NEWS WEBSITE

A REPORT SUBMITTED IN PARTIAL FULFILLMENT FOR AWARD OF BTECH.

IN

COMPUTER SCIENCE ENGINEERING



Session 2019 -2020

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PREFACE

The main objective of any computer science student is to get as much of practical knowledge as possible. Being an able to have a practical knowledge by developing a project is a life time experience. As practical knowledge is as important as theoretical knowledge we are thankful of having a project. Through the development of the project we had a great experience of various strategies that can be applied in development of project. This project is the stepping stone for our carrier.

We are pleased to present this project. Proper care has been taken while organizing the project so that it is to comprehend also various software engineering concepts as been implemented. We learn to tackle different real-world problems that strike while developing any real-world computer application.

In this project report we have included various concept, effects, and implication regarding to our project. This report consists of six chapters, 1st chapter gives you an introduction about project, titled as "News Website" where in this we describe about news which a base of our project.

The 2^{nd} chapter of this report mention about the tools and methodology that we have use for developing the project. The 3^{rd} chapter brings information about all the design model of our project. In 4^{th} chapter we discuss about the database of our project. In 5^{th} chapter provide an idea about how the website works. And the last chapter we mention the conclusion, Future scope, etc.

During this project session we come to know how to work in a group and what discussion are made about real world objects and problems arise during development phase. And also, we get an idea how to develop a real-world project in different modules and then combined them the main application. We also work on a new platform; we had acquired sound experience of team work and practical knowledge. Also learn that how to use web application. This platform is very different for using in our project session. When we work on this, we faced many difficulties but we find solutions of these difficulties.

ACKNOWLEDGEMENT

Life is a journey of excellence. Every mile that one reaches during the external journey is marked by guidance & support of the near & dear ones & this end beaver of mine is no inception.

We would like to express our sincere thanks to <u>Dr. RS Vyas</u> (Director Sir) for giving us this opportunity to undertake this project. We also wish to express our gratitude to <u>Mr. Gaurav Kumawat</u> (HOD Computer Science) for his kind-hearted support.

We specially wish overwhelming gratitude and immense respect to **Mr. Sanjay Rathore** (Project In-charge) for his valuable guidance, content encouragement and contractive cynicism in bringing this manuscript in the present shape.

We also wish to express our indebtedness to our parents as well as our family member whose blessings and support always helped us to face the challenges ahead. At the end we would like to express our sincere thanks to all our friends and others who helped us directly or indirectly during this project work.

Last but not the least Thank you God.

SUBMITTED BY:

Naresh Mali Ashish Jain Harshit Paneri

INTRODUCTION

1.1. About the project

- This website is made for daily news update. This website will help to provide most important news based on their functionality. News website is basically an online portal for new channel. They offer latest updates and notification on your device. There is various news portals present now a days. Also presenting breaking news in a more timely manner.
- Online news system allows customers to read up to date news related to many fields like Magazine, Business, Sports, Art, Politics, Travel, Breaking news, etc.
- Without any payment or login. He can also contact us to give suggestions and can also give us feedback related to our site.
- New news can be added or post by the admin and only admin have the authorized to update or delete any news.
- Admin have to right to give authority to other for insert, update and delete the news.

1.2. Functionality

- Magazine
- Business
- Sports
- Art
- Politics
- Travel

1.3. Why we need to make this website?

- The main objective of this website is that to provide the all type of instant and important news related to Magazine, Business, Sports, Art, Politics, Travel, breaking news, etc.
- Manage the information of Magazine, Business, Sports, Art, Politics, Travel, Breaking news.
- Integration of all records of news.
- Those people who don't have time to read the news paper and always linked with internet can get more informative.
- Publish news about local region, town and city, national and international. End user can
 upload news from anywhere at any time through web, mobile, tables, etc. with registered
 their login id and password.

1.4. Merit and Demerits of the project

Merits:

- Extremely fast news
- Completely free
- No personal information required
- Interactive news
- Environmentally friendly
- Quick and easy way to get the news

Demerits:

- Not accessible in some part of the world.
- Difficult to navigate the internet.
- Only those person can use this website who know the basic computer knowledge

TOOLS AND METHODOLOGIES

Now we will be describing all the languages, platforms tools and technologies are used in order to complete this project.

2.1 Node JS

What is Node.Js?

Node.Js is a server-side platform built on Google Chrome's JavaScript Engine (V8 Engine).Node.Js was developed by Ryan Dahl in 2009 and its latest version is v0.10.36.Node.Js is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.Js applications are written in JavaScript, and can be run within the Node.Js runtime on OS X, Microsoft Windows, and Linux. Node.Js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.Js to a great extent.

Node.Js = Runtime Environment + JavaScript Library 12

Features of Node.Js:

Following are some of the important features that make Node.Js the first choice of software architects.

- 1. **Asynchronous and Event Driven-** All APIs of Node.Js library are asynchronous, that is, non-blocking. It essentially means a Node.Js based server never waits for an API to return data. The server moves to the next API after calling it and a notification mechanism of Events of Node.Js helps the server to get a response from the previous API call.
- 2. **Very Fast-** Being built on Google Chrome's V8 JavaScript Engine; Node.Js library is very fast in code execution.
- 3. **Single Threaded but Highly Scalable-** Node.Js uses a single threaded model with event looping. Event mechanism helps the server to respond in a non- blocking way and makes the server highly scalable as opposed to traditional servers which create limited threads to handle requests. Node.Js uses a single threaded program and the same program can provide service to a much larger number of requests than traditional servers like Apache HTTP Server.
- 4. **No Buffering** Node.Js applications never buffer any data. These applications simply output the data in chunks.
- 5. License Node. Js is released under the MIT license

Who uses Node.Js?

Node.Js is used by eBay, General Electric, Go Daddy, Microsoft, PayPal, Uber, Wiki pins, Yahoo!, and Yammer to name a few. Projects, Applications, and Companies Using Node.

Concepts:

The following diagram depicts some important parts of Node.Js which we will discuss in detail in the subsequent.

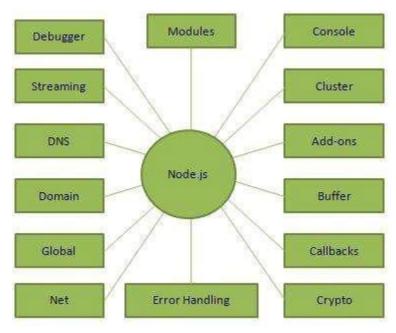


Fig 2.4 – Concepts of Node.Js

Where do we use Node.Js?

Following are the areas where Node.Js is proving itself as a perfect technology partner.

- 1. I/O bound Applications
- 2. Data Streaming Applications
- 3. Data Intensive Real-time Applications (DIRT)
- 4. JSON APIs based Applications
- 5. Single Page Applications
- 6. It is not advisable to use Node. Js for CPU intensive applications

2.2. Angular Js

Angular Js is a very powerful JavaScript Framework. It is used in Single Page Application (SPA) projects. It extends HTML DOM with additional attributes and makes it more responsive to user actions. Angular Js is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

Why to Learn Angular Js?

- Angular Js is an open-source web application framework. It was originally developed in 2009 by Misko Hevery and Adam Abrons. It is now maintained by Google. Its latest version is 1.2.21.
- Angular Js is a efficient framework that can create Rich Internet Applications (RIA).

- Angular JS provides developers an options to write client side applications using JavaScript in a clean Model View Controller (MVC) way.
- Applications written in Angular Js are cross-browser compliant. Angular Js automatically handles JavaScript code suitable for each browser.
- Angular Js is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.
- Overall, Angular Js is a framework to build large scale, high-performance, and easytomaintain web applications.

Applications of Angular Js

The general features of Angular Js are as follows –

- Angular Js is a efficient framework that can create Rich Internet Applications (RIA).
- Angular Js provides developers an options to write client side applications using JavaScript in a clean Model View Controller (MVC) way.
- Applications written in Angular Js are cross-browser compliant. Angular Js automatically handles JavaScript code suitable for each browser.
- Angular Js is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.
- Overall, Angular Js is a framework to build large scale, high-performance, and easy to maintain web applications.

2.3. Express

Express is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications. It facilitates the rapid development of Node based Web applications. Following are some of the core features of Express framework –

- Allows setting up middleware's to respond to HTTP Requests.
- Defines a routing table which is used to perform different actions based on HTTP Method and URL.
- Allows to dynamically rendering HTML Pages based on passing arguments to templates.

\$ npm install express --save

The above command saves the installation locally in the node modules directory and creates a directory express inside node modules. You should install the following important modules along with express –

Body-parser – This is a node.js middleware for handling JSON, Raw, Text and URL encoded form data

Cookie-parser – Parse Cookie header and populate req.cookies with an object keyed by the cookie names.

Multer – This is a node.js middleware for handling multipart/form-data

2.4. MongoDB

MongoDB is an open-source document database and leading No SQL database. MongoDB is written in C++. This tutorial will give you great understanding on MongoDB concepts needed to create and deploy a highly scalable and performance-oriented database.

Audience

This tutorial is designed for Software Professionals who are willing to learn MongoDB Database in simple and easy steps. It will throw light on MongoDB concepts and after completing this tutorial you will be at an intermediate level of expertise, from where you can take yourself at higher level of expertise.

Prerequisites

Before proceeding with this tutorial, you should have a basic understanding of database, text editor and execution of programs, etc. Because we are going to develop high performance database, so it will be good if you have an understanding on the basic concepts of Database (RDBMS).

2.5. Software Requirements

At Developer End

Front-end: HTML, CSS, JavaScriptBack –end: Node.js, Angular Js

• OS : Window 7 or above, Linux or any other

• Database : Mongodb

• IDE : Visual Studio Code

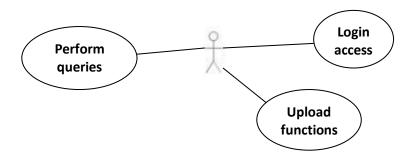
At User End

• Any latest web enabled browser

Project Design

3.1. Use Case Diagram

Use Case Diagram for Admin

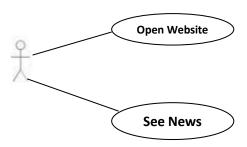


For Admin Panel

Description:

- 1. The admin just need to have login access.
- 2. Upload functions (with textbox and button).
- 3. Upload news, along with an image. Update news, images, Delete news and images
- 4. Upload photos for gallery by dates with a hyperlink to enlarge and Delete button.
- 5. Upload videos (with textbox and button) and if can download you see.
- 6. Delete members the news we will upload it, just give us the layout and functionalities.

Use Case Diagram for User

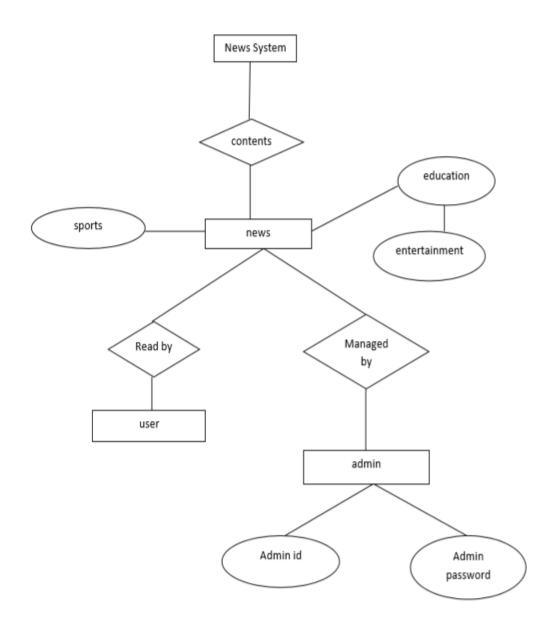


For User Panel

Description:

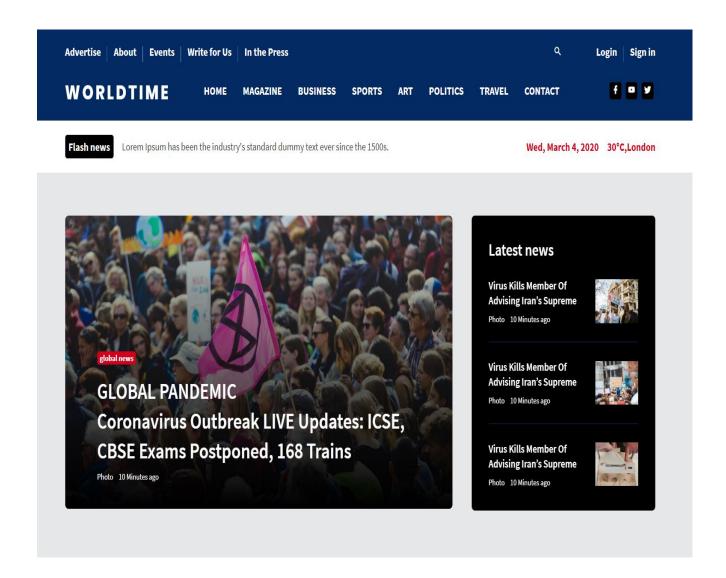
1. Login as user and see the news.

3.2. Entity-Relationship Diagram



WORKING PROCESS

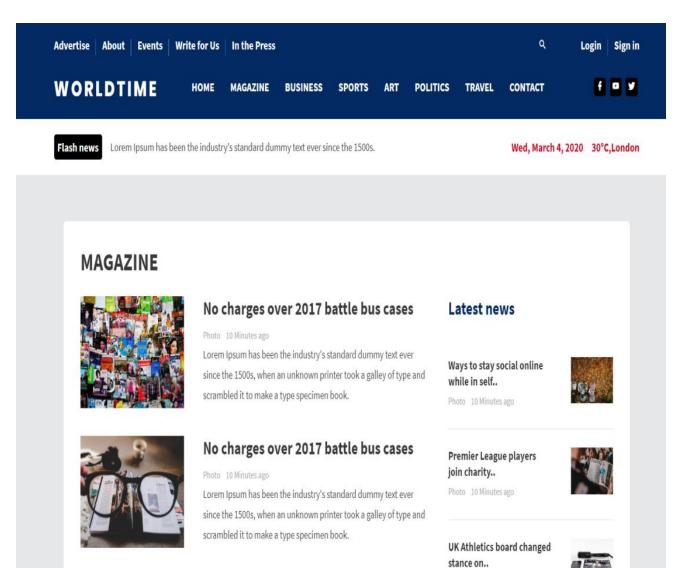
4.1. Home Page



- The home page is the name of the main page of a website where visitors can find hyperlinks and functionality to find other pages.
- Visitor navigating to a website from a search engine will see.
- And it may also serve as a landing page to attract visitors.

4.2. User Specification

Magazine



Magazine Views

Kaine: Trump Jr. may have committed

Photo 10 Minutes ago

Business



Flash news

Lorem Ipsum has been the industry's standard dummy text ever since the 1500s.

Wed, March 4, 2020 30°C, London

BUSINESS



No charges over 2017 battle bus cases

Photo 10 Minutes ago

Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.



No charges over 2017 battle bus cases

Photo 10 Minutes ago

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Latest news

Ways to stay social online while in self..

Photo 10 Minutes ago



Premier League players join charity..

Photo 10 Minutes ago

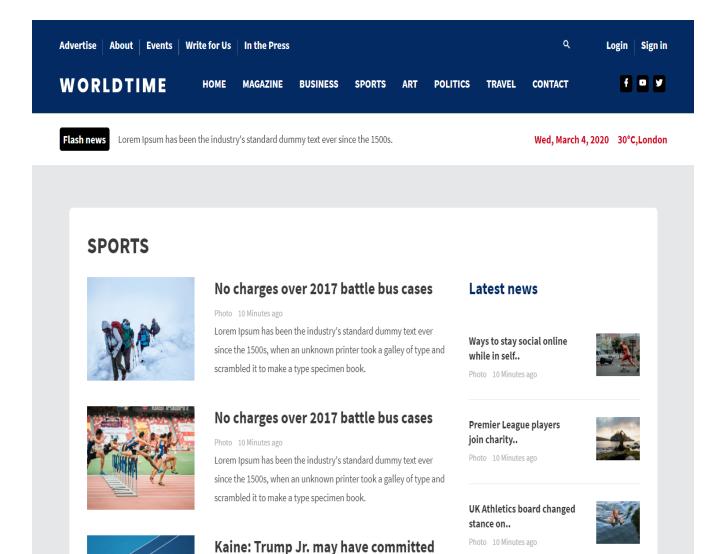


UK Athletics board changed stance on..



Business News

Sports



Sports News

Politics



Flash news

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POLITICS



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Photo 10 Minutes ago Lorem I psum has been the industrice the 1500s, when an unknown

No charges over 2017 battle bus cases

Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.



Latest news

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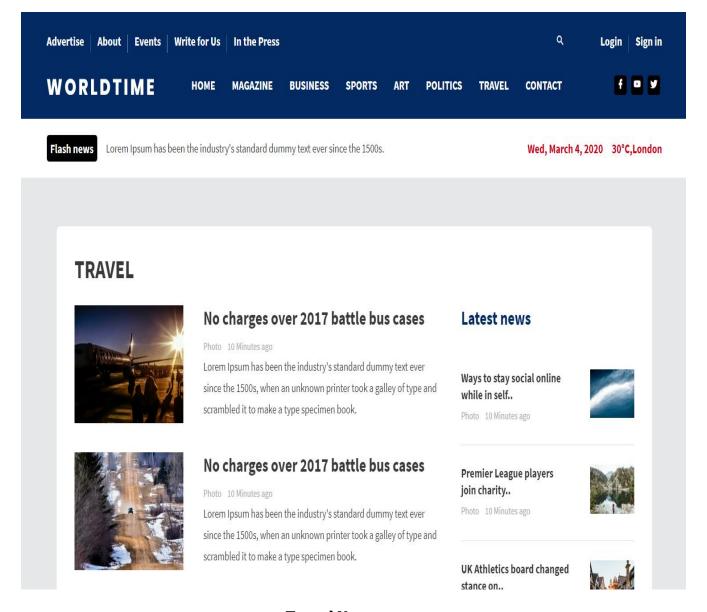
UK Athletics board changed stance on..

Photo 10 Minutes ago



Politics News

Travel



Travel News

Header



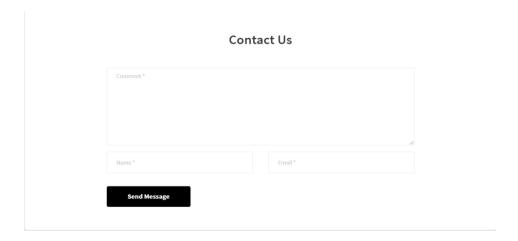
Header is the top section of the web page. Headers are often the first thing site visitors see so having the logo is important.

Footer



The footer appears at the bottom of site page. it usually contains small-print items like copyright information and footer design is about choosing what to include, with the intention to helping visitors and meeting business goals.

Contact Us



It could be beneficial to let your visitor decide what's useful for them. It's also helping the visitor to contact the website owner.

CONCLUSION AND FUTURE SCOPE

Conclusion

- To get information about current world ages anytime, anywhere, anyone can access by internet at low cost.
- Coverage of distribution and faster dissemination of information in a more timely manner.
- To provides a wonderful user interface that attracts more and more user.
- All new updated information that is more effective and useful for people.
- In our project work, an attempt has been made to develop a News or information-based website. We develop this project that helps the people and make them aware so that they can know any news. To establish this website, we use various methodologies. To develop this project, we have faced many problems but we hardly tried to develop this project. Our training faculty helps us by giving his valuable opinion, decision and time.

Future Scope

- The future scope is our project is valuable. In future if we get chance we will develop this website for large volume.
- As for other future developments, the following can be done:
 - > We update our database.
 - We can make searching system more flexible.