GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY



MAJOR PROJECT REPORT On "Gjus&t Edu Online"

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Under supervision of:-

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8th Semester

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CERTIFICATE

This is to certify that RAJVEER SINGH(170010139022). Students of Bachelor of Technology in Computer Science & Engineering from GURU JAMBESHWAR UNIVERSITY OF SCIENCE AND TECHNOLOGY, Hisar have completed the project entitled "Gjus&t Edu Online".

Dr. Saroj Ratnoo Department Of CSE GJUS&T Hisar

DECLARATION

I hereby certify that the work which is being presented in the project entitled "Gjus&t Edu Online" to Guru Jambheshwar University Of Science & Technology, Hisar in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is an authentic record of my own work carried under the guidance of Dr. Saroj Ratnoo(Professor, Department of CSE, GJUS&T, Hisar).

I further declare that the work reported in this project has not been submitted, either in part or full for the award of any other degree or diploma in this institute or any other institute.

Place: Hisar

Signature

Dr.Saroj Ratnoo

Professor

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ACKNOWLEDGEMENT

Today, when I have completed my project work, I am thinking that how easily I have succeeded in completing this project. It is due to all those people who helped me in accomplishing my tasks and supported me whenever I needed them all across the accomplishment of this Project. My heart is so filled with gratitude for those persons that I am unable to find proper words. However, I am trying to express my humble thanks towards all of them.

I am very thankful to **Dr. Saroj Ratnoo**, Department of CSE, and Project In-charge for this Project.

ABSTRACT

Online education is very important in today's life. Due to covid-19, the students are not able to go to Institute, schools for education purposes. There are lots of students that not getting proper guidelines in the educational field. They do not have any proper study material. The internet has lots of study material but not in one place and the available study material is not informative for them. It is a very serious concern is related to students about their education. How they get the study material from their college or schools in a systematic and organized manner. This problem is not only limited to the student, teachers also facing issue in delivering their lecture in a systematic manner.

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INTRODUCTION

Educational websites can include websites that have games, videos or topic related resources that act as tools to enhance learning and supplement classroom teaching. These websites help make the process of learning entertaining and attractive to the student, especially in today's age.

While there are many advantages of such websites, we also need to be aware of the negatives. Students need to be guided properly. Without proper guidance, students may find resources and content that are not reliable or do not align with the direction of the teaching in class. Some websites are huge and offer a massive variety of games and resources. Students may be easily distracted on such websites and end up spending time on activities that are either below their level or do not complement or add to the classroom teaching. Unrestricted access and freedom on the internet can be dangerous, especially for younger students.

Why E-Learning?

More and more organizations are becoming actively involved in E-Learning, as they are starting to realize how impactful and rewarding it can really be. It can help organizations become better and stand out from the competition, simply because it provides employees with outstanding opportunities tolearn and improve their skills.

Learning and development are crucial because, as employees learn and grow, they become more satisfied with their jobs and they want to push harder and contribute to the company's success. Before you know it, business is booming, and it's all because of employees who were empowered to go the extra mile and help their organization thrive.

This is exactly what E-Learning can help you accomplish and why it has become so important and popular in the business world, no matter the industry or niche. Here are the key reasons why E-Learning is absolutely essential.

1. Speeding Up Employee Training

According to Brandon Hall Group's HCM Outlook 2017 Survey, E-Learning can significantly reduce employee training time. It typically requires 40-60% less employee time than learning in a traditional classroom setting. It enables much faster delivery because employees can access E-Learning material anytime they want, and anywhere they are, setting their own pace and training whenever they have spare time.

Therefore, they don't need to follow the pace of the group and, more importantly, they can easily skip what they already know, and focus on learning what they actually need. Also, they don't need to travel to their training events or stay after work to engage in training, which additionally saves time and enables them to learn, and improve much faster.

2. Cost Reduction

Cost reduction is often the main reason why companies switch from traditional classroom-based training to E-Learning. In-house training tends to be very expensive, primarily because of the need for a professional trainer who will deliver it and who will help employees improve theirknowledge and skills.

On the other hand, E-Learning requires only an online training software that is not just cost-effective, but also enables employees to train at home. This translates to much lower costs related to travel, training venues, learning material, and trainers, not to mention that E-Learning almost immediately leads to lower costs by speeding up employee training.

3. Maximum Knowledge Retention

Maximizing knowledge retention is one of the most rewarding benefits of E-Learning. According to Brandon Hall (2001 and Rosenberg 2001), E-Learning can increase knowledge retention rate by 25-60%, simply because it is much more engaging than learning in a traditional classroom setting.

Since E-Learning provides employees with various types of interactive content and multimedia, they can retain much more of what they learn and improve their skills and performance quickly. You can include gamification and provide them with interactive quizzes and activities that enable real-time feedback, which will all create an effective learning environmentwhere your employees can truly grow and improve.

4. Increasing Productivity

Self-paced online learning leads to much higher productivity since employees can train at home, and then focus on their core tasks while at work. Learning in their free time will lead to better performance and higher efficiency, especially because online E-Learning software will enable them to revisit any information they need, whenever they need it.

According to IBM statistics, E-Learning can increase productivity by 50%. By utilizing online learning software, you will provide your employees with an incredible opportunity to engage in their training courses at any

convenient time (at home, during downtime at work, or even on-the-go). This will enable them to quickly get up to speed with everything they need to learn, and their training will not get in conflict with their core daily tasks.

5. Better Collaboration

Almost every online learning software provides useful communication and collaboration tools, which are essential for knowledge improvement and building a strong collaborative workforce. This software will enable your employees to communicate with you and among one another in real-time, which will lead to increased engagement and a comfortable and empowering learning environment.

Real-time collaboration and feedback provided by E-Learning will help you effectively address everyone's strengths and weaknesses, and deal with skill gaps, so that you can truly help your learners improve their skills and abilities, and ultimately enable them to improve and grow.

Benefits of Online Learning

1) Added Flexibility of Online Learning

Not many people have the ability to take time off from work to commit to a full-time graduate program, and others often travel for work. For those who still need to juggle working and going back to school, the flexibility of an online program provides individuals with the opportunity to learn while still working and growing professionally.

By earning your master's degree online, you can learn on your own schedule. Rather than leave the office early or skip family dinner to commute to campus, you're logging on when it's convenient for you—at a time that doesn't interfere with other commitments. That flexibility allows you to more easily balance work, life, and graduate school.

Additionally, students don't always feel comfortable asking professors to repeat a point they made in their last lecture or dive into deeper detail on a specific topic. When learning online, you can revisit past material or stop the lecture to perform additional research or organize your notes. You can work through the lesson plan at your own pace to ensure you're really mastering the material before moving on to the next section. This added flexibility allows online learners to move through the course work at their own speed and get the most out of the degree program.

2) Better Time Management

Juggling work, family, and school isn't an easy thing to do. Employers recognize this and admire the time management skills it takes to balance all three. Because there are no set classroom times within an online degree program, and students have the flexibility to create their own schedules, it'sup to the student to proactively reach out to faculty, complete assignments on time, and plan ahead.

One of the things we know employers expect is that we manage our time effectively. It's never enough to be at your desk on time in the morning and

stay through the end of the day; most of us are expected to get more projects done in less time. Online classes keep you on a regular schedule of making and meeting deadlines, allowing you to practice managing your time and staying productive week-to-week. Employers often appreciate the time management skills needed to complete an online degree program and view these skills as a valuable asset in potential employees.

3) Demonstrated Self-motivation

By successfully earning your master's degree online, you're demonstrating that you can practice time management and are self-motivated, which are among the top 10 employability skills employers want to see in new hires. By succeeding in earning an online degree, you prove that you can tackle multiple tasks, set priorities, and adapt to changing work conditions.

Instructors expect students to be independent, to learn on their own, and to engage with the material that they are teaching. It's the same thing in the workforce; employers want you to be self-motivated, go after things that interest you, and seek new opportunities and ways of doing things. The more you put your heart into it—whether it's learning online or working for your employer—the more you'll succeed.

4) Improved Virtual Communication and Collaboration

Learning to work with others in a virtual environment can make you a more effective leader. You'll develop critical leadership skills by utilizing specialized knowledge, creating efficient processes, and making decisions about best communication practices, such as what should be discussed inperson or electronically.

In an online program, you'll also participate in discussion boards with your classmates, communicate with professors via email, and collaborate through various software programs. As the program progresses, you'll get better at pitching your ideas and making strong, succinct, professional arguments through text.

Participating in discussion boards is a lot like participating in a virtual team. Communicating your ideas clearly, getting responses, and projecting a professional image are necessary skills in a virtual workplace. Instructors, just like managers, expect you to write respectful, thoughtful, and polite communications, respond to different perspectives, and build a rapport with your peers. Luckily, in an online program, you'll refine this skill quickly—post after post, week after week, course after course.

5) Refine Critical - thinking Skills

Online learning facilitates the ability to think critically about what you do every day. The goal in the classroom is to challenge you to think differently, and employers want you to do that, too—to think critically in your role at work. Mastering this skill is what will set you apart as a student, and as an employee.

Critical thinking plays a role in any type of education; however, online learning forces you to develop your critical thinking skills in ways that you might not have practiced in an in-person classroom setting. This sort of self-paced and self-motivated learning demonstrates to future employers that you have the ability to think critically and overcome any obstacles that might stand in your way.

6) New Technical Skills

Your online degree also equates to strong technical skills, a definite plus for any job seeker. As part of your coursework, you will likely need to utilize digital learning materials, get familiar with new tools and software, and troubleshoot common issues. After a program's worth of technical hurdles, big and small, an employer could trust that you are versed in common collaboration tools, content management systems, and basic troubleshooting.

With more companies using virtual teams, it's important to learn how to collaborate remotely. Your classmates will likely live in different time zones, which you need to learn how to adapt to and schedule around.

Tools & Language Requirement

Hardware Tools

- Computer & Laptop
- With OS (Window-7 and ABOVE)
- Ram-4gb/Rom-512gb
- Free memory space- 100gb

Software Tools

- (React Js or Visual Studio Code)
- Any Web-browser (chrome, etc.)

Languages

- HTML
- CSS
- JAVA-SCRIPT

Visual Studio

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. ... Visual Studio includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring.

HTML

HTML is the World Wide Web's core markup language. Originally, HTML was primarily designed as a language for semantically describing scientific documents. Its general design, however, has enabled it to be adapted, over the subsequent years, to describe a number of other types of documents and even applications.

HTML5 was first released in a public-facing form on 22 January 2008, witha major update and "W3C Recommendation" status in October 2014. Its goals were to improve the language with support for the latest multimedia and other new features; to keep the language both easily readable by humans and consistently understood by computers and devices such as web browsers, parser, etc., without X HTML's rigidity; and to remain backward-compatible with older software.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as 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

presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enablingthe .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

JavaScript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm.

Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. Over 97% of websites use it client-side for web page behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on the user's device.

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM).

OBJECTIVE

- The objective of the project is providing a better quality of content to the students from their colleges or schools and also a better service to the college.
- This project uses Visual Studio that is best in their field because it's very light & Support fast library of JavaScript and also is backward compliable & very flexible.
- Firebase. That provide software as a service you don't have so much time to manage the server and traffic all these thing done by the Firebase

3.1

FIREBASE

Firebase Hosting is **built for the modern web developer**. Websites and apps are more powerful than ever with the rise of front-end JavaScript frameworks like Angular and static generator tools like Jekyll. ... Using the Firebase CLI, you deploy files from local directories on your computer to our Hosting servers.

Key capabilities

Serve content over a secure connection: The modern web is secure. Zero-configuration SSL is built into Firebase Hosting, so content is always delivered securely.

Host static and dynamic content plus micro services: Firebase Hosting supports all kinds of content for hosting, from your CSS and HTML files toyour Express.js micro services or APIs.

Deliver content fast: Each file that you upload is cached on SSDs at CDN edges around the world and served as g-zip. We auto-select the best compression method for your content. No matter where your users are, the content is delivered fast.

Emulate and even share your changes before going live: View and test your changes on a locally hosted URL and interact with an emulated backend.

Deploy new versions with one command: Using the Firebase CLI, you can get your app up and running in seconds. Command line tools make it easy to add deployment targets into your build process.

And if you need to undo the deploy, Hosting provides one-click rollbacks.

METHODOLOGY

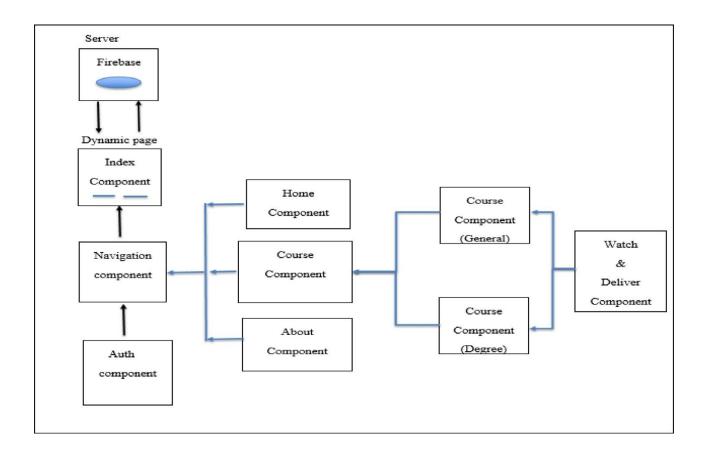
If you look at the data flow diagram you can easily find out our data flow is always in one direction. This happening due to the one-way binding property of react application.

So how this is happening and how we manage it because in an application back & forth data to work properly so the answer is that is hipping by using the reduce another very versatile, flexible & light weight library it used to manage the data.

What actually it does is it create a store, action & reducer as the name suggest store create a storage mechanism, action create action or events and reducer combine the data and store it into store.

So according to data-flow diagram there is a dynamic page called Index that contains all other pages in hierarchical manner. Firstly, it contains the navigation bar from this bar we can navigate on to the other component like courser about us. Course component contain two sub parts one for general things & other for the degree. Both of them are connected to the watch component where a user can view their study material in the form of Video, Text and Diagram.

DATAFLOW-DIAGRAM



PROBLEM DEFINATION

As we know that in this covid-19 situation all the educational offline institute like Universities, College and schools are closed. The Student is not able to get their education properly. They do not getting the proper guidelines related to the study.

The students facing lots of problems like they did not get a proper book for their study.

There are multiple E-Learning Websites on the internet over the world like Udemy, w3schools, java points, etc. They provide Paid and free courses but our Universities, College, Schools does not have their own e-learning website.

4.1

PROPOSED SOLUTION

We propose to design the Front end of the E-Learning Website using HTML, CSS, JavaScript to develop the Website.

The User interface of the Website is simple and easy to use. On this website, there are lots of features Like E-book, Syllabus, Old Question paper Traderelated courses, Notes provided by teachers, etc.

CODING

The purpose of code is to facilitate the identification, retrieval of the items and information. A code is oriented collection of symbols design to provide unique identification of an entry or attribute. Code is built with manually exclusive features. Codes in all cases specify object which are physical or an performance characteristics. They are used to give optimal distraction and other information.

Codes are used for identifying, accessing, storing and matching records. The codes ensure that only one value of the code with a single meaning is correctly applied to give entity or attribute as described in various ways. Code can also be design in a manner easily understood and applied by the user.

Web-Programming

Web programming refers to the writing, markup and coding involved in Web development, which have Web content, Web client and server scripting and network security. The most common languages used for Web programming are-XML, HTML, JavaScript, Perl 5 and PHP. Web programming is different from just programming, which requires interdisciplinary knowledge on the application area, client and server scripting, and database technology.

Web programming can be briefly categorized into client and server coding. The client side needs programming related to accessing data from users and providing information. It also needs to ensure there are enough plug ins to enrich user experience in a graphic user interface, including security measures.

- 1. To improve user experience and related functionalities on the client side, JavaScript is usually used. It is an excellent client-side platform for designing and implementing Web applications.
- 2. HTML5 and CSS3 supports most of the client-side functionality provided by other application frameworks.

FILE COMPONENT

	css	10-08-2021 20:23	File folder	
	e-book	10-08-2021 20:36	File folder	
	image	10-08-2021 18:48	File folder	
	js	15-07-2021 15:56	File folder	0.000
V	404	15-07-2021 13:25	Brave HTML Document	2 KB
W	about	10-08-2021 19:05	Brave HTML Document	19 KB
V	account	10-08-2021 17:15	Brave HTML Document	4 KB
W	Civil Engineering	10-08-2021 18:50	Brave HTML Document	6 KB
W	contact	10-08-2021 18:50	Brave HTML Document	6 KB
W	Course	10-08-2021 22:53	Brave HTML Document	4 KB
W	Dept	10-08-2021 22:53	Brave HTML Document	7 KB
W	Electrical Engineering	10-08-2021 18:50	Brave HTML Document	6 KB
W	Electronics & Comm. Engineering	10-08-2021 22:53	Brave HTML Document	6 KB
¥	Food Technology	10-08-2021 18:51	Brave HTML Document	6 KB
V	index	11-08-2021 12:44	Brave HTML Document	4 KB
W	Mechanical Engineering	10-08-2021 18:51	Brave HTML Document	6 KB
V	Packaging Technology	10-08-2021 18:51	Brave HTML Document	6 KB
W	Printing Technology	10-08-2021 18:51	Brave HTML Document	6 KB
W	Syllabus	10-08-2021 18:51	Brave HTML Document	30 KB
V	web-development	10-08-2021 22:53	Brave HTML Document	6 KB

In this section, there are lots of files that contain lots of information. It consists .html files, .css files, .js files, Image, Pdf, etc.

The implementation of HTML, CSS, JAVA-SCRIPT is mainly in visual studio.

RESULTANALYSIS

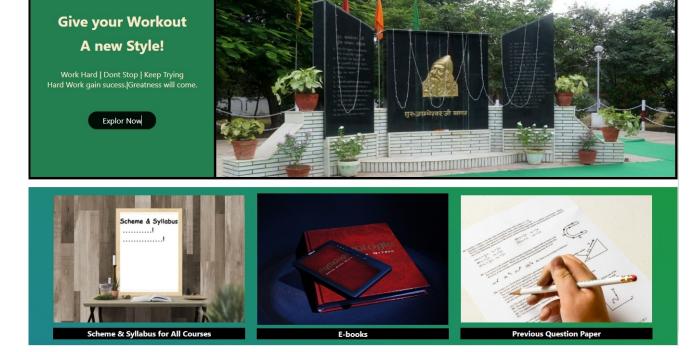
In this section, we Display all the Images as Output and their explanation in detail.

HEADER



- The Header Section consists top portion of the web page.
- The Top Section of the web page contains the Site Logo and Name of the Web site and search bar, Account function.

BODY



• The Body Section consists Middle view of the web page.

• The Body Section of the web page contains the University Image andlots of functions related to the Web site.

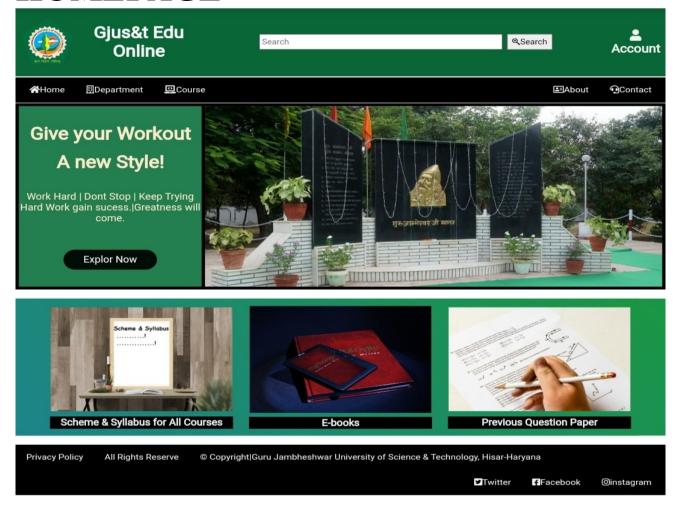
FOOTER



- The Footer Section consists Bottom portion of the web page.
- The Bottom Section of the web page contains the Privacy policy, All rights and some social media links.

7.1

HOMEPAGE

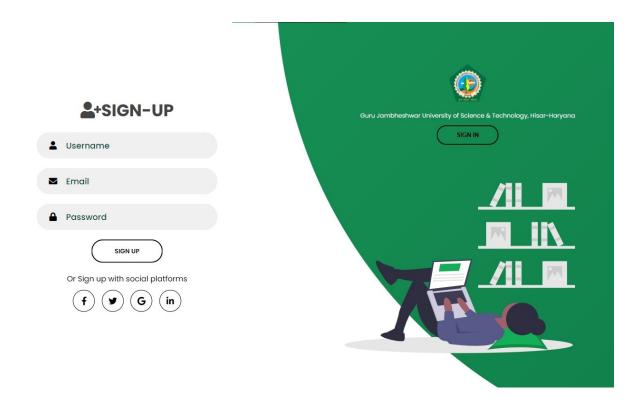


ACCOUNT

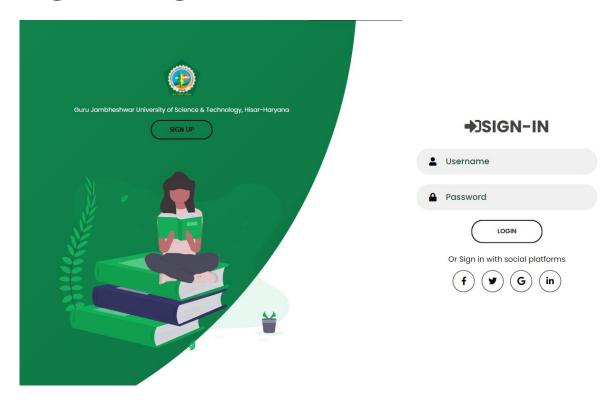
It Contain Sign-In & Sign-up Page.

Sign-up Page

- In the Sign-up Section We need to provide the Username, E-mail ID, And Password.
- In this page we can directly access the website through Facebook, Twitter, Google, Linked-in.

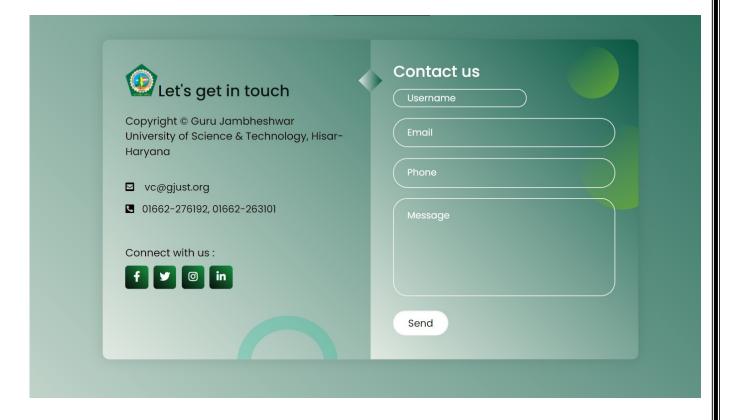


Sign-In Page



- In the Sign-In Section We need to provide the Username and Password.
- In this page we can directly access the website through Facebook, Twitter, Google, Linked-in.

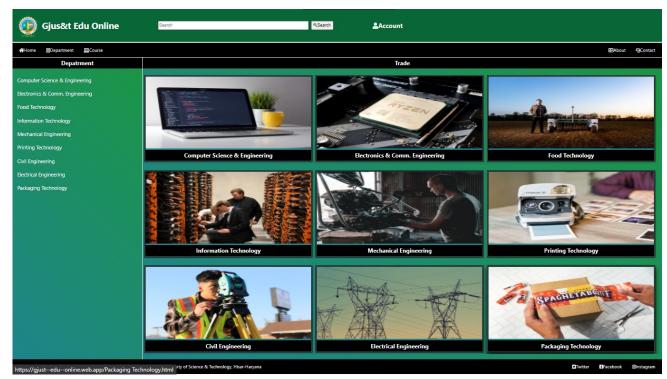
Contact-us



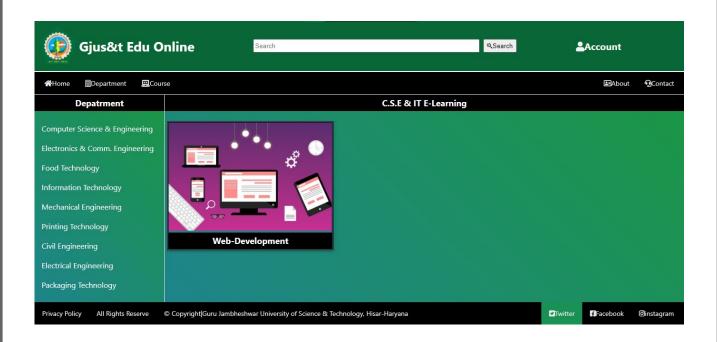
About-us



Department

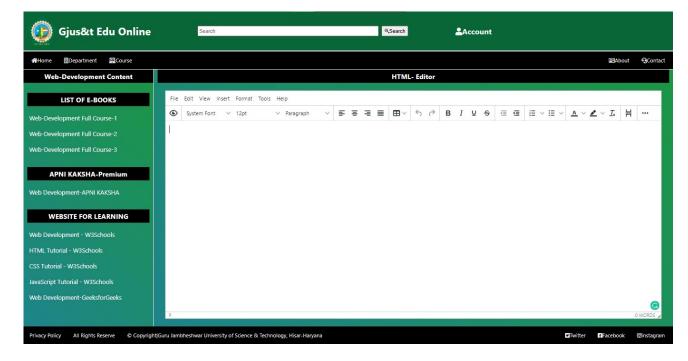


Coures

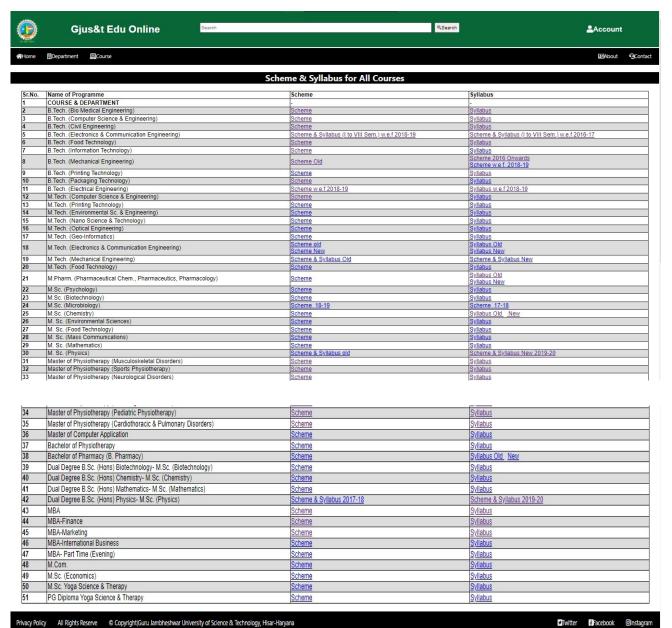


7.7

Web-Development Course

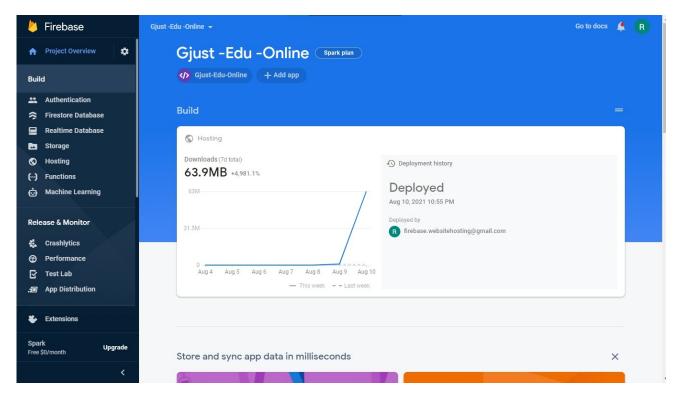


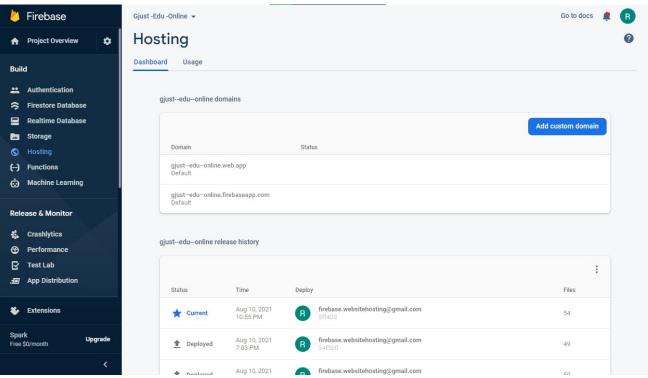
SCHEME & SYLLABS FOR ALL COURSES



Through the service of copyright point summer and or section of the money, made market

Hosting Through Firebase





Conclusion

In culmination, a comparative study between classroom study and online study was carried out. The study was done by examining the findingsrecorded in books and journals on the applicability online learning to students. The study revealed that, online learning has many benefits as compared to the conventional learning in the classroom environment.

Now a days online learning has several challenges such as lack of feedback from students and lack of the proper technology to effectively conduct online learning, these limitations can be overcome by upgrading the E- Leaning systems and the use of online discussion forums and new web based software's.

In conclusion, online learning is beneficial to the students, tutors and the institution offering these courses. I would therefore recommend that online learning be implemented on all learning institutions and research on how to improve this learning process should be carried out.

FUTURESCOPE

E-learning is not just a change of technology. It is part of a redefinition of how we as a species transmit knowledge, skills, and values to younger generations of workers and students. This book makes a few predictions of how e-learning and the functions it serves will continue to develop. Learners will have access to millions or billions of knowledge modules. Some will be Web pages with simple text and graphics. Others may include multimedia simulations. In many fields, e-learning has become the default way to conduct training or to provide education. There are four secrets of e-learning. The first secret is to teach what learners need to learn in the way they most naturally learn. The second secret is to define clear learning objectives. The third secret builds on the first two. It is to focus on the right objectives. The final secret is in the power of testing.

REFERENCES

- https://www.w3schools.com/
- https://firebase.google.com/
- https://www.apnikaksha.net/
- https://www.geeksforgeeks.org/

ORIGINA	ALITY REPORT				
9 SIMILA	% ARITY INDEX	4% INTERNET SOURCES	0% PUBLICATIONS	8% STUDENT PAPERS	
PRIMAR	Y SOURCES				
1	nrs.harv Internet Source			2) %
2	Submitte Student Paper	ed to Ibrahim Ba	abangida Univ	versity 1	%
3	Submitte Student Paper	ed to The British	n College	1	%
4	Submitted to International School of Management and Technology (ISMT), Nepal Student Paper			Nepal 1	%
5	Submitted to BITS, Pilani-Dubai Student Paper		1	%	
6	Submitted to Federal University of Technology Student Paper			chnology 1	%
7	Submitted to University of East London Student Paper			on <1	%
8	Submitte Student Paper	ed to Wawasan	Open Univers	ity <1	%
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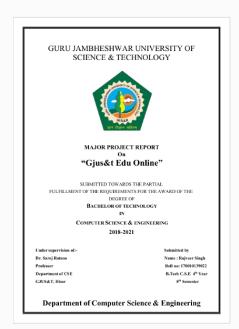
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