

Acknowledgement

First we would like to thank **Mrs. Sanjeevani** (Manager, P.M.U) for giving us the opportunity to do an internship within the **BIHAR STATE ELECTRONICS DEVELOPMENT CORPORATION LIMITED** (B.E.L.T.R.O.N, Patna). Although quite short, for summer internship was a great experience we can learn from. It helped us to explore our skills and increased our interest in web development. Special thanks to our mentors for being so accommodating and understanding.

We would also like thanks to all the staff at B.E.L.T.R.O.N, Patna for helping me during our internship period. We appreciate their patience and help.

Abstract

The key to having successful and fully functional web applications is in their Communication with the user. It is of no surprise that human/machine interaction is a popular topic of research and development. And as now days most of the student learn from the web, certainly the web page become an enlighten for education rather than stuff for just browsing and entertainment. Also education and development of students is the main goal at the B.E.L.T.R.O.N, Patna. , where we had the honor to spend our first training period.

A solution has been proposed in the form of webpage containing various videos and slides in general. Taking into account web standards and the back-end and Front-end architecture of web development, a method for providing a Multi-subject web video website has been planned from scratch and explained in details in this report.

Table of Contents

i. Acknowledgement.....	1
ii. Abstract.....	2
1. Introduction.....	4
1.1. Context of Project.....	4
1.2. Context of Internship.....	5
1.3. Technical aspect.....	6
2. Solutions	
2.1. Web page creation and implementation.....	7
2.2. Front-end module.....	8
3. Discussion	
3.1. Overview.....	9
3.2. MySQL.....	10
3.3. HTML.....	10
3.4. Style/CSS.....	10
3.5. JavaScript.....	10
3.6. Problems and Suggestions.....	12
4. Conclusion.....	13
5. List of figures.....	14
6. Appendix A.....	19
7. Appendix B.....	20
8. Sources.....	40

1. Introduction

As a full time student of Bakhtiayarpur college of engineering (B.C.E ,PATNA),Patna we have decided to undertake a summer internship at the end of our second year studies at BIHAR STATE ELECTRONICS DEVELOPMENT CORPORATION LIMITED (B.E.L.T.R.O.N, Patna. The degree towards we are currently studying is a Bachelor of technology in Computer science. The summer internship at the B.E.L.T.R.O.N, Patna was quite challenging for us for a few reasons: Firstly, the programming languages and development tools we was using at the B.E.L.T.R.O.N were new for us, hence we had to quickly integrate not only with our new environment but also academically. This was very beneficial for us as at the end we could compare what we have learnt with what we already knew and find a connection between us. Since we find ourselves more interested in the area of web development and design, we were happy to be assigned the position of a trainee in web development in a research Centre situated B.E.L.T.R.O.N, Patna

This report is a description of our 6 week internship carried out as a compulsory component of the bachelors of technology certificate as decided by AICTE. In the following chapter details of the activities of my team are given. Afterwards, we explain our individual role and tasks as a trainee and give specific technical details about our main tasks. Finally, a conclusion is drawn from the experience.

1.1. Context of Project

The B.E.L.T.R.O.N (BIHAR STATE ELECTRONICS DEVELOPMENT CORPORATION LIMITED) conducts research in the field of knowledge construction, user assistance, system adaptation to the user, and usage analysis by the user. The topic of the our team is about to create a website to provide free stuff to the student specially on the

least popular courses where students suffers a lot for quality material to gain knowledge. We design a website for successful knowledge transfer between users and marine engineering using web technology.

My team work on a web page that are developed to serve free videos and learning materials available for all student in nearly all branches of engineering so that the problem faced by us will not happens with any other engineering student.

This platform provides highly functional tools for the development of personal learning environments or educational perspective. Thus, users can read, gain, share and discuss information while being in with people of same goal orientation.

Traces of user activity are collected and stored for further exploration and analysis, which contributes to the improvement of the learning experience. The so-called Modelled trace (M-Trace) is proposed as a digital object with specified properties, well defined models, and knowledge with a precise semantics.

While the implementation of this project requires complex back-end programming and data management, it is of equally high importance that the delivered data to the user is understandable and accessible through good presentation and communication, or front-end programming.

1.2. Context of Internship

I have been assigned the task to provide video links for the videos collecting various resources, and suggest a solution to translating and dynamically editing the content of a web page in general. Ritesh yadav and lakshya shobhit works on database management to store the various information of users and also to provide them proper feedback, Ritesh Kumar and Ankit Kumar work to create the webpages. As previously mentioned, the M-Trace object contains information of the user traces which allows a detailed preview of each videos, presentation, and discussions. For a better user experience, an option to choose a language of preference had to be added to the pages displaying and managing the trace views. This is way of establishing good communication with the user, while making it accessible for a wider audience.

Furthermore, the solution had to be extended and modified in order to comply with any web page written in HTML.

More details on our weekly tasks can be found in Appendix A. Implementations will be discussed further ahead in the report.

1.3. Technical Aspect

For the completion of the tasks the following web languages and scripts have been Used:

- HTML for the construction of the layout,
- CSS for the design of the layout,
- JavaScript for dynamic functioning
- And MySQL for data storage.

2. Solutions

2.1. Web page creation and implementation

During the first half of our internship we was working on the about, home, contact and registration pages for the webpage and also create and associate a database to store the information of the new users and existing users. These consists of the motto for making the pages so that more and more people influence by the webpage and our dream to spread knowledge finally comes true. It also contains a contact us page through which user can directly contact us to give feedback, suggestions or can make request for videos on specific topics. The third page contains a home page that is the main page and all the other things appears in drop down menu on the home page thereafter a registration page to keep the track of new users there requirement and their expectations. There are also services to notify the user through the mail about new videos and study materials. Additional option page is available in order to provides videos collectively and keep tracks. As seen on the figure 1 and 2 (see page *), a drop down icon is on the right up corner on the website are there. A single click on that brings a menu having various options to visit and various videos group to gain knowledge.

We have used two different strategies for the translation of the windows. However, a general solution has been developed and will be further explained in the report.

For better display of the video we have decided to include the image buttons as another header cell, whereas in the option window they are stored inside a list table.

The solution is specific for the extension as all text values are collected and replaced using id recognition of predefined id's.

By clicking a flag, a video according to the desired preference is called. What the video contains, is played on a online media player another related videos are displayed and replace the previous ones by calling the tags by their id's.

2.2. Front-end Module

While the first solution is simple and functional, it is not developer-friendly and does not give any room for further user and admin configurations. A more general solution has been proposed for the following scenario:

A user would like to view a collection of videos arranged in a synchronized way and that includes many details. However, we are not happy with the long or vague video available on YouTube or any other internet platform, therefore would prefer if they could be shorter but still understandable. Also a lot of people is not fluent in English so provide the stuff in Hindi or in some cases their native language, also sometimes transcript needed to display as some of the text are barely readable in the videos.

On the other hand, an administrator has to take consideration on people's comments and suggestions and act accordingly for the same therefore a quick edit tool must be in there for videos and the text and therefore would like to quickly change them.

Our main task was to find a solution for this scenario that would also work for other related videos. What we were striving for is to develop a small cluster of videos (in the form of a folder) that can be built into any web source and provide the functionality to edit text data on the client side for the users and on server side for the administrators and give the ability to translate the same data, without affecting its accessibility levels.

We found ourselves sifting through large amounts of information trying to find the best solution for this problem, therefore some aspects of it are not yet fully developed. In the next chapter you will find more deeper explanation of how we went about suggesting the above solution.

3. Discussion

3.1. Overview

The webpage had been planned to consist of two parts front-end and back-end development. The front-end is the part of the web that you can see and interact with (e.g. Client-side programming). While front-end code interacts with the user in real time, the back-end interacts with a server to return user ready results. The front-end is a combination of HTML, CSS and JavaScript coding. By using JavaScript, modifications of the design of a webpage can be made immediately, however only temporary and visible only by the user.

Normally the user would not have rights to modify web content dynamically on the server side. Logically, administrators are the ones who deal with back-end modification of databases for example, as they often contain sensitive data which should not be available to see or modify by the general public. Back-end programming languages include PHP, Python, Ruby and others. As we have minimal experience with back-end programming, we have initially focused on the front-end development of the learning webpage module.

However, if a developer were to extend its functionality, they would be able to reuse code that manages user edits for their benefit. On figure 3 (see page *) it can be seen clearly seen how front-end and back-end development differentiate and where is their common point. Further explained you will find out more about each of the components in the above-described module.

3.2. MySQL

The database in this case is the MySQL library file, stored on the server-side and parsed upon request. As MySQL was used primarily in the Trace-Me to store data like comments suggestions and user details, we have decided it would be a good idea to

use it as a method of internationalization for the Assistant of Trace-Me, mainly because of the simplicity of adding data, which is an important part of the module.

By creating an array of objects, each containing default text from the Assistant and its translations, we were able to compare every text attribute on the page with the existing ones in the library and replace them appropriately.

3.3. HTML

What we had to take in mind prior to starting the project was accessibility issues and web standards. We had written a strict XHTML file that contains two sections - one list () section for the flag buttons and another (<div>) for the modification buttons.

One major concern of web accessibility is the use of images. It is considered best practice to add "alt" and "title" attributes for users who cannot distinguish images.

For example the video on the linear algebra has a title "familiarity with linearity" and alt attribute set to "linear algebra module".

The language attribute is also set as English (Lang="en") in order to inform the browser of the default human language of the script, which is essential for the proper reading of the web page by certain technologies for the disabled.

3.4. Style/ CSS

The main styling is stored in an external spreadsheet, although the HTML DOM style object has also been used to change some settings while the JavaScript is being loaded.

For example the Save button for the edit module has set visibility to "hidden" in the external style sheet, but the property changes to "visible" when the edit button is clicked to avoid potential confusion.

Another method we have used to change properties inside JS is the jQuery .css() method. I have found it to be effective in changing background and border properties of objects.

3.5. JavaScript

All functionality of the modules has been programmed in JavaScript, including jQuery and AJAX. JQuery is a fast and small JavaScript library that offers many useful features

that make event handling among other things much simpler with an easy-to-use API that works across a multitude of browsers.

AJAX, though not another programming language or library is a way of using existing standards. It is the art of exchanging data with a server and updating parts of a web page, without the need to reload the entire web page.

As AJAX was already used to dynamically load data for the Trace-Me Assistant, we have found certain AJAX event handlers in jQuery to be useful for our applications.

We used the `jQuery.ajax()` handler which performs an asynchronous HTTP (ajax) request. The request is sent to the translation library (or the json file) leading to the creation of a JSON object upon success. The object, stored in a variable called `libData` will be further used to refer to text values in the application.

The idea of the edit module is that once the user decides they want to change the screen text of a web page, all of the text values would become editable by a single button click. For this purpose, the following actions need to occur:

- Collect all HTML tags on the web page and store them in variables;
- Perform a check if each tag contains text;
- Highlight the tags with found text values upon mouse hover;
- Wrap the text inside a text box and allow modification;
- Distinct the modified text from the unmodified (e.g. Outline the text box);
- The next step of the edit process would be to save the changes by clicking on
- The 'Save' button. What happens is the following:
 - Input values are collected and stored in arrays;
 - A new MySQL object is created;
 - Whenever the user changes a text value, it is stored locally inside a mysql object;
 - Display new text values on reload;

Optionally, the user should be able to reset all text nodes in their original state.

That is made possible by adding another button called 'Default', which deletes the object in local storage.

Some of the main JavaScript code can be find attached as Appendix B on page *.

Explanations of what each bit of code does are provided.

The functionality of the back-end office modifications would be exactly the same with the only difference that the changes will be made permanent. It would be possible to reset default(old) values, however that would mean not only changing data but adding more to the database. This could bring up some complications, the most obvious one being processing time.

3.6. Problems and Suggestions

All in all, the methods proposed in the solution are quite general, however not fully completed. There is plenty of room left for improvement. For instance, while accessibility issues have been handled, some JavaScript functions remain accessible only at user click which could be difficult for those that do not use a mouse output. We would suggest that tab properties are added to all text that allows modification in order to make sifting through them easier and on click event handlers are extended to work on key press events as well.

We have struggled to find the best practice of comparing strings. Not all web applications are programmed perfectly with text that is always enclosed in tags, or properly spelled, which means a comparison is not full and might result in a glitch.

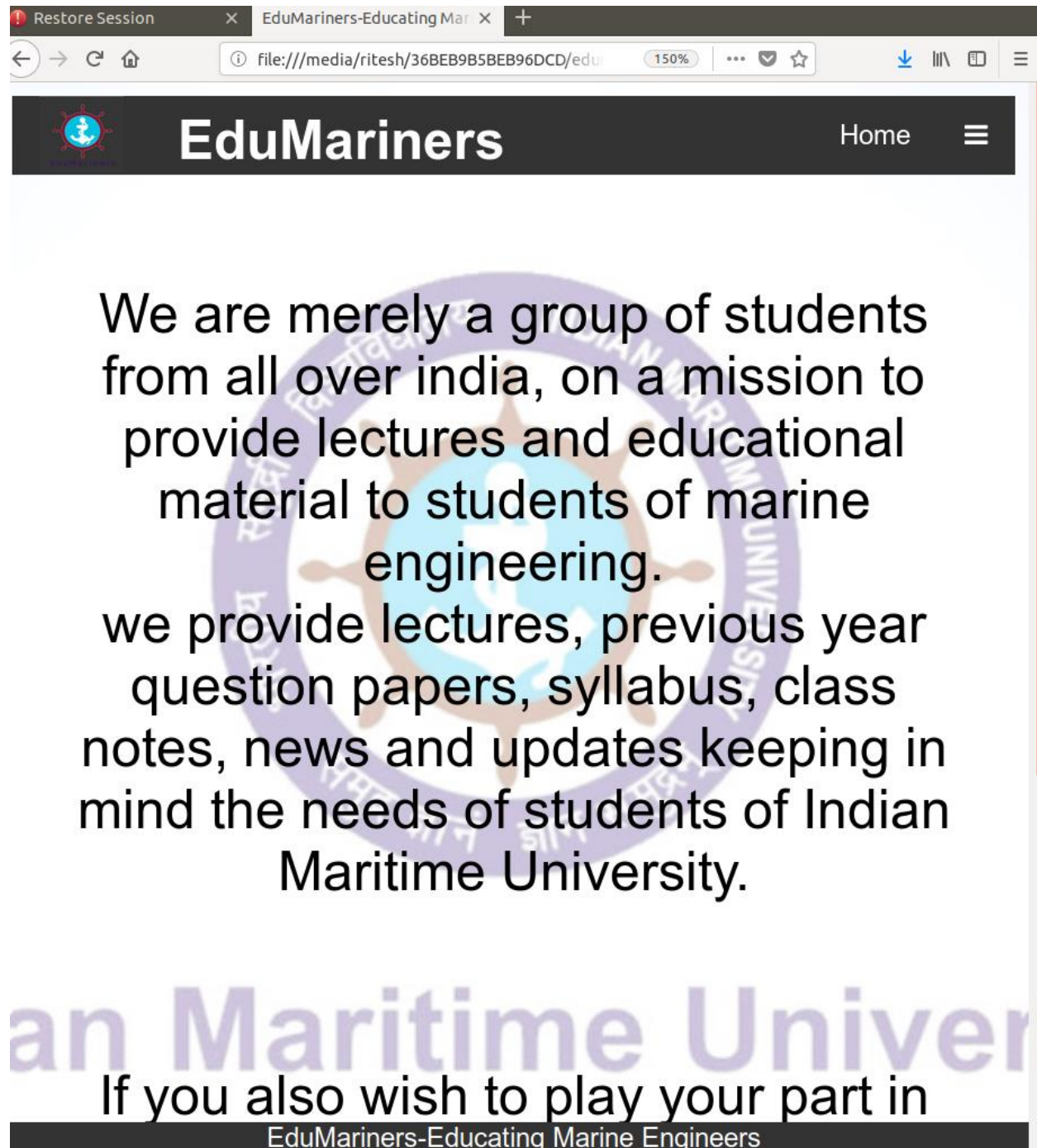
4. Conclusion

In a nutshell, this internship has been an excellent and rewarding experience. We can conclude that there have been a lot we have learnt from our work at the research Centre.

Needless to say, the technical aspects of the work we have done are not flawless and could be improved provided enough time.

As someone with no prior experience in JavaScript whatsoever we believe our time spent in research and discovering new languages was well worth it and contributed to finding an acceptable solution to an important aspect of web design and development. Two main things that we have learned the importance of our time-management skills and self-motivation. Although we have often stumbled upon these problems at college, they had to be approached differently in a working environment. We have yet to complete another two years of studies, in order to achieve a bachelor degree in Computer science. Working with web development languages has increased my interest in them, hence prompting me to transfer to the Web Design and Development course in my nearby future.


List of figures




About us page

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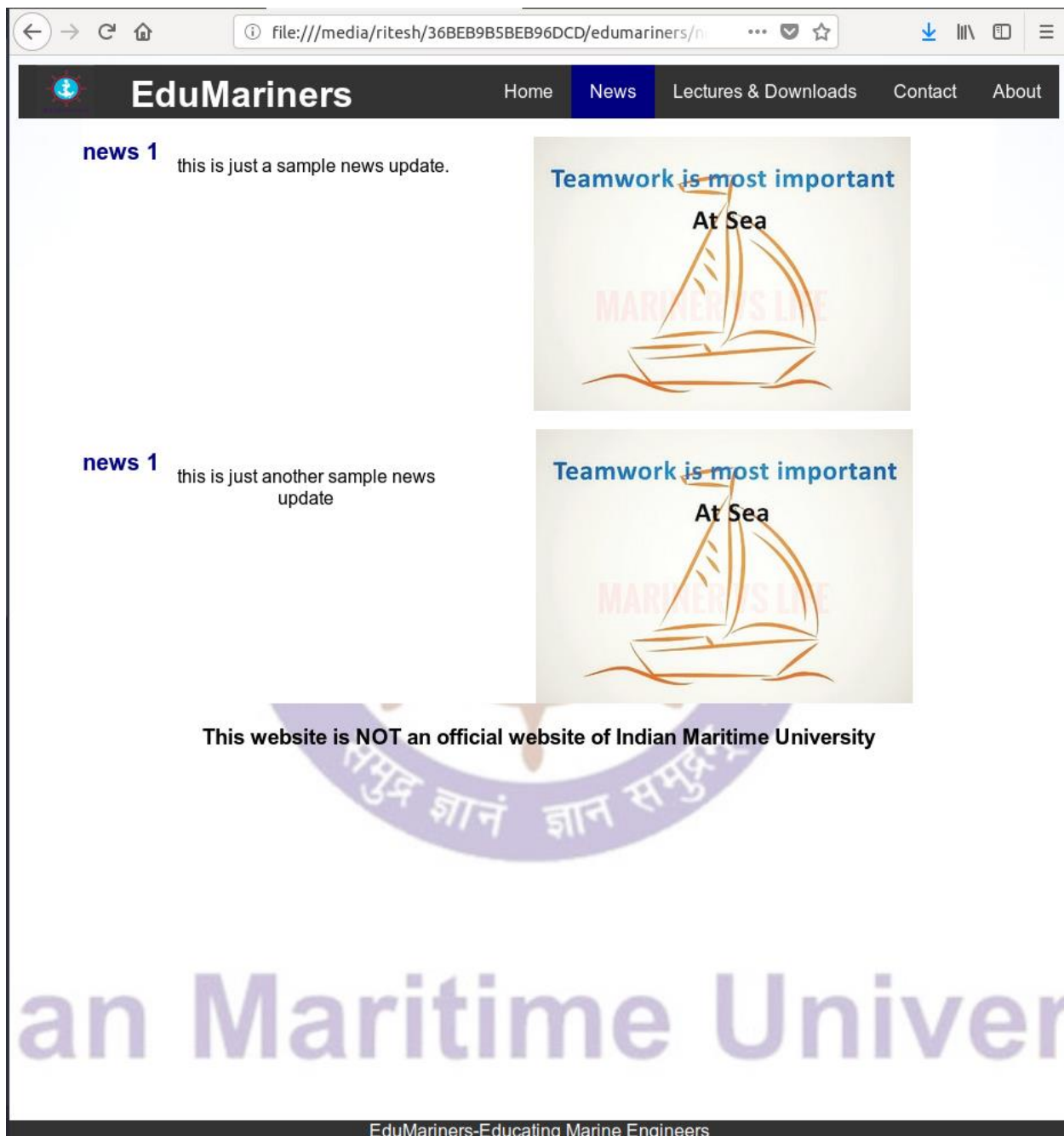


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Video menu semester wise

Appendix A - Table of weekly tasks

Week	Task	Completed weekly material
1.	Create about us and contact form	Created about us page fill the motto of making website also create a contact form to be in touch with users
2.	Create news page and ensure the proper notification handling	Create the news page attach a self-mailing system with it to ensure proper delivery of notifications to registered user
3.	Create separate pages for semester wise video uploading	Create separate pages semester wise as well as topic wise for the ease of search to the relative videos
4.	Create home page and join all other pages with it by drop down menu	Finally create a home page to establish connection among all other pages for the sake of easiness
5.	Work on back-end to ensure proper storing and updating the data	Worked on MySQL in order to create a database to store information about the users, suggestions and so on
6.	Report feedback, investigate Complications and improvement options	Discuss and show webpage for any corrections or improvements and work accordingly

Appendix B – codes used in the project

Code for about

```
<!DOCTYPE html>
<html>
  <head>
    <title>EduMariners-Educating Marine Engineers</title>
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <link rel="stylesheet" href="css/design.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  </head>
  <body>

    <div class="topnav" id="myTopnav">
      <IMG style="float: left; margin-left: 1em;" SRC="icon.png"
ALT="some text" WIDTH=50em HEIGHT=46em>
      <h1>EduMariners</h1>
      <div class="topnav-right">
        <a href="home.html">Home</a>
        <a href="news.html">News</a>

        <div class="dropdown">
          <button class="dropbtn" onclick="Function()">Lectures & Downloads
        </button>
          <div class="dropdown-content" id="myDropdown">
            <a href="lectures/semester_1/semester1.html">Semester 1</a>
            <!--<a href="lectures/semester_2/semester2.html">Semester 2</a>-
->
            <a href="lectures/semester_3/semester3.html">Semester 3</a>
            <!--<a href="lectures/semester_4/semester4.html">Semester 4</a>-
->
            <a href="lectures/semester_5/semester5.html">Semester 5</a>
            <!--<a href="lectures/semester_6/semester6.html">Semester 6</a>-
->
            <!--<a href="lectures/semester_7/semester7.html">Semester 7</a>-
->
            <!-- <a href="lectures/semester_8/semester8.html">Semester 8</a>-
->
          </div>
        </div>
        <a href="contact.html">Contact</a>
        <a class="active" href="about.html">About</a>
        <a href="javascript:void(0);" class="icon"
onclick="myFunction()">
          <i class="fa fa-bars"></i></a>
        </div>
      </div>
    </div>
  </body>
</html>
```

```

        </div>
<div>
  <p>
    We are merely a group of students from all over india, on a
    mission to provide lectures and educational material to students of
    marine engineering.</br>
    we provide lectures, previous year question papers, syllabus, class
    notes, news and updates keeping in mind the needs of students of
    Indian Maritime University.</br>
  </p>
  <p>
    If you also wish to play your part in any way, do fill our contact
    form.</br>
  </p>
  <p>Constructive criticism is always considered.</p>
</div>
<div>
  <h3>This website is NOT an official website of Indian Maritime
  University</h3>
</div>

  <footer class="footer">
    EduMariners-Educating Marine Engineers
  </footer>
  <script>
function myFunction() {
  var x = document.getElementById("myTopnav");
  if (x.className === "topnav") {
    x.className += " responsive";
  } else {
    x.className = "topnav";
  }
}
function Function() {
  document.getElementById("myDropdown").classList.toggle("show");
}
window.onclick = function(e) {
  if (!e.target.matches('.dropbtn')) {
    var myDropdown = document.getElementById("myDropdown");
    if (myDropdown.classList.contains('show')) {
      myDropdown.classList.remove('show');
    }
  }
}
  </script>
</body>
</html>

```

Code for contact

```
<!DOCTYPE html>
<html>
  <head>
    <title>EduMariners-Educating Marine Engineers</title>
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <link rel="stylesheet" href="css/design.css">
    <link rel="stylesheet" type="text/css" href="css/contact.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  </head>
  <body>

    <div class="topnav" id="myTopnav">
      
      <h1>EduMariners</h1>
      <div class="topnav-right">
        <a href="home.html">Home</a>
        <a href="news.html">News</a>

        <div class="dropdown">
          <button class="dropbtn" onclick="Function()">Lectures & Downloads
        </button>
        <div class="dropdown-content" id="myDropdown">
          <a href="lectures/semester_1/semester1.html">Semester 1</a>
          <!--<a href="lectures/semester_2/semester2.html">Semester 2</a>--
->
          <a href="lectures/semester_3/semester3.html">Semester 3</a>
          <!--<a href="lectures/semester_4/semester4.html">Semester 4</a>--
->
          <a href="lectures/semester_5/semester5.html">Semester 5</a>
          <!--<a href="lectures/semester_6/semester6.html">Semester 6</a>--
->
          <!--<a href="lectures/semester_7/semester7.html">Semester 7</a>--
->
          <!-- <a href="lectures/semester_8/semester8.html">Semester 8</a>--
->
        </div>
      </div>

      <a class="active" href="contact.html">Contact</a>
      <a href="about.html">About</a>
      <a href="javascript:void(0);" class="icon"
onclick="myFunction()">
        <i class="fa fa-bars"></i></a>
    </div>
```

```

        </div>

<div class="container">
  <form action="send_mail.php" method="post">
    <div class="row">
      <div class="col-25">
        <label for="fname">First Name</label>
      </div>
      <div class="col-75">
        <input type="text" id="fname" name="firstname"
placeholder="Your name..">
      </div>
    </div>
    <div class="row">
      <div class="col-25">
        <label for="lname">Last Name</label>
      </div>
      <div class="col-75">
        <input type="text" id="lname" name="lastname"
placeholder="Your last name..">
      </div></div>
      <div class="row">
        <div class="col-25">
          <label for="Email">Email</label>
        </div>
        <div class="col-75">
          <input type="email" id="email" name="Email" placeholder="Your
Email">
        </div>
      </div>
      <div class="row">
        <div class="col-25">
          <label for="country">Country</label>
        </div>
        <div class="col-75">
          <select id="country" name="country">
            <option value="India">India</option>
            <option value="canada">Canada</option>
            <option value="usa">USA</option>
            <option value="singapore">Singapore</option>
            <option value="UAE">UAE</option>
            <option value="Brazil">Brazil</option>
            <option value="Russia">Russia</option>
            <option value="Other">Other</option>
          </select>
        </div>
      </div>
      <div class="row">
        <div class="col-25">
          <label for="comment">Subject</label>
        </div>
        <div class="col-75">

```

```

        <textarea id="comment" name="comment" placeholder="Write
something.." style="height:200px"></textarea>

        <div class="row">
            <input type="submit" value="Submit">
        </div>
    </form>
</div></div>
<div>
<h3>This website is NOT an official website of Indian Maritime
University</h3>
</div>

    <script>
function myFunction() {
    var x = document.getElementById("myTopnav");
    if (x.className === "topnav") {
        x.className += " responsive";
    } else {
        x.className = "topnav";
    }
}
    function Function() {
        document.getElementById("myDropdown").classList.toggle("show");
    }
    window.onclick = function(e) {
        if (!e.target.matches('.dropbtn')) {
            var myDropdown = document.getElementById("myDropdown");
            if (myDropdown.classList.contains('show')) {
                myDropdown.classList.remove('show');
            }
        }
    }
}
    </script>
<div><footer class="footer">
    EduMariners-Educating Marine Engineers
</footer></div>
</body>
</html>

```

Code for home

```

<!DOCTYPE html>
<html>
    <head>
        <title>EduMariners-Educating Marine Engineers</title>
        <meta name="viewport" content="width=device-width, initial-
scale=1">
        <link rel="stylesheet" type="text/css"
href="css/design.css">

```



```

        <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    </head>
    <body>
        <div class="topnav" id="myTopnav">
            <IMG style="float: left; margin-left: 1em;"
SRC="icon.png" ALT="some text" WIDTH=50em HEIGHT=46em>
            <h1>EduMariners</h1>
            <div class="topnav-right">
                <a class="active" href="home.html">Home</a>
                <a href="news.html">News</a>
                <div class="dropdown">
                    <button class="dropbtn" onclick="Function()">Lectures & Downloads
                </button>
                <div class="dropdown-content" id="myDropdown">
                    <a href="lectures/semester_1/semester1.html">Semester 1</a>
                    <!--<a href="lectures/semester_2/semester2.html">Semester 2</a>--
->
                    <a href="lectures/semester_3/semester3.html">Semester 3</a>
                    <!--<a href="lectures/semester_4/semester4.html">Semester 4</a>--
->
                    <a href="lectures/semester_5/semester5.html">Semester 5</a>
                    <!--<a href="lectures/semester_6/semester6.html">Semester 6</a>--
->
                    <!--<a href="lectures/semester_7/semester7.html">Semester 7</a>--
->
                    <!-- <a href="lectures/semester_8/semester8.html">Semester 8</a>--
->
                </div>
            </div>
            <a href="contact.html">Contact</a>
            <a href="about.html">About</a>
            <a href="javascript:void(0);" class="icon"
onclick="myFunction()">
                <i class="fa fa-bars"></i></a>
            </div>
        </div>
        <div class="w3-content w3-display-container">
            
            
            
            

            <button class="slidebutton w3-black w3-display-left"
onclick="plusDivs(-1)">&#10094;</button>
            <button class="slidebutton w3-black w3-display-right"
onclick="plusDivs(1)">&#10095;</button>
        </div>
    </div>

```

```

    <h2>Welcome to EduMariners</h2>
</div>
<h3>This website is NOT an official website of Indian Maritime
University</h3>
    <footer class="footer">
        EduMariners-Educating Marine Engineers
    </footer>
    <script>
function myFunction() {
    var x = document.getElementById("myTopnav");
    if (x.className === "topnav") {
        x.className += " responsive";
    } else {
        x.className = "topnav";
    }
}
    function Function() {
        document.getElementById("myDropdown").classList.toggle("show");
    }
    window.onclick = function(e) {
        if (!e.target.matches('.dropbtn')) {
            var myDropdown = document.getElementById("myDropdown");
            if (myDropdown.classList.contains('show')) {
                myDropdown.classList.remove('show');
            }
        }
    }
    </script>
    <script>
var slideIndex = 1;
showDivs(slideIndex);

function plusDivs(n) {
    showDivs(slideIndex += n);
}

function showDivs(n) {
    var i;
    var x = document.getElementsByClassName("mySlides");
    if (n > x.length) {slideIndex = 1}
    if (n < 1) {slideIndex = x.length}
    for (i = 0; i < x.length; i++) {
        x[i].style.display = "none";
    }
    x[slideIndex-1].style.display = "block";
}
</script>
    </body>
</html>

```

Code for news

```
<!DOCTYPE html>
<html>
  <head>
    <title>EduMariners-Educating Marine Engineers</title>
    <meta name="viewport" content="width=device-width, initial-
scale=1">
    <link rel="stylesheet" href="css/design.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
  </head>
  <body>

    <div class="topnav" id="myTopnav">
      <IMG style="float: left; margin-left: 1em;" SRC="icon.png"
ALT="some text" WIDTH=50em HEIGHT=46em>
      <h1>EduMariners</h1>
      <div class="topnav-right">
        <a href="home.html">Home</a>
        <a class="active" href="news.html">News</a>

        <div class="dropdown">
          <button class="dropbtn" onclick="Function()">Lectures & Downloads
        </button>
          <div class="dropdown-content" id="myDropdown">
            <a href="lectures/semester_1/semester1.html">Semester 1</a>
            <!--<a href="lectures/semester_2/semester2.html">Semester 2</a>--
->
            <a href="lectures/semester_3/semester3.html">Semester 3</a>
            <!--<a href="lectures/semester_4/semester4.html">Semester 4</a>--
->
            <a href="lectures/semester_5/semester5.html">Semester 5</a>
            <!--<a href="lectures/semester_6/semester6.html">Semester 6</a>--
->
            <!--<a href="lectures/semester_7/semester7.html">Semester 7</a>--
->
            <!-- <a href="lectures/semester_8/semester8.html">Semester 8</a>--
->
          </div>
        </div>

        <a href="contact.html">Contact</a>
        <a href="about.html">About</a>
        <a href="javascript:void(0);" class="icon"
onclick="myFunction()">
          <i class="fa fa-bars"></i></a>
        </div>
      </div>
    <div class="news">
```

```

        <div><h2>news 1</h2></div>
        <p>this is just a sample news update.</p>
        <div class="w3-content w3-display-container">


        <!--<button class="slidebutton w3-black w3-display-left"
onclick="plusDivs(-1)">#10094;</button>
        <button class="slidebutton w3-black w3-display-right"
onclick="plusDivs(1)">#10095;</button>-->
</div>
        <div><h2>news 1</h2></div>
        <p>this is just another sample news</br> update</p>
        
</div>
<div><h3>This website is NOT an official website of Indian Maritime
University</h3></div>

        <footer class="footer">
            EduMariners-Educating Marine Engineers
        </footer>
        <script>
function myFunction() {
    var x = document.getElementById("myTopnav");
    if (x.className === "topnav") {
        x.className += " responsive";
    } else {
        x.className = "topnav";
    }
}
        function Function() {
            document.getElementById("myDropdown").classList.toggle("show");
        }
        window.onclick = function(e) {
            if (!e.target.matches('.dropbtn')) {
                var myDropdown = document.getElementById("myDropdown");
                if (myDropdown.classList.contains('show')) {
                    myDropdown.classList.remove('show');
                }
            }
        }
    </script>
</body>
</html>

```

Codes for semester wise web pages

```

<!DOCTYPE html>
<html>
    <head>
        <title>EduMariners-Educating Marine Engineers</title>

```

```

        <meta name="viewport" content="width=device-width, initial-
scale=1">
        <link rel="stylesheet" href="../../css/design.css">
        <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
    </head>
    <body>
        <div class="topnav" id="myTopnav">
            <IMG style="float: left; margin-left: 1em;"
SRC="../../icon.png" ALT="some text" WIDTH=50em HEIGHT=46em>
            <h1>EduMariners</h1>
            <div class="topnav-right">
                <a href="../../home.html">Home</a>
                <a href="../../news.html">News</a>
                <div class="dropdown">
                    <button class="dropbtn" onclick="Function()">Lectures
                </button>
                <div class="dropdown-content" id="myDropdown">
                    <a href="../../semester_1/semester1.html">Semester 1</a>
                    <a href="../../semester_2/semester2.html">Semester 2</a>
                    <a href="../../semester_3/semester3.html">Semester 3</a>
                    <a href="../../semester_4/semester4.html">Semester 4</a>
                    <a href="../../semester_5/semester5.html">Semester 5</a>
                    <a href="../../semester_6/semester6.html">Semester 6</a>
                    <a href="../../semester_7/semester7.html">Semester 7</a>
                    <a href="../../semester_8/semester8.html">Semester 8</a>
                </div>
            </div>
            <a href="../../contact.html">Contact</a>
            <a href="../../about.html">About</a>
            <a href="javascript:void(0);" class="icon"
onclick="myFunction()">
                <i class="fa fa-bars"></i></a>
            </div>
        </div>

        <footer class="footer">
            EduMariners-Educating Marine Engineers
        </footer>
        <script>
function myFunction() {
    var x = document.getElementById("myTopnav");
    if (x.className === "topnav") {
        x.className += " responsive";
    } else {
        x.className = "topnav";
    }
}
function Function() {

```



```

    <iframe class="video" width="600px" height="480px"
src="https://www.youtube.com/embed/tgbNymZ7vqY" frameborder=".50em"
gesture="media" allowfullscreen>
</iframe></div>
</div></div>
<script>
var acc = document.getElementsByClassName("accordion");
var i;

for (i = 0; i < acc.length; i++) {
    acc[i].addEventListener("click", function() {
        this.classList.toggle("active");
        var panel = this.nextElementSibling;
        if (panel.style.display === "block") {
            panel.style.display = "none";
        } else {
            panel.style.display = "block";
        }
    });
}
</script>
</body>
</html>

```

Css codes for contact

```

input[type=text], select, textarea {
    width: 100%;
    padding: 12px;
    border: 1px solid #ccc;
    border-radius: 4px;
    resize: vertical;
}

input[type=email], select, textarea {
    width: 100%;
    padding: 12px;
    border: 1px solid #ccc;
    border-radius: 4px;
    resize: vertical;
}

label {
    padding: 12px 12px 12px 0;
    display: inline-block;
}

input[type=submit] {
    background-color: navy;
    color: white;
    padding: 1em 2em;
}

```

```

        border: 1px;
        border-color: white;
        border-radius: 4px;
        cursor: pointer;
    }

    input[type=submit]:hover {
        background-color: skyblue;
    }

    .container {
        border-radius: .5em;
        background-color: #f2f2f2;
        padding: 5em;
    }

    .col-25 {
        float: left;
        width: 25%;
        margin-top: 6px;
    }

    .col-75 {
        float: left;
        width: 75%;
        margin-top: 6px;
    }

    .row:after {
        content: "";
        display: table;
        clear: both;
    }

    @media screen and (max-width: 600px) {
        .col-25, .col-75, input[type=submit] {
            width: 100%;
            margin-top: 0;
        }
    }

```

Css codes for design

```

* {
    box-sizing: border-box;
}

html, body {

```



```

max-width: 100%;
font-family: Arial, Helvetica, sans-serif;
background-color: skyblue;
background-image: url("../image.jpg");
background-repeat: no-repeat;
background-position: center;
background-size: cover;
background-attachment: fixed;
}
h2 {
    text-align: center;
    color: navy;
    font-size: 4em;
}
h3
{
    text-align: center;
    bottom: 0;
}
p{
    font-size: 2em;
    color: black;
    text-align: center;
    padding: 1em 1em 1em 1em;
}
.topnav {
    overflow: hidden;
    background-color: #333;
}
.topnav-right {
    float:right;
}
.topnav h1{
    background-color: inherit;
    font-size: 2em;
    float: left;
    margin: 0.25em 0 0 0;
    color: white;
    padding-left: 1em;
}

.topnav a {
    float: left;
    display: block;
    color: white;
    text-align: center;
    padding: 14px 16px;
    text-decoration: none;
    font-size: 1em;
    position: relative;

```

```

}
.topnav a:hover {
    border: 1px solid white;
    background-color: skyblue;
    color: black;
}
.active {
    background-color: navy;
    color: white;
}

.topnav .icon {
    display: none;
}

.topnav a.active {
    background-color: navy;
    color: white;
}
}
@media screen and (max-width: 850px) {
    .topnav a:not(:first-child), .dropdown .dropbtn {display: none;}
    .topnav a.icon {
        float: right;
        display: block;
    }
}

}

@media screen and (max-width: 850px) {
    .topnav.responsive {position: relative;}
    .topnav.responsive .icon {
        position: absolute;
        right: 0;
        top: relative;
    }
    .topnav.responsive a {
        float: none;
        display: block;
        text-align: left;
    }
    .topnav.responsive .dropdown {float: none;}
    .topnav.responsive .dropdown-content {position: relative;}
    .topnav.responsive .dropdown .dropbtn {
        display: block;
        width: 100%;
        text-align: left;
    }
    .news{
        width: 100%;
    }
}
}

```

```

.footer{
    text-align: center;
    overflow: hidden;
    background-color: #333;
    position: fixed;
    font-size: 1em;
    margin: 0.25em 0 0 0;
    color: white;

    left: 0;
    bottom: 0;
    width: 100%;
}

.dropdown {
    float: left;
    overflow: hidden;
}

.dropdown .dropbtn {
    cursor: pointer;
    font-size: 1em;
    border: none;
    outline: none;
    color: white;
    padding: 14px 16px;
    background-color: #333;
    font-family: inherit;
    margin: 0;
}

.topnav a:hover, .dropdown .dropbtn:hover, .dropbtn:focus {
    border: 2px solid white;
    background-color: skyblue;
}

.dropdown-content {
    display: none;
    position: absolute;
    background-color: #333;
    min-width: 5em;
    box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
    z-index: 1;
}

.dropdown-content a {
    float: none;
    color: white;

```

```

padding: 12px 16px;
text-decoration: none;
display: block;
text-align: left;
background-color: inherit;
}

.dropdown-content a:hover {
background-color: skyblue;
}

.show {
display: block;
}

.accordion { list-style-type: none;
padding: 1em;
margin: .15em;
color: white;
cursor: pointer;
width: 70%;
border: 30%;
text-align: center;
outline: none;
font-size: 1em;
transition: 0.4s;
background-color: #666;
margin-right: 4em;
}

.active, .accordion:hover {
background-color: #ccc;
}

.panel {
padding: 0 18px;
display: none;
overflow: hidden;
}

.submenu{
list-style-type: none;
padding: .5em;
margin: .15em;
color: white;
cursor: pointer;
width: 60%;
border: 20%;
text-align: center;
outline: ridge;
font-size: 1em;
transition: 0.4s;

```

```

        background-color: #ddd;
        margin-right: 4em;
    }
    .submenu:hover{
        background-color: skyblue;
    }
    .submenu a{
        color: black;
        display: block;
        text-decoration: none;
    }
    .row {
        display: -ms-flexbox;
        display: flex;
        -ms-flex-wrap: wrap;
        flex-wrap: wrap;
    }

    .side {
        -ms-flex: 30%;
        flex: 30%;
        padding: 20px;
    }

    .main {
        -ms-flex: 70%;
        flex: 50%;

        padding-top: 5em;
    }
    .container {
        position: relative;
    }
    .video {
        position: center;
        top: 5em;
        left: 5em;
        right: 5em;
        padding-bottom: 16.25%;
    }
    .home-image{
        width: 100%;
        height: auto;
    }
    .slidebutton{
        border:none;
        display:inline-block;
        padding:8px 16px;
        vertical-align:middle;

```

```

        overflow:hidden;
        text-decoration:none;
        color:inherit;
        background-color:inherit;
        text-align:center;
        cursor:pointer;
        white-space:nowrap
    }
    .slidebutton{
        -webkit-touch-callout:none;
        -webkit-user-select:none;
        -khtml-user-select:none;
        -moz-user-select:none;
        -ms-user-select:none;
        user-select:none
    }
    .slidebutton:disabled{
        cursor:not-allowed;
        opacity:0.3
    }
    .slidebutton:hover{
        color:#000!important;
        background-color:#ccc!important
    }

    .w3-center{
        text-align:center!important
    }
    .w3-content{
        max-width:980px;
        margin:auto;
padding:1em;
    }

    .w3-display-container{position:relative}
    .w3-display-container:hover .w3-display-hover{display:block}.w3-
display-container:hover span.w3-display-hover{display:inline-block}
    .w3-black{color:#fff!important;
        background-color:#000!important}
    .w3-display-left{position:absolute;
        top:50%;
        left:0%;
        transform:translate(0%,-50%);
        -ms-transform:translate(-0%,-50%)
    }
    .w3-display-right{
        position:absolute;
        top:50%;
        right:0%;
        transform:translate(0%,-50%);
        -ms-transform:translate(0%,-50%)
    }

```

```
.news{
    max-width: 50em;
    float: center;
    width: 50em
    margin:auto;
    background-color: white;
    position: relative;
    margin:auto;
}
.news h2{
    font-size: 1.25em;
    float: left;
}
.news p{
    overflow-wrap: normal;
    font-size: 1em;
    right: 0;
    height: auto;
    text-align: center;
float: left;
max-width: 25em;
}
.news img{
    display: block;
    margin-left: auto;
    margin-right: auto;
    max-width: 25em;
    max-height: 15em;
}
```

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