Website design is refers to the process of creating visual aspects of the interface. The process of website design entails logos type design and design elements such as links, color schemes as well as anything visible this can be done with the help of css and js. The major aspect which is fundamentally required in web design is good design, which gives consideration of the color , typography , responsiveness and usability of the website and the layout.

This paper will be focusing on developing a website for the Health Care Clinic through the use of the front end technologies a website for a local clinic, featuring a BMI calculator for patients to gauge their health status and a contact form for appointment requests . i.e. done with the use of HTML, CSS, and the JavaScript to ensure more functional ness and responsiveness to the company website, and customers access to online service such as body mass index ( BMI ) calculation and online appointment through the online self selection services by using or filling the form given the website.

We use these three dimensions which is JavaScript, HTML, and CSS work to create responsiveness design of the website. In the web design process, the hypertext mark-up language (HTML), gives the structure of the website which is also known as blueprint of the website using different tags eg h1 , p , image, form, div, etc . Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, aso forth to facilitate the sharing of scientific information between researchers. Now, HTML is being widely used to format web pages with the help of different tags available in HTML.

The cascading style sheets ( CCS ), is applied in the website design. Cascading Style Sheets is a style sheet language used for specifying the presentation and styling of a document written in a markup language such as HTML. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, as well as a variety of other effects. CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

We use inline and external style sheet is used to define the style for many HTML pages.

To use an external style sheet we add a link to it in the <head> section of each HTML page:

Example

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<h1>This is a heading</h1>

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

</body>

</html>

The JavaScript, on the other hand, regards to a programming language that enables the addition of customs behavior and interactive behaviors on the customers’ sites. JavaScript, often abbreviated as JS, is a programming language and core technology of the Web, alongside HTML and CSS. 99% of websites use JavaScript on the client side for webpage behavior. Web browsers have a dedicated JavaScript engine that executes the client code. JavaScript support is built right into all the major web browsers, including Internet Explorer, Firefox and Safari. Provided that the visitors to your site are using web browsers that support JavaScript (most do) and have JavaScript enabled (it is by default), then your JavaScript will run when they visit the page.The document object represents the whole html document. When html document is loaded in the browser, it becomes a document object. It is the root element that represents the html document.

Example

We point to an external JavaScript file by below tag.

<script src=" myscripts.js "> </script>

According to W3C - "The W3C Document Object Model (DOM) is a platform and language neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document."

In ensuring that the achievement of the web development and design goals, the web design principles will be applied which are website design structure, topography and forms , use of color palette and imagery, navigate etc.

The first step is to sketching a design of the website in a piece of paper or using different design software. This make sure , focuses on ensuring that every detail required for the creation of the desired website, is linked as required to be present on the home page. For example, the our health care client website we create nav , then description div, then body mass index ( BMI ) calculation div, then appointment form and footer section as show in figure below:-

A white rectangular object with black text

Description automatically generated

Figure 1 .Healthcare Clinic basic design

For this project we use xampp and visual studio code for creating the website.

We use parallel x in our website that give a visual animation that is activated while the website is scrolled. Parallax scrolling is a web site trend where the background content (i.e. an image) is moved at a different speed than the foreground content while scrolling. This is done using the java script.

Js code given below

const parallax\_1 = document.getElementById("parallax\_1");

window.addEventListener( "scroll", function () {

let offset = window.pageYOffset;

parallax\_1.style.backgroundPositionY = offset \* 0.7 + " px ";

});

The window off set is taken form the window.pageYOffset and then the div ie parallax\_1 background position y is updated or changed every time the scroll through the webpage happens.

In Navbar, it contains the link when click it scrolled to respective div for example when clicking in BMI link the body mass index ( BMI ) calculation section is focused on.

<nav class=" navbar ">

<img class=" logo " src=" logo.png " alt=" Health Care ">

<a href =" #home "> Home </a>

<a href =" #secondDiv "> BMR </a>

<a href =" #appoinment "> Appoinment </a>

</nav>

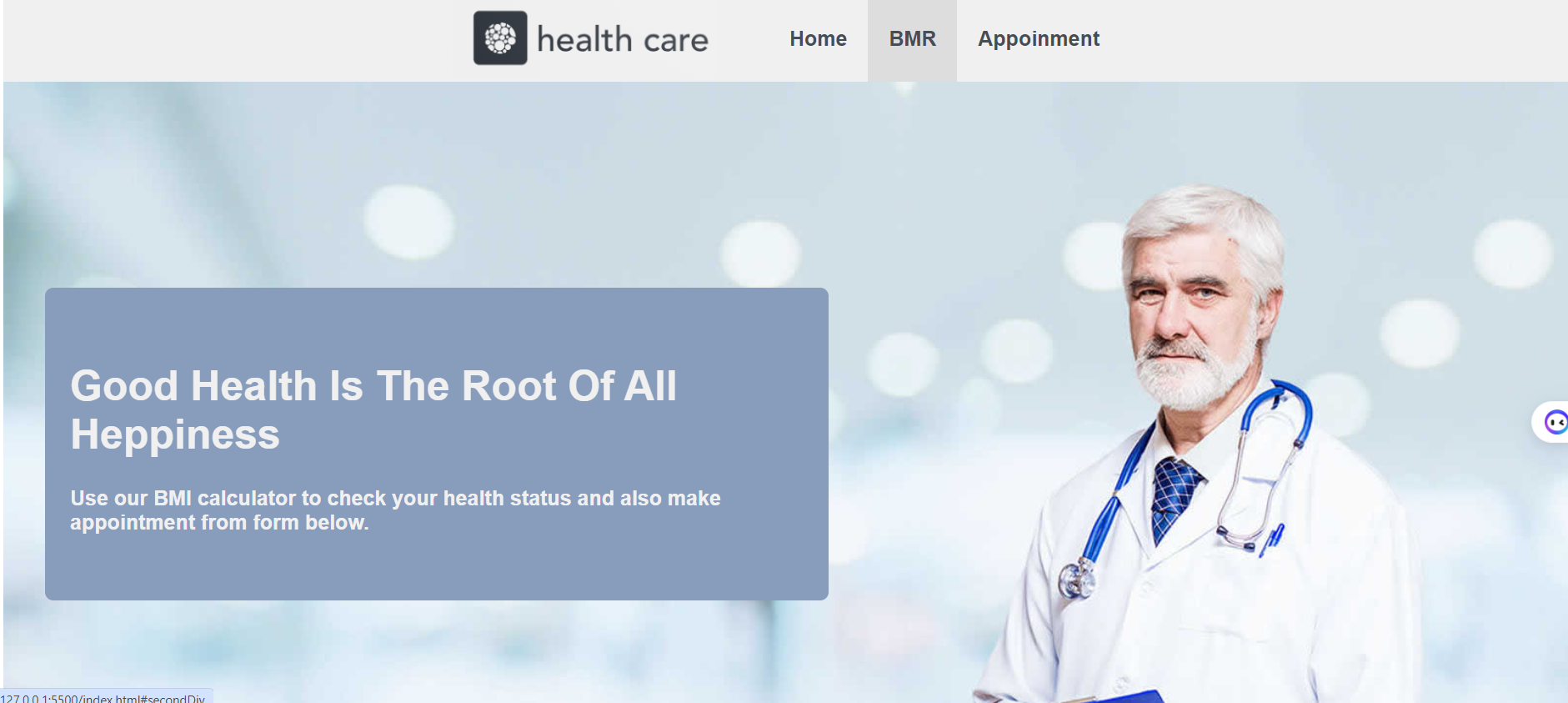


Figure 2 nav bar and div screenshot

In another div there is a image of doctor in the background and above the image there is a div that contains the information or some content on the website as shown in the above image.

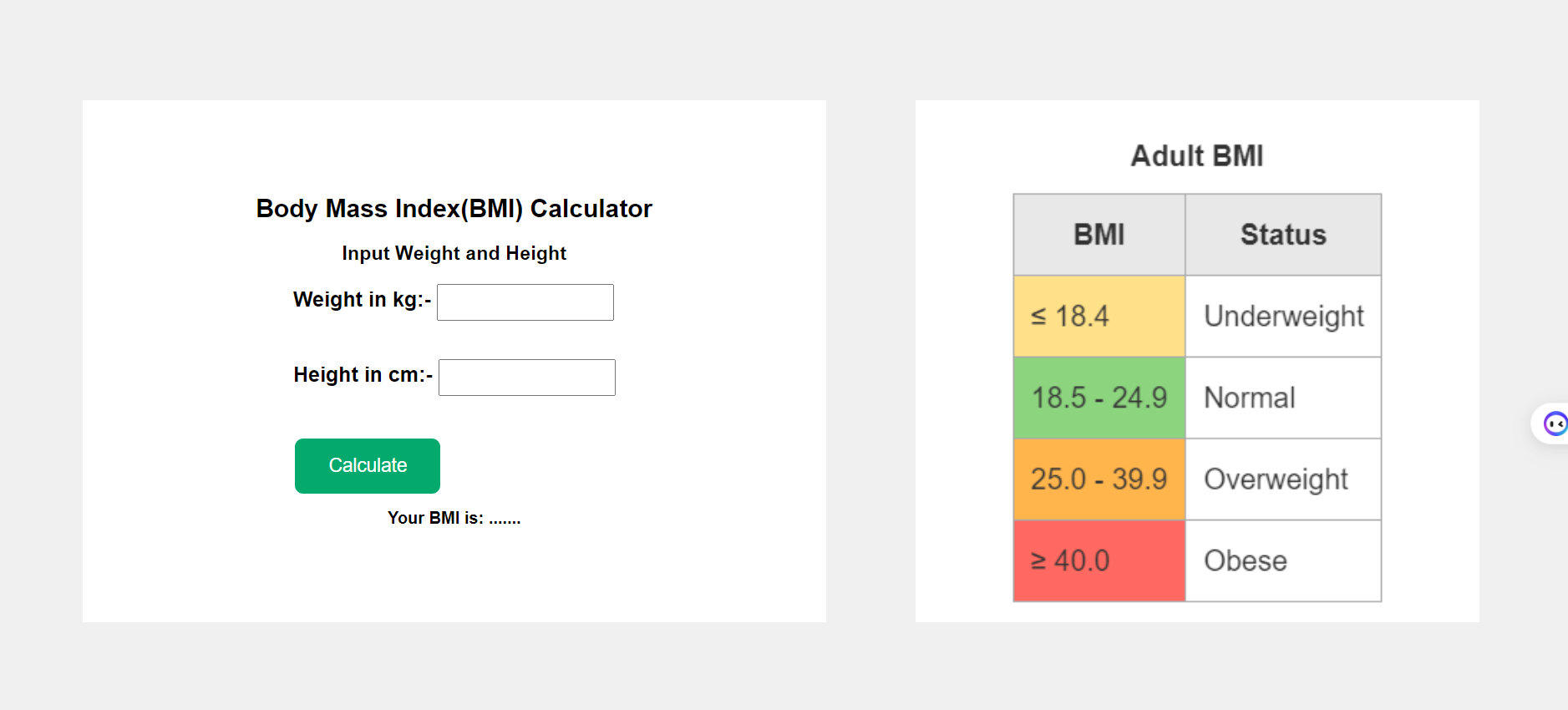


Figure 3 body mass index calculator

In another section there is a body mass index calculator that takes the input which is weight in kg and height in cm . when button calculate is clicked then bmi is calculated.

This is done with the help of js . The weight in kg and heignt in cm is taken by using js and calculation is made and then finally the result is appended in the inner html of the website which is shown the above figure.

Js code is given below

document.getElementById("bmiForm").onsubmit = function () {

// Get input values

var weight = parseFloat( document.getElementById(" weight ").value );

var height = parseFloat( document.getElementById( "height" ).value ) / 100 ; // Convert height to meters

// Calculate BMI

var bmi = weight / ( height \* height );

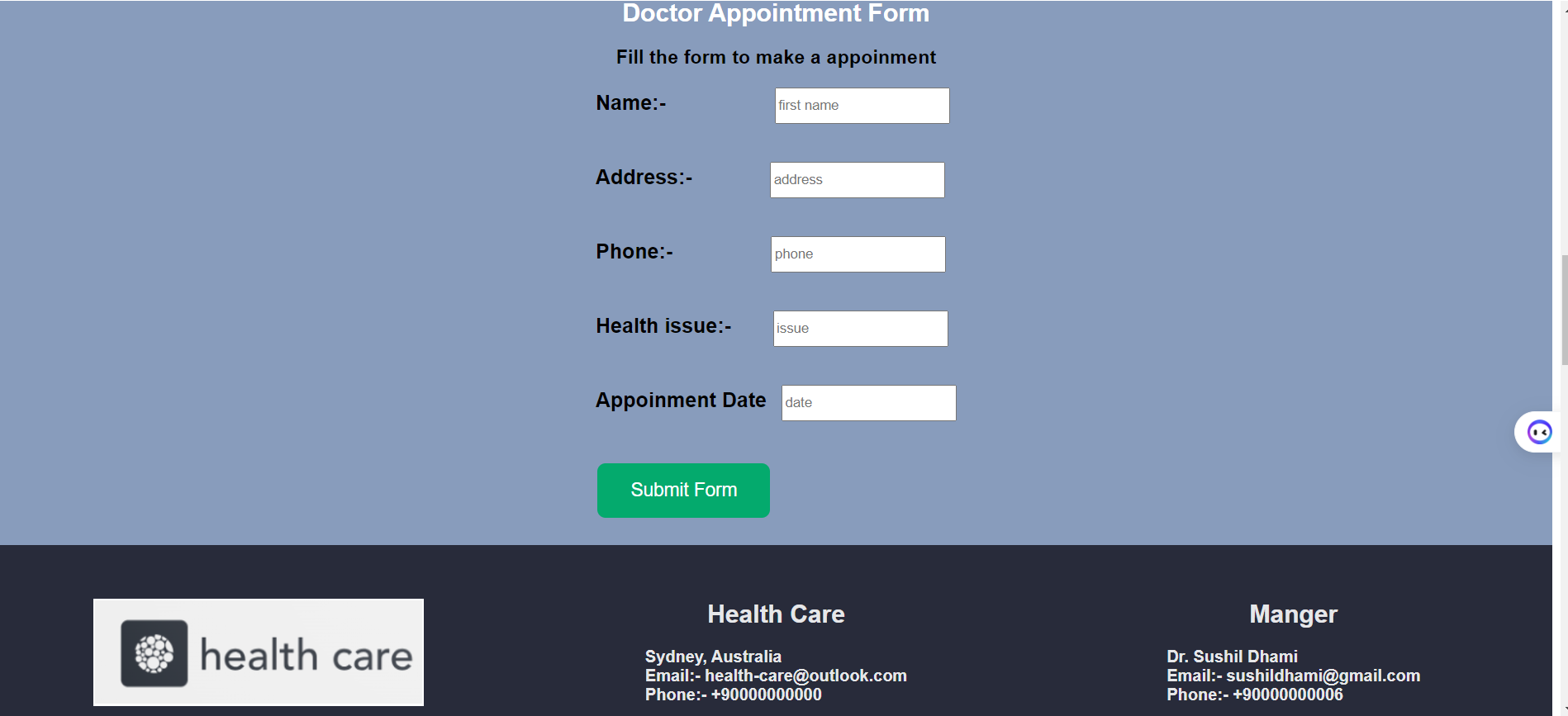
// Display result

document.getElementById(" reasultBMI ").innerHTML =

" Your BMI is: " + bmi.toFixed( 2 );

return false; // Prevent form submission

};



Another section contains the appointment form that user can input the data into the form for appointment the doctor. Then these data input in the form are then send to the database if we use database such as mysql. And the last section is the footer section that contains the contact information and location of the healthcare clinic.

We added the button hover effect by using css by applying the below code

.button {

background-color : #04AA6D ; /\* Green \*/

border : none ;

color : white ;

padding : 16px 32px ;

text-align : center ;

text-decoration : none ;

display : inline-block ;

font-size : 18px ;

margin : 4px 2px ;

transition-duration : 0.4s ;

cursor : pointer ;

border-radius : 8px ;

}

.button : hover {

background-color : white ;

color : black ;

}

Responsiveness in the website is maintained through media query. When the screen size width is changed ( ie small width for mobile devices ) the the css property is change when the width is applied to a condition. It uses the @media rule to include a block of CSS properties only if a certain condition is true. We can use multiple these types of media query for multiple section.

In our code we use below code

@media only screen and ( max-width : 600px ) {

div {

flex-direction : column !important;

width : auto !important ;

height : auto !important ;

}

.adultBMI {

Height : 400px ! important;

}

.logo {

Display : block;

}

}

Working process of above code is when the screen width is less than 600 px the div flex direction , width and height is changed and similarly for other. While the user view the website in the devices smaller than 600 px screen width then the code will be triggred.

This html, css, and js code is developed and run through using the local host and it is run successfully. We used xampp applications to make a local server that is used to make a website live in local machine. We use visual studio code to write code. When we write the code then we run the local server using xampp application. And we view the like site by using link provide by the xampp application which is the web link than contain the port number that the website is running on.

The crated web site is hosted with fee services provided by git hub for hosting of html pages using git hub pages. First we created a git hub account and log in into the account by entering username and password of create account. We created a repository on git hub by going to git hub repository named “health Care”. After creating the repository on the git hub website then we go to our personal computer and do the following things mentioned below :-

Then we go to the folder where the website code is written and saved. Then we open the command prompt in the this folder. And then we follow the following steps below :-

* Init the git hub local repository by using “ git init ” command
* Add the files to the local repository by using “ git add . ” command
* Commit the local repository by using “ git commit -m “ first commit message ” ”
* Then use “ git branch -M main “ command
* Then add origin “ git remote add origin https://github.com/bhatbhupendra/HealthCare.git ”
* Then push the local repository by using the command “ git push -u origin main ”

After the code is pushed into the online git hub repository then we go to open that repository then we go to the setting of that repository and then go to the pages section. On the pages section then can see the web link that can be used to view the website one.

In conclusion, it is clear that Html , css and Java Script are the basic fundamental for the design of a web page, which enables to create different responsive websites that is used by the customers for different services and also these maintain its productivity. Like we mentioned earlier before, HTML creates and structures the website’s content, CSS adds style and formatting to these structures, and then JavaScript turns those stylized components into something that a user can interact with. To sum up, there is a need to keep learning how to update the codes, as the level of technology changes to ensure that the right development of the company’s needs is achieved especially those linked with the clients. As mentioned in the question we have created a website for a local clinic, featuring a BMI calculator for patients to gauge their health status and a contact form for appointment requests. For this the user needs to give inputs to the form the data entered in the form are get by the js code and makes the calculation and update the result section inner HTML with the result. Also the appointment section also work similar way.