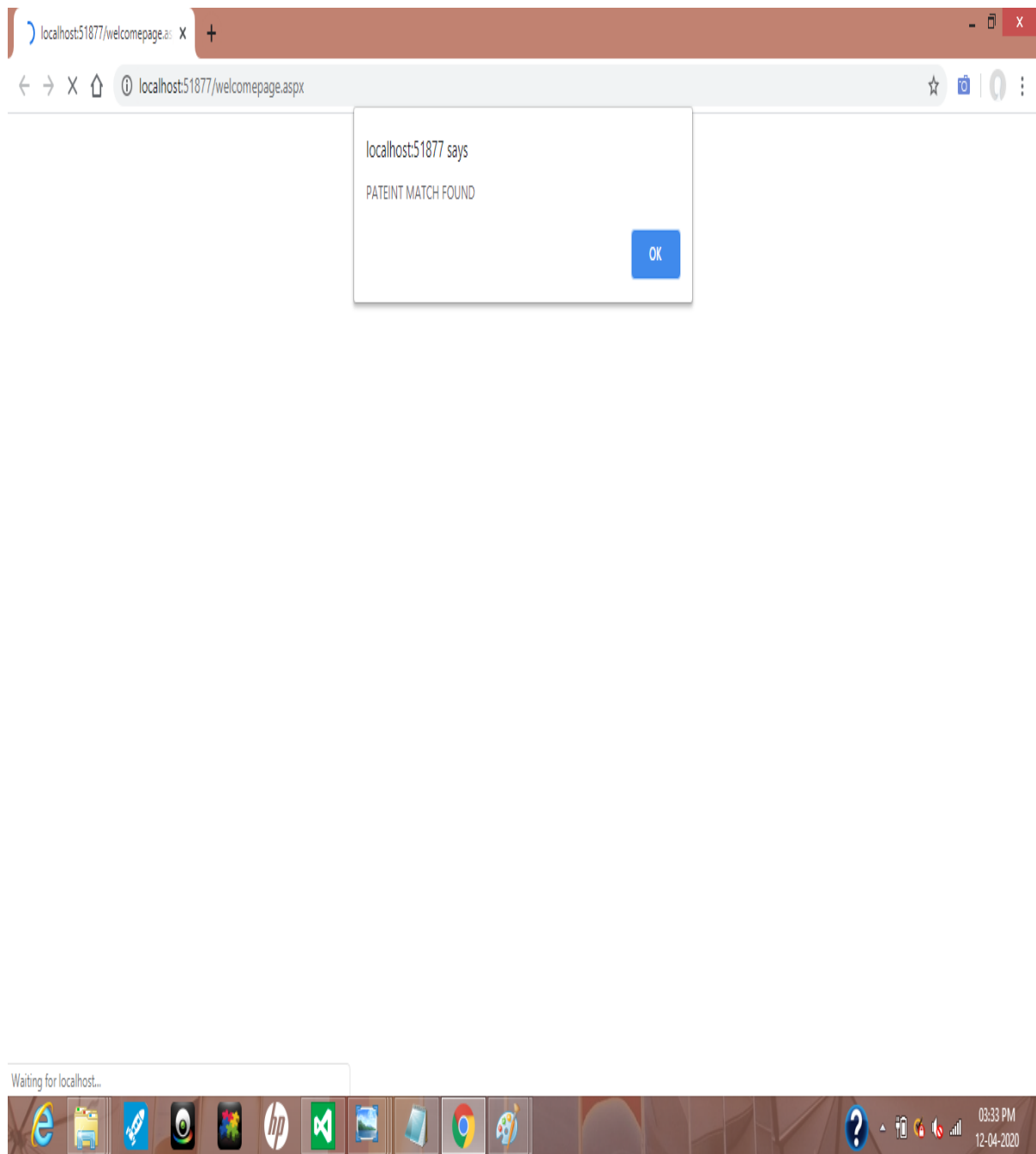


Fig 6.1.7: The message displayed up in the V8 compiler software on the patient data matched for the doctor provided requirements.

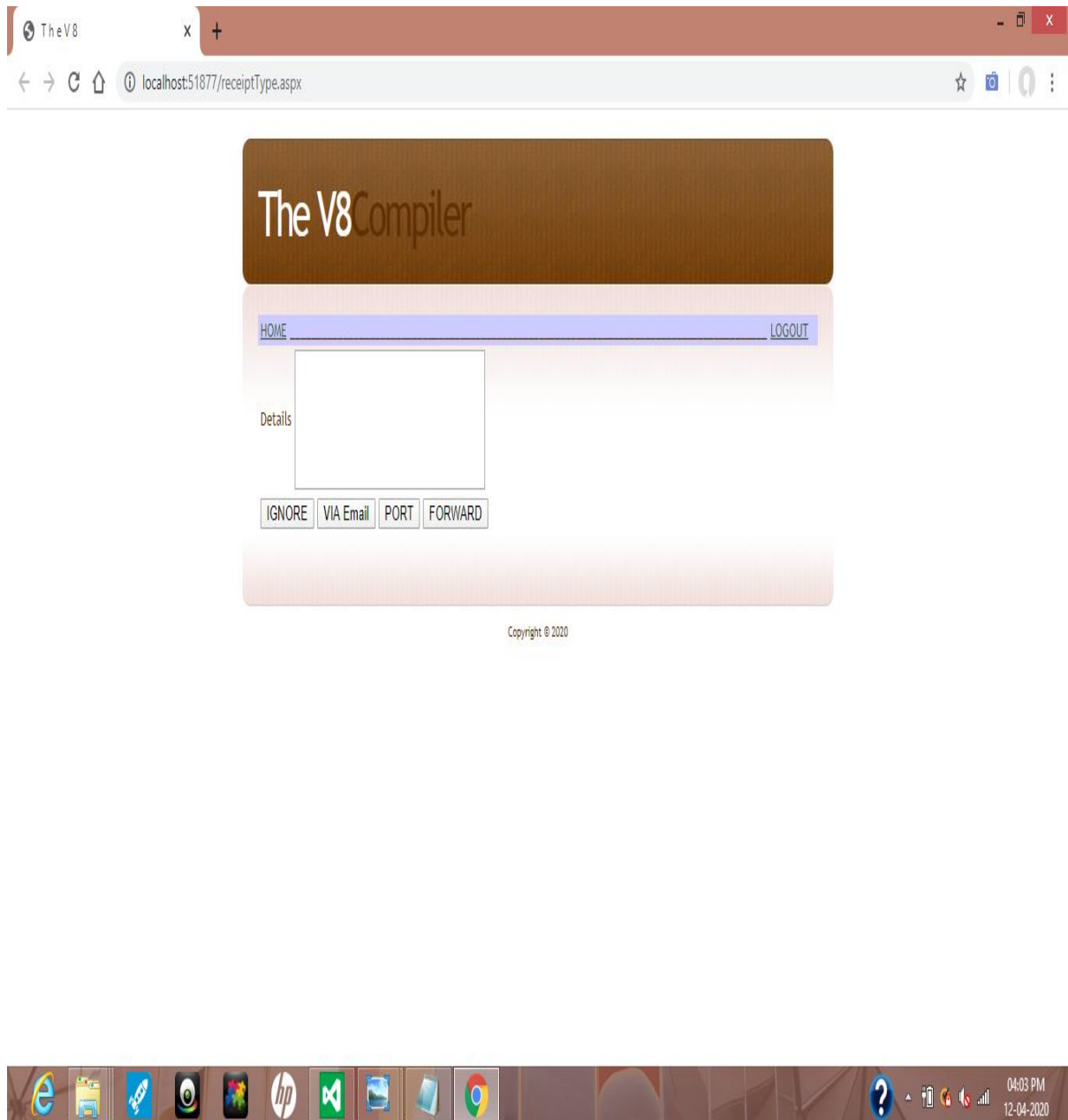


Fig 6.1.8: If doctor already received any request and approved then for the other request user had permission to ignore the request and send the reason for the by ignoring. Also if the configuration issues or network issues prevent form the further migrations then the communication will be possible with VIA Email.

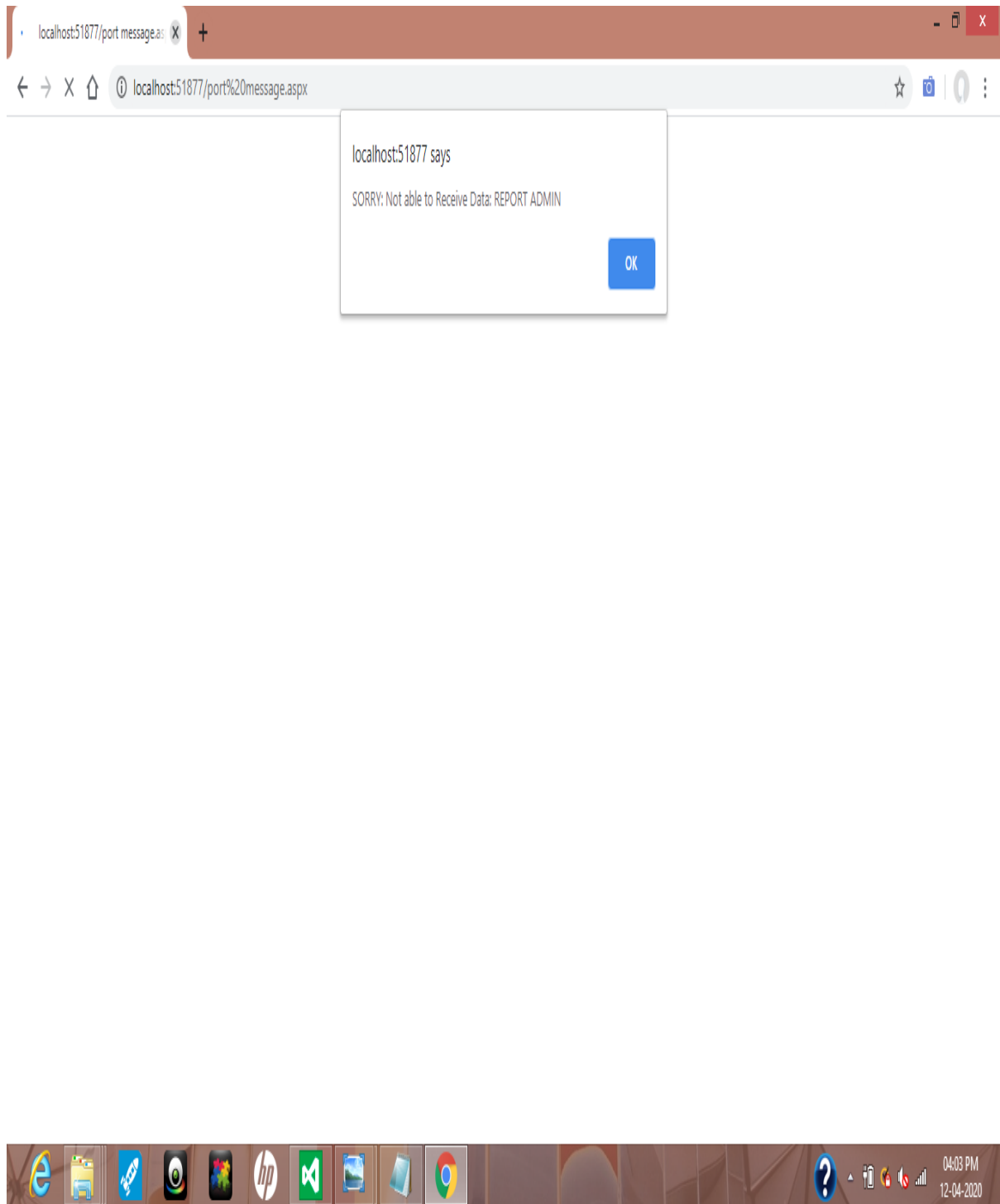


Fig 6.1.9: Message displaying error has occurred while porting the data in V8 compiler software

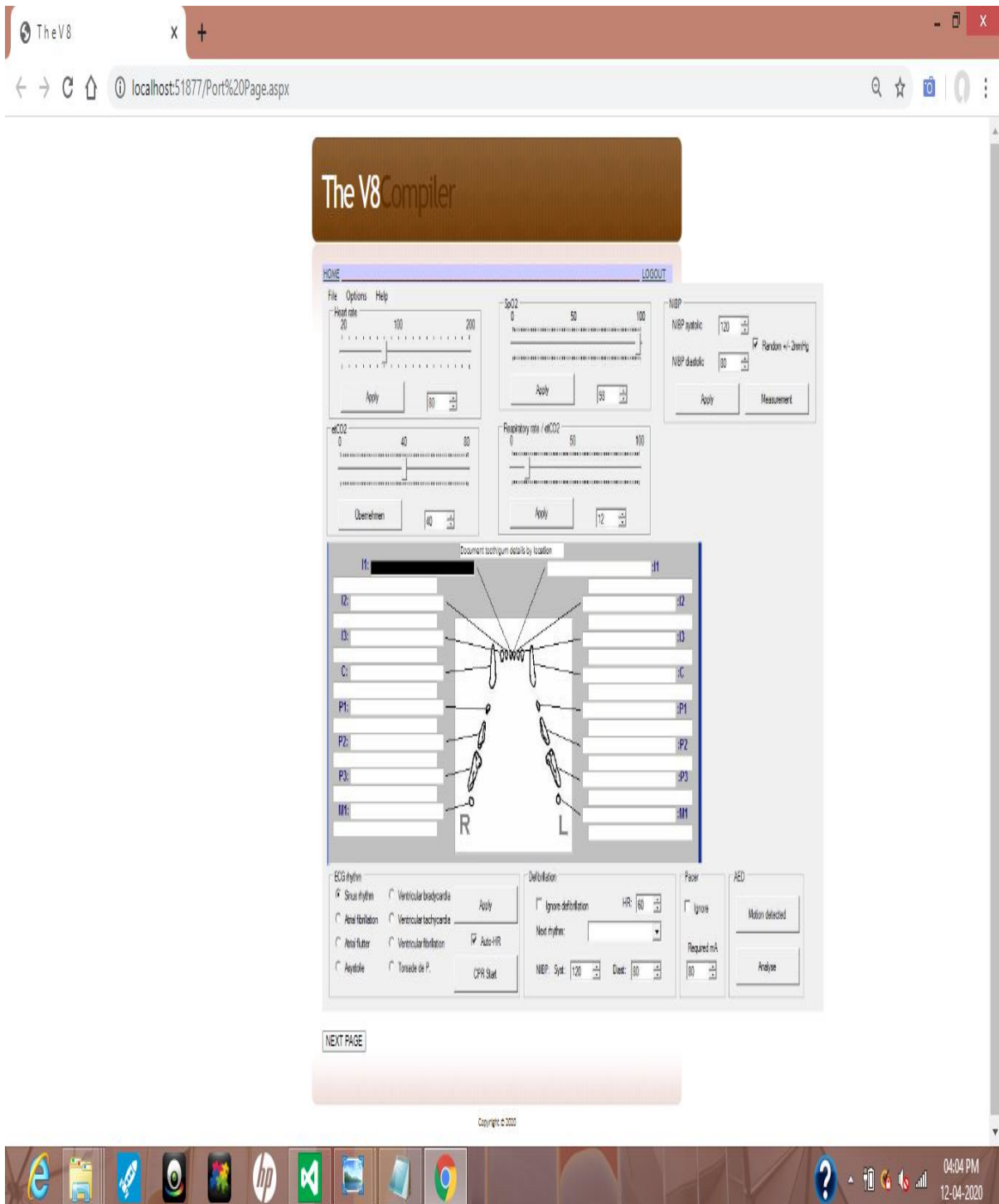


Fig 6.1.10: If the V8 compiler connection is success then the GUI of the remote system will be displayed in the users form.

The difference of V8 for the team viewer software is there users can access or update the data which are related to the hospital application which is hosted in the server. These application do not allow other driver access or migrations.

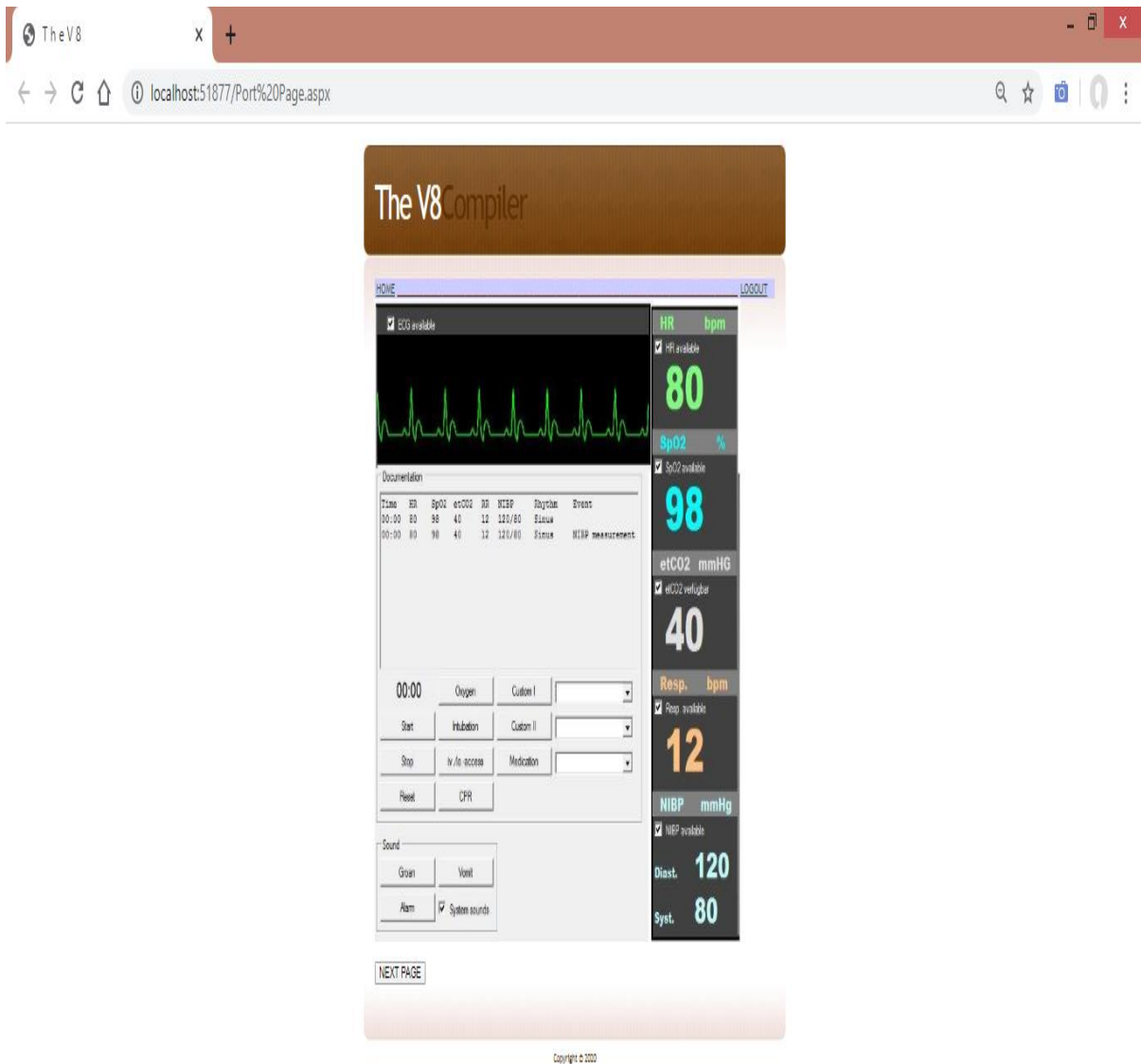


Fig 6.1.11: the other page in the web application is also able to view with help of V8 compiler.

The property of front end to front end communication will help the users to access live application updated with in the hospital which are connected by v8 compiler software



Fig 6.1.12: The data received from the V8 compiler will be affecting the other operation of Source Company.

The stock management of medicines is one of the verity which is affected. After the new data is loaded the clerks has to make sure the medicine stock for the further requirement needed is sufficient.

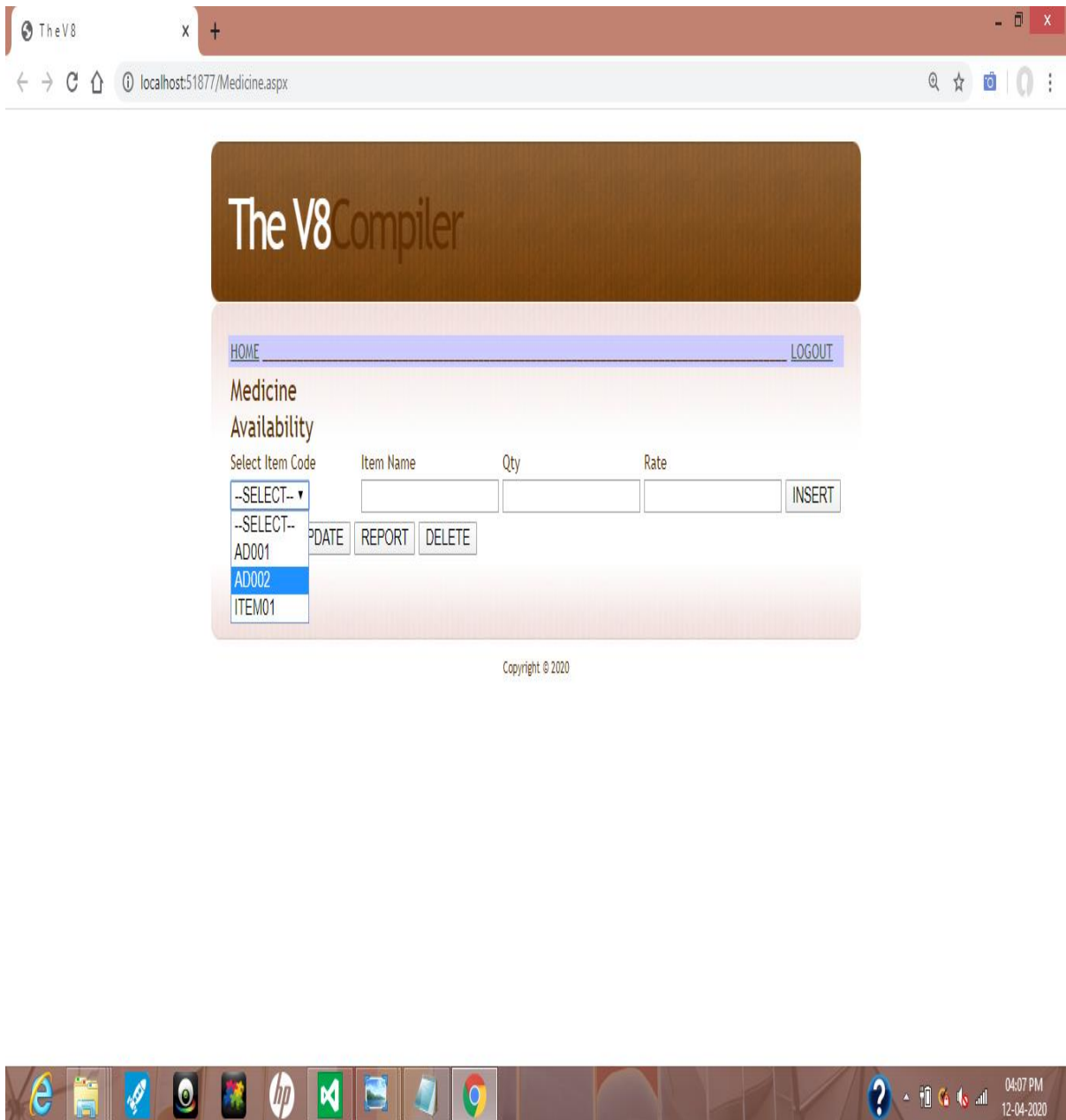
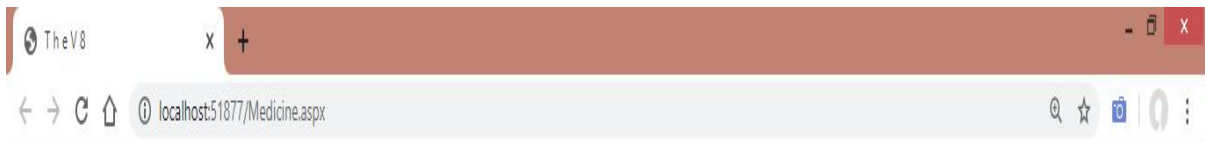


Fig 6.1.13: Select medicine item code and the related medicine name, the available qty and he rate etc will be displayed in the grid view.



The V8 Compiler

HOME [LOGOUT](#)

Medicine Availability

Select Item Code Item Name Qty Rate

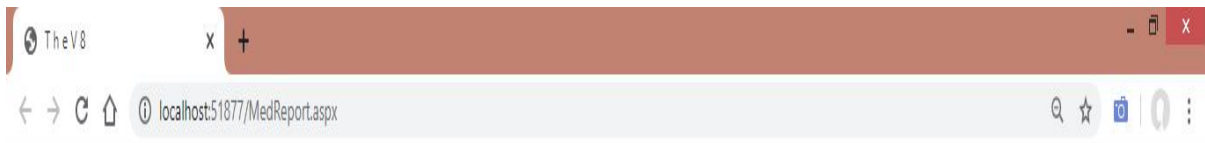
ITEM01 Sample Item 1 5 1

Item Code	Item Name	Qty	Rate	Amount
AD002	Sample Item	10	1	10
ITEM01	Sample item	5	1	5

Copyright © 2020



Fig 6.1.14: List of medicine and the qty is displayed in the grid view. If any item remains less than required quantity that will be displayed in red book mark.



The V8 Compiler

HOME LOGOUT

If this Stock Item is for a Preventative: (1) Select the Field in Field Date Update, type in the appropriate Preventative name, and the number of months per unit dispensed. If you leave PREVENTATIVE blank, the stock description will be used.

Field Date Update Preventative Months per Unit

Specify a document to be printed when this stock item is invoiced. Go to Hospital-> PetCare Documents to add documents.

Document # ? Document Name

Expiration Date ... Enter the Expiration Date for this item

Comments

Barcode ... Enter a Barcode for this product. When processing the invoice, you can scan the barcode to enter the product!

Actual Cost Price	5.55	Cost with Tax	5.55	Qty per Unit	10.00	Unit Cost	0.56
Max List Price	6.98	Desired Mark Up	125.00	Department	<input type="text"/>	Tax Rate	%

Accounting Category LABORATORY Active NO Taxed YES

For Resale

Calculated Price	1.25	Actual Mark Up	125	Actual Price	1.25	Must include the GST
------------------	------	----------------	-----	--------------	------	----------------------

Unit Qty On Hand	1.50	Total Items on Hand	15.00	Current Unit Qty On Hand	1.50
				Current Total Items On Hand	15.00

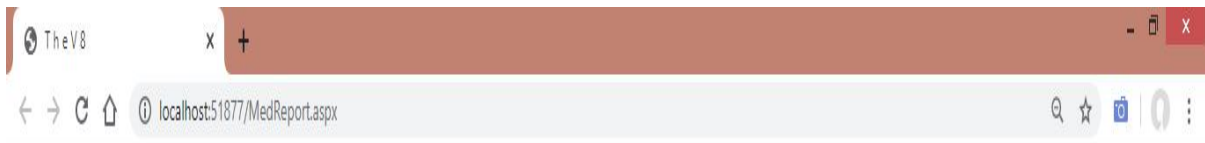
Re-Order Qty	0.50	Qty Ordered	1.50	Date Ordered	02/21/2003
Desired Qty	2.00	Qty To Order	0.00	Mark Up from List	79

OK DELETE STOCK PROCESS TAG EDIT

Copyright © 2020



Fig 6.1.15: The report generated for the medical reference



The V8 Compiler

HOME LOGOUT

Account Details Information Referrals Details Employ/Contact Personality

Comments

Driver License _____ Charge Interest/Account Fee No

Social Security No _____ Bad Risk _____ Discount BASIC 10%

Code DAH _____ Last Visit _____ Send Billing Letter Yes

Insurance Policy _____ Billing Letter Type Basic

Status Active _____ Distance _____ Send Reminder/Letter No

Set STATUS to 'Inactive' to prevent any action except POA.
Set STATUS to 'Bad Debt' to set Accounts Receivable flag.
Set STATUS to 'CareCredit' to set Account to Green, for CareCredit Use

Preferred Billing/No Tax/No Tax _____ Client Type Sponsor

Account Number 3917 Client Information First Visit 4/26/1999

Title First Last

Name Exotics Rescue Last Visit 8/2/2007

Address 1 C/O Nancy Smith Spouse/Other _____

2 987 West Cypress Road Employment _____

3 _____ Chart # 4479

4 _____

+ Town Staten Island 10304 NY

County _____

Telephone #: Home (631) 659-1111

Enter ONLY the phone number in HOME, with no comments. Work _____

Use DETAILS or COMMENTS. Cell _____ E-Mail _____

#	Description	Phone	Ext
1	Mobile For Dr	(333) 111-2222	
2	Fax	(333) 222-4444	
3	Bealpine	(333) 111-6678	



Fig 6.1.16: The application web page with medical reference number.

CHAPTER 7

SOFTWARE TESTING

7.1 TESTING

Test case name	Medical stock check
Page to test	Medicine .ASPX
Version	1.3
Filed to test	5

Filed name	Parameter	Value	Testing current status
TXT_CR_SW_VGTMED_ID	@CR_SW_VGTMED_ID	MED008	Pending for testing
TXT_CR_SW_VGTMED_NAME	@CR_SW_VGTMED_NAME	K	Pending for testing
TXT_CR_SW_VGTMED_QTY	@CR_SW_VGTMED_QTY	1	Pending for testing
TXT_CR_SW_VGTMED_RATE	@CR_SW_VGTMED_RATE	10	Pending for testing
TXT_CR_SW_VGTMED_AMT	@CR_SW_VGTMED_AMT	10	Pending for testing

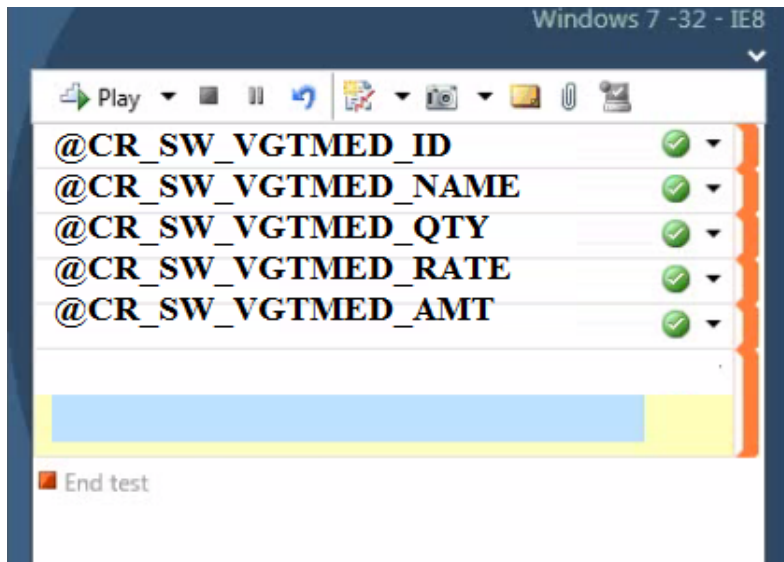
Assigned To Adam Barr Automation status Not Automated
 State Design Area FabrikamFiber
 Priority 2

STEPS SUMMARY TESTED BACKLOG ITEMS LINKS ATTACHMENTS ASSOCIATED AUTOMATION

Change steps Insert step Insert shared steps Insert parameter

Action	Expected Result
1. @CR_SW_VGTMED_ID	= MED008
2. @CR_SW_VGTMED_NAME	= K
3. @CR_SW_VGTMED_QTY	= 1
4. @CR_SW_VGTMED_RATE	= 10
5. @CR_SW_VGTMED_AMT	= 10
6.	
7.	

Delete iteration Rename parameter Delete parameter



Parameter	Value	Testing current status
@CR_SW_VGTMED_ID	TXT_CR_SW_VGTMED_ID showed MED008	Success
@CR_SW_VGTMED_NAME	TXT_CR_SW_VGTMED_NAME showed K	Success
@CR_SW_VGTMED_QTY	TXT_CR_SW_VGTMED_QTY showed 1	Success
@CR_SW_VGTMED_RATE	TXT_CR_SW_VGTMED_RATE showed 10	Success
@CR_SW_VGTMED_AMT	TXT_CR_SW_VGTMED_AMT showed 10	Success

Test case name	Medical stock check with NULL
Page to test	Medicine .ASPX
Version	1.4
Filed to test	5

Filed name	Parameter	Value	Testing current status
TXT_CR_SW_VGTMED_ID	@CR_SW_VGTMED_ID	NULL	Pending for NULL value testing
TXT_CR_SW_VGTMED_NAME	@CR_SW_VGTMED_NAME	NULL	Pending for NULL value testing

TXT_CR_SW_VGTMED_QTY	@CR_SW_VGTMED_QTY	NULL	Pending for NULL value testing
TXT_CR_SW_VGTMED_RATE	@CR_SW_VGTMED_RATE	NULL	Pending for NULL value testing
TXT_CR_SW_VGTMED_AMT	@CR_SW_VGTMED_AMT	NULL	Pending for NULL value testing

STEPS SUMMARY TESTED BACKLOG ITEMS LINKS ATTACHMENTS ASSOCIATED AUTOMATION

Change steps Insert step Insert shared steps Insert parameter

B / U A

Action	Expected Result
1. @CR_SW_VGTMED_ID	= NULL
2. @CR_SW_VGTMED_NAME	= NULL
3. @CR_SW_VGTMED_QTY	= NULL
4. @CR_SW_VGTMED_RATE	= NULL
5. @CR_SW_VGTMED_AMT	= NULL
6.	
7.	

Delete iteration Rename parameter Delete parameter

Play

@CR_SW_VGTMED_ID

@CR_SW_VGTMED_NAME

@CR_SW_VGTMED_QTY

@CR_SW_VGTMED_RATE

@CR_SW_VGTMED_AMT

Parameter	Value	Testing current status
@CR_SW_VGTMED_ID	TXT_CR_SW_VGTMED_ID not support NULL	Success
@CR_SW_VGTMED_NAME	TXT_CR_SW_VGTMED_NAME not support NULL	Success

@CR_SW_VGTMED_QTY	TXT_CR_SW_VGTMED_QTY not support NULL	Success
@CR_SW_VGTMED_RATE	TXT_CR_SW_VGTMED_RATE not support NULL	Success
@CR_SW_VGTMED_AMT	TXT_CR_SW_VGTMED_AMT not support NULL	Success

CHAPTER 8

CONCLUSION

The V8 is front end bases data compiler application used for data integration of XML and master page based attributes. This technology can reduce the complexity of data migrations form the SQL server. If the data is saved in the back end the next time accessing the data has go through the security parameters before it is added in the source machine GUI. But the V8 compiler is active the data access is made with server to server page relocation. The data can destination machine generated value or the value is fetched form the SQL server and loaded in the server page. After the checking the authorisation in the server to server data access calling server authentication will be a waste of time and developer use the V8 advance tools to integrate the server to server migrations.

CHAPTER 9

FUTURE ENHANCEMENT

The server base storage of the data is to be enhanced with new security parameters of session based algorithms. The data of v8 which will be stored in the cache memory for the destination machine and source machine can be retrieved after words. This is main raw back of the cookies or server page based data storage in the application. The technology of demand cache is a solution for the limitation where the data will be saved in direct from the server where the actual data is saved. So when the data got disconnected with server the values stored in the V8 based distributed cache will also be disconnected and cannot be retrieved. The advance feature of multi system storage in the demand cache can elaborate the V8 compiler based data storage in the different systems of the application.