

CLOUD COMPUTING PROPOSAL FOR HEALTH CARE

V.SELVA NANDHINI

(13PCA021)

A Project Report Submitted to

**Avinashilingam Institute for Home Science and Higher Education for
Women University, Coimbatore-641043**

**In Partial fulfilment of the requirements for the
Master's Degree in Computer Applications**

April-2016

ACKNOWLEDGEMENT

I would like to express my sincere thanks to God Almighty, for his constant love and grace that he has showered upon me.

I am very grateful to Shri.**Dr.P.R.Krishnakumar, Chancellor**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore for his support and encouragement during the course of my study.

My hearty thanks to **Dr.(Mrs).Premavathy Vijayan, M.Sc.,M.Ed.,Dip.Spl.Edn.,M.Phil.,Ph.D, Vice Chancellor in-charge**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore for providing all the resources that facilitated the conduct of the present study.

I express my humble gratitude to **Dr.(Mrs).A.Venmathi, Registrar in-charge**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for providing all the facilities necessary for the study.

I am also thankful to **Dr.(Mrs).A.Parvathi M.Sc., Dip.Ed., M.Phil., Ph.D., Dean, Faculty of Science**, for granting the facility required.

I wish to place my deep sense of gratitude to **Dr.(Mrs).G.Padmavathi, Professor and Head**, Department of Computer Science, for providing all the facilities to complete the project.

I owe a great deal of gratitude to my esteemed guide **Dr.(Mrs).G.Geetha**, Department of Computer Science, for imparting tremendous ideas and well-timed support for the triumph of my project.

I take this unique opportunity to express my sincere thanks to my project Coordinator **Dr.(Mrs).B.Sarojini, Assistant Professor**, Department of Computer Science, for her kind advice and knowledgeable suggestions which helped me to complete my project successfully.

I would extend my hearty thanks to all the staff members of Department of Computer Science, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore for helping me directly or indirectly in successful completion of my project.

Finally, I take pride to thank my beloved parents, my family members and my friends without whose support, encouragement and kind blessings I would not have succeeded in my endeavour.

COMPLETION CERTIFICATE

HCL INFOSYSTEMS LTD.
HCL CAREER DEVELOPMENT CENTRE
NO. 316, Sri Devi Towers,
9th Street Extension, Gandhipuram,
Coimbatore - 641 012.
T : + 91 422 4387000, 4389111
E-mail : cbe@hclcdc.in

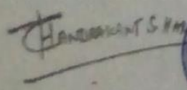

Ref: HCL/CHE/CERT21756

27 April 2016

COMPLETION CERTIFICATE

This is to Certify that Ms. SELVA NANDHINI V (Reg.No:13PCA021) currently pursuing her Master's Degree in COMPUTER APPLICATIONS at Avinashilingam Institute For Home Science And Higher Education For Women University, Coimbatore, 641043, has successfully completed the Project on "Cloud Computing Proposal For HealthCare" in our organization during the period from January 2016 To April 2016.

For HCL CDC

Authorized Signatory

HCL

SYNOPSIS

The project entitled “cloud computing proposal for healthcare” is a new dynamic website which is meant to be a meeting zone for the patients, hospitals and the doctors. Using an efficient search engine we can easily track the hospital and the doctor as per the disease in the required city at your convenience. The hospital names are listed according to the specializations. The booked appointments are redirected to the relevant hospitals immediately. The doctors and the hospitals get their outpatient details every day. The website is designed for layman. The necessary information is collected from the new patient through appointment registration. The details such as name of the patient, age, disease details, consulting time, date, etc. are collected. The username and password are provided to the patients upon registration which can be used by the patient to view his existing appointment details.

The private hospitals and medical *practitioners* can register in this website. They provide details as shown to the user (Patients), during their client search (hospital, doctor). It also serves as a source of advertisement to the clients in this modern era. The reports are generated in the necessary stages. Validations are maintained at the client side as well as server side of the website.

CONTENTS

S.NO	PARTICULARS	PAGE NO
1.	INTRODUCTION	
	1.1 Problem Definition	1
	1.2 Objective	1
2.	SYSTEM SPECIFICATION	
	2.1 Hardware Specification	2
	2.2 Software Specification	2
	2.3 About the Software	3
3.	SYSTEM ANALYSIS	
	3.1 Existing System	12
	3.2 Proposed System	13
	3.3 Feasibility study	
4.	SYSTEM DESIGN	
	4.1 Input Design	15
	4.2 Output Design	15
5.	SYSTEM DEVELOPMENT	
	5.1 Module Description	17
6.	SYSTEM TESTING AND IMPLEMENTATION	
	6.1 System Testing	20
	6.2 System Implementation	20

7.	CONCLUSION	21
8.	SCOPE FOR FUTURE ENHANCEMENT	22
9.	BIBLIOGRAPHY	23
10.	APPENDIX	
	10.1 Data Flow Diagram	24
	10.2 Screen Shots	27

1. INTRODUCTION

1.1 PROBLEM DEFENITION

Hospital is the vital place in our habitual life. In this 21st Century, we are not leading a healthy life, due to our food habits, working style, etc. We need checkups at least once in a month .To achieve our goal; we should have a healthy body. Consulting a good doctor is the first step to cure diseases. Before meeting a doctor we need an appointment and this proposed system provides an excellent way to identify and consult a specialized doctor using the internet.

This new Dynamic website will be a meeting zone for the patients, hospitals and the doctors. Using an efficient search engine we can easily track the hospital and the doctor as per the disease in the required city at your convenience.

1.2 OBJECTIVE

1. Provides a User friendly Remote appointment registration system.
2. Avoid the line “a few hours to see the doctor a few minutes”.
3. Introduce specialized experts to Patients.
4. Solution for Telephonic appointment.

2. SYSTEM CONFIGURATION

This section describes the hardware and software specification needed for both development and implementation phases of this project.

2.1 HARDWARE SPECIFICATION

PROCESSOR	:	Core 2 duo 1.8 GHz
RAM	:	1 GB DDR 1 RAM
HARD DISK DRIVES	:	160 GB
FLOPPY DISK DRIVES	:	1.44 MB
MONITOR	:	15" TFT
CABINET	:	ATX
KEYBOARD	:	Multimedia Keyboard
MOUSE	:	Logitech Mouse with two buttons

2.2 SOFTWARE SPECIFICATION

Operating System	:	Windows XP
Documentation	:	MS-Word 2007
Environment	:	ASP.NET
Backend	:	SQLSERVER 2008
Cloud Storage	:	Azure SQL

2.3 ABOUT THE SOFTWARE

OVERVIEW OF THE ASP.NET:

ASP.NET is a server-side technology for developing Web applications based on the Microsoft .NET Framework. ASP.NET is server-side; that is, it runs on the Web server. Server-side technologies, like ASP.NET, are not interpreted by the client; instead it can be interpreted by the Web server.

WORKING WITH ASP.NET:

- The server receives a request for a desired ASPX page.
- The server locates the page in the disk Submitting Data in the Augmented URL:
Get Method
- The server gives the page to the ASP.NET Engine.
- The ASP.NET Engine compiles the page and generates the page class. If the class had already been loaded, it simply provides a thread to the running class instead of regenerating the class. During compilation, it may require other code classes, such as code-behind classes and component classes. These are assembled during this step.
- The ASP.NET instantiates the class performs necessary processing, and it generates the *Response* object.
- The Web server then sends the *Response* object to the client.

ADVANTAGES OF ASP. NET

ASP. Net has many advantages - both for the programmers and for the end users.

- **Powerful database-driven functionality**

ASP.Net allows programmers to develop web applications that interface with a database. The advantage of ASP.Net is that it is object-oriented and has many programming tools that allow for faster development and more functionality.

Faster web applications

Two aspects of ASP.Net make it fast -- compiled code and caching. In the past, the code was interpreted into "machine language" when your website visitor viewed your page. Now, with ASP. Net the code is compiled into "machine language" before your visitor ever comes to your site.

- **Memory leak and crash protection**

ASP. Net automatically recovers from memory leaks and errors to make sure that your website is always available to your visitors.

- **Multiple Language support**

Programmers can actually write their code in more than 25 .Net languages (including VB.Net, C#, and JScript.Net). This allows programmers to develop your site in the language they know best and it means that you can more easily find programmers to support the work on your site.

Internet information server

Internet Information Server (**IIS**) is a powerful Web server that provides a highly reliable, manageable, and scalable Web application infrastructure for all versions of Windows Server.

IIS helps organizations increase Web site and application availability while lowering system administration costs. IIS is required to run ASP. Net web applications.

Features Of .Net

Now that one know some basics of .NET, see what makes .NET a wonderful platform for developing modern applications.

- Rich Functionality out of the box
- Easy development of web applications
- OOPs Support
- Multi-Language Support
- Multi-Device Support

- Automatic memory management
- Compatibility with COM and COM+
- No more DLL Hell
- Strong XML support
- Ease of deployment and configuration
- Security

MICROSOFT SQL SERVER

SQL SERVER is a Relational Database Management System. The abbreviation is Structure Query Language. SQL is the language used to query the database. SQL is a declarative language where you just say store this or modify this without saying how to do. It is the product of Microsoft.

The version of SQL used by SQL SERVER is called Transact – SQL. It supports the client/server architecture. It receives requests from the clients for data and returns the result of the processed query. All the SQL statements are submitted to the Transact-SQL, which on receiving them passes the result and displays it for the user.

SQL solved the ad hoc needs of users; the need for data access by computer programs did not go away. In fact, most database access still was (and is) programmatic, in the form of regularly scheduled reports and statistical analyses, data entry programs such as those used for order entry, and data manipulation programs, such as those used to reconcile accounts and generate work orders.

The following is a list of relational database that support SQL:

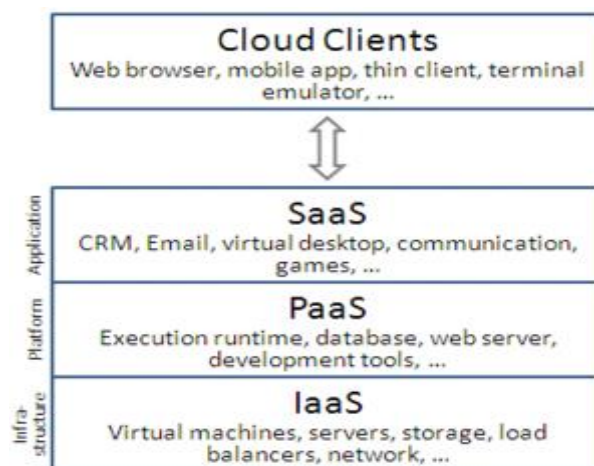
- SQL SERVER
- MS – Access
- Sybase
- Oracle
- Ingress
- Informix

CLOUD TECHNOLOGY:

Cloud computing, also on-demand computing, is a kind of Internet-based computing that provides shared processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort. Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in third-party data centers.

SERVICE MODELS

Though service-oriented architecture advocates "everything as a service" cloud-computing providers offer their "services" according to different models,¹ which happen to form a stack: infrastructure-, platform- and software-as-a-service.

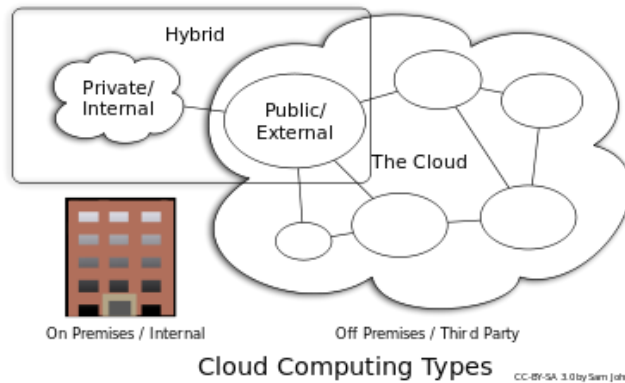


Business Benefits of the Cloud

1. Pay only for what you use
2. Easy/fast deployment to end users
3. Monthly payments
4. Encourages standard systems
5. Requires less in-house staff, costs
6. Compliance Issues
7. Security
8. Control

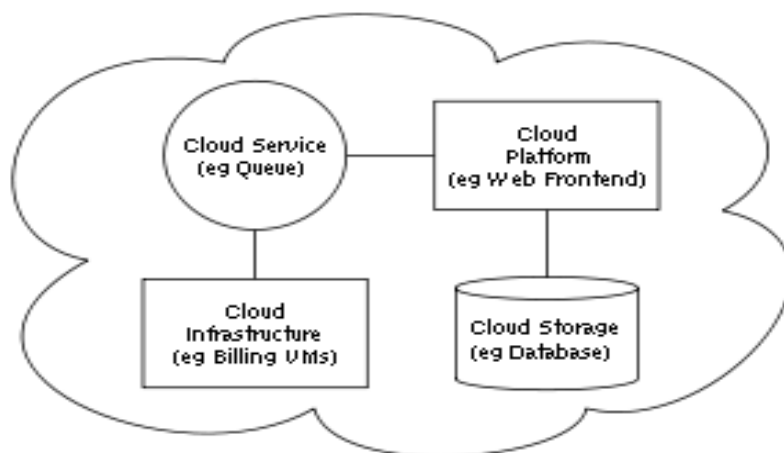


DEPLOYMENT MODELS



CLOUD ARCHITECTURE

Cloud architecture, the systems architecture of the software systems involved in the delivery of cloud computing, typically involves multiple cloud components communicating with each other over a loose coupling mechanism such as a messaging queue. Elastic provision implies intelligence in the use of tight or loose coupling as applied to mechanisms such as these and others.

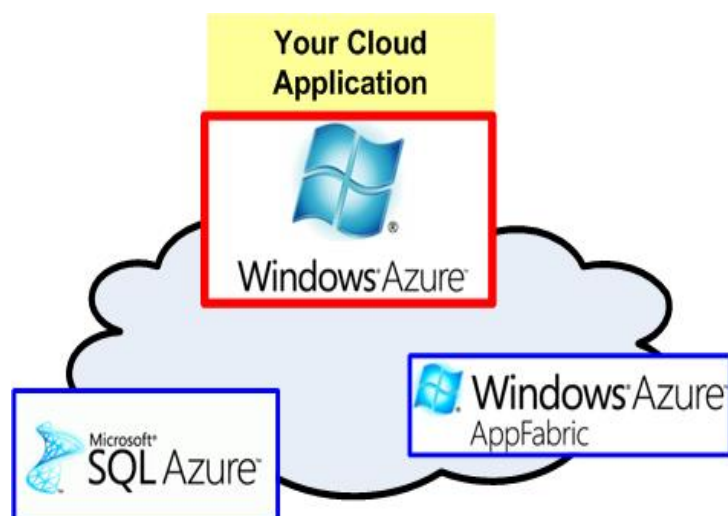


MICROSOFT AZURE (CLOUD PLATFORM):

- Azure is a cloud computing platform and infrastructure created by Microsoft for building, deploying, and managing applications and services through a global network of Microsoft-managed data centers.
- It provides both PaaS and IaaS services and supports many different programming languages, tools and frameworks, including both Microsoft-specific and third-party software and systems.
- SQL Azure Database is a Cloud version of Microsoft SQL Server and it is similar to SQL Server.

For developing an azure application the following steps are involved

1. Install the following:
 - IIS 7.0 (Internet Information Services)
 - Microsoft Visual Studio 2008 or 2010
 - .NET Framework 4.0
2. Download the Azure Platform SDK
 - <http://www.microsoft.com/windowsazure/>
3. Sign-up for an Account (Optional)



What is an Azure application?

- A service must include at least one role of either type
- Web role is frontend, Worker Role is backend
- Web role is worker role with IIS installed

WEB ROLE

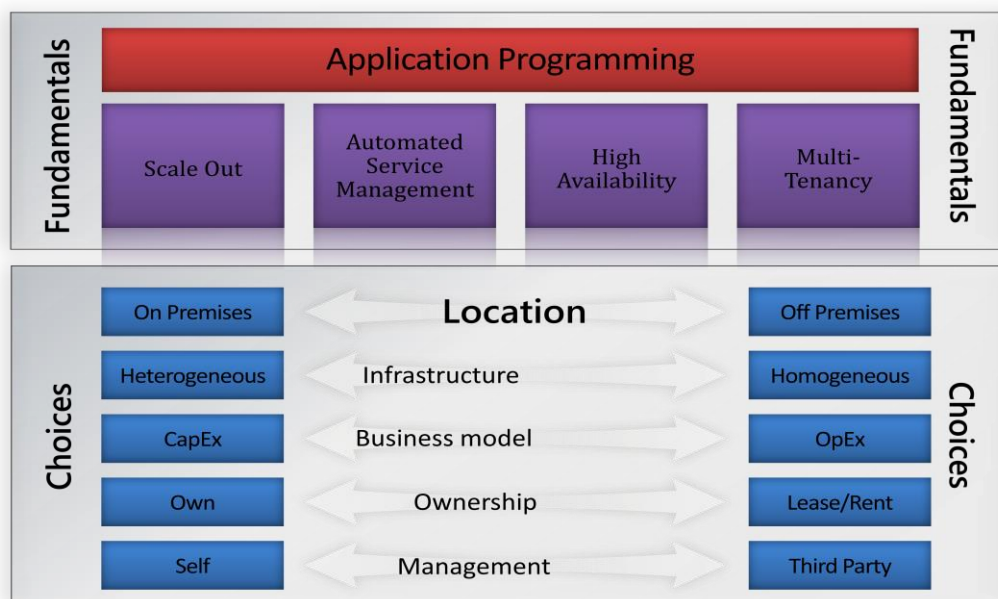
- Hosted IIS 7
- HTTP/HTTPS
- ASP.NET
- Fast CGI + PHP

WORKER ROLE

- Managed code start
- In bound on
- Any TCP port
- HTTP/HTTPS

Windows Azure Storage

How Microsoft Views the Cloud



- Scalable storage in the cloud
 - 100 TB per storage account
 - Auto-scale to meet massive volume and throughput
- 4 Types: Tables, Queues, BLOBs, Drives

- Accessible via RESTful Web Service API
 - Access from Windows Azure Compute
 - Access from anywhere via internet
 - Support .NET client library
- Features
 - Fault-Tolerance: All data replicated 3 times
 - Guaranteed consistency
 - Globally Visible: Accessible by non-Azure apps

In Microsoft Azure we can use SQL database by the following two ways:

1. Microsoft SQL Server

We can use Microsoft SQL server in Microsoft Azure Virtual Machines (Azure VM) which is used as **IAAS (Infrastructure as a Service)** where we have full access by RDA (Remote Desktop Access) on this VM where we can use any Microsoft SQL Server.

2. SQL Azure

Sql Azure in the second option to use Sql Database on cloud which behave like **PAAS** and it's very simple or easy to access by web portal of Microsoft Azure or in Visual Studio Azure SDK

What is SQL Azure Database?

In short, SQL Azure database is simply a way to get connected in Cloud Services where we can store our database into Cloud. Microsoft SQL Services and Microsoft SQL Data Services are now known as Microsoft SQL Azure and SQL Azure Database. Microsoft Azure is the best way to use **PAAS (Platform as a Service)** where we can host multiple database on the same Account.

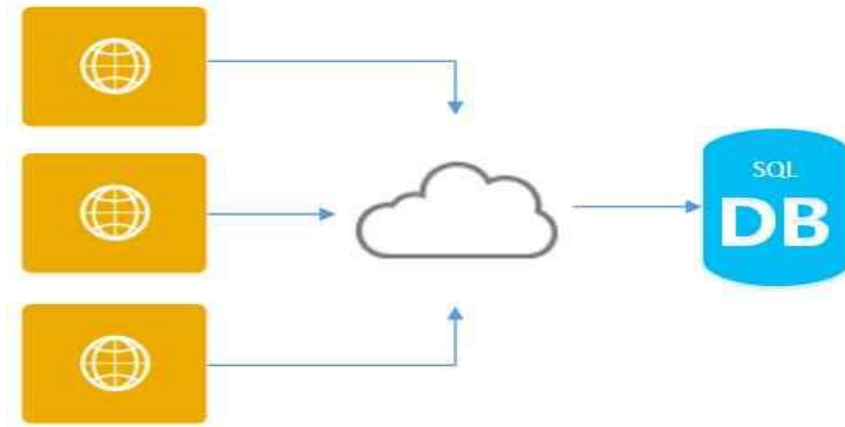
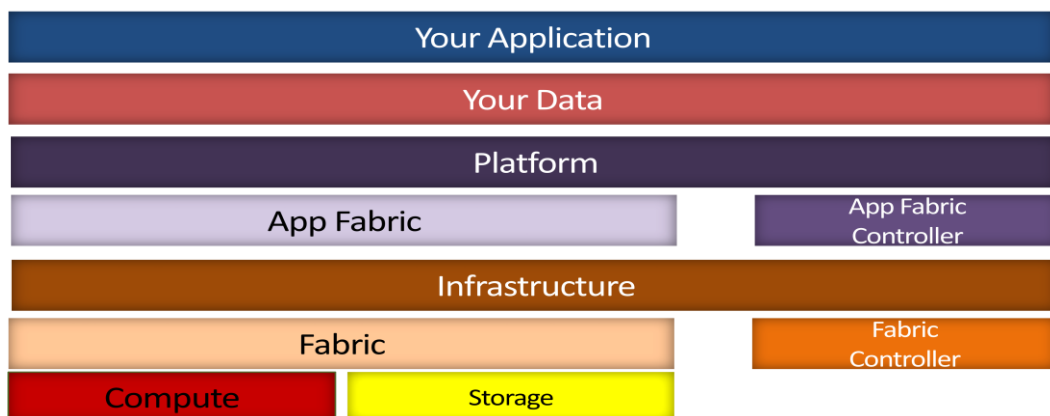


FIG: CLOUD STORAGE

FEATURES FOR AZURE

- On-Demand Resources
- Launch Websites Quickly
- Visual Studio Development
- Keep Data Storage Simple
- Keep Performance Predictable With SQL Database
- Use Familiar Microsoft Tools

Windows Azure™



3. SYSTEM ANALYSIS

3.1 EXISTING SYSTEM

"Medical treatment is difficult, more difficult to see an expert," is long plagued three hospitals, a major problem, hospitals crowded every day people line up to register.

REVIEW OF EXISTING SYSTEM

According to a survey data show that: first line of those, 52.9% of the troubleshooting team is hanging the wrong families of patients, the hospital increased the confusion; there are many patients is the superstition of experts, regardless of illness or minor illnesses to seek medical treatment when the number of non-linked non-experts , there are many referral patients, just to let experts review or periodic open a little medicine, or even just a few words to the expert advice, will scratch each time. Number of experts how to solve the more difficult phenomena linked to it? Government departments, the attitude has always been clear: the Ministry of Health in March 2, 2007 issue of "2007" patient-centered, to enhance the quality of medical services for the theme of "health care management program of activities", the clearly stated, "To strengthen the registration management, innovation and registered convenient way to raise the proportion of telephone appointment." Former Health Minister, Gao Qiang, secretary of party comrades in November 2007 highlighted in a speech: "out dial is a very good way of registration." December 13, 2007, when he was deputy director of Beijing Municipal Health Bureau Miss Deng Xiaohong clear instructions to the hospital: "Beijing has a doctor appointment system, but not universal.

Secondly, the appointment of registered medical treatment for foreign patients come to big cities for hotels to reduce spending; no time line on white-collar for leave to reduce the number of times; on just to review, medication of patients, that is a row of hours team save to see the trouble a few minutes diseases. Clearly, the reduction of hospital appointments line registration, improvement of hospital environment, preventing cross-infection medical resources regard, this is the doctors to change the direction, and it the Western decades method.

Drawbacks of Existing System

1. Time Consuming appointments
2. Mistakes in time allotment
3. Manual entries
4. Few contacts about hospital and doctors
5. Lot of Paper work

3.2 PROPOSED SYSTEM

This new dynamic website will be the meeting zone for the patients, hospitals & the doctors. Using Cloud technology it develops a web application which is connecting the hospitals & patient from anywhere and anytime. User can easily track the hospital and the doctor as per the disease in the required city at your convenience. The hospital names are listed according to the specializations. The booked appointments are redirected to the relevant hospitals immediately. The doctors and the hospitals get their outpatient details every day.

Advantageous of Proposed System

1. Powerful and easy to use
2. Improves the Quality of Out-Patient
3. Easier way to link to specialists.
4. Good and secure database
5. Varied awareness to the masses on the medical treatment
6. Providing a convenient , good, social and economic benefits

3.3 FEASIBILITY STUDY

Every project is feasible if given unlimited resource and infinite time. Feasibility study is undertaken to evaluate its workability, impact on the organization, ability to meet user needs, and effective use of resources. The main objective of feasibility study is to test the technical, operational and economic feasibility of developing the computer system. Thus, during feasibility analysis for this project the following three primary areas of interest were considered.

- Technical Feasibility
- Economic Feasibility
- Operational Feasibility

3.3.1 Technical Feasibility

Technical feasibility is to know whether reliable hardware and software capable of meeting the needs of a proposed system developed by an organization in the required time.

The consideration that is normally associated with technical feasibility includes resources availability of the organization, where the project is to be developed and implemented. By taking these factors into consideration before developing, thus the project is considered technically feasible for development.

3.3.2 Economic Feasibility

Economic feasibility deals with evaluation of development cost weighted against the ultimate income or benefit derived from the developed system. Financial benefits must equal or exceed the costs.

In the existing system all the entries are done manually. The main requirement to run this system is the SQL server, since it leads to the reduction in cost. So this system is economically feasible.

3.3.3 Operational Feasibility

Proposed system is beneficial only if it can be turned into information system that will meet the organizations operating requirements. Operational feasibility is a consideration about the working of the system after installation in the company. Simply stated, this system of feasibility asks if the system will work when it is developed and installed.

Issues that appear to be relatively minor in the beginning have ways of growing in to major problems after implementation. Therefore all operational aspects must be considered carefully. This system is developed using VB.Net and SQL Server, which is more user friendly. So the system is feasible.

4. SYSTEM DESIGN

4.1 INPUT DESIGN

The main aim of the website is to avoid time delays in appointment system at hospitals. Using developing modern web services we provide a dynamic website which assist to the needy people. The project has four main roles they are admin, clients, experts and users. The input of the website gets updated from four type of these members.

From Admin:

- New Customer information
- New experts information
- Search option like Specialty
- News about health care

From Client:

- Op Register
- Flash News

From Experts

- Experts voice

From User

- Contact details

4.2 OUTPUT DESIGN

Output design is very important concept in the computerized system, without reliable output the user may feel the entire system is unnecessary and avoids using it. The proper output design is important in any system and facilitates effective decision-making. The output design of this system includes various reports.

Computer output is the most important and direct source of information the user. Efficient, intelligible output design should improve the system's relationships with the user and help in decision making. A major form of output is the hardcopy from the printer.

Output requirements are designed during system analysis. A good starting point for the output design is the data flow diagram. Human factors reduce issues for design involved addressing internal controls to ensure readability.

An application is successful only when it can provide efficient and effective reports. Reports are actually presentable form of the data. The report generation should be useful to the management for future reference. The report is the main source of information for user's operators and management. Report generated are a permanent record of the transaction occurred.

5. SYSTEM DEVELOPMENT

This project is developed for providing a convenient, good social and economical benefit to the needy people. The project has the following modules, such as

- ✓ **Admin panel**
- ✓ **Trendy Search**
- ✓ **Registration Module**
- ✓ **Appointment module**
- ✓ **Resource Sharing**

5.1 MODULE DESCRIPTION

ADMIN PANEL

Admin is the owner of this particular site. Admin is the one who gives rights for all activities provided to the client. The admin provides all the necessary details required by the needy people in such a way which is captivating and user friendly. It is the admin Panel which controls the updating, statistical analysis, etc which enhances the viewing of the clients. The Admin Panel has the following sub modules

A) System setting: The module maintains category and sub category to assist the query module. The following are the sub process

1) Department management: The feature is included in the module is increased department, remove sections, revised sections, department doctor (check the details of any medical departments), department statistics (the number of hospital departments, each department the number of doctors).

(2) Medical management: Functions of sub process is medical information entry, medical information changes, medical information deleted. Management of patients with Features include: membership card recharge (top up according to the patients for their remittances)

B) Press Release Module: The only system administrators can use the module; the main function is to update the front of the news site. Recent events such as the medical term this week, experts recommended doctors; specialists introduce the characteristics of hospitals and so on. This module belongs to the background manage content Specific features include: upload news; delete the current news, updates current news, editorial news;

LDAP BASED CLIENT SYSTEM

This module provides a separate key to each client. The clients can make use of these keys and provide their own information like Specialists appointment for the week, expert's availability in their zone, etc. This is the gateway that provides the user with all the necessary information. By using their login they can view the statistical analysis. Using statistical analysis option the client can produce the necessary reports. The reports are generated as per the admin criteria. For example, the number of appointments for a particular client according to the day and month wise.

TRENDY SEARCH

Trendy search will play the main role of the proposed system, through this section user can get their necessary contacts with clients. The user friendly web page supports more options for search. The system provides a powerful query function. They are section, title, gender, appointment time, medical experts. The user can choose their own appropriate medical experts. It can quickly clear the selection of suitable doctors to avoid medical treatment of blindness, and also can avoid the peak of visits and improve efficiency. The module has sub process is

REGISTRATION MODULE

The module is primarily for members of registered patients, the module will provide patients with information saved to the database of patients in the table. Patient information in the registration module to the rigorous validation controls, including effective documentation of the legitimacy of the validity date format, message format correctness, accuracy, etc. age.

Meanwhile in the background to filter out all the special characters to prevent SQL injection attacks, improve system security

BOOKING PROCESS

The module's function is to provide an appointment for the patient registration functions. When the good doctor on patient selection and appointment time, the author generated. When prompted to make an appointment after the success that has been effective in patients with an appointment. Same page will also display the current records of patient appointments. One day a patient can make an appointment up to two doctors. Another feature of this module is to cancel an appointment, the temporary emergency when patients can make an appointment before the cancellation of the reservation.

RESOURCE SHARING

This dynamic website for support to the needy people and to overcome the appointment problems in client side. When the user fixes appointment to the clients, the details are sending to that particular client email. This is the special options in this site. The client can view the appointment details through their login in website also. Suppose the users may cancel their appointment in any emergency again the intimation send to the client login.

6. SYSTEM TESTING AND IMPLEMENTATION

6.1 SYSTEM TESTING

UNIT TESTING

Unit testing verification efforts on the smallest unit of software design, module. This is known as “Module Testing”. The modules are tested separately. This testing is carried out during programming stage itself. In these testing steps, each module is found to be working satisfactorily as regard to the expected output from the module.

INTEGRATION TESTING

Integration testing is a systematic technique for constructing tests to uncover error associated within the interface. In the project, all the modules are combined and then the entire programme is tested as a whole. In the integration-testing step, all the error uncovered is corrected for the next testing steps.

VALIDATION TESTING

Validation testing is where requirements established as a part of software requirement analysis is validated against the software that has been constructed. This test provides the final assurance that the software meets all functional, behavioural and performance requirements. The errors, which were not uncovered during integration testing, are found out and corrected during this phase.

6.2 SYSTEM IMPLEMENTATION

The objectives of this maintenance work are to make sure that the system gets into work all time without any bug. Provision must be for environmental changes which may affect the computer or software system. This is called the maintenance of the system. Nowadays there is the rapid change in the software world. Due to this rapid change, the system should be capable of adapting these changes. In our project the process can be added without affecting other parts of the system.

7. CONCLUSION

The major achievement of this project is the ability to register new user, patients, and doctors to store their data in the database. The most important thing that must be appreciated by all is that, the system is an eye opener to a lot more investigation & detailed research for implementation purpose in order to add the general knowledge base. Users do not require any special knowledge about the concept of Cloud computing to connect their computers to the server where applications have been installed and use them. Users can communicate through Internet with remote servers.

The system meant for computerizing the working in a hospital. The software takes care of all the requirements of an average hospital and is capable to provide easy and effective storage of information related to patients that come up the hospital.

8. SCOPE FOR FUTURE ENHANCEMENT

In future more refined and in-depth investigations can be conducted as well as integrated systems will be developed that try to deal with all the problems together because their interactions can help solving each individual problem.

Future work includes

For implementing this project we can use a clustering and data mining to reduce time consumption.

This project is currently used for sending alerts to patients through e-mail which in future can also be further extended by sending Short Message Service (SMS), voice mails.

9. BIBLIOGRAPHY

BOOK REFERENCES

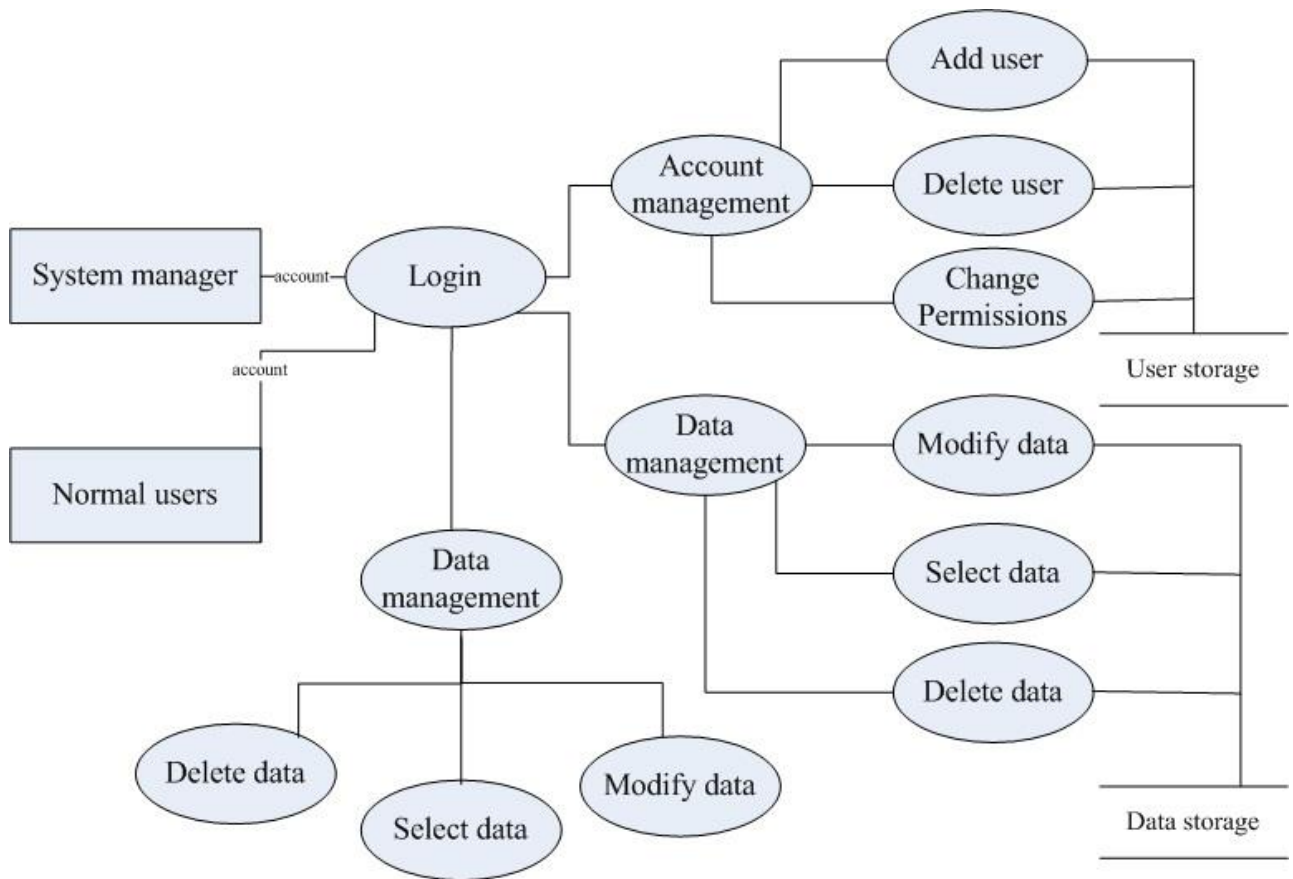
1. Liu Keeling book. Proficient ASP.NET3.5 typical module evelopment. Beijing: Posts & Telecom University Press .2008 (7)
2. GAO Shou Chuan with. Proficient SQL - Structured Query Language Xiang Jie. Beijing: Posts & Telecom in March University Press .2007
3. Shao Liang-shan, Liu good growth, Ma Haijun, eds. ASP.NET (C #) Practical Guide. Beijing: Tsinghua University Press .2007
4. Wang Chunyan with. Out on-line registration system design and application. Medical equipment .2007

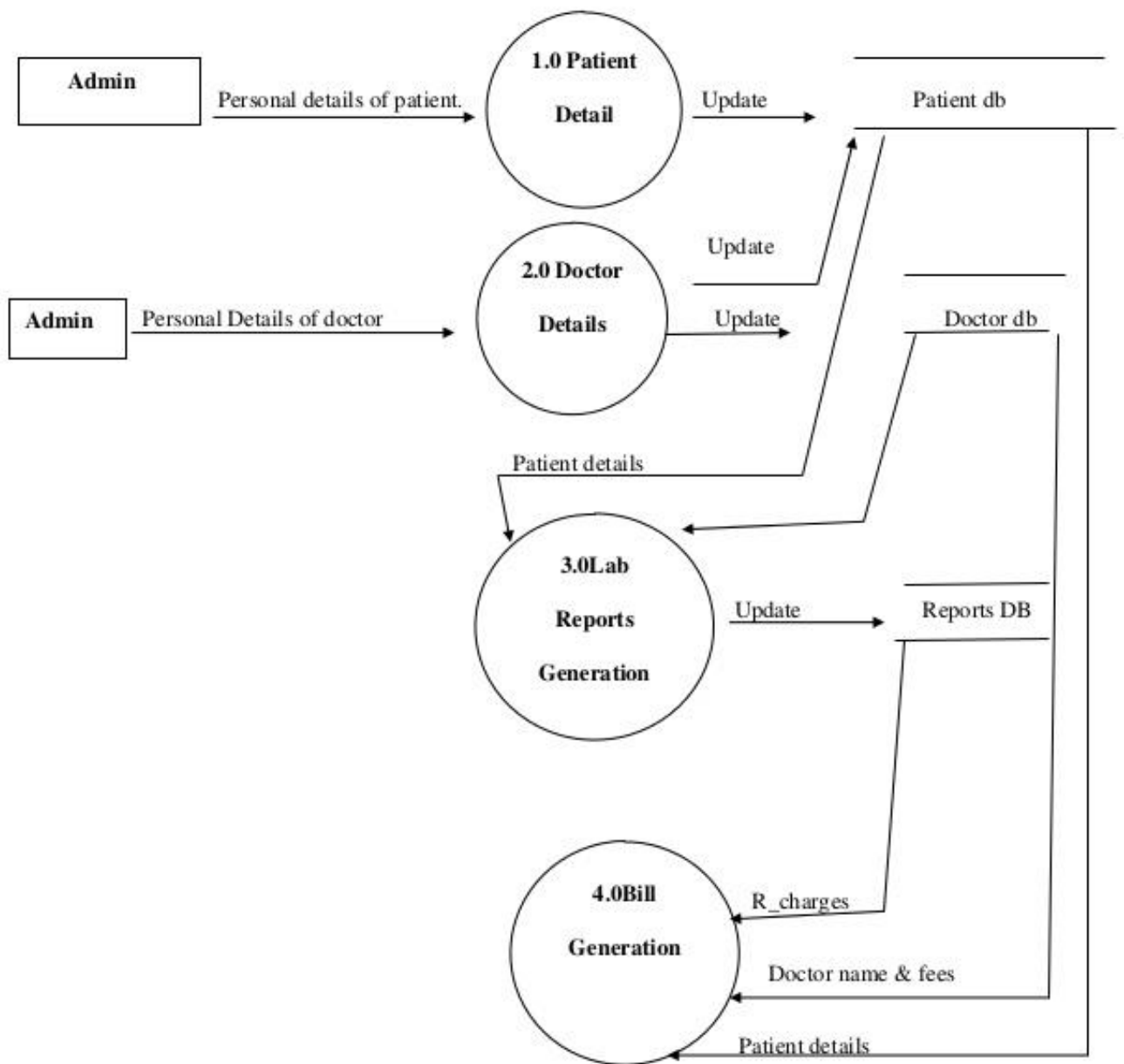
WEB REFERENCES

1. www.codeproject.com
2. [Www.aspnet.com](http://www.aspnet.com)
3. [http:// www.dotnetspider.com](http://www.dotnetspider.com)
4. <http://www.sourceforge.com>
5. <http://www.networkcomputing.com/>

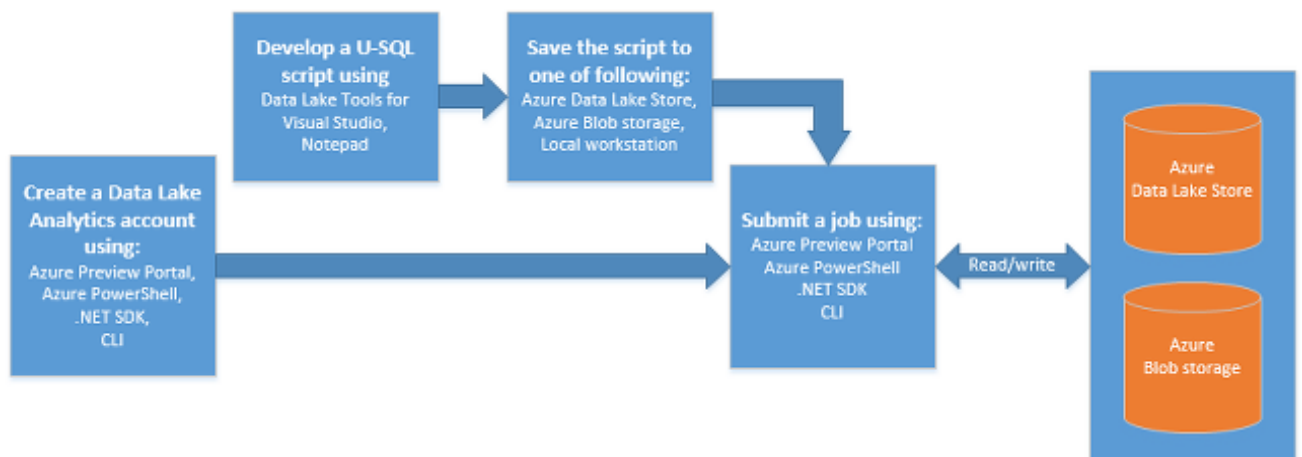
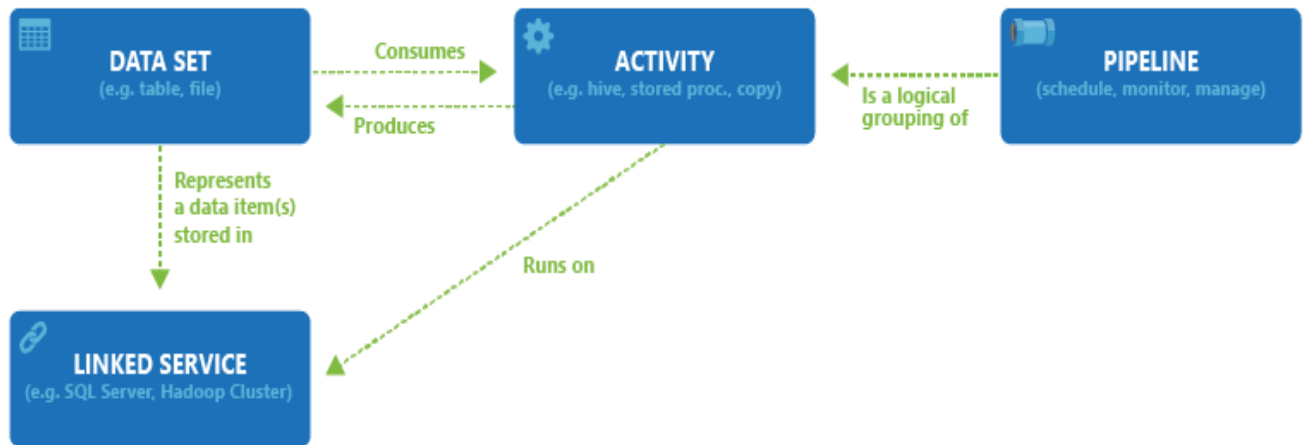
9. APPENDIX

10.1 DATA FLOW DIAGRAM



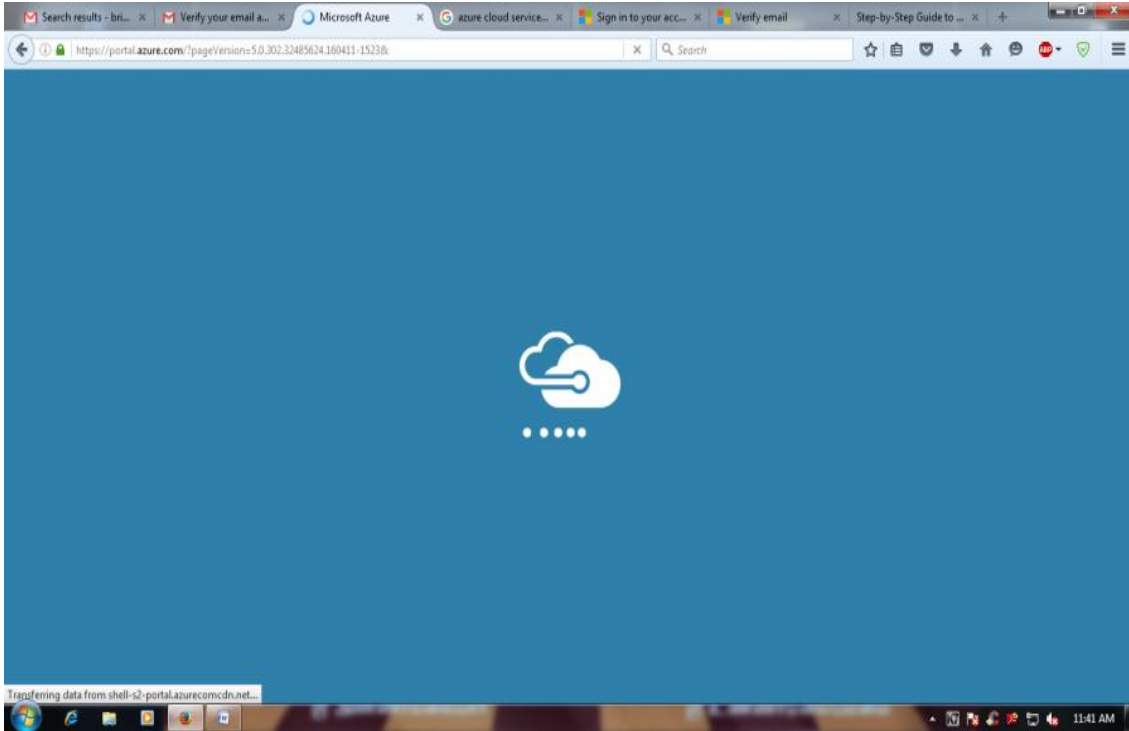


AZURE DATA FLOW DIAGRAM

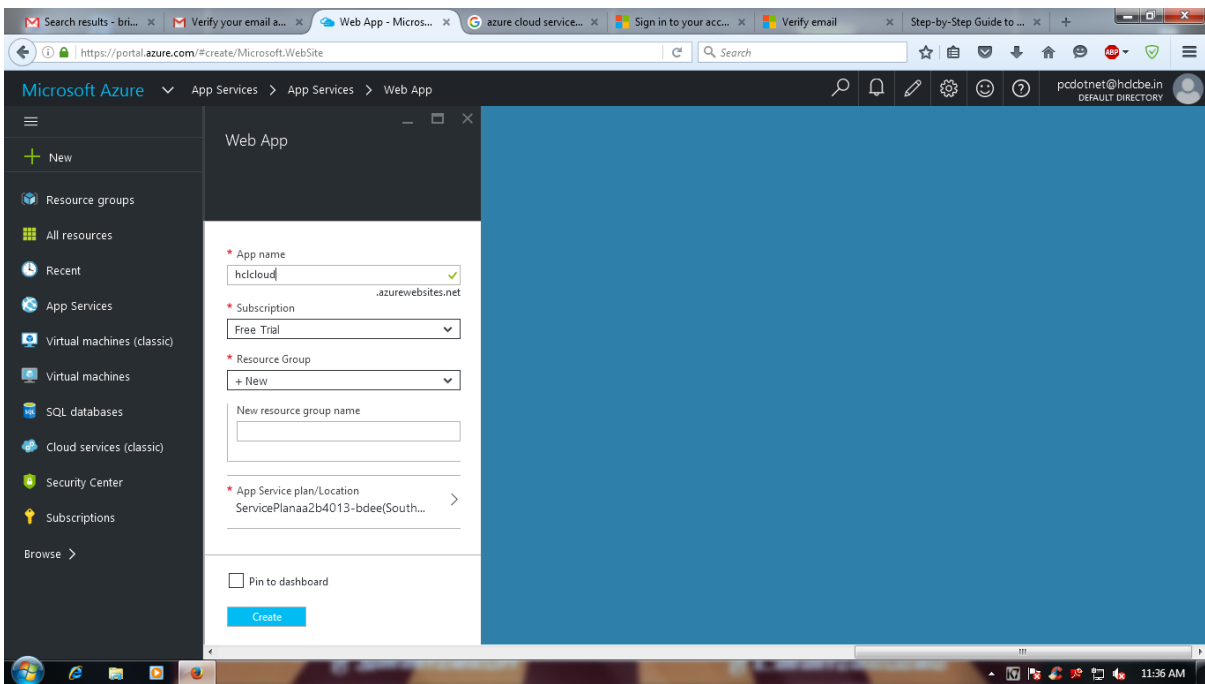


10.2 SCREEN SHOTS

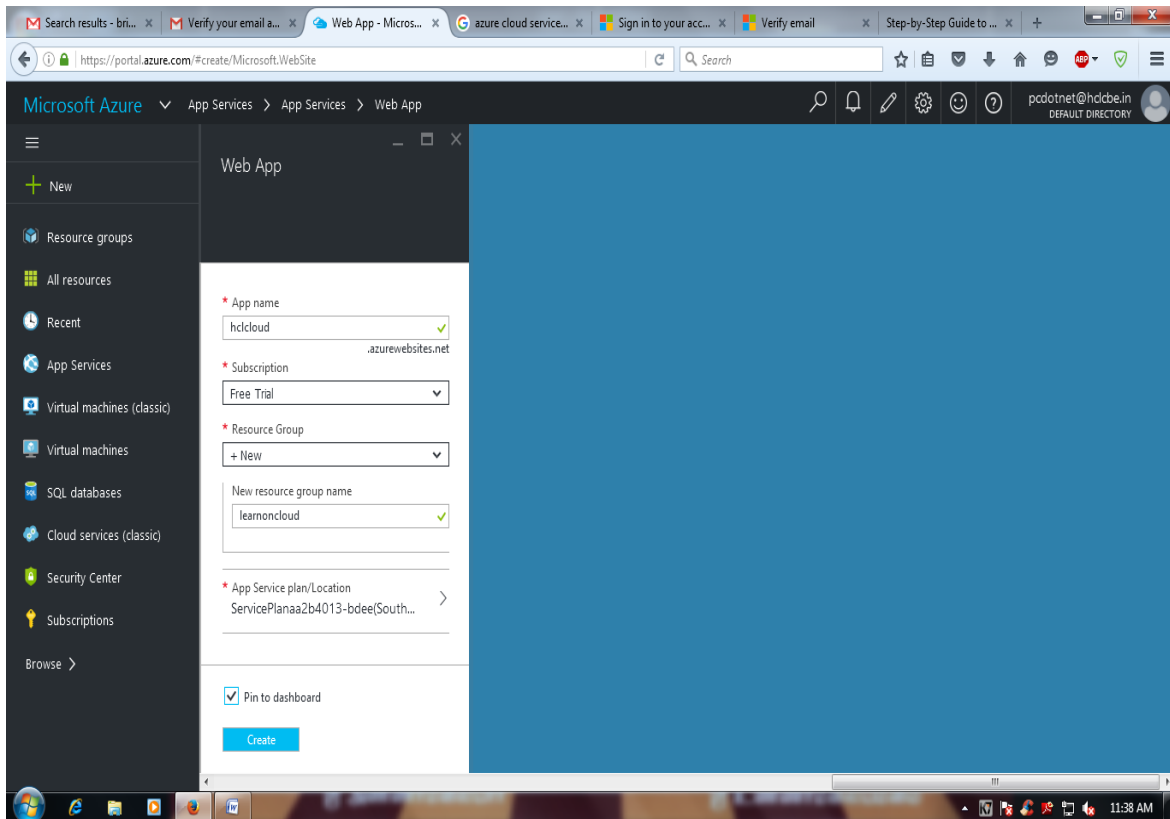
AZURE



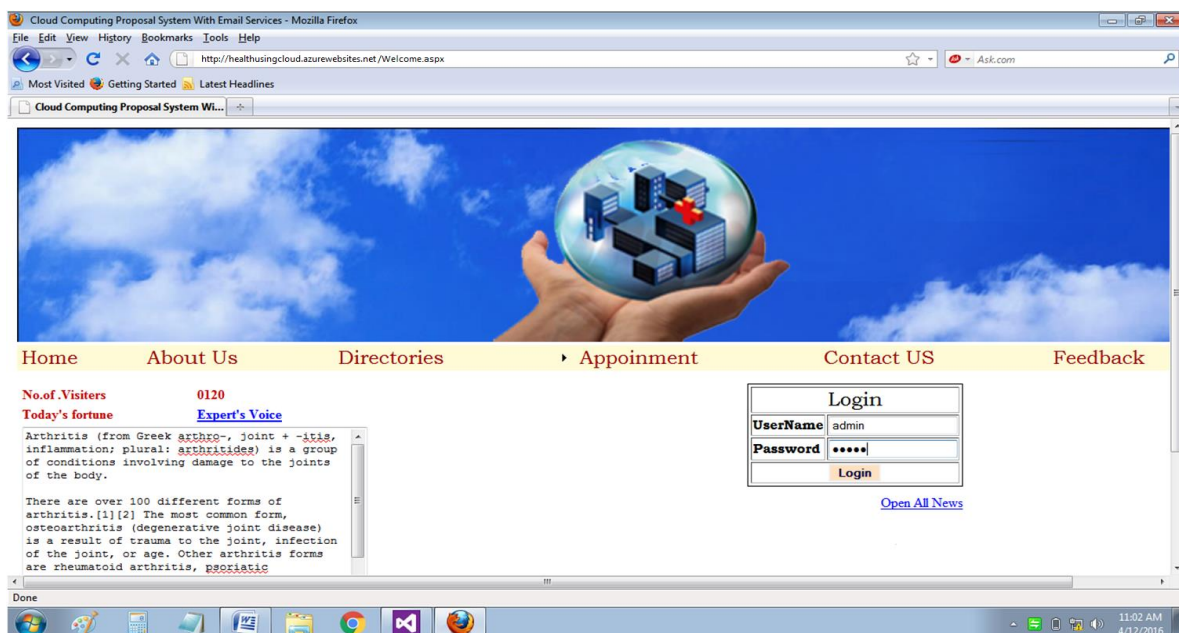
LOGIN



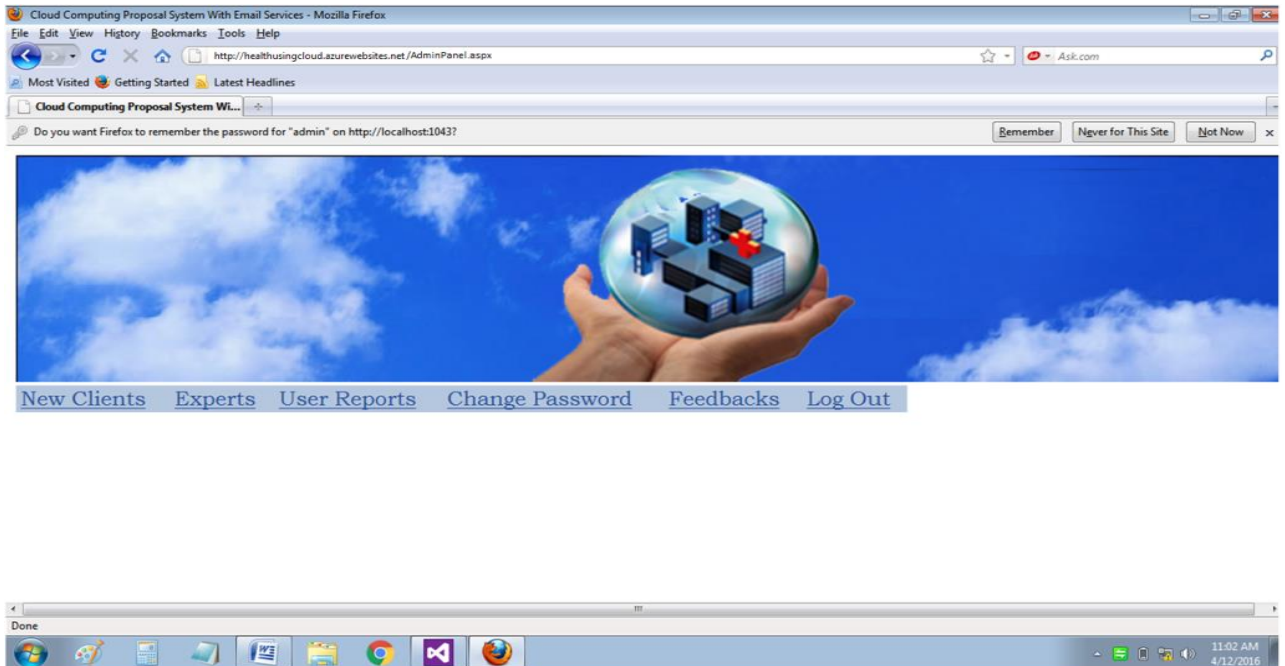
LOADING OUR PROJECT IN AZURE



LOGIN



ADMIN LOGIN



APPOINTMENT STATUS

Cloud Computing Proposal System With Email Services - Mozilla Firefox
 http://healthusingcloud.azurewebsites.net/AppointmentStatus_Experts.aspx

Do you want Firefox to remember the password for "surya" on http://localhost:1043?

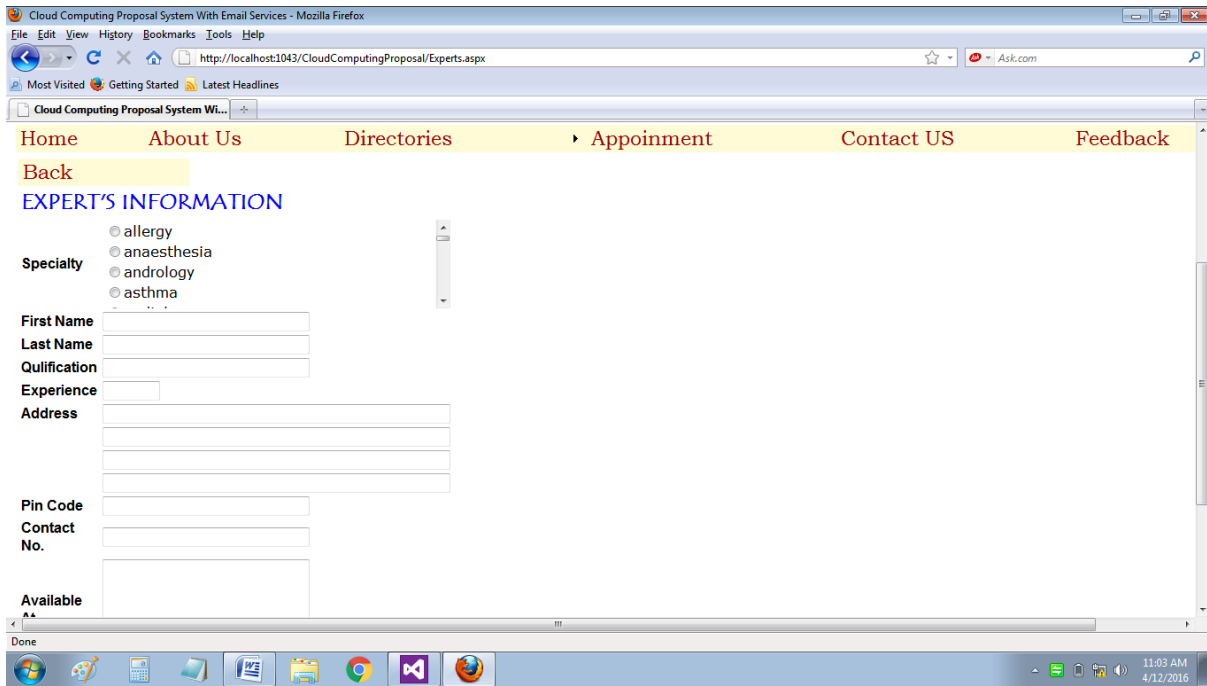
Specialty	Booking Date	Patient	Address -1	Address -2	Address -3	Address-4	Ph.No.	Email ID	Gender	Age	Problem
allergy	4/1/2016 12:00:00 AM	rose r			cbe	cbe	0422267890	rose@gmail.com	Female	23	hello
allergy	4/6/2016 12:00:00 AM	sarath ss			coimbatore		93875637	sarath@gmail.com	Female	23	heavy fever
	4/6/2016 12:00:00 AM	suraj s			cbe		93875637	suraj@gmail.com	Female	25	heavy vomit

Welcome Dr.surya prakash

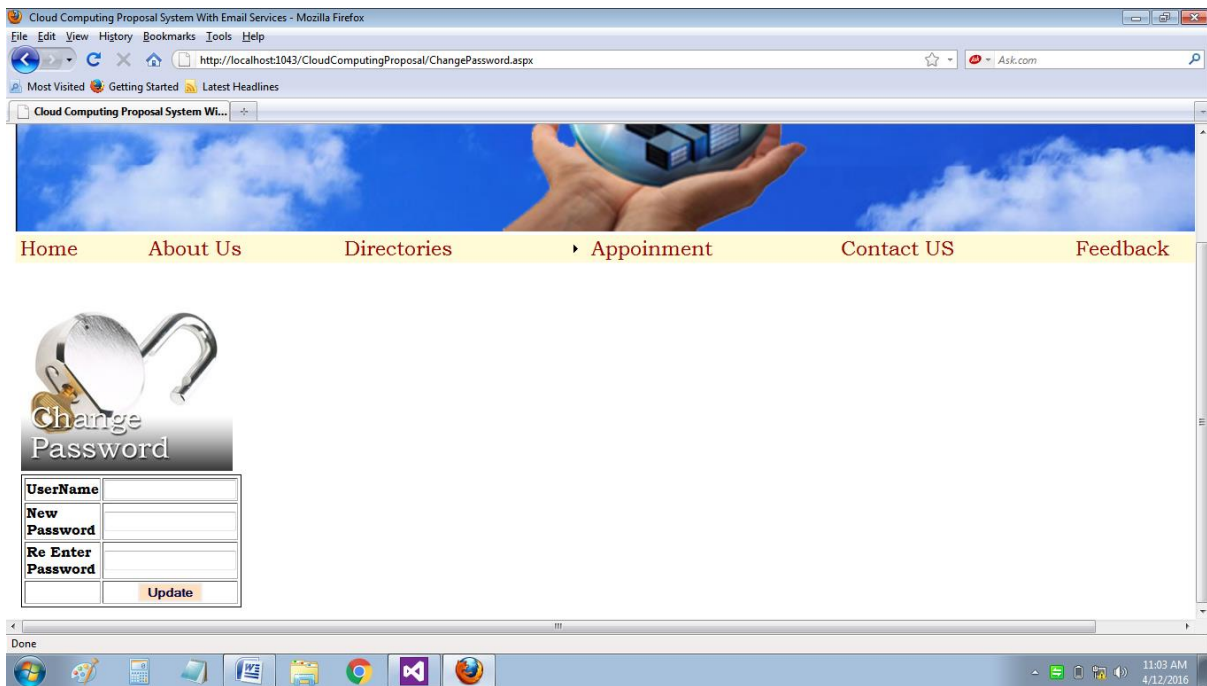
Specialty	Appointment Date	Patient	Address -1	Address -2	Address -3	Address-4	Ph.No.	Email ID	Gender	Age	Problem
allergy	4/13/2016 12:00:00 AM	vai nn	c		cbe		93875637	vai@gmail.com	Female	28	fever
allergy	4/13/2016 12:00:00 AM	tamildoc tt	10,ettygf		cbe	aa	93875637	good@gmail.com	Male	33	dadada

Done

EXPERTS IINFORMATION



FOR SECURITY



TRENDY SEARCH

Cloud Computing Proposal System With Email Services - Mozilla Firefox

http://healthusingcloud.azurewebsites.net/ListofallExperts.aspx

Home About Us Directories Appoinment Contact US Feedback

Speciality: allergy, anaesthesia, andrology, asthma, audiology

Qualification: aaa, cse, fwefewg, M.B.B.S., M.D., M.B.B.S., M.D,FRC.,

FirstName	Lastname	Qualification	Experience	Street	Area	City	Eid	State	Pincode	Available	Email ID	URL	Appoin
Vineeth	menon	MBBS,MDS	8	2nd street	Rajaji Road	Madurai	1	Tamilnadu	123234	Hospital	smartynovin@gmail.com	www.vineeth.com	Select
dff	fdsf	fwefewg	4	ewtwry	rtrt	rtr	2	tre	13414	ggfd	dgfg	gfg	Select
aaa	ssss	aaa	3	ddd	d	d	3	d	22	2fg	ew	efwe	Select

FEEDBACK

Untitled Page - Mozilla Firefox

http://localhost:1043/CloudComputingProposal/FeedBackForm.aspx

Home About Us Directories Appoinment Contact US Feedback

Please enter the following requested information below to send us your comments.

Your Name:

Your Email Address:

Your Comment: