1. INFORMATION GATHERING

1.1 Project Profile:-

Sr.no	Title	Detail
1	Group No.	14
2	Project Title	H_SMACHINES ONLINE STORE
3	Front-End Tool	ASP.NET
4	Back-End Tool	Microsoft SQL Server 2014
5	Project Type	Web Application
6	Duration	Nov(2024) To Feb(2025)
7	Project Team Size	One (1)
8	Submitted By	Padaliya Drashti H.(037000610064)
9	Stream	T.Y.B.C.A. (sem-6)
10	Guided By	Prof. Priti Bheda
11	Submitted To	Shree V.N. Borad Mahila BCA Collage, Joshipura, Junagadh.

1.2 Introduction:

Title: - H_S MACHINES ONLINE STORE

- ➤ Welcome to [H_S MACHINES STORE], your one-stop online destination for all electric machines. I offer a vast selection of top-quality products, ranging from household appliances to industrial equipment.
- ➤ Our platform aims to provide a seamless and convenient shopping experience, allowing you to browse and purchase electric machines from the comfort of your own home.
- ➤ I prioritize customer satisfaction, ensuring that our products are reliable, efficient, and meet the highest standards of quality.
- ➤ Our team is dedicated to providing exceptional customer service, prompt shipping, and easy returns.

1.3 Scope:-

- Any user can Purchasing product over the internet without the need of going physically to the store.
- > Capacity to store and retrieve products.
- Aims to provide a comprehensive online platform for customers to purchase electric machines and related products.

1.4 Objective:-

- ➤ Provide a wide range of electric machines and related products.
- > Offer competitive pricing and discounts.
- > Ensure timely and efficient delivery.
- Achieve high customer satisfaction ratings.
- > Continuously improve and expand product offerings and services.

1.5 Advantages:-

- ➤ It makes easy to find the product as per user's need.
- ➤ In it purchase by login user only.
- > It is very comfortable.
- ➤ It is 24 hour available or show every product information when you are there opens this website and gets buy.
- Easy register that provide and show product in which user will be interested.

1.6 Limitation:

- There are some websites which luck in personal service because they do not come face to face with the buyers.
- ➤ If sometimes any error is occurring in this website then buyer can face many problems.
- > User will be able to register, login and buy product over the website.
- ➤ Reliable Internet access is required.

1.7 Pages:-

- **♣** Admin Side :-
 - Home/index
 - Product
 - Category
 - Service
 - Team
 - View-all
 - View-register
 - View-team
 - View-product
 - View-category
 - View-bill
 - View-feedback
 - View-service
 - Logout/login

↓ User Side :-

- Home/index
- Shop
- Catalog
 - Mobile
 - Tablet
 - Laptop
 - Earphone
 - Pen drive
 - Glass
 - Speaker
 - Computer
 - Mouse
 - Keyboard
 - TV
- Team
- Feedback
- About
- Setting
 - Reset password
 - Delete account
- Single product
- Cart
- Checkout
- Bill
- PDF download

2. REQUIREMENT ANAYLSIS

2.1 Tools & Technology :-

2.1.1 ASP.net :-

- Asp.net is an object oriented event driven development platform for waiting webbased application before .net active based server pages was the Microsoft technology for developing application that run through the browser.
- ♣ Because ASP.net is based on the .net framework the some classes in the framework class library are available to all .net based application.
- Asp.net gives you the ability to code in any supported .net languages. (Including VB, C#, J# and many other language that have their party compilers)
- ♣ ASP.net also include a file turned data access model and flexible data catching to further boost performance.

➤ Advantages of ASP.net:-

- ASP.net is integrated with .net framework.
- ASP.net compiled .net interpreted.
- ASP.net is multi language.
- ASP.net is hosted by the common language runtime.
- ASP.net is object-oriented.
- ASP.net is multi service and multi browser.
- ASP.net is easy to deploy and configure.

➤ New feature of ASP.net :-

- Better language support.
- Programmable control.
- Event driven programming.
- Xml based components.

➤ Benefit of ASP.net are as under:-

- Make code cleaner.
- Easy to use graphical interface.
- Provide various tools are debugging.
- Designing tools are of varied type.
- Deployment, scalability, security, reliability are improved.

> SQL Server 2014 :-

- ➤ SQL Server 2014 express edition is the entry level free database and is ideal for learning and building desktop and small server data drive application it is the best choice for independent software vendors, develops and hobbyists building client application.
- ➤ If you more need advanced database features SQL Server express can be seamlessly upgraded other higher and versions of SQL server.
- > SQL server express LOCALB a list weight version of express that has all of its programmability features yet runs in user mode and a fast, zero configuration installation and a short list of prerequisites.

> Feature:-

- Resource governor
- Policy
- Table
- Back up
- Data capture
- Data collection

➤ SQL Advantages:-

- Backup encryption executed at back up time to prevent tempering.
- Tables level access control. Column level access data.
- Cross platform support and .net are.
- Transparent data encryption the ability to encryption and entire database.
- Auditing, monitoring at the data access.

2.1.2 Java Script:-

- ❖ Java Script is a scripting language often used to client side web development.
- ❖ Java Script was influenced by many language and was designed to have similar work to java but be easier for non-programmers to work wish.

> Features of java script

❖ In the community of web development and surfers java script is highly popular as client side scripting language for the web browser.

Support for object

❖ Java Script is an object oriented language however the way java script handles object inheritance is bit different from conventional object programming language like due to this java script support most of the object oriented concepts while being simple to learn and use.

2.1.3 CSS:-

- **CSS** cascading style sheets.
- ❖ CSS use to control the style and layout of multiple web pages all once.
- ❖ Style are normally stored in style sheets. External style sheets are stored in CSS file.
- **Style** ware added to html to solve a problem.
- Multiple style definition cascaded in to one.

2.2 User Characteristic:-

- User should be comfortable with English language.
- Basic knowledge about computer.
- Use able to put required in formation secure user login account.
- These users are usually responsible for insuring that
- A design is feasible and software.
- More often than not software is design for a client.

2.2.1 Educational Level:-

- User should conformable with English language.
- Must have network.

2.2.2 Skills:-

- User should have basic knowledge and should be comfortable using generate purpose application on compare.
- ❖ User should have provided information on regarding the farmer.

2.3 Hard Ware and Software Requirement:-

2.3.1 Hardware:-

Hard Disk	500GB
Processor	2.33 GHZ
System Type	64 bit operating system
RAM	2.00 B

2.3.2 Software:-

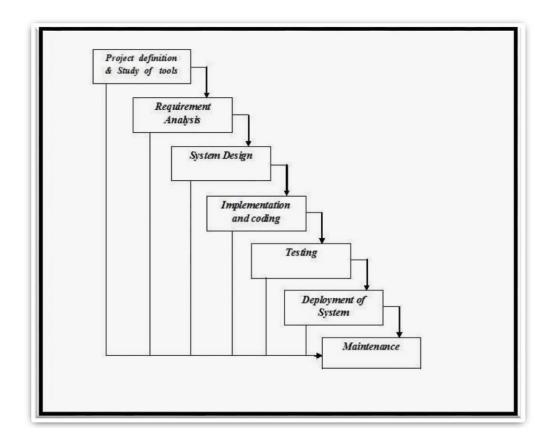
Operating System	Microsoft Windows-10	
Development Tool	ASP.Net(visual studio 2015)	
Technology Back End	SQL Server 2014	

3. PROJECT PLANNING

- I referred the tutorials from Internet with the help of them; I can make project more efficient & more reliable.
- Project planning is part of project management which related to the use of schedules such as Gantt chart to plan and subsequently report progress within the project environment.
- Following this step, the durations for the various tasks necessary to complete the work are listed and grouped in to a work are breakdown structure.
- After collection all data I start make web pages by macromedia.

3.1 Waterfall Model:-

- ➤ The waterfall model was first process model to be introduction it is also referred to as a liner sequential lifecycle model.
- ➤ It is very simple to understand and use in a waterfall model, each phase must be completed be for the next phase can being and there is no overlapping in the phases.



3.1.1 Project Definition & Study Tools:-

➤ Our Project is basically used for to do business and provide business for people.

3.1.2 Requirements Analysis:-

➤ The requirements gathering process makes stronger and focused specifically on business activities understanding requirement, an analyst can have clear idea about the nature of the software including function behavior, performance and interface requirements for the system recorded and evacuated with the user.

3.1.3 System Design:-

- > Software design shows following four distinct components of a program.
 - 1. Database Design
 - 2. Software Architecture
 - 3. Interface Design
 - 4. Algorithm
- ➤ The process converts requirements into a symbolic representation of the software that can be used for static testing before coding like requirement the design is documented and turns out to be part of the software configuration.

3.1.4 Implementation of Coding:-

➤ The design must be converted into a machine, program the code generation step done this task. If design is performed in a correctly code generation can be done speedy and with more efficiency.

3.1.5 Testing:-

➤ Once code developed program testing can be started. The testing process Covered by static and dynamic way. It also covers structure and functional testing. For quality testing also covers non-functional requirements.

3.1.6 Deployment of System:-

➤ Once the functional and non-functional testing is done the product deployed in the customer environment or released in to the market.

3.1.7 Maintenance:-

➤ There are some issues which come up in the client environment to fix those issues patches are released maintenance is done to deliver these changes in the customer environment.

3.2 Project Scheduling:-

➤ Project scheduling is corned with the techniques that can be employed to manage the activity that need to be undertaken during the development of a project.

No	Activity	Starting Date	Completion Date
1	Requirement analysis	20 Nov	30 Nov
2	System analysis	1 Dec	10 Dec
3	Project planning & scheduling	11 Dec	17 Dec
4	System design & form design	18 Dec	20 Jan
5	Coding & implementation	21 Jan	10 Feb
6	Testing	11 Feb	20 Feb
7	Documentation	20 Nov	20 Feb

3.3 Gantt Chart:-

Task date& name	20Nov to 30Nov	1Dec to 10Dec	11Dec to 17Dec	18Dec to 20Jan	21Jan to 10Feb	11Feb to 20Feb	20Nov to 20Feb
Requirement Analysis							
System analysis		V					
Project planning Scheduling							
System design							
Implementation &					+		
Coding Testing							
Documentation							

4. FEASIBILITY STUDY

- ➤ The initial investigation points to the question whether the project is feasible a feasibility is conducted to identity the best system that meets the all the requirements this includes an identification description and evaluation of the proposed system and selection of the best system for the job.
- ➤ The requirement of the system is specified with a set of constraints. Such as system objective and the description of the output. If is then duty of the analyst to evaluate the feasibility of the proposed system to generate the above results.

4.1 Technical Feasibility:-

- ➤ Technical current of technology supports the proposed system. The current setup is sufficient for the processing of the kind tasks.
- Management aggressed to purchase extra devices for latest technology if necessary.
- The software needed to important and execute the system are already existing.
- Technical analysis evaluation technical merits of the system at the same time collecting additional information about performance, reliability, maintainability, productivity.

4.2 Operational Feasibility:-

- The proposed system will fulfill the company's quarrymen.
- The proposed system covers all aspect of the current Manual system.
- The human sources required number of staff operationally for the company.
- > Proposed system is helpful for all the users associated with the organization.
- ➤ The decision making process of their will also become faster with the use of data integration, consolidation so it is feasible to implement the system.

4.3 Social Feasibility:-

- ➤ Social feasibility addresses the influences that a proposed project may have on the social system in the project environment.
- ➤ It should be recognized that workers in certain industries may have certain status system within the society.
- ➤ The ambient social structure may be such that certain categories of workers may be in short supply or non-existent.
- > The stages in social assessment are:-
 - ✓ Develop an effective public plan to involve all potentially affected public.
 - ✓ Scoping to identify the full range of probable social impacts.
 - ✓ Screening to determine the boundaries of the SIA.

4.4 Organizational Feasibility:-

- ➤ I have organizational feasibility as meaning whether the new system will fit in to the organization and meet the current goals and objectives.
- This involves questions such as whether the system has enough support to be implemented successfully whether it brings an excessive amount of change and whether the organization is changing two rapidly to it.
- > Two of important factors in this are:-
 - ✓ The passion that the sole entrepreneur or management team has for the business idea.
 - ✓ The extent to which the management team or sole entrepreneur understand the markets in which the firm will participate.

4.5 Economic Feasibility:-

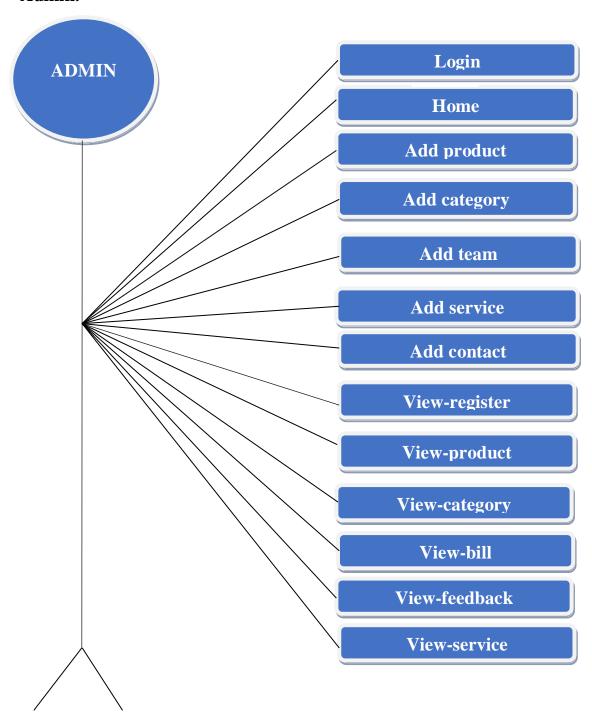
- ➤ Economic feasibility is the most important and frequent used method for evaluating the effectiveness of the proposed system.
- ➤ It is very essential the main goal of the proposed system is to have economically better result along with increased efficiency cost benefit analysis is usually performed for the purpose.
- ➤ It is the comparative study of the cost versus the benefit and savings that are expected from the proposed system, since the organization is well equipped with the organization is well equipped with the required hardware the project was found to be economically.
- Cost Estimation:-
 - Working the estimation is given :-
 - 3Months and 3 days = 95 days
 - Hours 1 days = 95 * 4 = 380 / 24 = 16 days
 - Now, the expense & cost estimation:-

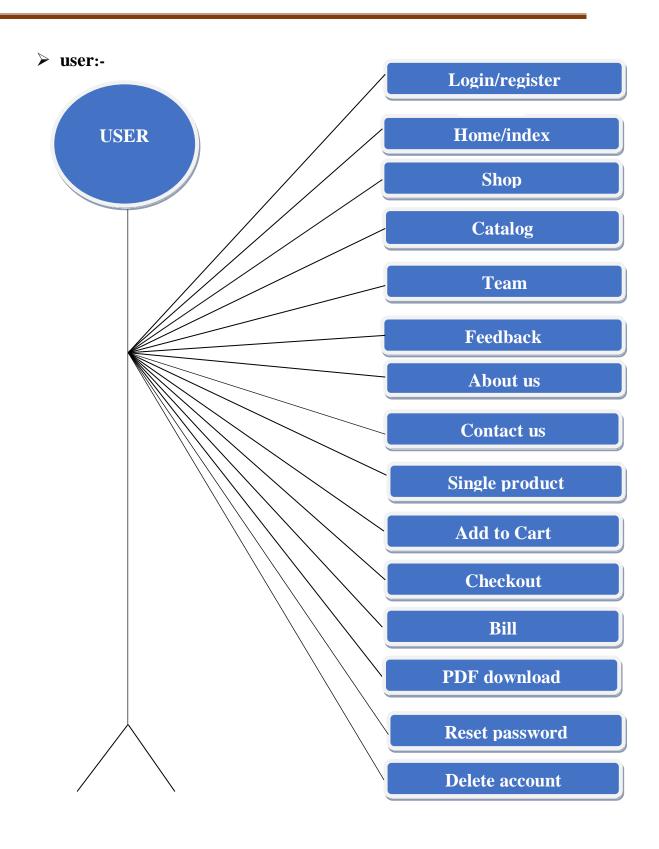
Light Bill	4000
Energy charge	2000
Database design	3000
Coding	2000
Internet connection	2000
Extra activity	5000
Total	Rs.18, 000

5. DATABASE DESIGN

5.1 Use case diagram:-

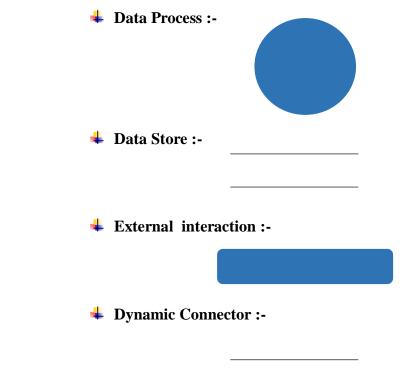
> Admin:-





5.2 DFD (Data Flow Diagram):-

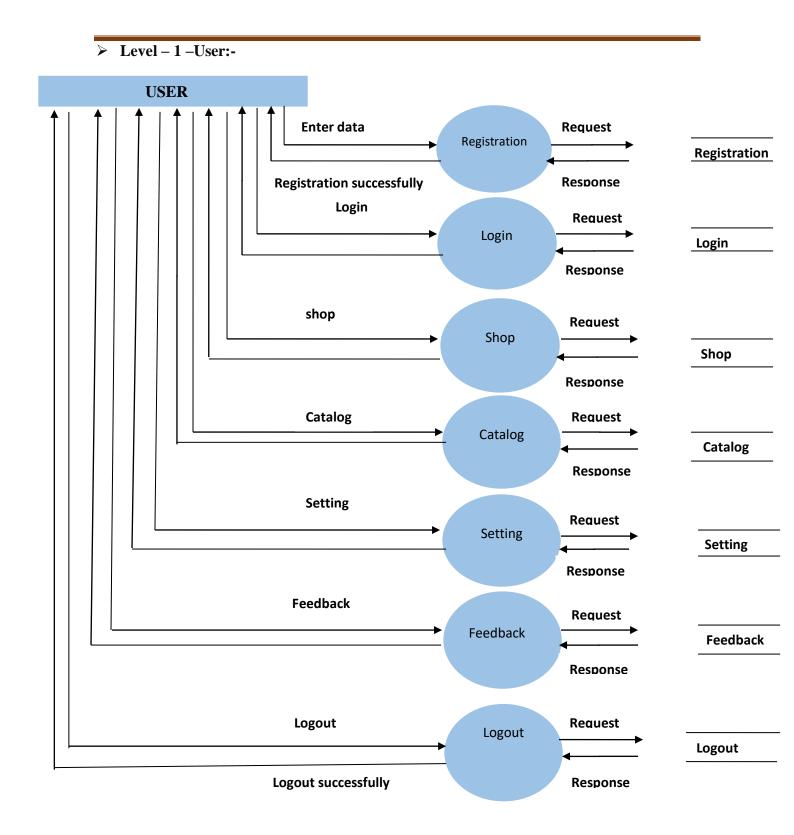
➤ Data is the life blood of any system. Diagram of flow of data in system and its processing which converts data into valuable information in known as data flow diagram. It will not show logic of the algorithm its shows only flow of the data from the process to the process or from the table or from external source to the external source to the external destination.



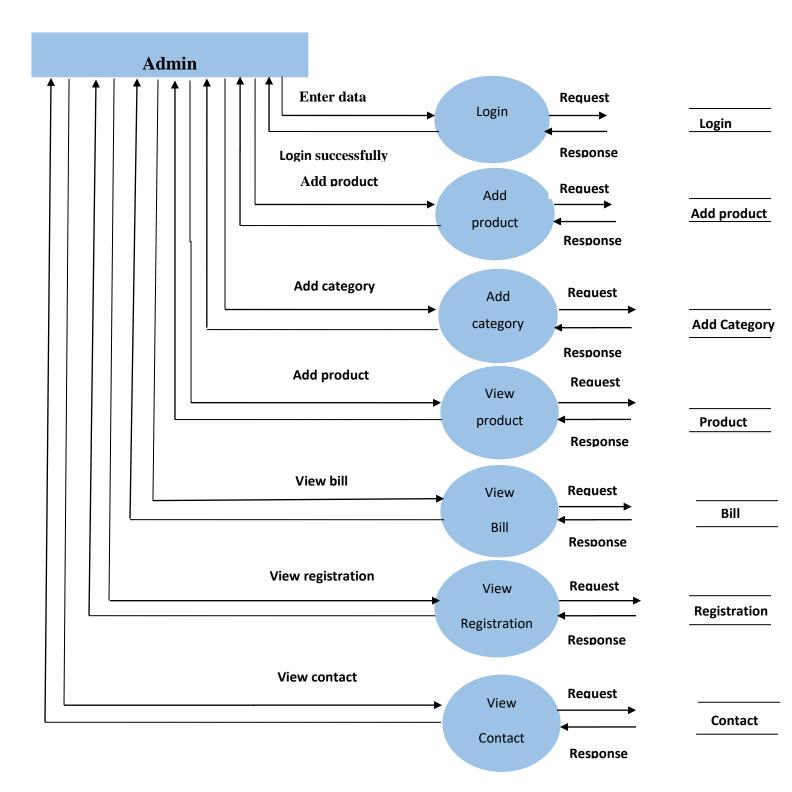
5.2.1 DFD:-

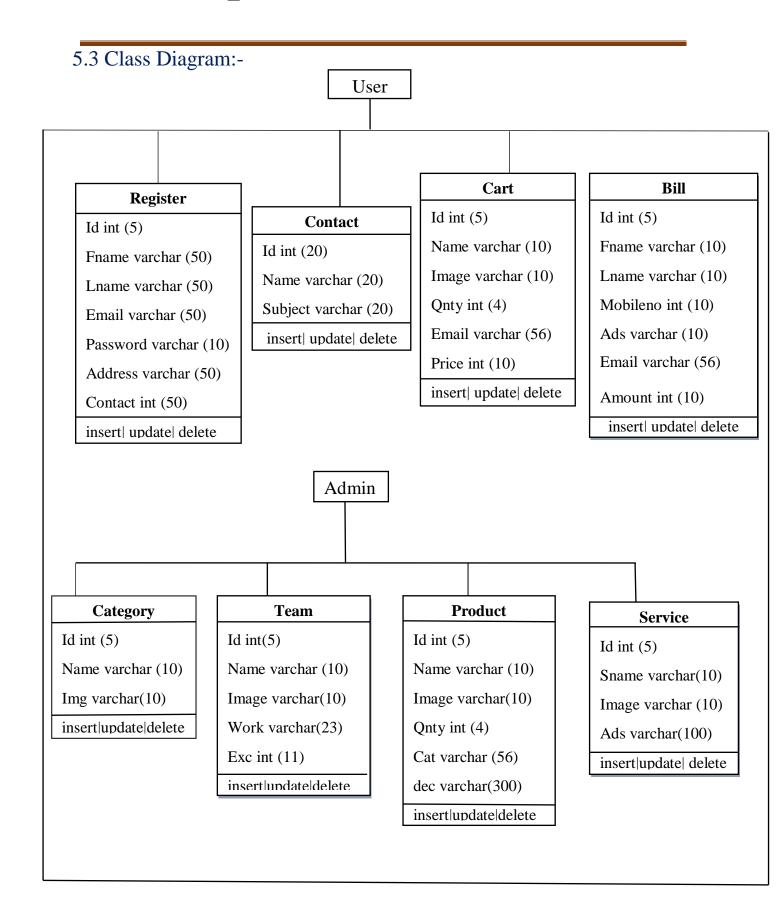
 \triangleright Level – 0:-





> Level − 2 − Admin :-





5.4 Data Dictionary:-

- ➤ The Data Dictionary can be specifically defining as an exhaustively organized list of all data elements that are pertinent to the system with precise, rigorous understanding of inputs and outputs and the components of stores along with all the constraints and intermediate calculations.
- ➤ In other words, a data dictionary is a catalogue a repository of element in a system. Here in a data dictionary one can find list of all the elements composing the data flowing through a system. The major elements are data flows, data stores and process. The data dictionary stores the details and description of all these elements.

↓ Importance of data dictionary:-

- ✓ To manage the details in large system.
- ✓ To communicate a common meaning for all system elements.
- ✓ To document the features of a system. To facilitate analyst for the details in order to evaluate system requirements
- ✓ Following is the list of Tables which are used in my project. Consider Following Data Dictionary which denotes tables detail.
 - Register
 - Contact
 - product
 - category
 - cart
 - team
 - service
 - bill

* Register :-

Field name	Data type
Id	Int (20)
Fname	Varchar (20)
Lname	Varchar (20)
Email	Varchar (50)
Password	Int (10)
Mobile	Int (10)
Address	Varchar (100)
Role	Varchar (30)

* Product:-

Field name	Data type
Id	Int (20)
Pname	Varchar (20)
Price	Int(10)
Image	Varchar (20)
Qnty	Int (10)
Category	Varchar (100)
Dec	Int (10)

***** Category:-

Field name	Data type
Id	Int (10)
Cname	Varchar (20)
Image	Varchar (30)

***** Cart :-

Field name	Data type
Cid	Int (20)
Pname	Varchar (20)
Qnty	Int(10)
Image	Varchar (20)
Id	Int(10)
Uid	Int(10)
Status	Varchar(50)

❖ Service:-

Field name	Data type
Id	Int (20)
Name	Varchar (20)
Image	Varchar (20)
Details	Varchar (100)

❖ Contact:-

Field name	Data type
Id	Int (20)
Name	Varchar (20)
Subject	Varchar (100)
Email	Varchar (100)
message	Varchar (100)

❖ Team:-

Field name	Data type
Id	Int (20)
Name	Varchar (20)
Image	Varchar (20)
Work	Varchar (20)
Exp	Int (20)

❖ Bill:-

Field name	Data type
Id	Int (20)
Fname	Varchar (20)
Lname	Varchar(20)
Pname	Varchar(20)
Qnty	Int(10)
moblie	numeric(18, 0)
email	varchar(50)
state	varchar(50)
address	Varchar(100)
city	Varchar (20)
date	date
total	Varchar (20)

6. DATABASE NORMALIZATION

4 Normalization :-

- Normalization is the first step to design any database.
- Normalization is a database design technique which organizes tables in a member that reduces redundancy and dependency of data. There are three types of normalization:-
 - ✓ 1NF
 - ✓ 2NF
 - ✓ 3NF

UN – Normalization:

	– Norman						
Register	Product	Cart	Bill	Contact	Category	Team	Service
Id	id	cid	Id	id	id	id	id
fname	pname	pname	fname	name	cname	name	name
lname	image	qty	lname	subject	image	image	image
pass	price	image	moblie	email		work	details
email	desc	price	pname	message		exp	
mobile	qty	id	qnty				
address	catgry	uid	email				
role		status	state				
			address				
			city				
			date				
			total				

♣ 1NF:-

- ✓ 1NF means first Normalization form.
- ✓ There are two rules of 1NF.
- ✓ First create a separate table for each set of related data.
- ✓ Identify each set of related data with a primary key.
- ✓ All attributes are single values and non-repeating.

→ Example :-

* register :-

Field name	Data type	Size
Id	Int	11
Fname	Varchar	20
Lname	Varchar	30
Email	Varchar	30
Password	Int	10
Mobile	Int	10
Address	Varchar	50
Role	Varchar	50

❖ product :-

Field name	Data type	Size
Id	Int	11
Pname	Varchar	20
Price	Int	30
Image	Varchar	30
Qnty	Int	10
Category	Varchar	100

category:-

Field name	Data type	Size
Id	Int	11
Cname	Varchar	20
Image	Varchar	30

❖ bill:-

Field name	Data type	Size
Id	Int	11
Fname	Varchar	20
Lname	Varchar	30
Pname	Varchar	30
Qnty	Int	30
moblie	numeric	10,8
email	varchar	10
state	varchar	20
address	Varchar	30
city	Varchar	30
date	date	30
total	Varchar	30

contact:-

Field name	Data type	Size
Id	Int	11
Name	Varchar	20
Subject	Varchar	30
Message	Varchar	100

❖ cart:-

Field name	Data type	Size
Cid	Int	11
Pname	Varchar	20
Qnty	Varchar	30
Image	Varchar	30
Id	Varchar	10
Uid	Int	10
Status	Varchar	20

service:-

Field name	Data type	Size
Id	Int	11
Name	Varchar	20
Image	Varchar	30
Details	Varchar	100

❖ Team:-

Field name	Data type	Size
Id	Int	11
Name	Varchar	20
Image	Varchar	30
Work	Varchar	10
Exp	Int	10

♣ 2NF:-

- > 2NF means second normal form.
- Create separate table for sets of values that apply to multiple records.
- > Relate the tables with a foreign key.
- > Records should not depend on anything other than a table's primary key. Meet all the requirements the first normal form.
- Create relationship between new table and their pre decessors through the use of foreign keys.
- > Remove subset of data that apply to multiple rows of a tables and place them separate table.

O Example:

→ contact:-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Name	Varchar	20	-
Subject	Varchar	30	-
Message	Varchar	100	-

→ register :-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Fname	Varchar	20	-
Lname	Varchar	30	-
Email	Varchar	30	-
Password	Int	10	-
Mobile	Int	10	-
Address	Varchar	100	-
Role	Varchar	20	-

→ cart:-

Field name	Data type	Size	Constraint
Cid	Int	11	Primary Key
Pname	Varchar	20	-
Qnty	Varchar	30	-
Image	Varchar	30	-
Id	Varchar	10	Foreign Key
Uid	Int	10	Foreign Key
Status	Varchar	20	-

→ bill:-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Fname	Varchar	20	-
Lname	Varchar	30	-
Pname	Varchar	30	-
Qnty	Int	30	-
moblie	numeric	10,8	-
email	varchar	10	-
state	varchar	20	-
address	Varchar	30	-
city	Varchar	30	-
date	date	30	-
total	Varchar	30	-

→ service:-

Field name	Data typ	Size	Constraint
Id	Int	11	Primary Key
Name	Varchar	20	-
Image	Varchar	30	-
Details	Varchar	100	-

→ category:-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Cname	Varchar	20	-
Image	Varchar	30	-

→ Team:-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Name	Varchar	20	-
Image	Varchar	30	-
Work	Varchar	10	-
Exp	Int	10	-

→ product :-

Field name	Data type	Size	Constraint
Id	Int	11	Primary Key
Pname	Varchar	20	-
Price	Int	30	-
Image	Varchar	30	-
Qnty	Int	10	-
Category	Varchar	100	-

♣ 3 NF:-

- > 3NF means third normal form.
- Eliminate fields that do not depend on the primary key.
- ➤ Each non-primary key attributes must be dependent only on primary key.

→ PARENT Table:- (Product)

Field name	Data type	Size	Constraint
Id(id)	Int	11	Primary key
Qnty	Int	30	-

(Register)

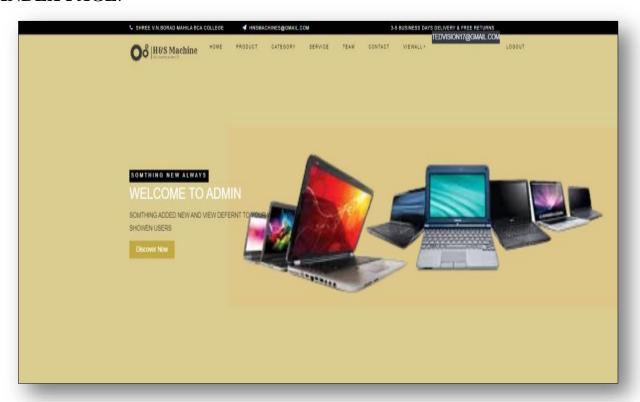
Field name	Data type	Size	Constraint
Id(uid)	Int	11	Primary key

→ Child Table:- (Cart)

Field name	Data type	Size	Constraint
Cid	Int	11	Primary key
Uid	Int	11	Foreign key
Id	Int	11	Foreign key

7. SCREEN SHOT

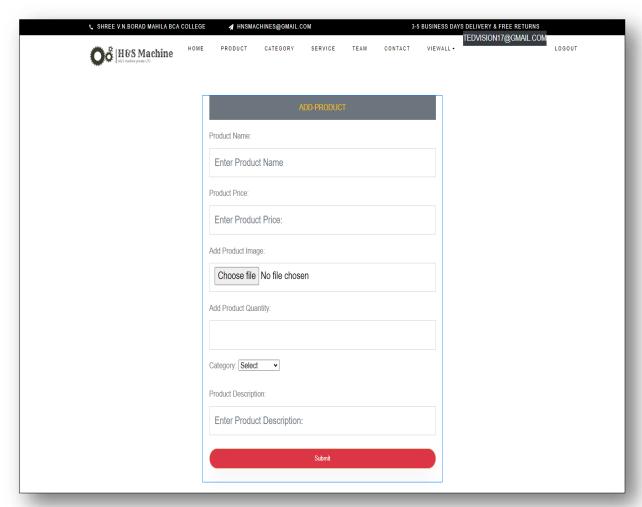
- **→** ADMIN SIDE:-
- > INDEX PAGE:-



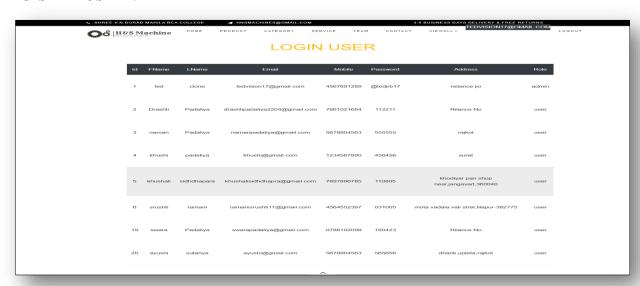
> ADMIN LOGIN :-



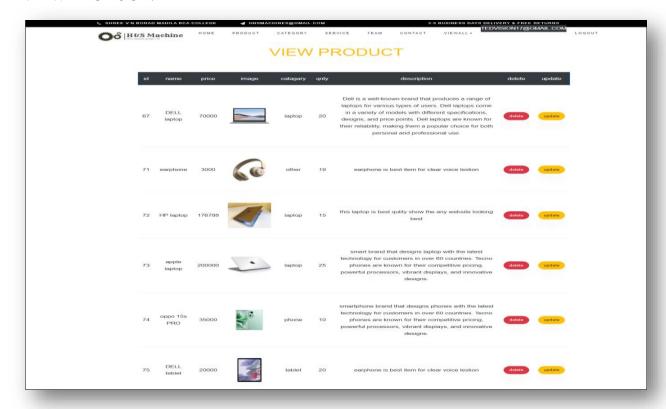
> ADD PRODUCT:-



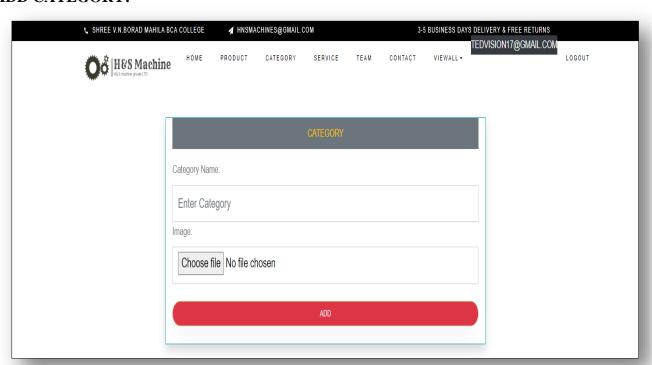
> REGISTER USER :-



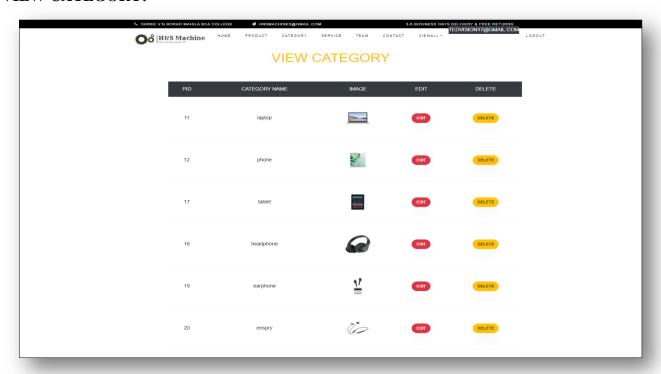
> VIEW PRODUCT:-



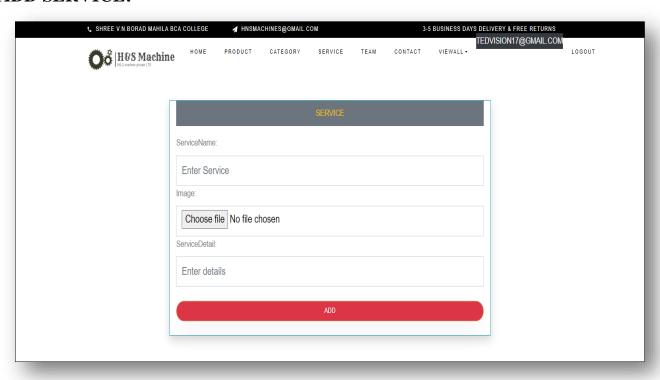
> ADD CATEGORY:-



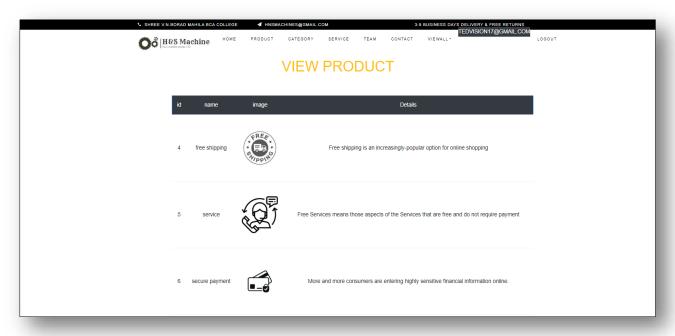
> VIEW CATEGORY:-



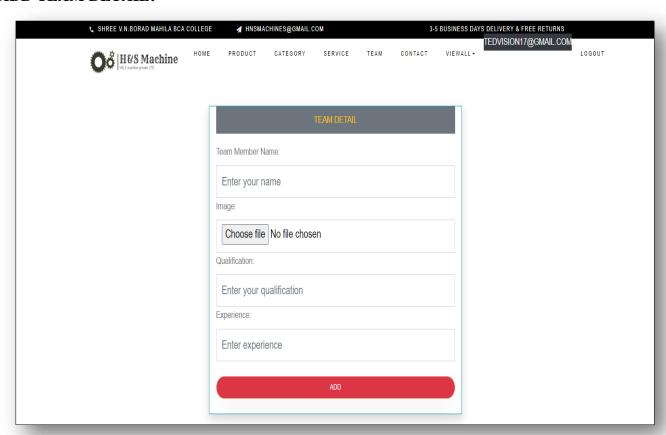
> ADD SERVICE:-



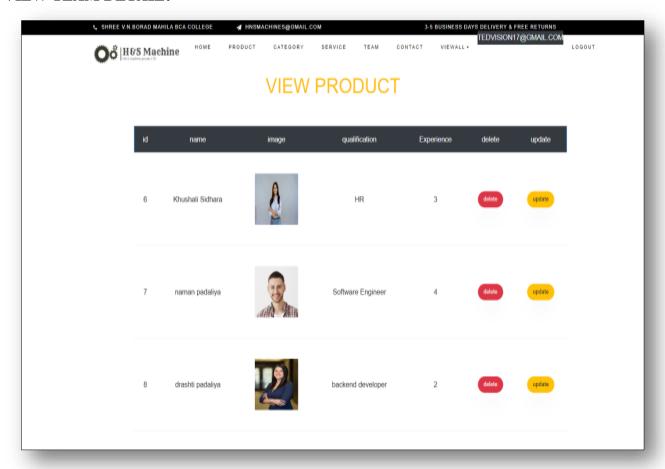
> VIEW SERVICE:-



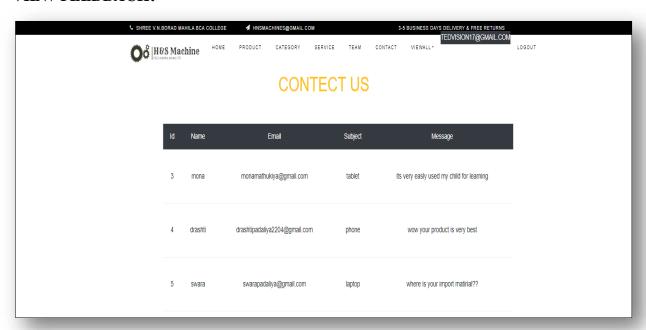
> ADD TEAM DETAIL:-



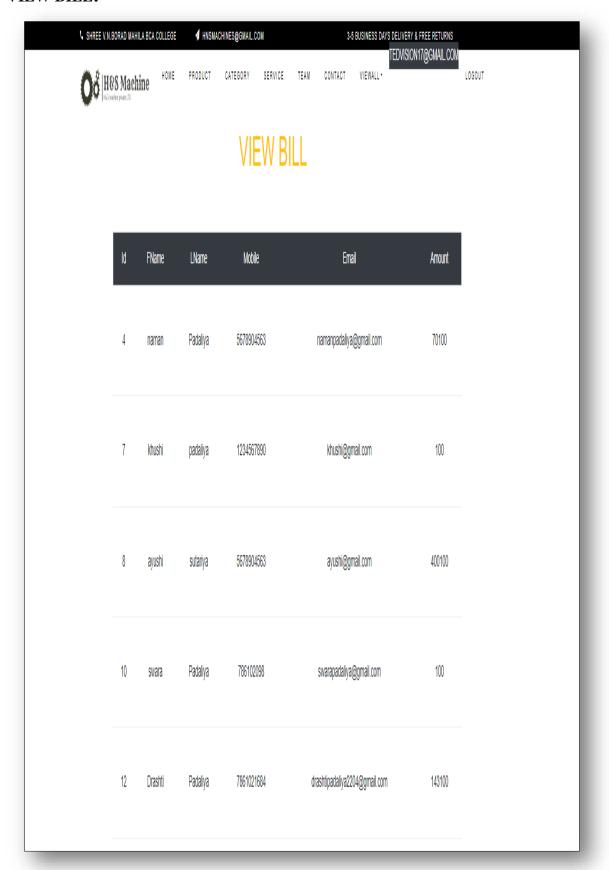
> VIEW TEAM DETAIL:-



> VIEW FEEDBACK:-

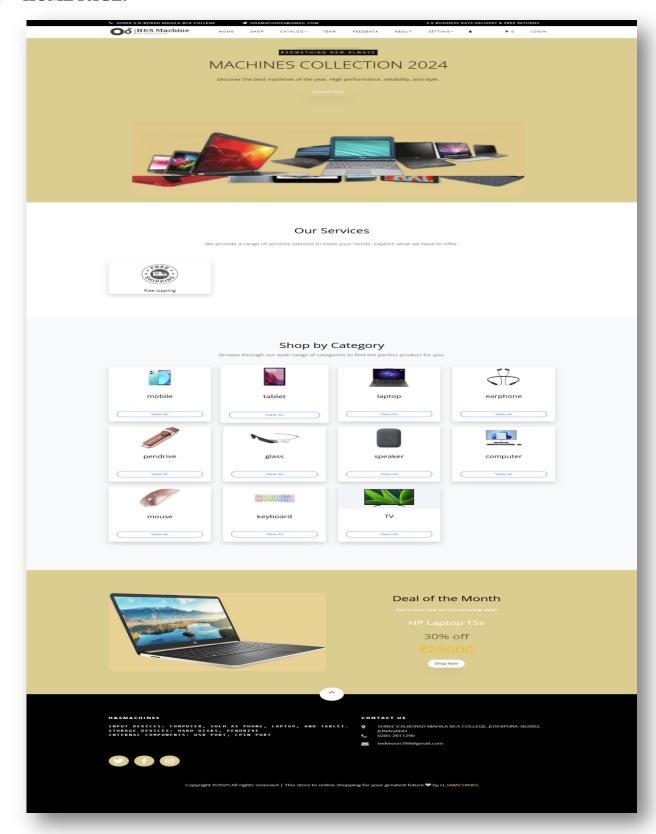


VIEW BILL:-

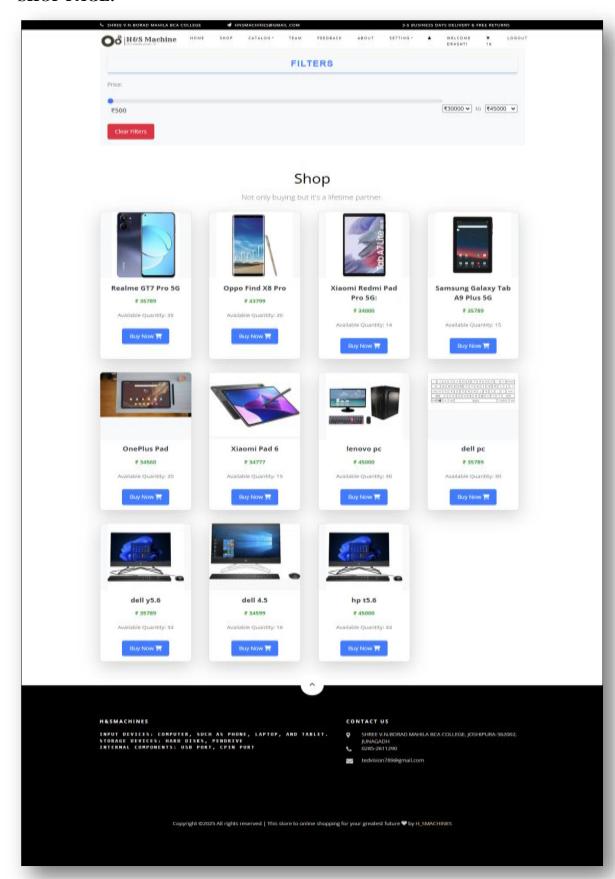


→ USER SIDE:-

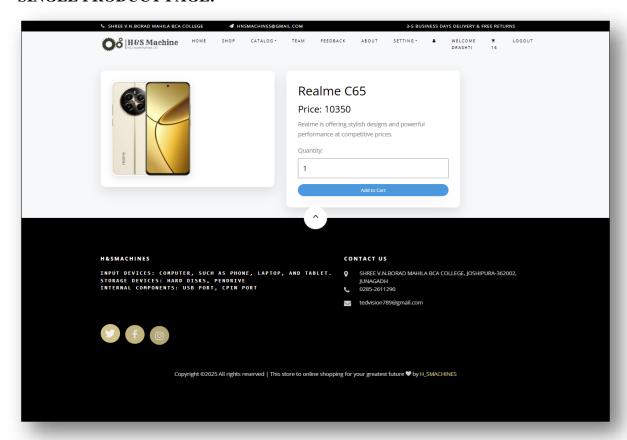
HOME PAGE:-



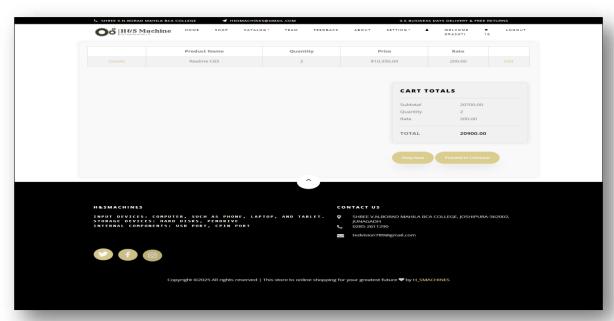
> SHOP PAGE:-



> SINGLE PRODUCT PAGE:-



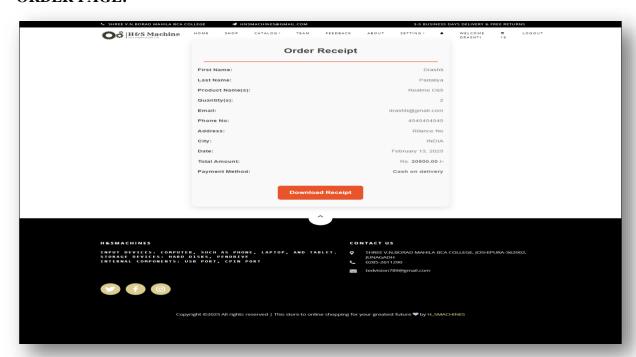
> CART PAGE:-



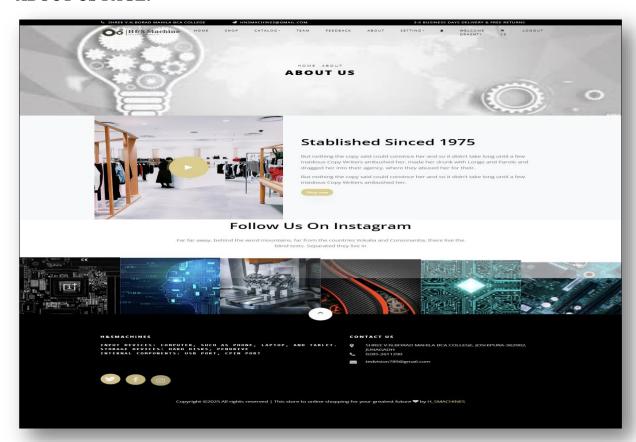
> CHECKOUT PAGE:-



> ORDER PAGE:-



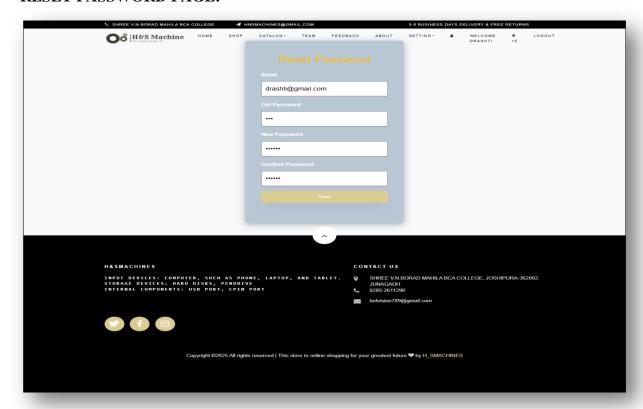
> ABOUT US PAGE:-



> TEAM PAGE:-



> RESET PASSWORD PAGE:-



> FEEDBACK PAGE:-



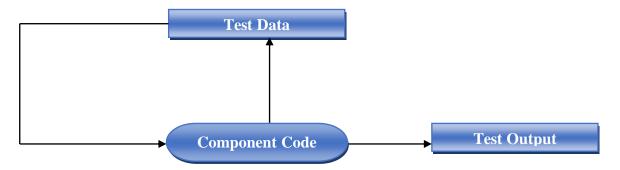
8. SOFTWARE TESTING

- > Software testing in values the executing of a software component or system component of evaluates one or more properties of interest.
- ➤ Meet the requirements that guided its design the development. Responds correctly to all kinds of inputs. Perform its function whether on acceptable time. Is sufficiently usable.

8.1 Types of Testing:-

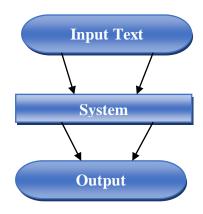
- ✓ Black Box Testing
- ✓ Validation Testing
- ✓ White Box Testing

8.1.1White Box Testing:-



- As per our project, I have used white box testing model because independent paths of PHP file and loop are the cornerstones of the vast majority of all algorithms implemented in the software.
- ➤ White box testing sometime called glass box testing, where test data are derived from direct examination of the code to be tested.
- For glass box testing the test case cannot be determined until the code has actually been written both of these testing techniques have advantages and disadvantages, but when combined, they help to ensure thorough testing of the product.

8.1.2 Black Box Testing:-



- ➤ It takes an external perspective of the test object to derive test cases. These tests can be functional or non-functional, though usually functional.
- The test designer selects valid and invalid input and determines the correct output.
 - Interface errors.
 - Errors data structures or external data base access.
 - Behavior or performance errors.
 - Initialization and termination error.

8.1.3 Validation Testing:-

➤ In validation testing, the software is assembling as a package. Validation testing is completely associated with requirement satisfaction of customers. According to this test, project is tested and found to be satisfactory for functional characteristic, behavioral characteristics and performance requirement.

8.1.4Alpha:-

- Alpha is the first letter of the Greek alphabet. In the system of Greek numerals, it has value of 1. It was derived from the Phoenician letter alpha.
- Letter's that arose from alpha include the Latin A and Cyrillic letter A. in English, the noun" Alpha" is used as a synonym for "beginning", or" first", Reflecting its Greek roots.

8.1.5 Beta:-

➤ Beta is the second latter or the Greek alphabet. In system of Greek numerals has valued has of 2. In ancient Greek, beta represented the voiced bilabial plosive. In modem Greek it represents the voice labiodentals fricative. Letters that arose from beta include the roman letter (B) and Cyrillic letter (5) and (B).

8.1.6 Manually:-

➤ I have done manual testing for over project all the web pages validation, redirection, navigation are manually test by us.

8.2 Test Strategy:-

- A test strategy is an outline that describes testing approach of the software development cycle. it is created to inform project manages, testers, and developers about some key issues of the testing objective, methods of testing new functions, total time and resources required for the project, and the testing environment.
- > Design document describe the functionality of the software to be enabled in the upcoming release's corresponding test strategy should be created to test the new feature sets.

8.3 Test Case:-

- A test case is a set of conditions or variable under which a tester will determine whether a system under test satisfies requirements or works correctly. The process of developing test case can also help find problems in the requirements or design of an application.
 - ✓ Formal test case
 - ✓ Informal test case
 - ✓ Typical written test cases
 - ✓ Error Handling

8.3.1 Formal Test Case:-

- > The formal test case is order to fully test that all the requirements of an application are met, there must be at least two test cases for each requirement positive test and one negative test.
- ➤ If a requirement has sub-requirements, each requirement must haveat least two test cases.
- A formal test-case is characterized by a known input and by an expected output, which is worked out before the test is executed.

8.3.2 Informal Test Case:-

- Information is valuable because it can affect behavior, decision, or an outcome.
- ➤ For example, if a manager is told her company's net profit decreased in the past month, he may use this information as a reason to cut financial spending for the next month.
- A piece of information is considered valueless if, after receiving it, things remain unchanged. For a technical definition of information see information theory.

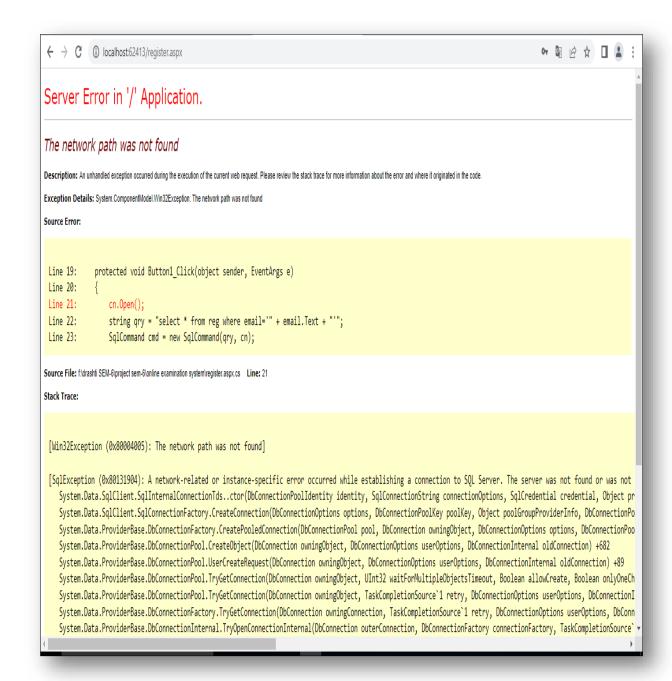
8.3.3 Typical Written Case:-

- A test case is usually a single step, or occasionally a sequence of steps, to test the correct behavior/functionally, features of an application. An expected result or expected outcome is usually given.
- A written test case should also contain a place for the actual result. The larger test case may also contain prerequisite states or steps, and descriptions.
- ➤ These steps can be stored in a word processor document, spreadsheet, database or other common repository.

8.4 Error Handling:-

1) Error:-The network path was not found

Solution:-write correct data source name



9. PROJECT IMPLEMENTATION

- ➤ Project implementation for an online store specializing in software machines such as laptops, phones, tablets, and headphones details the systematic execution of the activities outlined in the business plan.
- ➤ This complex endeavor requires seamless coordination among various functions, including website development, inventory management, and customer service. Effective team oversight is essential to ensure that all tasks align with the project's objectives and budget.
- ➤ Communication strategies must also be established to engage potential customers and promote products effectively.

9.1 User to function:-

➤ A user define function is a programmed routine that has its parameters set by the user of the user of the system.

9.1.1Admin:-

- Admin is the heart of any application. In this project admin can view and manage all the details about the institute.
- > The most important facility is to manage the input validation.
- Another thing is that, material update, delete by the admin and add tricks so user cannot make any change in profile details. This makes the database secure and reliable.

9.1.2 User:-

- ➤ User an individual who uses as computer. This includes expert programmer as well as novice.
- An end user is any individual who runs an application program. User can login in the application with user id, password given after the registration.

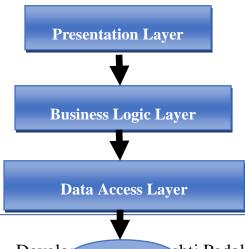
9.2 security features:-

➤ Security is an important aspect of any software components, without reasonable level of security, the availability, the reliability and safety may be compromised if external attack causes some damage to the system.

- As our application web-based so network security is an aspect which should be provided by the servers where the application is deployed.
- ➤ User name and password should not accessible by any other user. Only administrator can delete users.
- Session is created as the user login and session is checked in all the modules. Session destroyed after the user logout to application.

9.3 Coding Standards:-

- > Tier architecture used for coding which makes the functionality easy error face, easy modification.
- ➤ The coding standard is the well-defined and standard style of coding with the help of the coding standard any person can go into any code and figure out what's going on and new people can get up to speed quickly. A coding standard's ways of doing several things such as the way variable are to be named the code is to be a id the comments are to be described, the work of function are to carried out etc.
- The entire query is written as a store procedure which is separately stored for further modification.
- Make a property file for all Queries. This will help in changing query easily without changing you. Java files. Queries can also be reused.
- Data source is physical storage space where they actually data stored.
- ➤ Connection is established in web.config file, developer doesn't require making connection in the entire file, just have to call the connection string of web.config file.
- ➤ Keep few variables at class level along with frequently used DAO and Property files. Make proper usage of CSS files. Use standard Style Class defined in CSS except for exceptional cases.
- ➤ Write proper comments in all files for easy maintenance and understanding. Changes in the files made should also be maintained.



Develog Shti Padaliya.

Data Source

10. LIMITATION AND FUTURE ENHANCEMENTS

10.1 Limitation:-

- Additionally, e-commerce regulations, including consumer protection laws, data privacy policies (like GDPR), and payment security requirements, add a layer of complexity in ensuring compliance across various markets.
- As the product range increases (e.g., laptops, phones, tablets, etc.), providing robust and specialized customer support for technical inquiries becomes essential. However, balancing high-quality support with cost management for this service can be a challenge.
- Managing support across multiple product categories, while maintaining a consistent level of service, requires resources and training to ensure customer satisfaction.

10.2 Enhancements:-

- ➤ In the future, I plan to implement a **Global Positioning System (GPS)** feature to enhance user convenience.
- ➤ In the future, to make the store more accessible to a broader audience, I will work on making the online store language-independent.
- ➤ In the future, I will continuously collect feedback from customers regarding the new features, which will allow for fine-tuning and improvements over time.
- ➤ In the future, Collaborating with tech partners and developers will be key to successfully integrating features like GPS systems and secure payment gateways, as well as ensuring compliance with global regulations.

11. CONCLUSION

- ➤ Online H_S machines online store site manages all software products by which user are login. In this site provide database can be maintained by the H_S machines store. This site is providing all India's machines.
- ➤ In this site only registered users can buy on the products and after the user can buying on the any products.
- After only registered user can fill up their details. Then conformation that they are ready to purchase product. This is very easy to use it is very less time consuming.

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➤ Programming PHP:-

♣ Website:-

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