CHAPTER – V

TECHNICAL SPECIFICATION

5.1 Software and Hardware Project Specification

The Software used in the project coding is C#. NET and the front end design is using ASP.NET these technologies are more user friendly and it’s easy to design user intuitive interface using these technologies. The database, which has been designed to store the information about the users, is designed using the MSSQL Server 2005.

The research project, this is easily understood and implemented in an object oriented programming language developed by Microsoft that is all code is written in Microsoft C # programming language is developed with the help of back end coding is used for the C # programming language, using this implemented at the end of the coding of the API ’s are useful in the programming language C # programming language and tools are used and the software project provides a rapid application development. The programming is mainly on the particular crop precision irrigation decision-making system using precision crop in the decision to deploy a solution that is focused, project management at the farm have been used. Emerald Services Platform the cloud infrastructure is highly scalable and sapphire Microsoft SQL as a service platform and software used to access the different services can be extended depending on the Infrastructure.

5.2 C#. NET

This programing language is used for coding because its Object Oriented and also helps in the front end design and development. The implementation of the code for this research project is carried out in C#. NET which is one of the languages supported by Microsoft Visual Studio .NET Coding these modules is the most critical part of the research project also I have incorporated some security codes for authentication modules also the Secured Socket Layer SSL certificate is taken into consideration and code is more secure and authentic. With the help of this programing language it’s important to collaborate and connect to the various data sources and data bases using the API’s which are provided in this programing language.
5.3 ASP.NET

This programming language is used for designing the front end of the user interface the default page which loads when the research project is executed is Default.aspx which is a ASP.NET file which contains the code of front end design and development. With the help of ASP.NET it’s easy to design the user interface for the users the Microsoft Visual Studio has drag and drop tools, which can be used for designing the user interface easily and the user interface, which is designed, is more intuitive. A visit to the Composites ASP.NET rendering techniques is used. During integration, template File the original sample data control tree makes the initialization code is compiled into. Literal control class is text elements, and server controls are represented by instances of a specific control class. Start for user -written code and the pages are combined with class specific results. This page for tree. Actual requests are processed by a number of steps to control doubles as root. First, during the initialization steps , page class instance is created and initialized code is executed . The following steps are usually held in the page system is the initial control tree produces. Each node in the tree represents a class of control, for example, for individual nodes of the tree structure and change the properties / methods can manipulate. Finally, during the rendering step a visitor visitor ’s methods to render himself, asking each node, visiting each node of the tree is used to. The resulting HTML output is sent to the client. View the Web form controls and widgets ASP.NET applications to maintain the state of the HTML pages used by the page -level state management mechanism, are mentioned. This controls the state and View state encoded as hidden field on each form submission is sent to the server. Server page is re- rendered; the controls are rendered in their final state, so that the variable is sent back. This process requires a change in control of the state on the server side, the application, which can change the view state. Individual controls states decoded on the server, and ASP.NET pages using the View State collection is available for use.

5.4 MSSQL SERVER

The Microsoft SQL server is used to design the database table design and development all the users data and user registration, development, coding and status report is stored in the database tables information is accessed from the table and the required data is displayed to the intended
users. Published in October 2005 SQL Server 2005. The native support for managing XML data in relational data, including. For this purpose, the database column data type or as literals in queries can be used as either the XML data type is defined. XML columns can be associated with XSD schemas; XML data stored in the system is being tested against. XML database stored in the internal binary data type before it is rolled. Specialized indexing methods were made available for XML data. XML data is queried using XQuery; SQL Server 2005 T-SQL to T-SQL language to allow embedding XQuery queries added some extensions. In addition, it also allows you to update XML data based on a query that a new extension to XQuery, called XML DML, defines. SQL Server 2005 database server in a tabular data stream (TDS) SOAP packets is encapsulated within requests using web services to allow open. Web services have access to the data; the results are returned as XML. Common Language Runtime (CLR) integration, managed by the CLR for SQL code to write as a viable, this version was released. For related information, T-SQL error handling features and the CTEs has been enhanced with support for the recursive queries. SQL Server 2005, new indexing algorithms, syntax and better error recovery systems have been improved. Information pages are check summed for better error resiliency, and optimistic currency support has been added for better performance. Permissions and access control is made more granular and the query processor is designed to handle the execution of concurrent queries more efficiently. Partitions on tables and indexes are supported natively, so it is easy to pull out of the database on a cluster. The SQL CLR. NET Framework to allow for integration with SQL Server 2005 was released. SQL Server 2005 "MARS", database connections for multiple purposes, allowing data to be used in a method. Introduction to SQL Server 2005, diagnose problems, monitor the health of a server instance that can be used for the specific views and functions return server state information that DMVs, and tune performance. SQL Server 2005 Service Pack 1 (SP1) Introduction to database mirroring database -level redundancy and failover capabilities that provide a high- availability option. Failover can be done manually or can be configured for automatic failover. Automatic failover witness Partner and a synchronous operating mode is required. SQL Server 2008.

5.5 CSS
The CSS Cascading Style Sheets. Prior to CSS, nearly all presentational attributes of HTML documents were contained within the HTML markup; all font colors, background styles, element alignments, borders and sizes specified HTML, several times repeated, was described. CSS in HTML authors considerably easier, as a result of another file, a style sheet to allow it to move. Headings, sub-headings (H2), sub-sub-headings (H3), etc., HTML is defined using the infrastructure. Print and on the screen, to the elements of the font, size, color and emphasis presentational. Prior for CSS is selected, say, Typographic features such as document authors who wanted to assign, all H2 headings HTML presentational markup for each repetition of the title of the event. These documents create a larger more complex, and more difficult to maintain. CSS structure from presentation allows. CSS can define color, font, text alignment, size, borders, spacing, layout and many other Typographic features, and on the screen and can be printed separately for views. CSS also aural text readers such as the text are read by the speed with which the stress defines non-visual styles. The W3C has deprecated the use of all presentational HTML markups.