MINI PROJECT-2

(SESSION 2020-2021)

Report



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**Declaration**

I hereby declare that the work which is being presented in the Full Stack Project **“QUIZ-On WEBSITE”,** in partial fulfillment of the requirements for Full Stack project Lab is an authentic record of our own work carried under the supervision of **Mr. Manoj Varshney, Assistant Professor.**

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**Certificate**

This is to certify that the project entitled “QUIZ-On WEBSITE” carried out in Full Stack Project is a bonafide work done by Shantanu Saraswat (181500651), Ashish Chaudhary(181500140) ,

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**Signature of Supervisor:**

**Name of Supervisor: Mr. Manoj Varshney**

**Date:15/05/2021**

**ACKNOWLEDGEMENT**

It gives us a great sense of pleasure to present the report of the B. Tech Project undertaken during B. Tech. Third Year. This project in itself is an acknowledgement to the inspiration, drive and technical assistance contributed to it by many individuals. This project would never have seen the light of the day without the help and guidance that we have received.

Our heartiest thanks to Dr. (Prof). Anand Singh Jalal, Head of Dept., Department of CEA for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal.

We owe special debt of gratitude to Mr. Manoj Varshney, Assistant professor, for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. He has showered us with all his extensively experienced ideas and insightful comments at virtually all stages of the project & has also taught us about the latest industry-oriented technologies.

We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

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**Abstract:**

The system is implemented to provide a platform which will enhance the accuracy of practice for quiz related to computer science. This system manages and maintains the record of players in the local storage of web browser according to their highscores. This Website has been made in a user friendly interface. So that students can play the quiz any time just by entering their name

. The main page consists of 10 questions which comes one by one and on giving the correct answer a score of 10 is being added to the scorecard , the players can simply click on the answers and if the answer is correct a green color will be displayed and on choosing of wrong answer a red color will be displayed . The highscore page displays the performance of last 5 players who have played this quiz.

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Chaper-1

**Introduction :**

For practicing and gaining confidence in any field, proper knowledge, guidance and regular monitoring and assessment is very crucial in any field. As per the current scenario, it is hard to evaluate or judge the ones performance. So it is very necessary to use internet and mobile devices to give mock test, quiz for record the performance of students. And getting reality check of where you stand and how far you have to go. Healthy competition is always good! It is essentially required to assist student for the learning and preparation of different test conducted for admission.

**Objective:**

The main objective of this project is to develop an online quiz website, which deals with **“**Computer science related questions”. The system has two parts first to play the game and the other for checking the highscore.

The key objective of the project is to develop front end part of quiz web application QUIZZ-ON. This will play a key role in enhancing the learning of students. In the higher education sector, it is becoming increasingly important to motivate students to learn because of a number of factors present in their environment that compete against valuable study time and the way the new generation of students learn.This will provide students with quizzes of various difficulty levels for regular growth to give the stundents a chance to know, where do they stand, among there peers .

**PROBLEM STATEMENT:**

**Problem Area:**

Quiz-On website is a kind of platform that serves people all over world with challenging minds. ,not only students but people from all over the world of any age group can compete with others on this plateform, there are various existing such websites like geeks for geeks , coding block, coding ninjas , quizzes etc.

**ADVANTAGES AND LIMITATIONS OF THIS APPLICATION:**

**ADVANTAGES:**

### 1. **Makes the practicing easier**

### 2. **Easy and clean user interface for smooth functioning**

### 3. **Free practicing platform for students.**

### 4. **The convenience to use from mobile.**

**DISADVANTAGES:**

1.Data security.

2 .Chances of technical problem in the system.

**TOOLS USED**

**Technical Feasibility:**

The proposed system is developed using HTML, CSS and as front-end tool and javascript for functionality . The Web browser is used to view the web page that is available within the Windows operating system itself. The proposed system will run under Win9x, NT, and win2000 environment. As Windows is very user friendly and GUI OS it is very easy to use. All the required hardware and software are readily available in the market. Hence the system is technically feasible.

**Operational Feasibility:** The proposed system is operationally feasible because of the following reasons.

• The player is benefited more as most of his time is saved.

• The purpose of this website helps to provide a good quiz website at free of cost to the computer science or computer science lovers.

**Economical Feasibility:** As the necessary hardware and software are available in the market at a low cost, the initial investment is the only cost incurred and does not need any further enhancements. Hence it is economically feasible. The system is feasible in all respects and hence it encourages taking up the system design. We have used different languages and technologies for preparing the project .

**HTML**

The extended reach of information and services to customers that the Internet has enabled, has created a new challenge for the developer. The developer should develop a user interface that is distributable, available on multiple platforms and supports a wide range of client environments from handheld wireless devices to high-end workstations. So to maintain a broad reach to client environments and to achieve greatest compatibility with all browsers, this system uses standard HTML. Hyper Text Markup Language is the standard language for creating documents for the World Wide Web. An HTML document is a text file, which contains the elements, in the form of tags that a web browser uses to display text, multimedia objects, and hyperlinks using HTML; we can format a document for display and add hyperlinks to other documents. The user interface has been designed in HTML hence can be browsed in any web browser.

HTML can embed programs written in a [scripting language](https://en.wikipedia.org/wiki/Scripting_language) such as [JavaScript](https://en.wikipedia.org/wiki/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](https://en.wikipedia.org/wiki/World_Wide_Web_Consortium) (W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

HTML code ensures the proper formatting of text and images so that your [Internet browser](https://www.computerhope.com/jargon/b/browser.htm) may display them as they are intended to look. Without HTML, a browser would not know how to display text as [elements](https://www.computerhope.com/jargon/h/html-element.htm) or load images or other elements. HTML also provides a basic structure of the page, upon which [Cascading Style Sheets](https://www.computerhope.com/jargon/c/css.htm) are overlaid to change its appearance. One could think of HTML as the bones (structure) of a web page, and CSS as its skin (appearance).

**CSS (Cascading Style Sheets)**

**C**ascading **S**tyle **S**heets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. 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, layout designs, variations in display for different devices and screen sizes 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.

**Advantage Of CSS**

**CSS saves time** − You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

**Pages load faster** − If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So less code means faster download times.

**Easy maintenance** − To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

**Superior styles to HTML** − CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.

**Multiple Device Compatibility** − Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.

**Global web standards** − Now HTML attributes are being deprecated and it is being recommended to use CSS. So its a good idea to start using CSS in all the HTML pages to make them compatible to future browsers.

## JAVA SCRIPT (JS)

**JavaScript** often abbreviated as **JS**, is a [high-level](https://en.wikipedia.org/wiki/High-level_programming_language), [interpreted](https://en.wikipedia.org/wiki/Interpreted_language) [programming language](https://en.wikipedia.org/wiki/Programming_language) that conforms to the [ECMAScript](https://en.wikipedia.org/wiki/ECMAScript) specification. It is a programming language that is characterized as [dynamic](https://en.wikipedia.org/wiki/Dynamic_programming_language), [weakly typed](https://en.wikipedia.org/wiki/Weak_typing), [prototype-based](https://en.wikipedia.org/wiki/Prototype-based_programming) and [multi-paradigm](https://en.wikipedia.org/wiki/Multi-paradigm_programming_language).

Alongside [HTML](https://en.wikipedia.org/wiki/HTML) and [CSS](https://en.wikipedia.org/wiki/CSS), JavaScript is one of the core technologies of the [World Wide Web](https://en.wikipedia.org/wiki/World_Wide_Web). JavaScript enables interactive [web pages](https://en.wikipedia.org/wiki/Web_page) and is an essential part of [web applications](https://en.wikipedia.org/wiki/Web_application). The vast majority of [websites](https://en.wikipedia.org/wiki/Website) use it, and major [web browsers](https://en.wikipedia.org/wiki/Web_browser) have a dedicated [JavaScript engine](https://en.wikipedia.org/wiki/JavaScript_engine) to execute it.

As a multi-paradigm language, JavaScript supports [event-driven](https://en.wikipedia.org/wiki/Event-driven_programming), [functional](https://en.wikipedia.org/wiki/Functional_programming), and [imperative](https://en.wikipedia.org/wiki/Imperative_programming) (including [object-oriented](https://en.wikipedia.org/wiki/Object-oriented_programming) and [prototype-based](https://en.wikipedia.org/wiki/Prototype-based_programming)) [programming styles](https://en.wikipedia.org/wiki/Programming_paradigm). It has [APIs](https://en.wikipedia.org/wiki/Application_programming_interface) for working with text, [arrays](https://en.wikipedia.org/wiki/Array_data_type), dates, [regular expressions](https://en.wikipedia.org/wiki/Regular_expression), and the [DOM](https://en.wikipedia.org/wiki/Document_Object_Model), but the language itself does not include any [I/O](https://en.wikipedia.org/wiki/Input/output), such as [networking](https://en.wikipedia.org/wiki/Computer_network), [storage](https://en.wikipedia.org/wiki/Data_storage), or [graphics](https://en.wikipedia.org/wiki/Computer_graphics) facilities. It relies upon the host environment in which it is embedded to provide these features.

Initially only implemented [client-side](https://en.wikipedia.org/wiki/Client-side) in web browsers, JavaScript engines are now embedded in many other types of host software, including [server-side](https://en.wikipedia.org/wiki/Server-side) in web servers and databases, and in non-web programs such as word processors and [PDF](https://en.wikipedia.org/wiki/Portable_Document_Format) software, and in runtime environments that make JavaScript available for writing mobile and desktop applications, including desktop widgets.

The terms Vanilla JavaScript and Vanilla JS refer to JavaScript not extended by any frameworks or additional libraries. Scripts written in Vanilla JS are plain JavaScript code.

Although there are similarities between JavaScript and [Java](https://en.wikipedia.org/wiki/Java_(programming_language)), including language name, [syntax](https://en.wikipedia.org/wiki/Syntax_(programming_languages)), and respective [standard libraries](https://en.wikipedia.org/wiki/Standard_library), the two languages are distinct and differ greatly in design. JavaScript was influenced by programming languages such as [Self](https://en.wikipedia.org/wiki/Self_(programming_language)) and [Scheme](https://en.wikipedia.org/wiki/Scheme_(programming_language)).

**jQuery:**

jQuery is a DOM manipulation library that essentially helps us do many JavaScript tasks much faster and more simply.

It comes with a number of useful methods for:

* Selecting/Manipulating/Creating Elements
* Adding Event Listeners
* Animating Elements
* Adding Effects
* Making HTTP Requests (AJAX)
* It’s easy to learn and use
* Makes DOM manipulation a breeze
* Has cross-browser support
* Working with AJAX is easy
* Lots of knowledge out there if you need help

**VISUAL STUDIO :**

Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including  [Java](https://en.wikipedia.org/wiki/Java_(programming_language)), [JavaScript](https://en.wikipedia.org/wiki/JavaScript), [Go](https://en.wikipedia.org/wiki/Go_(programming_language)), [Node.js](https://en.wikipedia.org/wiki/Node.js) and [C++](https://en.wikipedia.org/wiki/C%2B%2B). It is based on the [Electron](https://en.wikipedia.org/wiki/Electron_(software_framework)) framework, which is used to develop [Node.js](https://en.wikipedia.org/wiki/Node.js) [Web applications](https://en.wikipedia.org/wiki/Web_application) that run on the [Blink layout engine](https://en.wikipedia.org/wiki/Blink_layout_engine). Visual Studio Code employs the same editor component (codenamed "Monaco") used in [Azure DevOps](https://en.wikipedia.org/wiki/Azure_DevOps_Server) (formerly called Visual Studio Online and Visual Studio Team Services).

Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a [language-agnostic](https://en.wikipedia.org/wiki/Language-agnostic) code editor for any language. It supports a number of programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface, but can be accessed via the command palette.

Visual Studio Code can be extended via [extensions](https://en.wikipedia.org/wiki/Plug-in_(computing)), available through a central repository. This includes additions to the editor and language support. A notable feature is the ability to create extensions that add support for new [languages](https://en.wikipedia.org/wiki/Programming_language), [themes](https://en.wikipedia.org/wiki/Theme_(computing)), and [debuggers](https://en.wikipedia.org/wiki/Debugger), perform [static code analysis](https://en.wikipedia.org/wiki/Static_code_analysis), and add [code linters](https://en.wikipedia.org/wiki/Lint_(software)) using the [Language Server Protocol](https://en.wikipedia.org/wiki/Language_Server_Protocol).

Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development. Code can be synced between the editor and the server, without downloading any extra software.

Visual Studio Code allows users to set the [code page](https://en.wikipedia.org/wiki/Code_page) in which the active document is saved, the [newline](https://en.wikipedia.org/wiki/Newline) character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language.

**WEB BROWSER**  :

A web browser (commonly referred to as a browser) is a [software application](https://en.wikipedia.org/wiki/Software_application) for accessing information on the [World Wide Web](https://en.wikipedia.org/wiki/World_Wide_Web). Each individual [web page](https://en.wikipedia.org/wiki/Web_page), image, and video is identified by a distinct [Uniform Resource Locator](https://en.wikipedia.org/wiki/URL) (URL), enabling browsers to retrieve these resources from a [web server](https://en.wikipedia.org/wiki/Web_server) and display them on the [user](https://en.wikipedia.org/wiki/User_(computing))'s device.

A web browser is not the same thing as a [search engine](https://en.wikipedia.org/wiki/Web_search_engine), though the two are often confused. For a user, a search engine is just a [website](https://en.wikipedia.org/wiki/Website), such as [google.com](https://en.wikipedia.org/wiki/Google_Search), that stores searchable data about other websites. But to connect to a website's server and display its web pages, a user needs to have a web browser installed on their device.

The most popular browsers are [Chrome](https://en.wikipedia.org/wiki/Google_Chrome), [Firefox](https://en.wikipedia.org/wiki/Firefox), [Safari](https://en.wikipedia.org/wiki/Safari_(web_browser)), [Internet Explorer](https://en.wikipedia.org/wiki/Internet_Explorer), and [Edge](https://en.wikipedia.org/wiki/Microsoft_Edge).

**Requirements:**

Following are the hardware and the software requirements for our project:

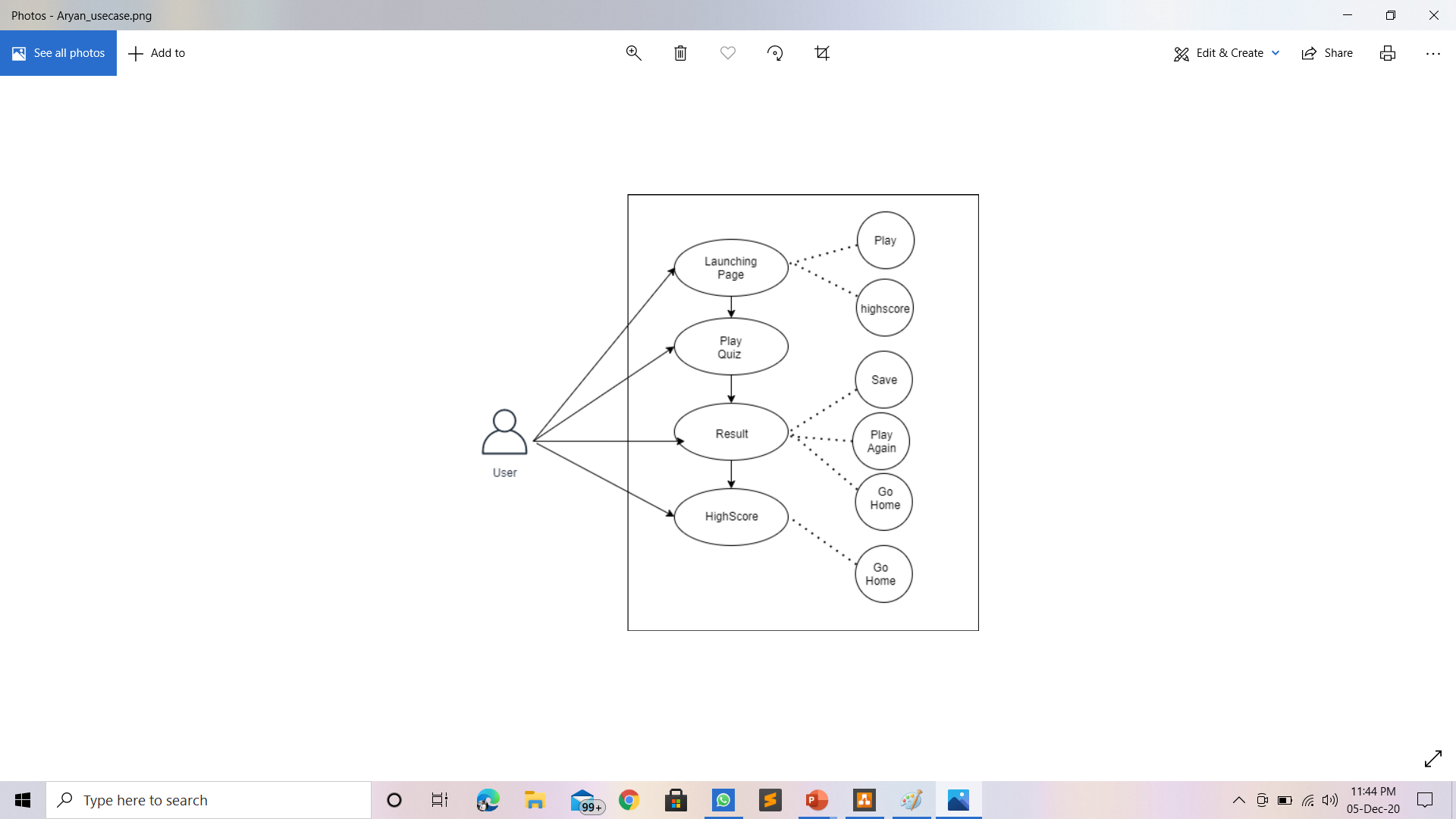
* 1. **a) Hardware:**
  + Laptop/Desktop
  + 1.8 GHz or faster processor. Quad-core or better recommended
  + 2 GB of RAM
  + Hard disk space: Minimum of 800MB up to 210GB of available space
  + Video card that supports a minimum display resolution of 720p (1280 by 720)

**b) Software:**

* + Windows 8.1 and above
  + Visual Studio
  + Windows Server 2016
  + .NET Framework 4.5 is required to install Visual Studio
  + Web Browser

**Software Design**

**Preliminary Design:** Preliminary design is basically concerned with deriving an overall picture of the system. Deriving entire system into modules and sub-modules while keeping Cohesion and Coupling factors in mind. Tools, which assist in preliminary design process, are Data Flow Diagrams.



**Code design:** The purpose of code is to facilitate the identification and retrieval for items of information. A code is an ordered collection of symbols designed to provide unique identification of an entity or attribute. To achieve unique identification there must be only one place where the identified entity or the attribute can be entered in the code; conversely there must be a place in the code for every thing that is to be identified. This mutually exclusive feature must be built into any coding system. The codes for this system are designed with two features in mind. Optimum human oriented use and machine efficiency. Length of the code range from length of one to length of five characteristics:

Ø The code structure is unique; ensuring that only one value of the code with a single meaning may be correctly applied to a given entity or attributes.

Ø The code structure is expansible allowing for growth of its set of entities and attributes.

Ø The code is concise and brief for recording, communication, transmission and storage efficiencies.

Ø They have a uniform size and format.

Ø The codes are simple so that the user can easily understand it.

Ø The codes are also versatile i.e., it is easy to modify to reflect necessary changers in condition, chart eristic and relationships of the encode entities.

Ø The codes are also easily storable for producing reports in a predetermined order of format.

Ø The codes are also stable and do not require being frequently updated thereby promoting user efficiency.

Ø The codes are also meaningful.

Ø They are also operable i.e., they are adequate for present and anticipate data processing both for machine and human use.

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| **SOME SCREENSHOTS OF WEBSITE** | |  |
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| **SOME SCREENSHOTS OF CODE**  **HTML FILES**          **CSS FILES**          **JAVASCRIPT FILES** | |  |
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| **CONCLUSION**  Through this project we aim to make it easy for the students to check their knowledge in different areas and according to level of difficulty.  **References**   * <https://www.w3schools.com> * <https://getbootstrap.com> * <https://www.javascript.com> * <https://www.beta-labs.in> * <https://developer.mozilla.org/en-US> | |  |
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