A Project Report

On

WEB DEVELOPMENT

AND APPLICATION

Submitted to

Amity University Uttar Pradesh

in partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology

in

Computer Science and
Engineering by

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under the guidance of
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AMITY UNIVERSITY UTTAR PRADESH

NOIDA (U.P.)

September 2017

DECLARATION

I, **Ahmed Raza**, student of B.Tech (CSE) hereby declare that the project titled "**Health and Nutrition Website**" which is submitted by me to Department of Computer Science and Engineering, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, in partial fulfillment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering, has not been previously formed the basis for the award of any degree, diploma or other similar title or recognition.

Noida

Date - 16 Aug 2017   Ahmed Raza

CERTIFICATE

On the basis of declaration submitted by **Ahmed Raza**, student of B.Tech CSE, I hereby certify that the project titled "**Health and Nutrition Website**" which is submitted to Department of Computer Science and Engineering, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science, is an original contribution with existing knowledge and faithful record of work carried out by them under my guidance and supervision.

To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

Noida

Date - 16 Aug 2017   Ms. Monika Bhalla

Department of Computer Science and Engineering

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I take this opportunity to express my profound sense of gratitude and respect to all those who helped me throughout our project.

This report acknowledges the intense driving and technical competence of the entire individual that has contributed to it. It would have been almost impossible to complete this project without the support of these people. I extend thanks and gratitude to **Prof. (Dr.) Abhay Bansal,** HOD, Department of Computer Science, **Ms. Monika Bhalla**, Lecturer**,** Department of Computer Science who have impacted me the guidance in all aspects. They shared their valuable time from their busy schedule to guide me and provide their active and sincere support for my activities.

This report is an authentic record of my own work which is accomplished by the sincere and active support by all the teachers of my college. I have tried my best to summarize this report.

<div align="right">

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ABSTRACT

A website may be an assortment of sites, videos, pictures and different digital assets that square measure hosted on one or many internet servers, typically approachable via the net, computer network or a telephone.

The pages of internet sites will typically be accessed from a standard root computer address known as the home page and typically, reside on an equivalent physical-server. The address of the pages sort themselves out into a progressive system, however, the hyperlinks between them administration, however, the per-user sees the structure and the way the movement streams between the different components of the destinations.

A site needs alluring style and right course of action of pictures and connections that adjust a program to just translate and get to the properties of the area. Along these lines, it furnishes the program with satisfactory information and common sense in regards to the group, association, arranges and so forth.

The website has been produced for fitness and nutrition purpose, in an attempt to form it as dynamic and enticing as attainable.

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LIST OF FIGURES AND SNAP

INTRODUCTION

"A healthy mind in a healthy body "... This well-known adage is, you will agree, very meaningful. Both mental and physical health are very important concerns, and fortunately, society and the medical community are increasingly interested in this issue. What if the exercise was part of the arsenal of means to achieve it?

The aversion of unending ailments is as of now important to both the all-inclusive community and the therapeutic group. To be sure, it has been exhibited in numerous clinical examinations that specific more destructive ways of life add to the advancement of many conditions, for example, diabetes, hypertension, hypercholesterolemia (elevated cholesterol), coronary illness, osteoporosis and a few growths. These incorporate low-quality eating regimens, deficient admission of certain fundamental supplements, abundance weight and stoutness, stress, smoking, and, obviously, physical dormancy and absence of physical movement.

Although you often do not see the word "increase physical activity" on your medical-prescriptions, the fact remains that this measure is often advocated as a means of controlling and managing different diseases. Mental illnesses such as depression, anxiety disorders, bipolar disorder or schizophrenia are no exception.

- A sedentary lifestyle is one of the 10 mortality risk factors in the world.
- Physical idleness is a noteworthy hazard factor for non-transmittable sicknesses (NCD, for example, cardiovascular illnesses, malignancy, and diabetes.
- Physical action has vital medical advantages and counteracts NCDs.
- Globally, one of every four grown-ups needs work out.More than 80% of adolescents do not have enough physical activity.

Physical activity can be beneficial in many ways, including:

- It improves mood, vitality, and quality of life.
- It contributes to a sense of pride, self-esteem and general well-being, especially when it contributes to the desired weight loss.
- It increases the ability to concentrate and to carry out daily activities.
- It prevents many diseases and reduces the level of stress and improves the ability to manage it.
- It promotes better sleep.

Working

The first page (home page) gives an outline for the website and link to the registration. There is a navigation bar, through which you can directly navigate to different pages of the website. The home page has inspirational videos and health benefits of exercising.

The website has been made interactive and easy to use even for the novice users. The home page guides you to different sections of the website, step by step or one can even navigate directly, according to the need. Different pages of the website are as follows:

1. Home
2. BMI
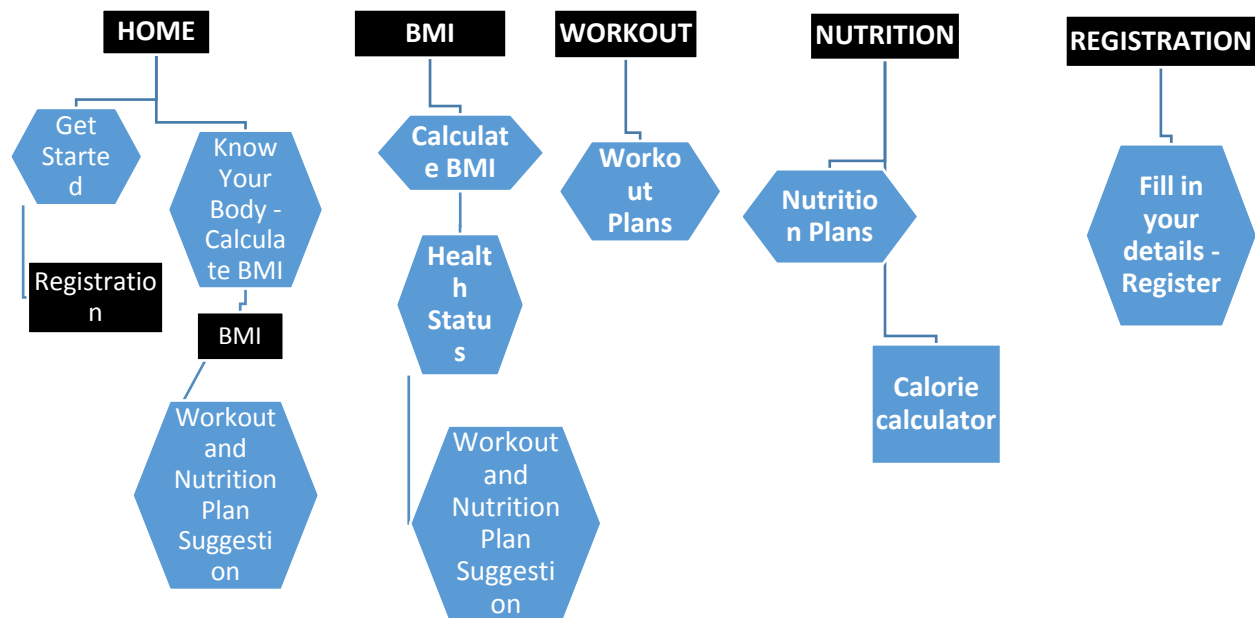3. Workout
4. Nutrition
5. Register

For a novice, the website calculates your body mass index, tells you about your health status and suggests you with appropriate workout and nutrition plan, which can be accessed from home page links. The website also offers you the functionality of calculating your calorie intake according to your body goal and needs.For the intermediate or experienced person, they can look for their specific workout or nutrition plan according to their needs.

BMI Calculator – The application takes your body weight (in kg) and height (in cm) as input and calculate your body mass index and tells you about your health status.

Calorie Calculator – This application takes your age, gender, height, weight, and activeness level as input and calculates calorie needed for you. It also lists how much protein, fat, and carbohydrate you must intake (in grams) daily.

The nutrition plan and workout plan is suggested according to the three major health status of the people that is overweight (and who need to lose their body weight), healthy (and need to maintain their healthy form), underweight (and need to gain weight in order to be in shape).

- WORKPLAN OF THE WEBSITE

This work plan shows the navigation throughout the website and all the major function offered by it. The home page takes you to:

- Registration
- BMI Calculator
- And Calorie Calculator

The BMI page calculates your BMI and suggests you work out and nutrition plan. One can explore all the workout and nutrition plan directly on its respective page.

SYSTEM ANALYSIS AND SYSTEM SPECIFICATIONS

System analysis is the procedure of deciphering and assembling certainties, investigating issues and utilizing the data to suggest upgrades to the System. System examination is a critical thinking action that requires escalated correspondence between the System engineers and System clients.

System examination or study is a critical period of any System advancement process. The System is concentrated to the minutest detail and investigated. The System examiner assumes the part of an investigator and abides profound into the working of the present System. The System is seen all in all and the contributions to the System are distinguished. The yields from the association are followed through the different preparing that the data sources stage through in the association.

An itemized analysis of these procedures must be made by different systems like Questionnaires, Interviews and so on. The information gathered from these sources must be investigated to land at a conclusion. The conclusion is a comprehension of how the System capacities. It accentuation on making an interpretation of outline determinations to execution detail. System configuration has two periods of advancement sensible and physical outline.

--System Specifications

DESKTOP BROWSER: Chrome 49+/ Firefox 45+/ Internet Explorer 10+

1. **Cascading Style Sheet (CSS)** – used to deliver User Interface look and feel of the portal. Disabling this will not provide the suitable user experience.
2. **JavaScript** – used to deliver an enhanced user experience in using User Interface (UI) controls. Disabling this will not let the user perform any transaction on the portal.

Technology used for front-end: HTML, CSS, JavaScript, JQuery, Bootstrap

System Design

System design is the production of another System. This stage is made out of a few Systems. This stage concentrates on the point by point execution of the achievable System. It accentuation on making an interpretation of outline particulars to execution determination.

System design has two periods of advancement intelligent and physical outline.

Amid legitimate plan, the expert depicts inputs (sources), yields (goals) and techniques all in an arrangement that meets the client prerequisites. The investigator additionally indicates the client needs and at a level that essentially decides the data stream into and out of the System and the information assets. The physical plan is trailed by physical coding. The physical plan creates the working System by characterizing the outline details, which tell the developers precisely what the competitor System must do. The software engineers compose the vital projects that acknowledge the contribution from the client, perform vital preparing on acknowledged information through call and deliver the required give an account of a printed copy or show it on the screen.

Tools Used

Editing software: Notepad++

"Notepad++ is a text editor and source code editor for use with Microsoft Windows. It supports tabbed editing, which allows working with multiple open files in a single window. The project's name comes from the C increment operator. Notepad++ is distributed as free software".

Browser: Google Chrome

Language Description

HTML

"Hypertext Markup Language is the primary markup dialect for pages. HTML components are the fundamental building-pieces of pages. HTML is composed as HTML components comprising of labels encased in point sections (like <html>), inside the website page content. HTML labels most regularly come in sets like <p> and </p>, albeit a few labels, known as void components, are unpaired, for instance <img>. The main tag in a couple is the begin tag, the second tag is the end tag. In the middle of these labels, website specialists can include content, labels, remarks and different sorts of content based substance."

The motivation behind a web program is to peruse HTML reports and create them into capable of being heard or noticeable website pages. The program does not show the HTML labels but rather utilizes the labels to translate the substance of the page. HTML is an organization used to characterize the different components of a "page" that can be seen with WEB examining programming: a Browser (Netscape or Explorer).

Hypertext Mark-Up Language is a supposed "stamping" ("organizing" or "markup") dialect, the part of which is to formalize the composition of a record with designing labels. The labels are utilized to show how the archive ought to be introduced and how it identifies with different records.

HTML language

HTML5 is an open stage created under eminence free authorizing terms. Individuals utilize the term HTML5 in two ways:

1. To allude to an arrangement of advancements that together shape the future Open Web Platform. These innovations incorporate HTML5 determination, CSS3, SVG, MathML, Geo-location, XMLHttpRequest, Context 2D, Web Fonts (WOFF) and others. The limit of this arrangement of innovations is casual and changes after some time.

2. To allude to the HTML5 particular, which is, obviously, additionally part of the Open Web Platform.

CSS

CSS contains rules with two sections: selectors and properties.A selector recognizes what part of your site page gets styled. Inside a selector are at least one properties and their esteems.The property advises the program what to change, and the esteem tells the program what that change ought to be.

CSS is implied basically to modify the division of report content from record introduction, together with segments like the format, hues, and textual styles. This division will enhance openness, offer extra adaptability and administration inside the determination of introduction attributes, adjust various pages to share information, and scale back quality and redundancy inside the basic substance.

It additionally can be usual allow the net page to indicate generally figuring on the screen size or gadget in that it's being seen. The record is spared with expansion (.css). We must connect the markup dialect document and CSS record along. It's finished by <link> part, put inside the highest point of the markup dialect record.

<link href="#" type="text/css" rel="stylesheet">

JavaScript

JavaScript is a model based scripting dialect that is dynamic, feebly wrote and has five-star capacities. It is a multi-worldview dialect, supporting item situated, basic, and utilitarian programming styles. JavaScript was formalized inside the ECMAScript vernacular standard and is basically utilized as a part of the state of customer-side JavaScript, kept up as a touch of an online program to supply broadened UIs and dynamic goals.

JavaScript uses dialect structure affected by that of C. JavaScript copies a couple of names and naming customs from Java, however, the 2 lingos region unit by and large superfluous and have offensively absolutely one of a kind phonetics. The key style measures among JavaScript extend unit taken from the self and point programming vernaculars.

We can link JavaScript file to HTML by including it as the src of a <script> inside HTML file

<script src ='js/main.js'></script>

JQuery

Document object model commonly referred to as the DOM, is the term for elements in an HTML file. To better interact with DOM elements, we can use a library. A library is a set of code that contains useful pre-written functions.

JQuery is a library written in JavaScript. The syntax and functions it contains help with DOM interaction. With JQuery we select element as

$('.class-name');

$('#id-name');

BootStrap

Since Bootstrap launched in August 2011, it has taken off in popularity. It has evolved from being an entirely CSS-driven project to include a host of JavaScript plugins and icons that go hand in hand with forms and buttons. At its base, it allows for responsive web design and features a robust 12-column, 940px-wide grid. One of the highlights is the build tool on Bootstrap's website, where you can customize the build to suit your needs, choosing which CSS and JavaScript features you want to include on your site. All of this allows frontend web development to be catapulted forward, building on a stable foundation of forward-looking design and development. Getting started with Bootstrap is as simple as dropping some CSS and JavaScript into the root of your site.

It is a CSS framework with pre-written CSS rules designed to help you build web pages faster.

-Header

-Section

-Footer

They offer grids. A grid makes it possible to organize HTML element using pre-configured columns. Using a grid you can customize responsive page layouts quickly and reliably. The page is represented by 12 vertical bars (12 column grid).

The words "col-sm-6", "col-sm-3", "container" and "Jumbotron refer to BootStrap classes. Class "Jumbotron" spans the entire width (all the 12 grids) of the webpage. Class "col-sm-3" and "col-sm-6" take up three and six grid columns.

Linking of BootStrap is done with the help of <link> element placed within the head of the HTML file.

<head>

...¯...¯...¯...

<link rel ="stylesheet"

href ="https://..............main.css"/>

</head>

Result And Conclusion

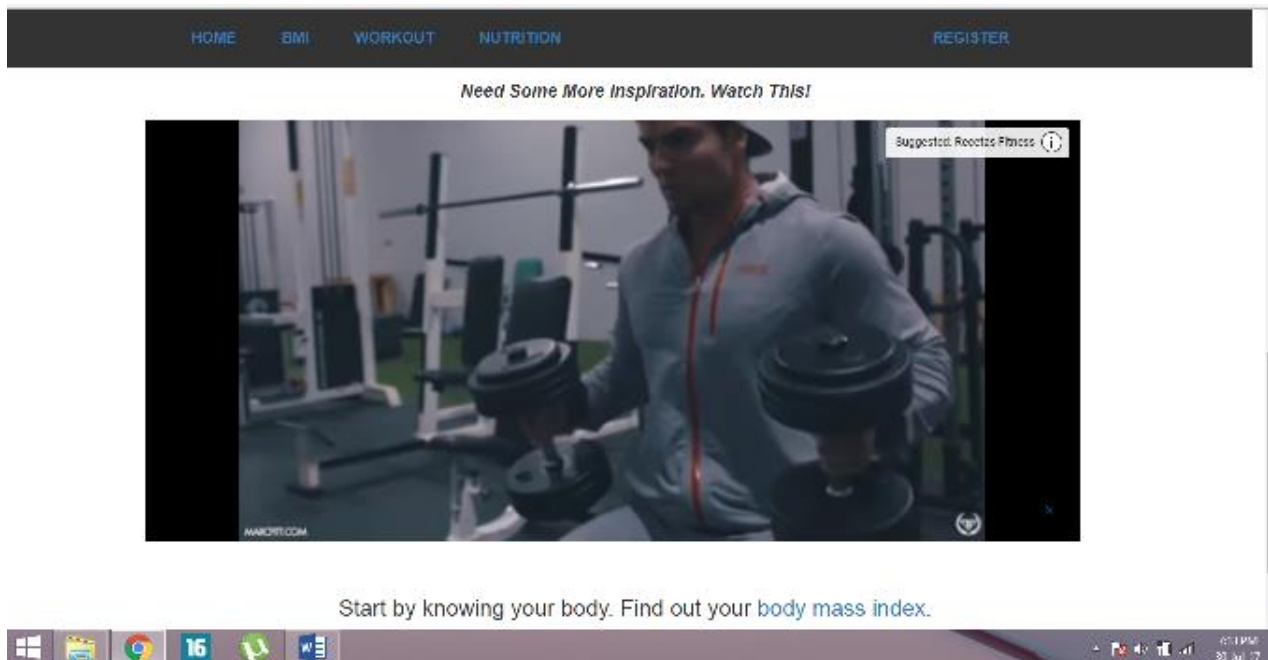Following are some snapshots of the website.

Fig: 1, Home Page

Fig: 2, Home Page Video

Fig: 3, BMI Page, BMI Calculator

Fig: 4, Registration Page and footer

HOME   BMI   WORKOUT   NUTRITION   REGISTER

Calorie Calculator

Age: _____ (in years)

Gender: ⊙ Male ○ Female

Height: 1' ▼   1" ▼

Cms : _____

Weight: _____   Kg ▼

Activeness: Sedentary ▼

Calculate The Calorie

Fig: 5.1, calorie calculator input fields

Calculate The Calorie

Calorie Result

Calorie Needed: _____   Grams ▼

You Must Intake The Following Daily

Fat: _____ per day

Protein: _____ per day

Carbohydrate: _____ per day

Fig: 5.2, calorie calculator output fields

Conclusion

I personally believe that it doesn't matter what project you are working on, what matters is that you are making something, doing something and most importantly learning something. Before and during this project, I learned many skills and I am proud of that.

Skills I learned for (and during) this project: HTML, CSS, JavaScript, JQuery, Bootstrap and Responsive Design

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