A PROJECT REPORT

ON

AMD SemiConductors

Submitted

By

C V Sreyas DeviPrasad (En.NO - 03051700083)

In fulfilment for the award of the degree

Of

Bachelor of Computer Application

In

Computer Department

V.J. Modha Collage Porbandar
October 2019



ACKNOWLEDGEMENT

The successful and final outcome of this Project required lots of guidance and assistance from many people and I am extremely fortunate to have completed my Project work. Whatever I have done is only due to such guidance and assistance and I should not forget to thank them. I respect and thank **Mr. Thakrar Zalak** at first place for giving me an opportunity to do this Project and providing me support and guidance through which I could complete the Project in time. I am extremely grateful to him for providing such co-operation.

This Project also could not be completed without the help of my parents. I would also like to thank my friends for their most valuable effort to help me. Last but not the least; I would once again like to express my gratitude to my friends, teachers, my parents for their support and willingness to spend their important time with me.

It is our great pleasure to represent our project as one Desktop application titled "AMD SemiConductors" and which we conceived in the 5th semester of BCA affiliated with BKNMU (Bhakt Kavi Narshinh Mehta University).

We are also thankful to the BKNMU (Bhakt Kavi Narshinh Mehta University) for including this project development subject in our syllabus. We got a golden opportunity to test and implement our creativity and programming skill simultaneously. Lastly, we would like to extend our sincere thanks to our advisors, classmates as well as all the books and websites.

Index

Sr NO	Topic Name	Page No
Chapter-1	INTRODUCTION	5
	1.1 Purpose	
	1.2 Scope	
	1.3 Technology & Literature Review	
Chapter-2	SYSTEM ANALYSIS	12
	2.1Problem Definition	
	2.2Process Model	
	2.3Requirement Analysis	
	2.4SRS	
	2.5Grant Chart	
Chapter-3	SYSTEM DESIGN	23
	3.1 Data Flow Diagram	
	3.2 E-R Diagram	
	3.3 Use Case Diagram	
Chapter-4	DATA DICTIONARY	29
	4.1 Data Dictionary	
Chapter-5	INPUT AND OUTPUT DESIGN	35
	5.1 Admin Layout	
	5.2 Client Layout	
Chapter-6	LIMITATIONS AND FUTURE ENHANCEMENT	51
	6.1 Limitations	
	6.2 Further Enhancement	
Chapter-7	CONCLUSION	53
_	7.1 Conclusion	
	7.1 Conclusion 7.2 Advantages	
Chapter-8	BIBLIOGRAPHY	55
Chapter-9	REFERENCES	57

Abstract:

Project Type: Website

Project Title: AMD Semiconductors

Shop Name: Advanced Micro Devices

Project Language: PHP accompanied by HTML and CSS

Database: MySQL

Description:

This is a website for the company named Advanced Micro Devices, commonly known as AMD or the 'Red Team'. Recently AMD launched their Ryzen 3000 Series Processors and the new Radeon 5000 series GPUs. This website will have the Products listed.

An Admin Panel, Feedback form, Product Listing, etc have been included in this website.

Advantages:

- Listing of all the CPUs and GPUs
- Admin Panel to manage the Products and News
- Links to buy the Products

AMD (Advanced Micro Devices) Semiconductors

CHAPTER NO: 1 INTRODUCTION

- 1.1 Purpose
- 1.2 Scope
- 1.3 Technology and Literature Review

1.1 Purpose of the Website

The main purpose of this website is to list out the products to the masses via internet. This will help the company to attract potential customers. This website can also be used as an advertising platform. This website will give an opportunity to the company to present their products to the masses and potentially increase the sales of the company.

In this website the company can list out their products and list its specifications. This would help any potential customers to read and determine what to buy and what not to buy.

By covering new launches and listing them on the website, people can sit at their home and have a look at the products of the company and make a decision to buy it or not. Listing out the specs of the products will help the customers/users/reviewers to compare the products with the competitors and agree on which one is better than the others.

1.2 <u>Scope</u>

This website may help to increase the awareness of the company and its products. This will in turn help the company to increase their sales. With the help of this website, the company can determine what users/clients like based on the traffic and page visits.

Goals of the system:

- List out the products
- Advertise the products
- List out the features of the products
- Showcase the new products
- A way to communicate with the masses
- Easy access to the information

1.3 Technology & Literature Review

Front End:

> HTML:

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

> CSS:

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

> JavaScript:

JavaScript, often abbreviated as JS, is a high level, interpreted scripting language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it.

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles. It has APIs for working with text, arrays, dates, regular expressions, and the DOM, but the language itself does not include any I/O, such as networking, storage, or graphics facilities. It relies upon the host environment in which it is embedded to provide these features.

Initially only implemented client-side in web browsers, JavaScript engines are now embedded in many other types of host software, including server-side in web servers and databases, and in non-web programs such as word processors and PDF software, and in runtime environments that make JavaScript available for writing mobile and desktop applications, including desktop widgets.

> jQuery:

jQuery is a JavaScript library designed to simplify HTML DOM tree traversal and manipulation, as well as event handling, CSS animation, and Ajax. It is free, open-source software using the permissive MIT License. As of May 2019, jQuery is used by 73% of the 10 million most popular websites. Web analysis indicates that it is the most widely deployed JavaScript library by a large margin, having 3 to 4 times more usage than any other JavaScript library.

jQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction

and animation, advanced effects and high-level, themeable widgets. The modular approach to the jQuery library allows the creation of powerful dynamic web pages and Web applications.

Back End:

> PHP:

PHP: Hypertext Preprocessor (or simply PHP) is a general-purpose programming language originally designed for web development. It was originally created by Rasmus Lerdorf in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor.

PHP code may be executed with a command line interface (CLI), embedded into HTML code, or used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in a web server or as a Common Gateway Interface (CGI) executable. The web server outputs the results of the interpreted and executed PHP code, which may be any type of data, such as generated HTML code or binary image data. PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control.

➤ MySQL:

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of cofounder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.

AMD (Advanced Micro Devices) Semiconductors

MySQL is a component of the LAMP web application software stack (and others), which is an acronym for Linux, Apache, MySQL, Perl/PHP/Python. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, MediaWiki, Twitter, and YouTube.

AMD (Advanced Micro Devices) Semiconductors

CHAPTER NO: 2

SYSTEM ANALYSIS

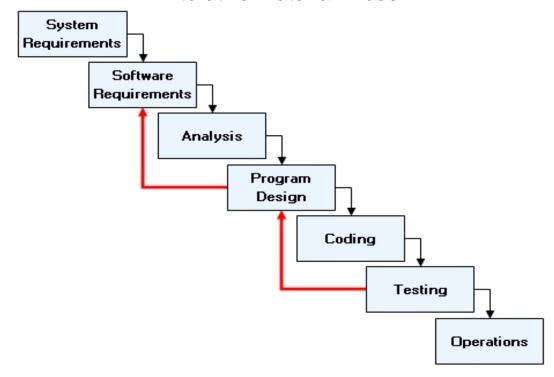
- 2.1 Problem Definition
- 2.2 Process Model
- 2.3 Requirement analysis
- 2.4 SRS
- 2.5 Grant Chart

2.1 Problem Definition

To increase the sales and awareness about the product of the company, in the masses, having a website is kind of mandatory. Having a website means that the people can look up your products online on your website and determine whether they need it or not. Any company that is related to the computing industry, should have their own attractive website.

2.2 Process Model

Iterative Waterfall Model



- Advantages of Iterative Waterfall Model
- 1. Simple and Easy to Understand
- 2. Each Phase has well defined input and output
- 3. It works well for small project where requirements are clear and well understood
- 4. It divides complex tasks into more manageable small tasks
- Application of Iterative Waterfall Model
 - 1. When requirements are clear and fixed
 - 2. Product Definition is Stable & Technology is understood
 - 3. When project is short

• Why Iterative Waterfall Model??

The Incremental Model is an evolution of the waterfall model, where the waterfall model incrementally applied. The Incremental Process Model combines elements of the linear sequential model (applied repetitively) with the iterative philosophy of prototyping.

2.3 Requirement Analysis

Hardware Requirements

• Operating System : 32 bit / 64 bit

• RAM : 512 MB or More

• Processor : any x86 CPU

Software Requirements

• Front End Tool : Notepad++, Visual Studio Code, Chrome,

Edge, Mozilla FireFox

Back End Tool : PhpMyAdmin

• Development Tool : Notepad++, Visual Studio Code, XAMPP

Server

Supported Operating Systems: Any OS that can run Browsers like

Mozilla Firefox, Edge, Chrome

2.4 System Requirement Specification

REQUIREMENT SPECIFICATION OF USER 1: ADMIN

R1: Login

R2: Manage CPU

R3: Manage GPU

R4: Manage News

R5: Manage Feedback

R6: Manage Users

REQUIREMENT SPECIFICATION OF USER 2: Client

R1: Login

R2: Register

R3: Give Feedback

R4: View CPU

R5: View GPU

R6: View News

SYSTEM REQUIREMENT SPECIFICATION FOR ADMIN

R1: Login

Description: This page will authenticate the admin user.

State: The beginning page for the admin panel. Here the Username and Password is requested.

Input: Username and Password are the Input.

Output: The result of authentication process.

Process: The user's input will be matched in the database and then admin field will be checked to see if the user is admin or not.

R2: Manage CPU

Description: Using these pages, the admin can manage the CPUs listed in the website.

State: Is the admin is logged in, then the admin can insert or update or delete a CPU.

Input: Insert or Delete or Update of the CPU

Output: The modified records.

Process: Depending on the selection of the user, the records will be altered or inserted.

R3: Manage GPU

Description: Using these pages, the admin can manage the GPUs listed in the website.

State: Is the admin is logged in, then the admin can insert or update or delete a GPU.

Input: Insert or Delete or Update of the GPU

Output: The modified records.

Process: Depending on the selection of the user, the records will be altered or inserted.

R4: Manage News

Description: Using these pages, the admin can manage the News listed in the website.

State: Is the admin is logged in, then the admin can insert or update or delete a News.

Input: Insert or Delete or Update of the News

Output: The modified records.

Process: Depending on the selection of the user, the records will be altered or inserted.

R5: Manage Feedback

Description: Using this page, the admin can manage the Feedbacks given by the registered users.

State: Is the admin is logged in, then the admin can view and delete the feedbacks.

Input: Delete a Feedback record

Output: The modified records.

Process: Depending on the selection of the user, the records will be deleted.

R6: Manage Users

Description: Using this page, the admin can manage the Users.

State: Is the admin is logged in, then the admin can view and delete.

Input: Delete a User or make it admin

Output: The modified records.

Process: Depending on the selection of the user, the records will be altered or

deleted.

SYSTEM REQUIREMENT SPECIFICATION FOR CLIENT

R1: Login

Description: This page will authenticate the user.

State: This page is used when someone wants to give feedbacks. Here the Username and Password is requested.

Input: Username and Password are the Input.

Output: The result of authentication process.

Process: The user's input will be matched in the database to authenticate the user.

R2: Register

Description: This page will register a new user.

State: This page contains various fields for a user to fill up to register themselves with the website.

Input: First Name, Last Name, Username, Password, Confirm Password, Mobile Number, E-mail and Date of Birth.

Output: The login page.

Process: The inputs will be inserted to the database if there is no identical username.

R3: Give Feedback

Description: This page will allow the registered User to leave a feedback.

State: This page is only accessible to the registered users. This is the last module, but can also be accessed first.

Input: The feedback of the user.

Output: Telling the user that the feedback was noted,

Process: The user's feedback is only taken; the name and the email and others are fetched from the logged in user.

R4: View CPUs

Description: These pages will showcase the CPUs.

State: These pages are accessible without logging in.

Input: Nothing

Output: CPU lists.

Process: The CPUs are retrieved from the database and displayed

R5: View GPUs

Description: These pages will showcase the GPUs.

State: These pages are accessible without logging in.

Input: Nothing

Output: GPU lists.

Process: The GPUs are retrieved from the database and displayed

R6: View News

Description: These pages will showcase the News.

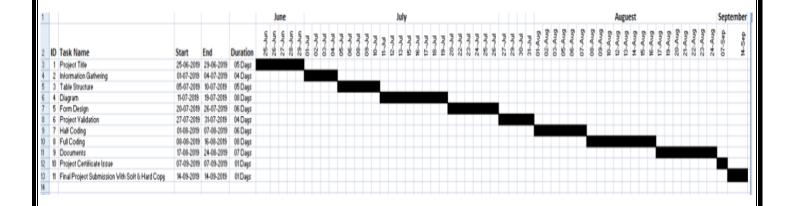
State: These pages are accessible without logging in.

Input: Nothing

Output: News list.

Process: The News are retrieved from the database and displayed

2.5 Grant Chart

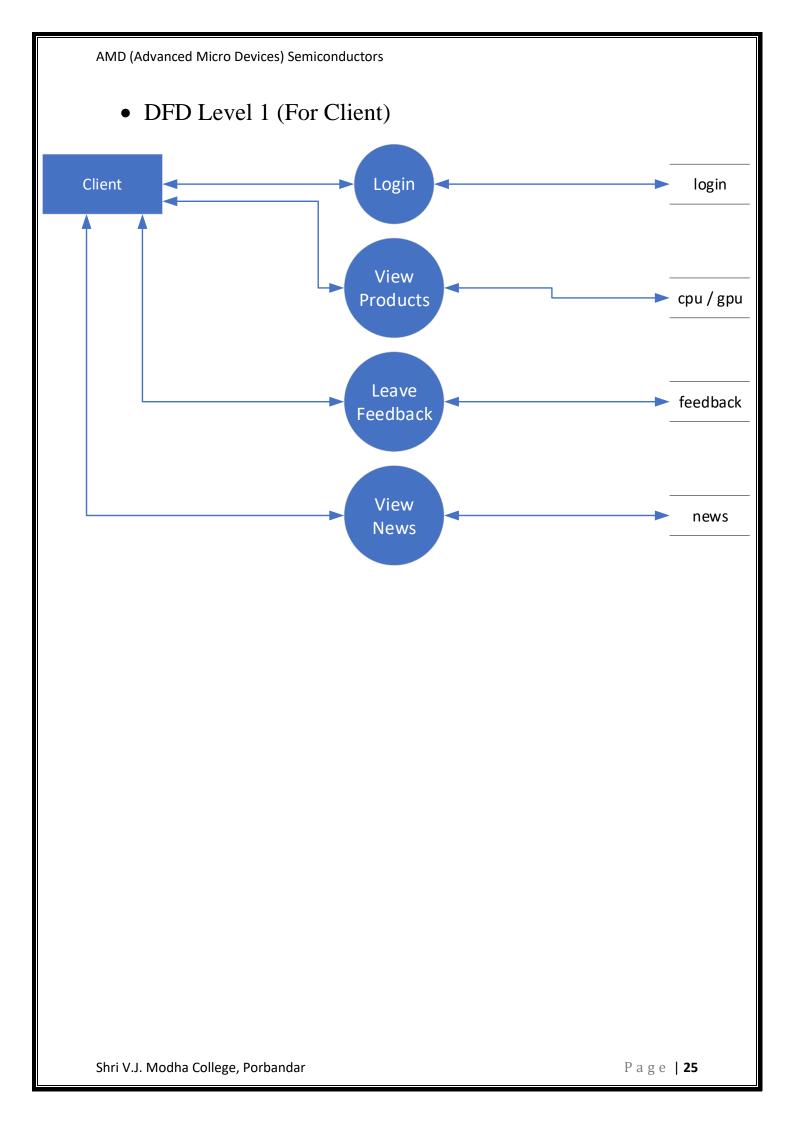


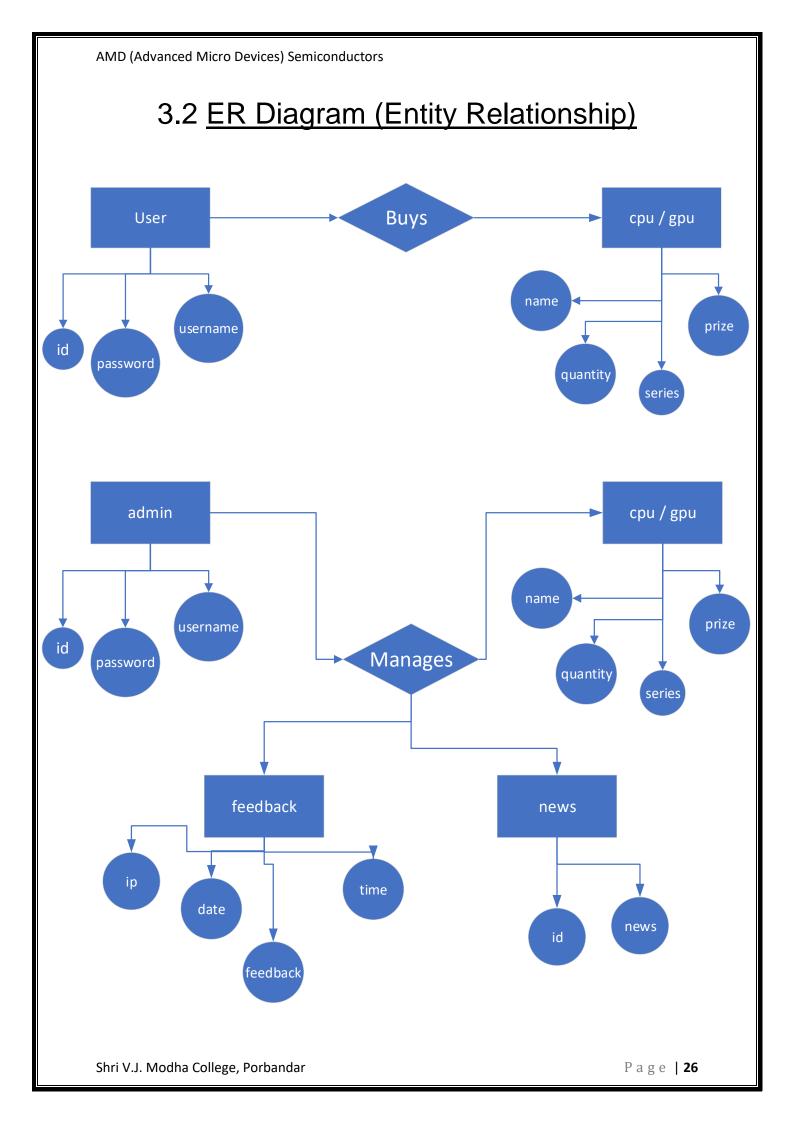
AMD (Advanced Micro Devices) Semiconductors

CHAPTER NO: 3

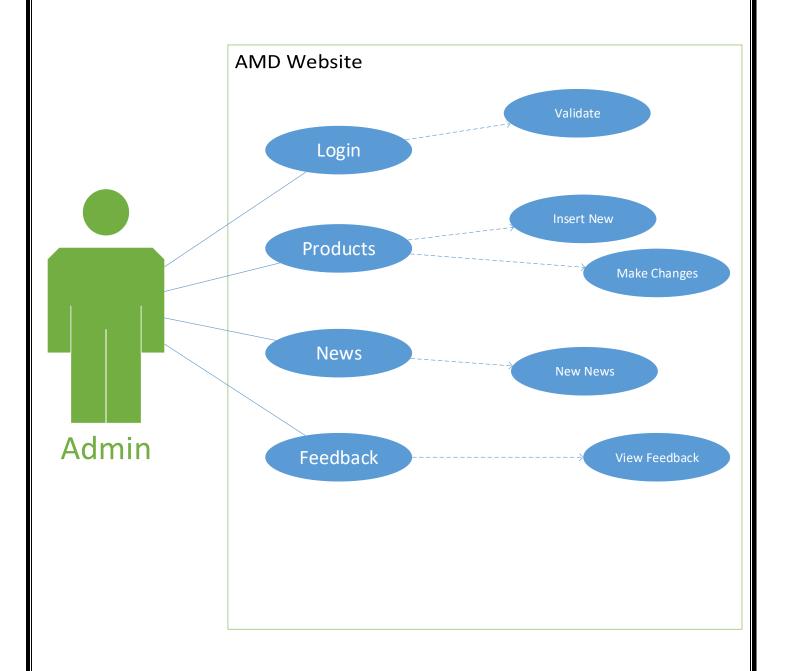
SYSTEM DESIGN

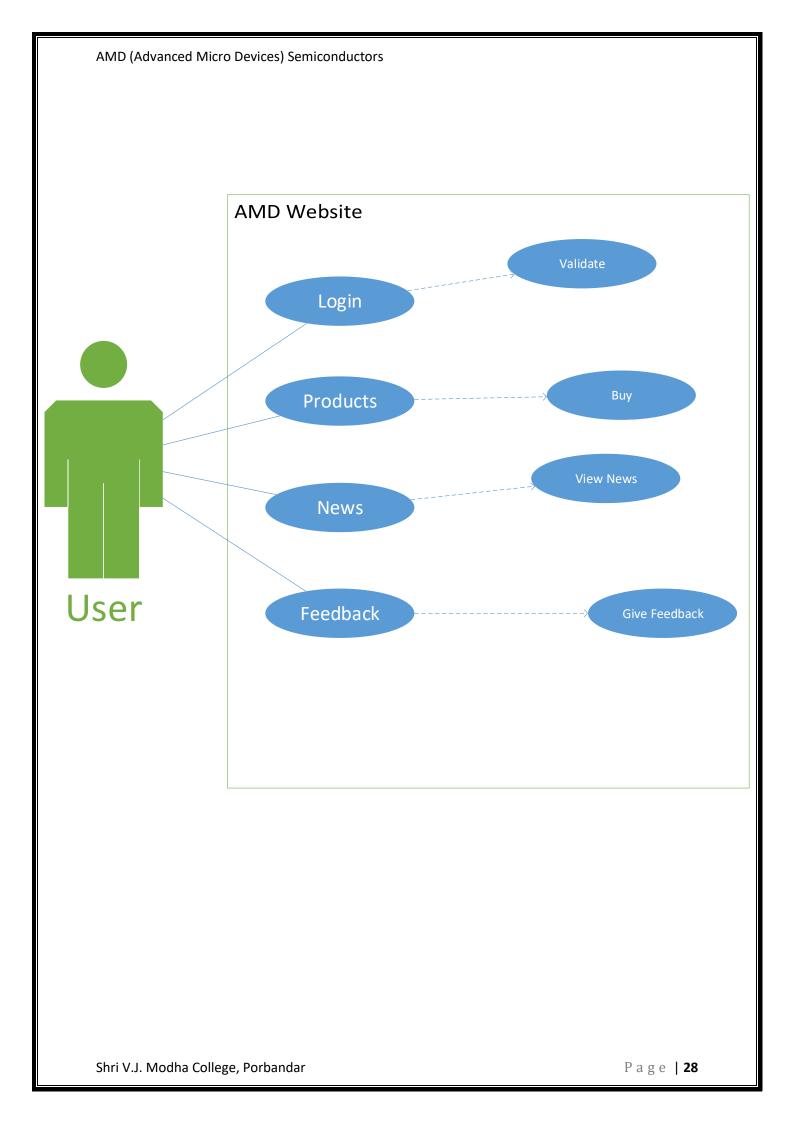
- 3.1 Data Flow Diagram
- 3.2 E-R Diagram
- 3.3 Use Case Diagram





3.3 ER Diagram (Entity Relationship)





Aicro Devices) Semiconductors
CHAPTER NO: 4
DATA DICTIONARY
4.1 Data Dictionary

4.2 Data Dictionary

Table Name – "cpu"

Field Name	Type/Size	Description
no	int/11	Identification Number
series	varchar/20	This contains the series name of the CPU (eg- Ryzen 5, Ryzen 7)
name	varchar/50	Contains the name of the CPU (eg-2700, 2700X)
cores_threads	varchar/10	Contains the number of cores and threads of the CPU.
stock_freq	varchar/11	Shows the stock speed of the CPU.
boost_freq	varchar/11	Shows the boost speed of the CPU
transistor_size	varchar/11	Sows the size of the transistor in nanometer (eg-7nm)
total_cache	varchar/11	Shows the total cache memory of the CPU
11	varchar/11	Amount of Level 1 Cache
12	varchar/11	Amount of Level 2 Cache
13	varchar/11	Amount of Level 3 Cache
cooler	varchar/40	Names the included cooler
TDP	varchar/11	Show the Boost Clock TDP
prize	int/11	Launch Prize

Field Name	Type/Size	Description
discount	int/11	Discounts when needed
url	varchar/10000	URL of the amazon.in search result
type	varchar/10	Shows if the Product is a server grade or for gamers
img	varchar/10000	This field contains the url of the image of the cpu

Description:- This table is used to store the details of the CPUs.

Table Name – "gpu"

Field Name	Type/Size	Description
no	int/11	Identification Number
series	varchar/50	This contains the series name of the GPU (eg- Radeon, Navi)
name	varchar/50	Contains the name of the GPU (eg-RX580, RX 560)
compute_units	varchar/11	Contains the number of Compute Units
stream_processors	varchar/11	Contains the number of Stream Processors
texture_units	varchat/11	Contains the number of Texture Units
stock_freq	varchar/20	Shows the stock speed of the GPU

Field Name	Type/Size	Description
boost_freq	varchar/20	Shows the boost speed of the GPU
game_freq	varchar/20	Show the Special Gaming Clock Speed
transistor_size	varchar/11	Sows the size of the transistor in nanometer (eg-7nm)
transistor_count	varchar/20	Shows the number of Transistors
output	varchar/200	Show the Output Ports of the GPU
memory_type	varchar/10	Shows the Memory Type
VRAM	varchar/10	Shows the amount of the Video RAM
prize	int/11	Launch Prize
discount	int/11	Discounts when needed
url	varchar/10000	URL of the amazon.in search result
type	varchar/10	Shows if the Product is a server grade or for gamers
img	varchar/10000	This field contains the url of the image of the gpu

Description:- This table is used to store the details of the GPUs.

Table Name – "feedback"

Field Name	Type/Size	Description
no	int/11	Identification Number
name	varchar/100	Name of the User

Field Name	Type/Size	Description
email	varchar/200	Email of the User
phone	int/10	Phone Number
date	varchar/100	Date of time post
time	varchar/100	Time of the post
in	varchar/200	IP of the User
ip	Valicitality 200	leaving the post
feedback	varchar/10000	Feedback of the
TEEUDACK	Val.Clial./ 10000	User

Description: - This table is used to store the feedbacks.

Table Name – "index_page_visits"

Field Name	Type/Size	Description
sr	int/11	Identification Number
ip	varchar/255	IP of the visitor
time	varchar/100	Time of the visit
date	varchar/100	Date of the visit

Description: This table is used to store the IP address, date and time of the clients visiting the index.php page.

Table Name - "login"

Field Name	Type/Size	Description
no	int/11	Identification Number
first_name	varchar/100	First Name
last_name	varchar/100	Last Name
username	varchar/30	Username
password	varchar/30	Password
admin	tinyint/1	To check if the user is admin or not
mobile_number	varchar/100	Mobile Number
email	varchar/255	Email
dob	varchar/100	Date of Birth

Description:- This table is used to store the details of Users.

Table Name – "news"

Field Name	Type/Size	Description
id	int/11	Identification Number
name	varchar/20	Name of the User who posted
about	varchar/100	About what the news is
content	varchar/10000	The actual news
date	varchar/100	Date of the Post
time	varchar/50	Time of the Post
ip	varchar/255	IP of the User who posted

Description:- This table is used to store the posts of the admin.

AMD (Advanced Micro Devices) Semiconductors

CHAPTER NO: 5 NPUT AND OUTPUT DESIGN

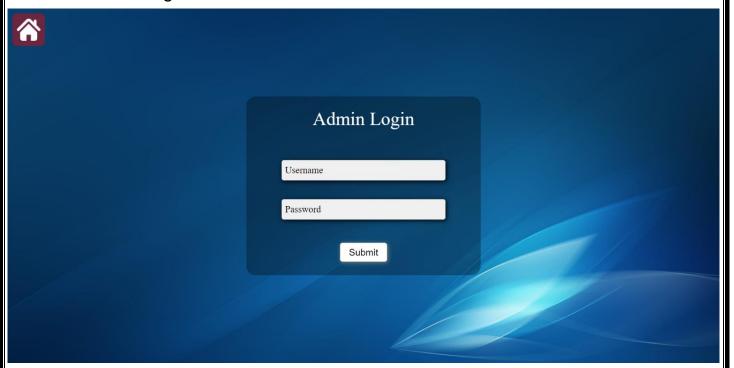
5.1 Admin Layout

5.2 Client Layout

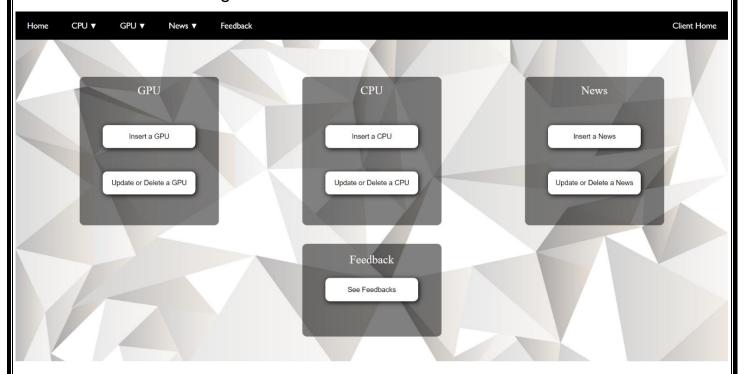
AMD (Advanced Micro Devices) Semiconductors

5.1 Admin Layout

1. Admin Login



2. Admin Index Page



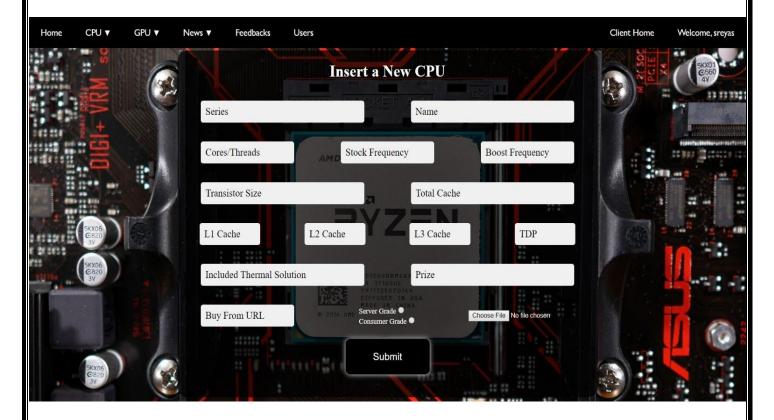
3. GPU Insert



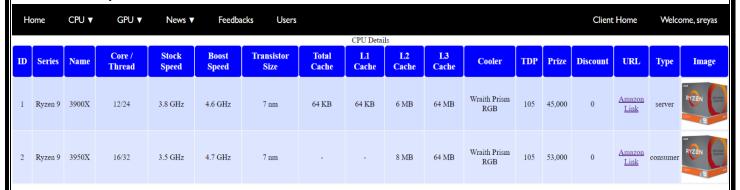
4. Update/Delete a GPU



5. CPU Insert



6. Update/Delete a CPU







7. News Insert



8. Update/Delete News



9. View/Delete Feedbacks



10. Manage Users



5.2 Client Layout

1. Home Page



Advanced Micro Devices (AMD)



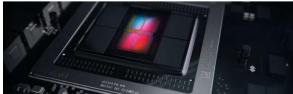
Our Offerings





Our Newest Addition in CPU Lineup

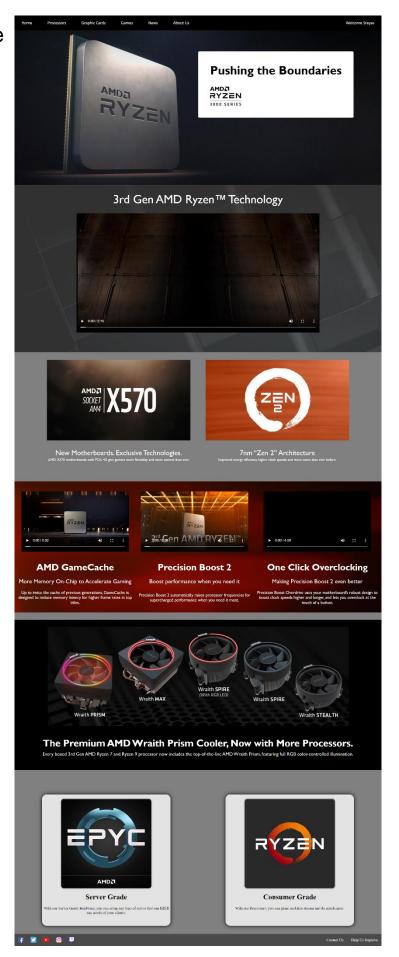




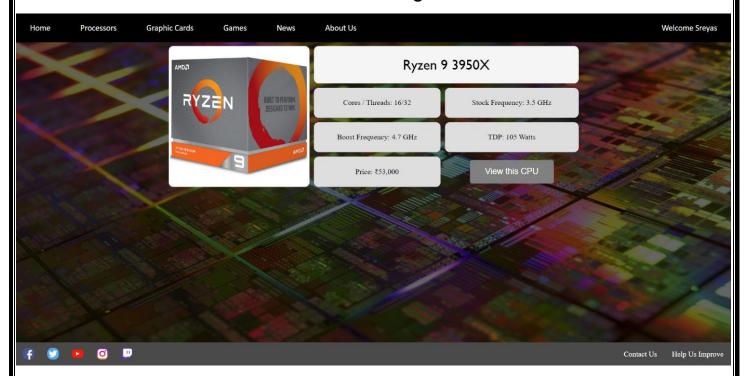
Our Newest Addition in GPU Lineup



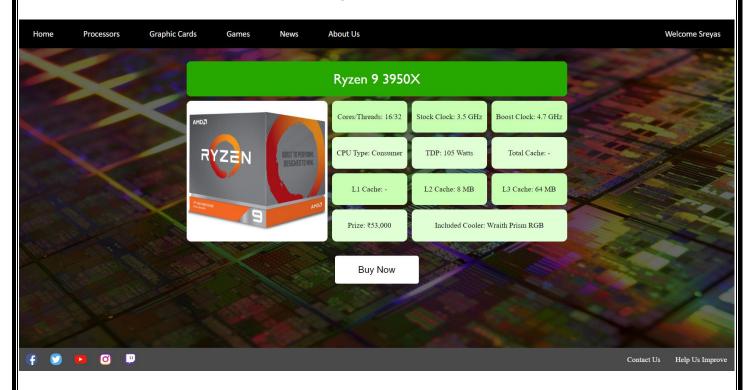
2. Processors Page



3. Consumer/Server Grade CPU Page



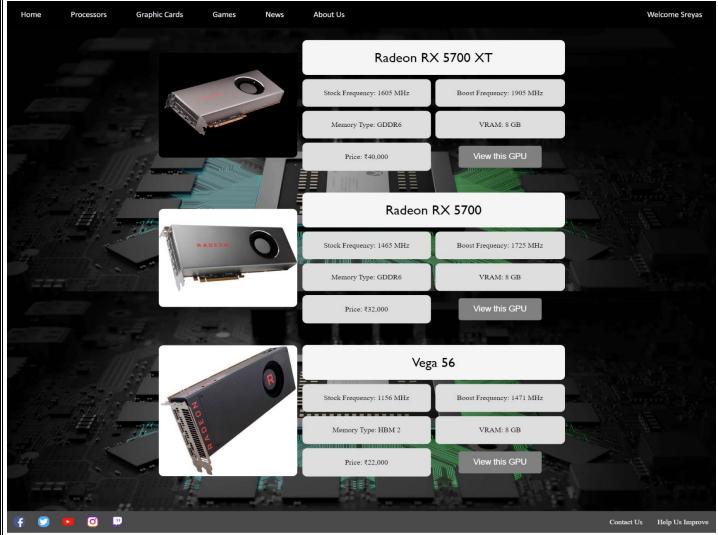
4. Detailed CPU Display Page



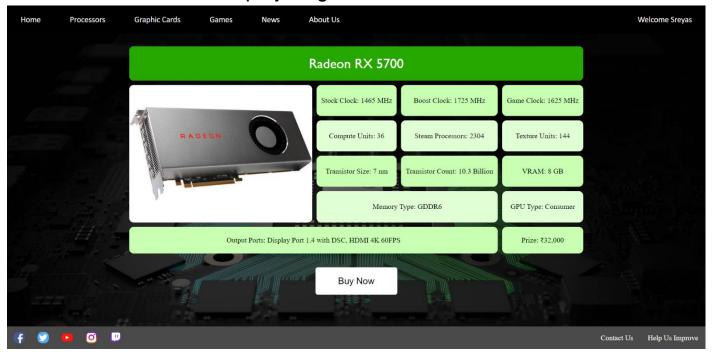
5. Graphic Card Page



6. Consumer/Server Grade GPU Page



7. Detailed CPU Display Page



8. Games Page



Sera is crumbling, your enemies uniting! Arm your squad with AMD!













Arm yourself with AMD Radeon graphics and become an Elite Spec Ops soldier.













Gear up to Save DC with AMD Radeon™ graphics and Ryzen™ processors.















You know what to do..!





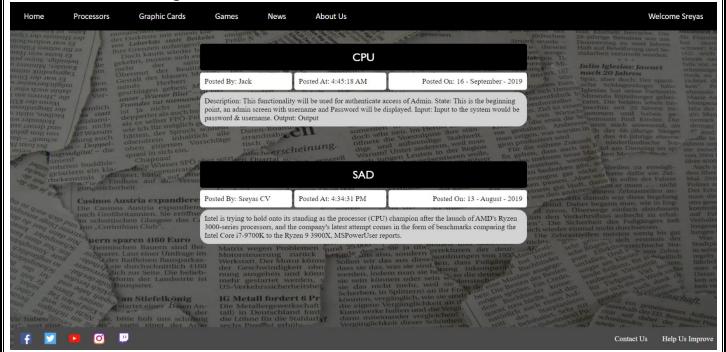








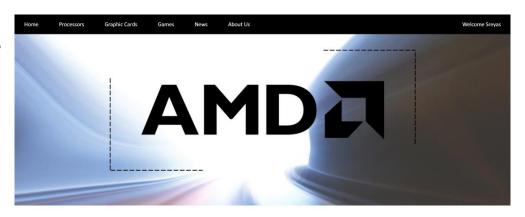
9. News Page



10. Login Page



11. About Us



AMD

Founded in 1969 as a Silicon Valley start-up, the AMD journey began with dozens of employees focused on leadingedge semiconductor products. From those modest beginnings, AMD has grown into a global company of 10,000 people, achieving many important industry firsts along the way. AMD today develops high-performance computing and visualization products to solve some of the world's toughest and most interesting challenges. There has never been a better time to be in the semiconductor industry, and we are ready to tackle the next 50 years with high-performance computing and graphics solutions that transform all of our lives.



Ryzen

With our state of the art 7nm Processors, we plan to get computing to as many as people we can at an affordable rates. Our high performance CPUs can handle your day to day life works in a breeze and your heavy tasks, without breaking a sweat. All of our processors are Unlocked so that everyone can just Overclock without paying extra for an unlocked CPU. With our Precision Boot 2 Technology, you can get more power when needed, in a moment.



Radeon

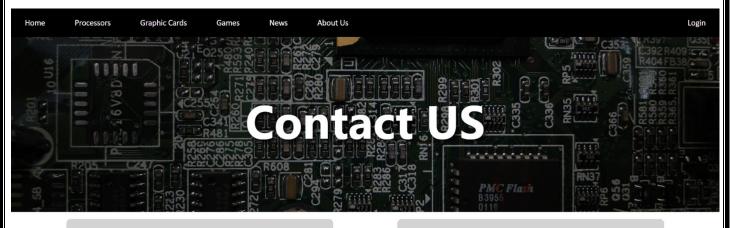
With out Industry leading 7nm Graphic Cards, the Gamers and the Content Creators can get the most. With our high performance Graphic Cards, the Gamers can get the best visuals with the highest FPS in their games to give them the edge in the game. Let it be an e-sports title or an Open World title, our Graphic Cards can give you the highest details and FPS in your games.



12. Register Page



13. Contact Us Page



1800 2525 854

Call Us Anytime... We'll be more than happy to serve you. Address: New Hamshire Block No-45, Taliban HQ, Pakistan

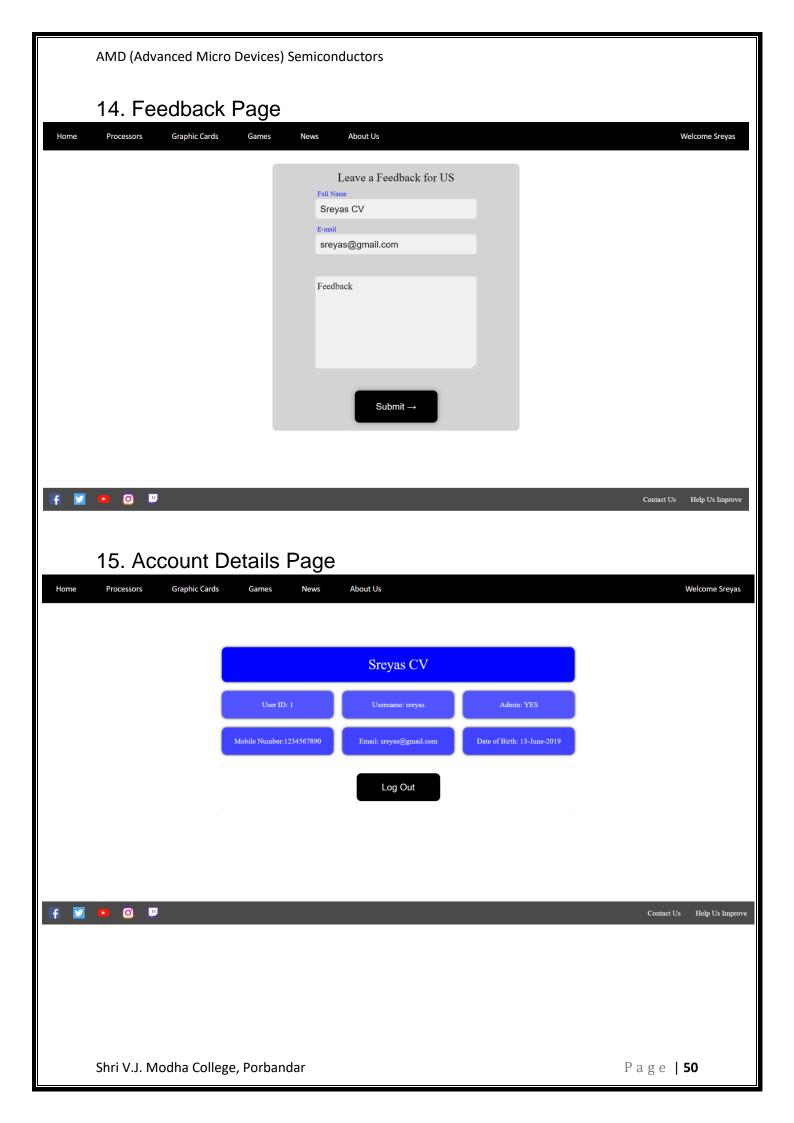








Contact Us Help Us Improve



CHAPTER NO: 6 LIMITATIONS AND FUTURE ENHANCEMENTS

- 6.1 Limitations
- 6.2 Future Enhancements

6.1 Limitations

- No backup features.
- No Individual end pages for product category.
- Can't directly sell the products.
- Not tracking users like Google and Facebook does.
- No User specific functionalities.
- No ads in the website
- No email newsletters.

6.2 Future Enhancements

- Incorporate a redundant server for the data
- Include a different product display page for different generation of the products
- Sell the products here on the website
- Incorporate email newsletters

CHAPTER NO: 7

CONCLUSION

- 7.1 Advantages
- 7.2 Conclusion

7.1 Advantages

- User Friendly UI
- Easy Navigation
- · Lists all products
- A way of advertisement
- Convenient for a user to view the website on their device
- Fast response of the server due to less complications in the software

7.2 Conclusion

This website is a perfect package for a semiconductor based company. Using this website, the company can showcase their products to the masses and attain more attention and potentially attract more customers. This website is convenient for the users to stay at the home or look up things on the go without visiting stores and waste time on travelling.

CHAPTER NO: 8 BIBLIOGRAPHY	AMD (Advance	d Micro Devices) Semiconductors	
		CHADTER NO. 2	
BIBLIOGRAPHY			
		BIBLIOGRAPHY	

Shri V.J. Modha College, Porbandar

Page | **55**

8 Bibliography

PHP – for server side scripting

JavaScript – for client side scripting

jQuery – as an alternate for JavaScript

CSS – to style the website

AMD (Advanced Micro Devices) Semiconductors
CIIADTED NIO. O
CHAPTER NO: 9
REFERENCES

Shri V.J. Modha College, Porbandar

Page | **57**

References

We are really thankful to our guider Mr. Zalak Thakrar to guide us and inspire us. We also Thankful to the whole staff of computer Department to gives us a huge support in our project.

Sites:

www.stackoverflow.com

www.codepen.io

www.w3schools.com

www.github.com

www.wikipedia.com