**ABSTRACT**

* The project is developed to manage the blood stock and the blood donor details.
* The project takes it easy to give information regarding blood type, date of donation of blood, available blood group and many more.
* The stock and donor details or maintained in the database and retrieve whenever needed.
* The donor and stock details are input by visual studio windows form and stored in the MYSQL database.
* Admin view the donor side view the available blood requested by the users.

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**FEASABILITY STUDY**

**1**

**EXISTING SYSTEM**

* The main problem with existing was maintaining the stock of the blood and the daily transaction without computerisation
* Retrieval of data takes lots of time.
* Problem to calculate number of donor available in list.
* Difficulty in identifying blood donors expiry date.
* Problem to manage huge data and to process the necessary report and document.

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**PROPOSED SYSTEM**

* System makes the overall project management much easier and flexible.
* It provides the easy record of blood group wise.
* Customer won’t have to wait for long time.
* Everything will be very fast instead of hand written.
* A proper and managed detail of each and every customer will be maintained.

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**SYSTEM SPECIFICATION**

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**HARDWARE SPECIFICATION**

The minimum hardware requirement of this project is as follows:

Processor : Intel dual core or above

Speed : 2.0 GHZ or above

RAM : 2 GB or above

Hard Disk : 120 GB

**SOFTWARE SPECIFICATION**

Front End : ASP.net

Back End : SQL

Operating system : Windows 10

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**ABOUT THE SOFTWARE**

**INTRODUCTION TO ASP.NET**

ASP.NET is the.NET version of ASP introduced but Microsoft for creating dynamic web page using server side script. To create web application we need Internet Information Service (IIS) on our system. DynamicWeb Application contains both server side scripting executed on web server rewritten using ASP, JSP etc.

**Client side**

* It executed on browser. It includes languages like java script ,VB script etc.
* Web can create web pages that can be accessed by any browser.
* Web pages are given extension .aspx.

**Advantages using ASP.NET**

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 ASP.NET drastically reduces the amount of code to build a large application

 ASP.NET makes development simpler and easier to maintain with an event driven, server side programming model.

 ASP.NET pages are easy to write and maintain because the source code and html or together.

 The Source Code is compiled at the first time the page is requested. Execution is fast as the web server compiles the pages the first it is requested.

 The HTML produced by ASP.NET page is sent back to the browser. The application source code you write is not sent and is not easily stolen.

 ASP.NET makes for easy development. There is no need to register components because configuration information is built in.

 The Web server continuously monitors the pages, components and application running on it. If it notices memory leaks, infinite loops, other illegal software or activities, it seamlessly kills those activities and restarts itself. 7

 ASP.NET Validates information (Validation controls) entered by the user without writing a single line of code.

 ASP.NET easily works with ADO.NET using data-binding and page formatting features.

 ASP.NET application run faster and counter large volumes of user without performances problems.

**Server Control**

Label-A Label is used to display text. If we want to display static text, we do not need a label server control; we should instead use HTML. We should use a label server control only if we need to change its properties via server code.

Text Box-A text box control enables the user to enter text. By default, the Textmode property is single Line, but it can also be set to multiline or password. In case of multiline Textbox, the rows property determine the height. If is AutoPostBack property is set to True, it generates a Post Back on its TextChanged() event. 8

Buttons-All three types of button cause Post Back when the user clicks them.

 Button Controls can be placed inside other container controls, such as Data List, Data Grid and Repeater.

 Link Button The Link Button renders a hyperlink in the page.

 Image Button The Image Button displays an image that response to mouse clicks, We can also use it as an image map. Thus we may pin point where in the graphic the user has clicked.

**Introduction to SQL Server**

Social database frameworks are the most critical database frameworks utilized as a part of the product business today. A standout amongst the most remarkable frameworks is Microsoft SQL Server. SQL Server is a database administration framework created and showcased by Microsoft. It runs solely under Windows NT and Windows 95/98. 9

 The most critical parts of SQL Server 8 are:

 SQL Server is anything but difficult to utilize.

 SQL Server scales from a portable tablet to symmetric multiprocessor frameworks.

 SQL Server gives information warehousing elements that as of recently have just been accessible in Oracle and other more costly DBMSs.

A database framework is a general gathering of distinctive database programming segments and databases containing the parts viz. Database application projects, Front-End segments, Database administration frameworks, and Databases.

 A database framework must give the accompanying elements:

 A mixture of client interfaces

 Physical information autonomy

 Logical information autonomy

 Query advancement 10

 Data honesty

 Concurrency control

 Backup and recuperation

 Security and approval

SQL Server is a Relational Database Management System. The SQL Server social dialect is called Transact-SQL.SQL is resource arranged dialect. This implies that SQL can inquiry numerous lines from one or more tables utilizing only one announcement. This component permits the utilization of this dialect at a coherently larger amount than procedural dialects. Another vital property of SQL is it’s non-procedurally. SQL contains two sub dialects DDL and DML. SQL Server functions as a characteristic augmentation of Windows NT and windows 95/98.SQL Server is generally simple to oversee through the utilization of a graphical registering environment for each undertaking of framework and database organization. SQL Server uses administrations of Windows NT to offer new or expanded database capacities, for example, sending and accepting 11

messages and overseeing login security.

The SQL Server chairman&#39;s essential device for connecting with the framework is Enterprise Manager. The Enterprise Manager has two primary purposes: Administration of the database server and Management of database items.

 SQL Server Query Analyzer gives a graphical presentation of the execution arrangement of a question and a programmed segment that recommends which list ought to be utilized for a chose inquiry. This intelligent segment of SQL Server performs the assignments like:

 Generating and executing Transact-SQL explanations

 Putting away the produced Transact-SQL explanations in a document

 Analyzing execution gets ready for produced inquiries

 Graphically representing the execution arrangement for a chose question.

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A put away method is an exceptional sort of clump written in Transact-SQL utilizing the SQL dialect and SQL augmentations. It is saved money on the database server to enhance the execution and consistency of monotonous undertakings. SQL Server backings put away methods and framework techniques. Put away techniques can be utilized for the accompanying purposes: to control access approval, to make a review trial of exercises in database tables, to discrete information definition &amp; information control articulations concerning a database &amp; every single comparing application.

The database article perspective can be utilized for:

 Restricting the utilization of specific sections and lines of tables - that is to control access to a specific piece of one or more tables,

 To shroud the points of interest of confounded inquiries, to limit embedded &amp; redesigned qualities to certain extents.

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The Query Optimizer is the piece of SQL Server that chooses how to best perform a question. It creates a few inquiry execution gets ready for the given question &amp; chooses the arrangement with the most minimal expense.

SQL Server can work in one of two security modes:

 Windows NT

 Mixed

Windows NT security mode solely utilizes Windows NT client records to sign into the SQL Server framework. Blended mode permits clients to associate with SQL Server utilizing the Windows NT security framework or the SQL Server framework. Moreover it gives three security offices to controlling access to database objects:

 Transact-SQL explanations GRANT, DENY, and REVOKE.

 Views.

 Stored methodology 14

A Windows NT client record or a SQL server login name permits a client to sign into the SQL server framework. A client who hence needs to get to a database of the framework needs a database client record to work in the DB. In this manner clients must have a DB client represent each DB they need to utilize. In the event that there is no such record the client may be permitted to work in the DB under the visitor account.&quot; Put away methods can likewise be utilized to limit information access. The confinement of information access utilizing put away methodology is based upon the property that the consent to execute a put away&#39; strategy is free of any authorization for DB objects that are referenced by the put away system. SQL server gives an instrument called a trigger for upholding procedural respectability requirements.

A DBMS handles 2 sorts of honesty requirements:

 Declarative Integrity limitations characterized utilizing CREATE &amp; ALTER TABLE articulations.

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 Procedural honesty requirements took care of by triggers.

A trigger is an instrument that is conjured when a specific activity happens on a specific table. Every trigger has 3 general parts:

 A name

 The activity

 The execution

SQL server keeps record of every change it makes to the db amid an exchange. This is essential in the event that a lapse happens amid the execution of the exchange. For this situation all already executed explanations inside of the exchange must be moved back. SQL server keeps every one of these records, specifically the previously, then after the fact values, in one or more documents called the exchange log. Each DB of the SQL server framework has its own particular exchange log. Concurrency in multi client frameworks, for example, SQL Server has chosen impact of execution. At the point when access to the

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project at once can utilize the information, preparing moderates significantly. SQL Server like all different DBMSs takes care of this issue utilizing exchanges. All announcements inside an exchange manufacture a nuclear unit. This implies that either all announcements are executed or for the situation of disappointment, all announcements are wipedout.

**Elements of SQL Server**

Microsoft SQL Server bolsters a full arrangement of elements that outcome in the accompanying. SQL incorporates an arrangement of managerial and advancement instruments that enhance our capacity to introduce, convey, oversee and use SQL Server over a few locales.

 Adaptability

The same database motor can be utilized crosswise over stages going from smart phones Microsoft Windows95 to substantial; multiprocessor servers running Microsoft Windows NT, Enterprise Edition.

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SQL Server incorporates instruments for removing and examining synopsis information for online investigative preparing (OLAP). SQL Server likewise incorporates apparatuses for outwardly planning databases and breaking down information utilizing English based inquiries.

**SQL API (SQL Application Programming Interface)**

Implanted SQL applications utilize the DB-library DLL to get to SQL server. The SQL Server ODBC driver clients don&#39;t get to Microsoft SQL Server straightforwardly. They utilize an application kept in touch with access the information in SQL Server. SQL Server can likewise be gotten to through COM, Microsoft ActiveX, or Windows DNA (Windows Distributed Internet Applications Architecture) parts. Applications are composed to get to SQL Server through a database Application Programming Interface (API).

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**MODULES SPECIFICATION**

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**MODULE DESCRIPTION**

* **Adding Donor**
* **Finding Donor**
* **Availability of Units**
* **Hospitals**
* **Donor Removal**

**Admin Page:**

In this page admin need to give their admin username and password to login the page.

**Adding Donor:**

In this module admin register the blood donor details like their name age gender, mobile no, blood group, etc. Admin update the donor details and view their details.

**Finding Donor: 20**

In this module use to find the donor

location and their blood group.

**Availability Of Units:**

In this module to check the blood stock and who can donate a blood the blood stock units will be increased and transfer the the blood stock units will be decreased.

**Hospitals:**

In this module admin register the hospital details like hospital name, blood group, etc.

Edit, Delete and view the hospital details.

**Donor Removal:**

In this module admin can remove the donor.

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**SYSTEM DESIGN**

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**SYSTEM DESIGN**

**FLOW DESIGN**

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**DATAFLOW DIAGRAM**

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**DATABASE DESIGN**

**ADDING DONOR:**

|  |  |  |
| --- | --- | --- |
| COLUMN NAME | DATA TYPE | LENGTH |
| Did | int | NULL |
| Dname | varchar | 250 |
| Dage | int | NULL |
| dmobile | bigint | NULL |
| dgender | varchar | 25 |
| daadharno | bigint | NULL |
| demail | varchar | 250 |
| dbloodgroup | varchar | 50 |
| Dcity | varchar | 150 |
| daddress | varchar | 550 |
| ddonorapprovalornot | varchar | 50 |

**BLOOD STOCK:**

|  |  |  |
| --- | --- | --- |
| COLUMN NAME | DATA TYPE | LENGTH |
| Bgroup | varchar | 50 |
| Bstock | int | NULL |

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**HOSPITALS:**

|  |  |  |
| --- | --- | --- |
| COLUMN NAME | DATA TYPE | LENGTH |
| Hid | int | NULL |
| Hhospitalname | varchar | 250 |
| Hbloodgroup | varchar | 50 |
| Hmobile | bigint | NULL |
| Hcity | varchar | 150 |

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**FUTURE ENHANCEMENTS**

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**FUTURE ENCHANCEMENTS**

* System can be expended with availability over worldwide.
* Reaching as close as possible of the donor from emergency soon.
* A smart phone application of the system can be made.
* Providing donor an option of change his / her availability

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**CONCLUSION**

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**CONCLUSION**

* As the donor’s data is saved in the system. We can reject those who have HIV or any other infection.
* As we have the contact number of donor we can contact donor whenever necessary comes.
* Since, we have the expiry date of the packs we can have a proper storage management system.

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