

InfoNote

A PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

In

Computer Science and Engineering (Core)



SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

VIT BHOPAL UNIVERSITY

KOTHRIKALAN, SEHORE

MADHYA PRADESH - 466114

**A PROPOSED DESIGN AND IMPLEMENTATION OF WEBSITE
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BONAFIDE CERTIFICATE

Certified that this project report titled **“InfoNote”** is the Bonafide work of
“Devashish Mishra (20BCE10473), Sanskar Sharma (20BCE10522),
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who carried out the project work under my supervision. Certified further
that to the best of my knowledge the work reported at this time does not form
part of any other project/research work based on which a degree or award
was conferred on an earlier occasion on this or any other candidate.

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Abstract

InfoNote is an online free content website which is quick responsive and easy to access created to gain knowledge which could help them change the world.

InfoNote help the people of any generation to gain or enhance their skills or knowledge about programming. InfoNote also gives the user a section where they can suggest if any changes need to be done. If the user feel that information provided is not sufficient and they want some more information to be added they can contact us through the contact information provided on the contact section.

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Chapter- 1

Project Description and Outline

1.1 Introduction

This report proposes the website named “InfoNote”. This is an online free content website which is quick responsive and easy to access created to gain knowledge. InfoNote help the people of any generation to gain or enhance their skills or knowledge about programming. This website is designed in such a way that is easy to understand and can help a lot of people in their journey of being a programmer at beginner level to an advanced level programmer.

1.2 Motivation for the work

Although we can find many other websites which provide information about programming on a basic level to advanced level, the main motivation was to just provide knowledge about programming which can help them gain knowledge, enhance their knowledge, enhance their programming skills which they can use in different working sectors and help to develop different technologies and help change the world.

1.3 Problem Statement-

Web design encompasses many different skills and disciplines in the production and maintenance of websites. The different areas of web design include web graphic design; user interface design (UI design); authoring, including standardized code and proprietary software; user experience design (UX design); and search engine optimization. Often many individuals will work in teams covering different aspects of the design process, although some designers will cover them all. The term "web design" is normally used to describe the design process relating to the front-end (client side) design of a website including writing markup. Web design partially overlaps web engineering in the broader scope of web development.

1.4 Objective of work-

The main objective of creating this project is to create a website which is user friendly, easy to use, easy to access and fulfil whatever they would expect to find when they visit our website.

1.5 Organization of project- the project has been organized in the following sections.

- Home page
- About us page
- Blog page
- Comment section
- Contact us page
- Mail
- HTML page
- Data page
- Examples
- Output

1.6 Summary- the website is designed in a way which can be easy to access and easy to use.

Chapter-2

RELATED WORK INVESTIGATION

2.1 WEB DEVELOPMENT

Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration, and e-commerce development.

Among Web professionals, "Web development" usually refers to the main non-design aspects of building Web sites: writing markup and coding. Web development may use content management systems (CMS) to make content changes easier and available with basic technical skills.

For larger organizations and businesses, Web development teams can consist of hundreds of people (Web developers) And follow standard methods like Agile methodologies while developing Web sites. Smaller organizations may only require a single permanent or contracting developer, or secondary assignment to related job positions such as a graphic designer or information systems technician. Web development may be a collaborative effort between departments rather than the domain of a designated department. There are three kinds of Web developer specialization: front-end developer, back-end developer, and full-stack developer. Front-end developers are responsible for behavior and visuals that run in the user browser, while back-end developers deal with the servers.

2.2 EXISTING METHODS

When it comes to developing websites, there's not one single method or approach that IT companies can use. There are actually several different website methodologies that development teams can turn to, each with its own pros, cons, and unique features.

2.2.1 WATERFALL

Waterfall is arguably the most traditional of the website methodologies, originating back in 1970. It's the classic form of web development that you may already be familiar with, in which the process is broken down into individual steps or stages that are completed one by one.

It's a very linear method, with all of the objectives and ideas laid out at the start before being implemented in regimental, structured order. Therefore, when using the Waterfall method, it's important to plan out the full project before the web development starts and then stick to that plan as closely as possible throughout each stage, because difficulties can arise if any deviations occur or if unexpected changes need to be made.

Because of this, Waterfall is most commonly used for small-scale and relatively simple projects with minimal risk of any deviations. It's less well-suited for longer or ongoing projects.

2.2.2 AGILE

Agile is, in many ways, the opposite to the Waterfall method. With Agile, which has been around since 2001 and was originally designed to improve productivity in the field of software development, there aren't any set steps or stages.

Instead, this time-oriented methodology is focused on creating a project gradually over time, with adaptability and the possibility for change built directly into the process. This is very appealing in today's world, with 95% of organizations practicing Agile website methodologies.

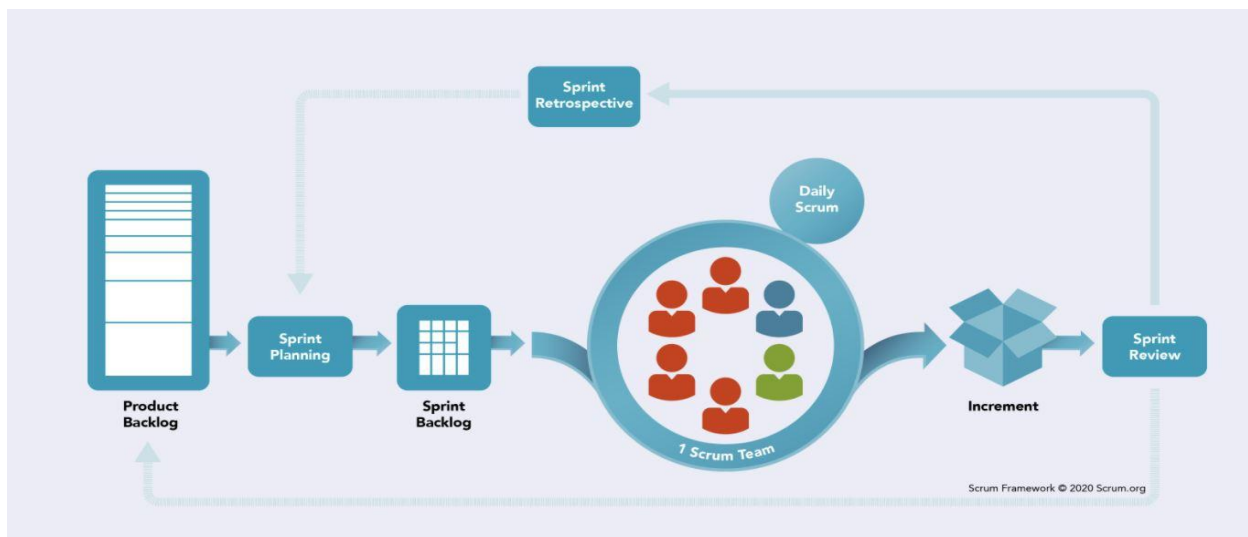
This is an ideal methodology to use for longer projects or tasks that may not have a clearly defined end goal to begin with and are subject to changes and improvements over time.

It's all about adaptability and flexibility, but it's important to ensure that the process doesn't go on endlessly, otherwise, there's a risk of the product constantly changing and never actually being finalized.

2.2.3 SCRUM

Scrum is a website methodology that has a lot in common with Agile, initially used in the 1990s for product development and later used for web and software development too.

In the Scrum system, a lot of the responsibility for how the project unfolds is on the development team itself, with the client actually having minimal involvement. This is a method that offers many of the same advantages as the Agile system and is useful for web engineering teams that prefer to work more freely and use their own best methods to deliver results, rather than adhering to strict limits and specifications. It's also useful for clients who don't want to busy themselves with too much paperwork or involvement in the process.



The client doesn't have to fill in documents or create reams of specification paperwork; instead, they simply state what they want from the project and then let the team get to work.

The Scrum team always has a "Scrum Master", who serves as a coach or overseer for the project. There's also a "Product Owner", who is a representative from the

client's side and is responsible for ensuring that their vision is implemented during development.

With this method, regular Scrum meetings are held with both the Scrum Master and Product Owner in attendance. During these meetings, the team discusses the work done so far and the best next steps. Like with the Agile method, time is divided into sprints, and at the end of each sprint, the whole group gathers again to discuss ways to make the next sprint better and more efficient.

2.2.4 KANBAN

The Kanban website methodology was developed in Japan at the Toyota company and is named after the Japanese words "Kan", meaning visible, and "Ban", meaning board or card.

This system is all about visualization. It involves the creation of a "Kanban board" which is regularly updated over time to show progress and track the project from start to finish.

The board can be shared across different teams and individuals and provides a useful way for everyone to remain up to date and aware of the current stage of the project, as well as what has been done so far and what still remains to be accomplished.

In practice, this method has a lot in common with Scrum and Agile methodologies, except there aren't any clearly defined roles like "Scrum Masters" within the group and work isn't divided into sprints. Instead, work is delivered continuously and changes can be made at any time during the process.

This can be a very useful methodology due to the visual benefits of the Kanban board itself, working well for projects that are likely to undergo various changes and evolutions as they proceed.

Chapter- 3

Requirement Artifacts

3.1 Introduction

Designing a webpage requires a lot of content, images, data and many more. And all this was required to design the webpage InfoNote. It contains much data and information to serve the agenda of teaching HTML. It also contains many images for the same purpose and also to make it attractive. But a webpage is successful if one uses a good software and keeping in mind about the memory size.

3.2 Software requirements

To design InfoNote following softwares are used:

- Visual Studio code
- Chrome browser
- Notepad
- MS word

3.3 Specific project requirements

3.3.1 Data requirement

To design a web page, developer has to decide the amount of correct data that is sufficient to be included in the web page. He has to a lot of research for the correct data with correct and good language.

Similarly, **InfoNote** provides the information about the different tags of HTML. Thus, the data must be easy to understand, correct and sufficient to learn the working of a particular tag. Beginners can learn through the definition and theory provided for each tag as well as they can learn in a practical way by observing the

output of example of each tag. They can also change the code in the compiler but it will not be affected for another user. Through all this, users can learn the programming language as InfoNote provides sufficient and correct data through all the research and studying.

3.3.2 Functions requirement

While designing InfoNote many HTML and CSS functions were used. HTML tags were used to design the web page while CSS functions were used to make it attractive and beautiful.

3.3.3 Performance and security requirement

InfoNote is free to use for all the users but they cannot change the content present in it. Although we have provided a comment and contact part so that if the user feels that if the information given is not sufficient and not correct then he can send his query through the contact page and also give us suggestions.

For every tag an example tag is given which is sufficient for any user to understand the working of the code in a practical way. He can click on the output link which directs the user to different page of compiler. There he can execute the code and see the output. Moreover, he can change the code in the compiler and run again to see the new output. But his change cannot be seen by other users. The change that he is making is only for his own benefit.

3.3.4 Look and feel requirement

InfoNote is attractive and every part is in a sequential way. It looks good through different images and colours.

The image in the home page gives you motivation to become a good programmer and confidence that you are learning from a good web site.

The image in the Blog and About page uses a part of the flying graduation caps from a graduation ceremony which makes the user feel about the completion of a course.

So, the different images used in different parts of InfoNote are as follows:









3.4 Summary

InfoNote is a web page of learning and can learn which makes the user feel like a class room with beautiful and advance infrastructure. Through InfoNote users can learn theoretical and practical manner. It is made attractive through many beautiful and motivating images. The codes and the information given in it is correct and safe which no one can alter.

Chapter- 4

Design methodology and its novelty

4.1 Methodology and goal

InfoNote is under the web site development category where the web page is providing specific and spot on information for aspiring coders who wants to get started for their coding career. InfoNote is an online free content website which is quick responsive and easy to access created to gain knowledge which could help them change the world. InfoNote help the people of any generation to gain or enhance their skills or knowledge about programming. InfoNote also gives the user a section where they can suggest if any changes need to be done. If the user feel that information provided is not sufficient and they want some more information to be added they can contact us through the contact information provided on the contact section.

InfoNote has a quality of being new in a simple and straight forward way and as follows: -

- USER FRIENDLY
- VISUAL INPRESSIONS
- EASE OF ACCESS
- WELCOMES ADVICES
- SUFFICIENT DATA
- INTERACTIVE WEB PAGES

4.2 Functional Modules design and analysis

Module-1 consist of the home page and the About us page- This module is everything about displaying brief details of our website such as our facilities, user reviews and etc. to the user.

The home page is beginning page of the web site by default showing some basic details. It is then followed by the About us page, having details about the team.

Module-2 consist of the Tags of HTML: -

This module has all the data related to the Html as far its concerned for beginner. It's an interactive platform where we have provided Hypertext of is specific tags. If any user wants to browse through any specific Tag, they can just click on the text and they will be directed to page having that tag at the top of the screen.

Module 3: After instant browsing when the user comes to the data page, we have added information regarding that particular tag with an example.

On top of that we also have given an interaction Output hypertext which redirects the user to the page where they can run the code and see the output themselves.

Module-4 consist of the Search option: -

Here we have added a new feature of search.

In this if user wants to search any information or have any doubt, they can click on the search text provided and then they will be directed to the search bar have browsing feature.

Module-5 consist Feedback & Review section: -

In this module we have given user a privilege to express their thoughts on our site.

Firstly, there is a feedback section where it asks user whether they find the information useful or not, having interactive option of yes & no.

And at last, there will be a link provided for user to mail Infonote regarding the information.

4.3 Software Architectural Design

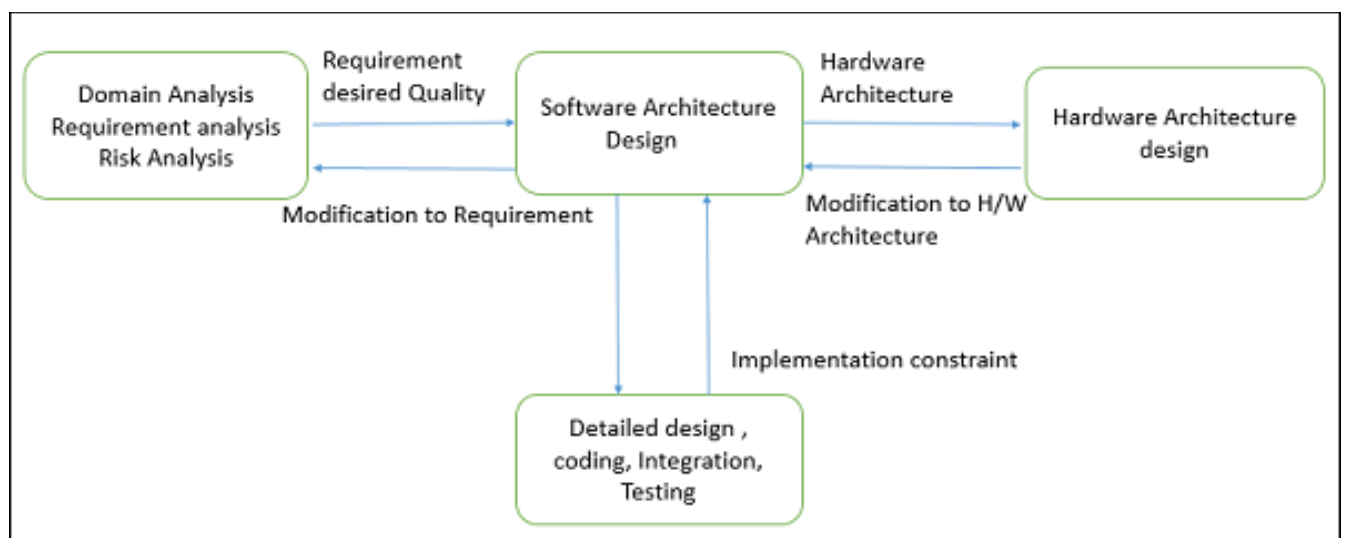
The architecture of a system describes its major components, their relationships (structures), and how they interact with each other. Software architecture and

design includes several contributory factors such as Business strategy, quality attributes, human dynamics, design, and IT environment.

We can segregate Software Architecture and Design into two distinct phases: Software Architecture and Software Design. In Architecture, nonfunctional decisions are cast and separated by the functional requirements. In Design, functional requirements are accomplished.

Software design provides a design plan that describes the elements of a system, how they fit, and work together to fulfill the requirement of the system. The objectives of having a design plan are as follows –

- To negotiate system requirements, and to set expectations with customers, marketing, and management personnel.
- Act as a blueprint during the development process.
- Guide the implementation tasks, including detailed design, coding, integration, and testing.



4.4 User Interface design

User interface (UI) design is the process designers use to build interfaces in software or computerized devices, focusing on looks or style. Designers aim to create interfaces which users find easy to use and pleasurable.

During the designing of InfoNote UI best, we considered the following points in mind:

- Users judge designs quickly and care about usability and likeability.
- UI is also be enjoyable (or at least satisfying and frustration-free).
- UI communicate brand values and reinforce users' trust.
- Made buttons and other common elements perform predictably Keep interfaces simple (with only elements that help serve *users' purposes*) and create an “invisible” feel. so, users can unconsciously use them everywhere.
- Respect the user's eye and attention regarding layout. Focus on hierarchy and readability:
 - Used proper alignment. Typically chosen edge (over center) alignment.
 - Drew attention to key features using:
 - Color, brightness and contrast. Avoided including colors or buttons excessively.
 - Text via font sizes, bold type/weighting, italics, capitals and distance between letters.
- Put controls near objects that users want to control. For example, a button to submit a form should be near the form.
- Kept users informed regarding system responses/actions with feedback.

4.5 Summary

InfoNote was set up with a new goal and different and unique methods which can be viewed through is novelty. It can be divided into five modules, each for a different purpose and with different idea. InfoNote is designed with proper software benefits and its user interface is friendly and easy to interact which was designed with much discussion and research keeping in mind about the ease of users.

CHAPTER-5:

TECHNICAL IMPLEMENTATION & ANALYSIS

5.1 OUTLINE:

Our website 'Infonote' gives a very precise and detailed information on the various HTML tags which are often used in making websites. It includes different sections within the same page from where you can go to the About Us section, contact section, Blog section etc. by just clicking on the respective buttons given at the top of every page.

5.2 TECHNICAL CODING AND CODE SOLUTIONS:

For Infonote we have used HTML and CSS languages to make our website and give our website a wonderful look.

5.3 TEST AND VALIDATION:

The webpage InfoNote works on multiple devices whether it is a laptop or an iPad or any other mobile phone. It works in horizontal as well as vertical screen mode. The typing of any text (comment, name, email address etc.) works in the same way as in a laptop or computer.

[html.log](#)

[table.log](#)

Search:

head :

The head element is a container for metadata (data about data) and is placed between the html tag and the body tag. Metadata is data about the HTML document. Metadata is not displayed. Metadata typically define the document title, character set, styles, scripts, and other meta information.

Example :

```
<html>
<head>
<title>Title of the document</title>
</head>
</html>
```

body :

The tag defines the document's body. The element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.

Example :

```
<html>
<head>
<title>Title of the document</title>
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
</body>
</html>
```

[Output](#)

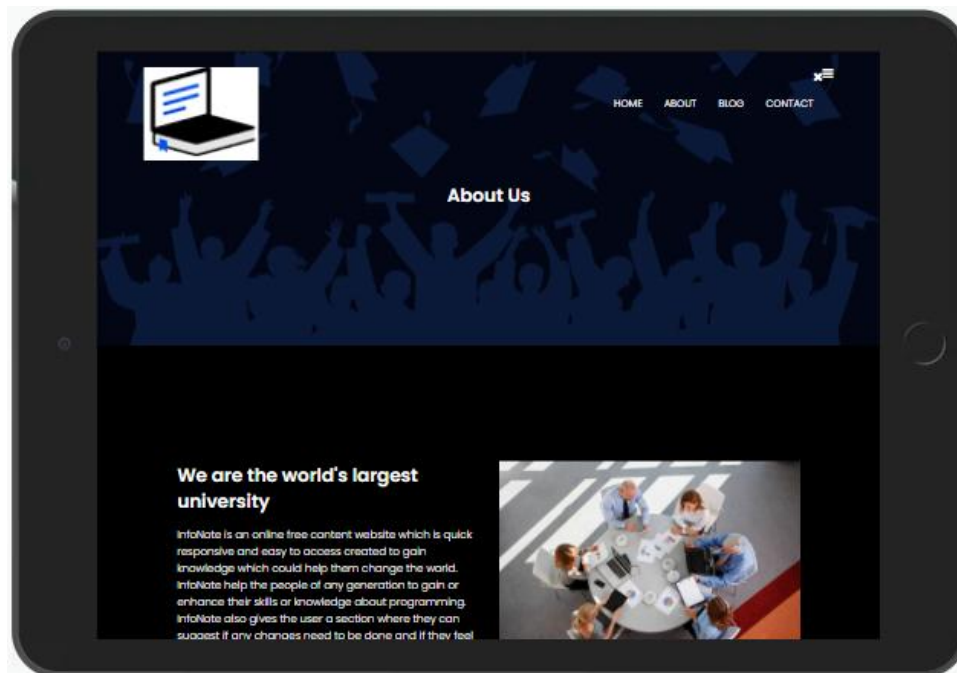
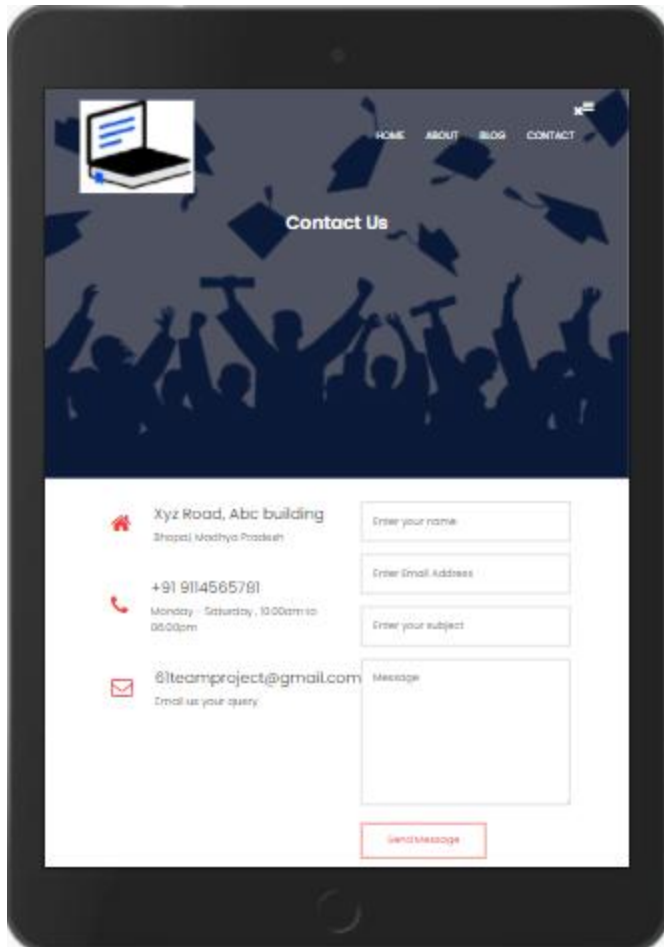
p :

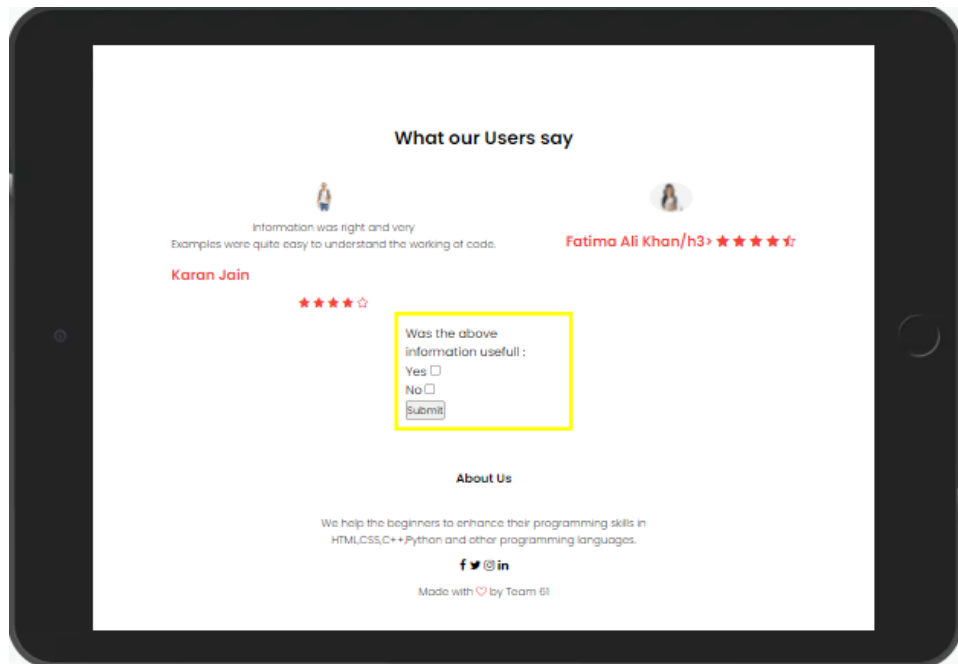
The p tag is used to display a paragraph of text.

Example :

```
<p>This is a paragraph.</p>
```

[Output](#)





5.4 SUMMARY:

The process of making InfoNote had various technicalities attached to it starting from HTML code to making big, small and efficient changes in the website through CSS coding.

CHAPTER-6

Project outcome and Applicability

6.1 OUTLINE:

Our website 'Infonote' gives a very precise and detailed information on the various HTML tags which are often used in making websites. It includes different sections within the same page from where you can go to the About Us section, contact section, Blog section etc. by just clicking on the respective buttons given at the top of every page.

6.2 TECHNICAL CODING AND CODE SOLUTIONS:

For Infonote we have used HTML and CSS languages to make our website and give our website a wonderful look. We have used many softwares like Visual Studio Code, Windows Notepad, Chrome Browser and many more.

6.3 SIGNIFICANT PROJECT OUTCOMES:

The project, InfoNote that we have chosen is under the web site development category where the web page is providing specific and spot on information for aspiring coders who want to get started for their coding career. Inspired by InfoNote many other web pages or applications or softwares can be made which tells the users about other programming languages and other important courses in non-technical field like management, creative writing and many more.

6.4 SUMMARY:

The process of making InfoNote had various technicalities attached to it starting from HTML code to making big, small and efficient changes in the website through CSS coding.

CHAPTER-7:

CONCLUSIONS AND RECOMMENDATION

7.1 Outline:

In this project we designed and created a website that is capable of fulfilling all the basic requirements of a basic web designer starting from making a website to learning about new tags and implementing in their future projects. In this website we have added many basic HTML tags, their definition and a code related to each one of them. We have also added different pages such as About Us page, Contact Page, Blog page which the individual can access from the top right of the home page.

7.2 LIMITATIONS/CONSTRAINTS OF THE SYSTEM:

Before starting the project, we had a basic idea on our limitation that we need to overcome on upcoming review

1. HTML is a language that not very familiar to our group members and the primary limitation of HTML is that HTML tags do not describe the meaning of the data included in an HTML document.
2. Due to this it's very difficult to analyze the script for further modification.
3. It is time consuming it consumes time to maintain on the colour scheme of a page and to make lists, tables and forms.

4. Working on a project without having an upper hand on the language used is very time consuming making it tough to be efficient within the time provided.

7.3 FUTURE ENHANCEMENTS:

In the near future we are going to add a login button in the website where you can login to your respective account by typing your login credentials.

We will also add more tags in this website and will also make its interface more user friendly. Many other tutorial videos can be added to make user understand every concept very easily.

7.4 INFERENCE:

That this project not only helped us in learning HTML and CSS languages but in future will also help beginners in making their website and learning through the process as well. They can also learn many other programming languages and join the other courses in online mode provided by InfoNote.

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