

# **SUMMER INTERNSHIP PROJECT REPORT**

## **INTERN AT CODING NINJAS**

**From:**

03-03-20 to 03-07-20 (16 weeks)

**Supervised By:**

Mr Arpan Garg and Miss Manisha Khattar  
Instructor at Coding Ninjas

**Submitted By:**

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Guru Gobind Singh Indraprastha University, Dwarka**

## DECLARATION :

I Aman Kumar Jha, a student of Information Technology, Vth semester in University School of Information, Communication & Technology, Dwarka hereby declare that the work presented in this project report was undertaken from 03-03-20 to 03-07-20 under the guidance of Mr. **Arpan Garg** and Miss **Manisha Khattar**, Instructor and Founding Member of **CODING NINJAS**.

The matter embodied in this project report has not been submitted by me or anybody else to any institution for award of any other degree or diploma except to University School of Information, Communication & Technology, for the fulfillment of the requirements for the award of degree of Bachelors of Technology.

Aman Kumar Jha  
40416401518

## ACKNOWLEDGEMENT :

The time I spent in CODING NINJAS as an intern from 3rd March 2020 to 3rd July 2020 was a memorable one for me as it was rich in experience sharing and helped me discover my potential. I have had so many experiences and opportunities that I personally believe will forever shape and influence my professional skills while fostering personal growth and development.

With a sage sense of gratitude, I acknowledge various people who directly or indirectly contributed in the development of this work and who influenced my thinking, behavior & acts during the course of internship. I express my deep sense of gratitude to Mr. Arpan Garg and Miss. Manisha Khattar for their technical support and constant supervision which contributed immensely to my development. I also thank them for their guidance which was a remarkable force that enabled me to successfully complete the internship program.

I would also like to thank my parents and my friends whose love and guidance are with me in whatever I pursue.

Aman Kumar Jha  
40416401518

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## ORGANIZATION PROFILE :

At Coding Ninjas, our mission is to continuously innovate the best ways to train the next generation of developers and to transform the the way tech education is delivered.

Coding Ninjas was founded in 2016 to bridge the knowledge gap between colleges and industry. Founded by Ankush Singla, Kannu Mittal and Dhawal Parate, Coding Ninjas boasts of world-class teaching faculty and a state-of-art learning platform for Coding education with faculty alumni of IIT, Stanford, IIIT and Facebook. Coding Ninjas teaches 17+ Programming courses in Foundation, I Advanced, Data & Development courses such as Machine Learning, Data Science, Web Development, Android and more. Today, Coding Ninjas ecosystem comprises of 40,000+ students and alumni, 1000+ Campus Ambassadors, 2000+ Teaching Assistants, and 150+ employees.

Aman Kumar Jha  
40416401518

## INTRODUCTION :

I did an internship at for sixteen weeks from 3rd March 2020 to 3rd July 2020. This internship was a part of my 4 years Bachelors (B.Tech. - IT) program, which I am currently pursuing in University School of Information, Communication & Technology .

I was assigned a role to debug codes and to work on the web development course to help students solve there doubts and i also evaluated more than 30+ Projects along with 680+ doubts on the complete Full Stack Development Course at CODING NINJAS.

Key responsibilities during the internship were -

- Taking doubt sessions
- Debugging codes
- Helping students in their assignments & various projects.

I used VSCODE to develop the projects and Evaluation.

Through this internship, I not only gained a lot of knowledge about the Full Stack Development but also got a chance to sharpen my skills in a professional working environment, which was very new to me. I had a great experience working with the team of Coding Ninjas.

The screenshot shows a web application interface. On the left is a dark sidebar with the 'COPINAS' logo and user information for 'Aman jha' (email: ajha4942@gmail.com). The sidebar lists applications: Dashboard, Doubts, Project Evaluation, Calendar, Taship, Taship-Records (highlighted), and Slot Schedule Requests. The main content area shows 'Your Taships' for the course 'Basics of Web Development with Node.js'. It displays statistics: 664 Total Resolved Doubts, 4.7 Overall Rating, and 32 Total Evaluated Projects. A 'Download Certificate' button is also present. At the top right, there's a 'Week off: N.A' indicator and an 'Apply For Leave/Reschedule' button.

## FRONT END DEVELOPMENT

### HTML:

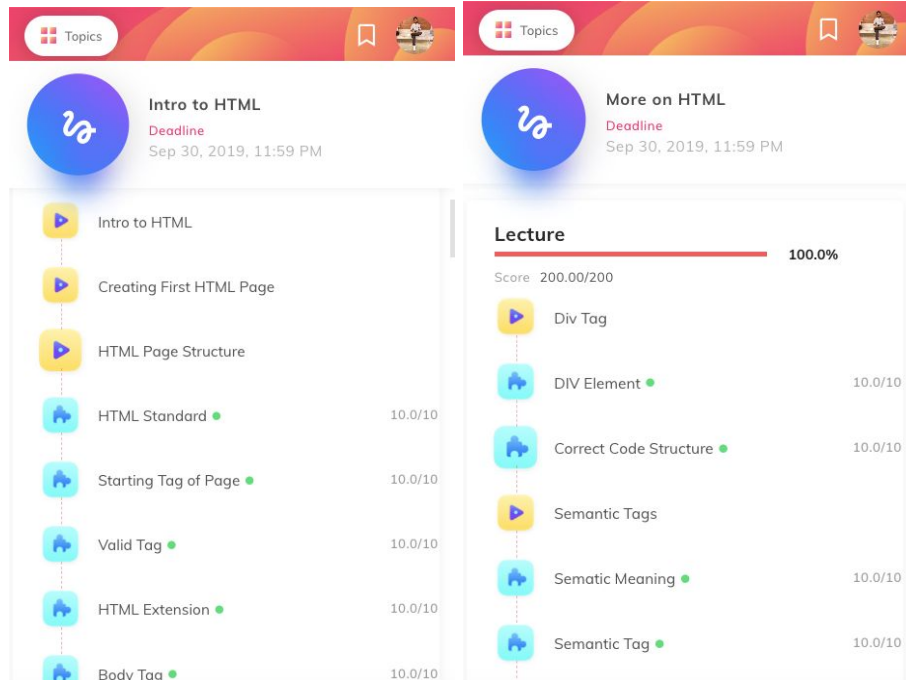
**HTML** stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within tag which defines the structure of web pages.

#### HTML PAGE STRUCTURE

```

<!DOCTYPE html>      ← Tells Version of HTML
<html>                ← HTML root element
  <head>               ← Used to contain page HTML metadata
    <title>Title of Page</title> ← Title of HTML Page
  </head>
  <body>               ← Hold content of HTML
    <h1>Headline</h1>   ← A HTML Headline tag
    <p>This is a paragraph.</p>
  </body>
</html>

```



## ❏ CSS:

**Cascading Style Sheets**, fondly referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page.

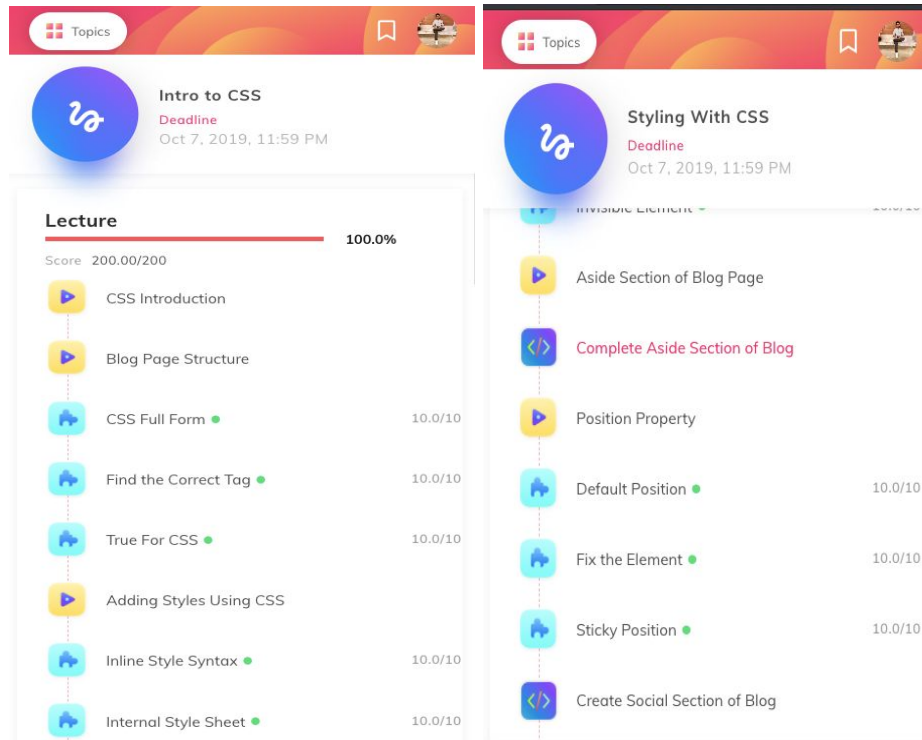
CSS is easy to learn and understood but it provides powerful control over the presentation of an HTML document.

```
p {  
    color: blue;  
    text-align: center;  
}
```

Hello World!

These paragraphs are styled with CSS.





## ❏ JAVASCRIPT:

**JavaScript** is a lightweight, cross-platform and interpreted scripting language. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for **Client-Side** developments as well as **Server-Side** developments. JavaScript contains a standard library of objects, like **Array**, **Date**, and **Math**, and a core set of language elements like **operators**, **control structures**, and **statements**.

### Basic Syntax:

```
<script>  
document.write("Basic Print method in JavaScript");  
</script>
```

Topics

Starting with Javascript

Deadline  
Nov 11, 2019, 11:59 PM

Lecture

Score 200.00/200

100.0%

Intro to Javascript

History of Javascript

What can Javascript do? ● 10.0/10

Initial Name for JS ● 10.0/10

ECMA Official Release ● 10.0/10

Chrome Dev Tools

Variables

Topics

JavaScript: Functions and Arrays

Deadline  
Nov 11, 2019, 11:59 PM

Lecture

Score 250.00/250

100.0%

Functions

Variable Length Arguments

Purpose of Return ● 10.0/10

Function Definition ● 10.0/10

More Arguments Passed ● 10.0/10

Fewer Arguments ● 10.0/10

Function Hoisting

## BACK END DEVELOPMENT

### ❏ NODE JS

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**

```

1  const http = require('http')
2
3  const hostname = '127.0.0.1'
4  const port = process.env.PORT
5
6  const server = http.createServer((req, res) => {
7    res.statusCode = 200
8    res.setHeader('Content-Type', 'text/plain')
9    res.end('Hello World!\n')
10 })
11
12 server.listen(port, hostname, () => {
13   console.log(`Server running at http://${hostname}:${port}`)
14 })

```

Topics


**Node.js : Writing Our First Server**  
 Deadline  
 Nov 30, 2019, 11:59 PM

Server: What & How?

Setting Up Our First Node.js Server

Web Server Architecture

Node Project 10.0/10


Package.json 10.0/10

Multiple Node Servers 10.0/10

Instance of HTTP Module 10.0/10

Node Server 10.0/10

Topics


**Node.js : The Beginning**  
 Deadline  
 Nov 30, 2019, 11:59 PM

Lecture

Score 80.00/80 100.0%

Introduction to the course

Getting Our Tools Right!

Setting Up The Tools

Install Node.js and npm - Windows

Install Node.js and npm - Ubuntu

Install Node.js and npm - Mac

## EXPRESS JS

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 to set up middlewares 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 render HTML Pages based on passing arguments to templates.

```

var express = require('express');
var app = express();

app.get('/', function (req, res) {
  res.send('Hello World');
})

var server = app.listen(8081, function () {
  var host = server.address().address
  var port = server.address().port

  console.log("Example app listening at http://%s:%s", host, port)
})

```

Topics

📖

👤

My First Express App :: Continued

Deadline

Dec 27, 2019, 11:59 PM

Lecture

Score 70.00/70

100.0%

Introduction

Creating A Contact List

Sending Data To The Server

Parsing Form Data : Introduction

Parsing Form Data : Storing The Con...

Hint in Input Field ● 10.0/10

Topics

📖

👤

My First Express App :: A List of Contacts!

Deadline

Dec 27, 2019, 11:59 PM

Web Frameworks : A Quick Introduct...

Understanding MVC (Models, Views, ...

MVC Framework

Why Express.js

Express ● 7.5/10

MVC Framework ● 7.5/10

package.json ● 7.5/10

Core Features Express ● 7.5/10

## 📦 MONGO DB

MongoDB, the most popular NoSQL database, is an open-source document-oriented database. The term 'NoSQL' means 'non-relational'. It means that MongoDB isn't based on the table-like relational database structure but provides an altogether different mechanism for storage and retrieval of data.

A simple MongoDB document Structure:

```
{
  title: 'Geeksforgeeks',
  by: 'Harshit Gupta',
  url: 'https://www.geeksforgeeks.org',
  type: 'NoSQL'
}
```

The screenshot shows a course interface. At the top, there's a red header with a 'Topics' button and a user profile icon. Below the header, a blue circular profile picture with a white 'S' is next to the course title 'My First Express App :: Intro To Databases'. Under the title, it says 'Deadline Jan 2, 2020, 11:59 PM'. A vertical list of topics follows, each with a play button icon and a progress indicator. The topics are: 'Installing MongoDB, Robo3T and mo...', 'MongoDB Installation', 'Connecting to MongoDB using mong...', 'Creating the DB Schema', 'Populating the DB' (highlighted in pink), 'Fetching Data from DB', 'Connecting to Database' (with a green dot and '10.0/10'), and 'Schema Types in MongoDB' (with a green dot and '10.0/10').

Topic	Progress
Installing MongoDB, Robo3T and mo...	
MongoDB Installation	
Connecting to MongoDB using mong...	
Creating the DB Schema	
Populating the DB	
Fetching Data from DB	
Connecting to Database	10.0/10
Schema Types in MongoDB	10.0/10

## ❑ PASSPORT JS:

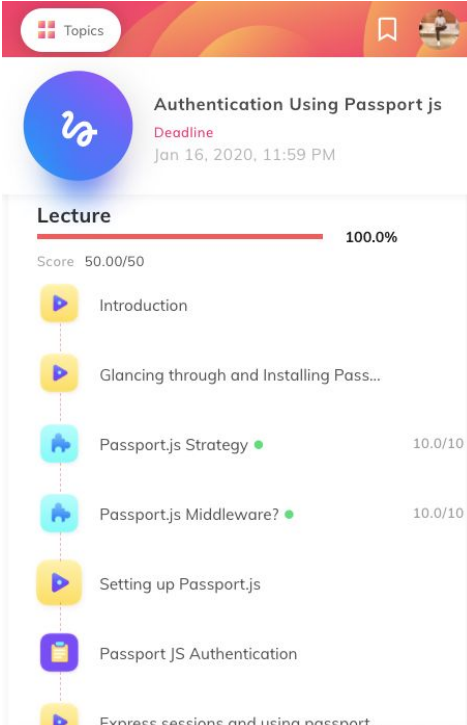
Passport is the authentication middleware for Node. It is designed to serve a singular purpose which is to authenticate requests. It is not practical to store user password as the original string in the database but it is a good practice to hash the password and then store them into the database.

```
// importing modules
var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var passportLocalMongoose = require('passport-local-mongoose');

var UserSchema = new Schema({
  email: {type: String, required:true, unique:true},
  username : {type: String, unique: true, required:true},
});

// plugin for passport-local-mongoose
UserSchema.plugin(passportLocalMongoose);

// export userschema
module.exports = mongoose.model("User", UserSchema);
```



The screenshot shows a course interface with a red header bar containing a 'Topics' button and icons for a bookmark and a user profile. Below the header is a blue circular profile icon with a white 'u' and the course title 'Authentication Using Passport.js'. A 'Deadline' section indicates 'Jan 16, 2020, 11:59 PM'. A progress bar for the 'Lecture' section is at 100.0%, with a score of 50.00/50. A list of lecture topics follows, each with a play button icon and a completion status:

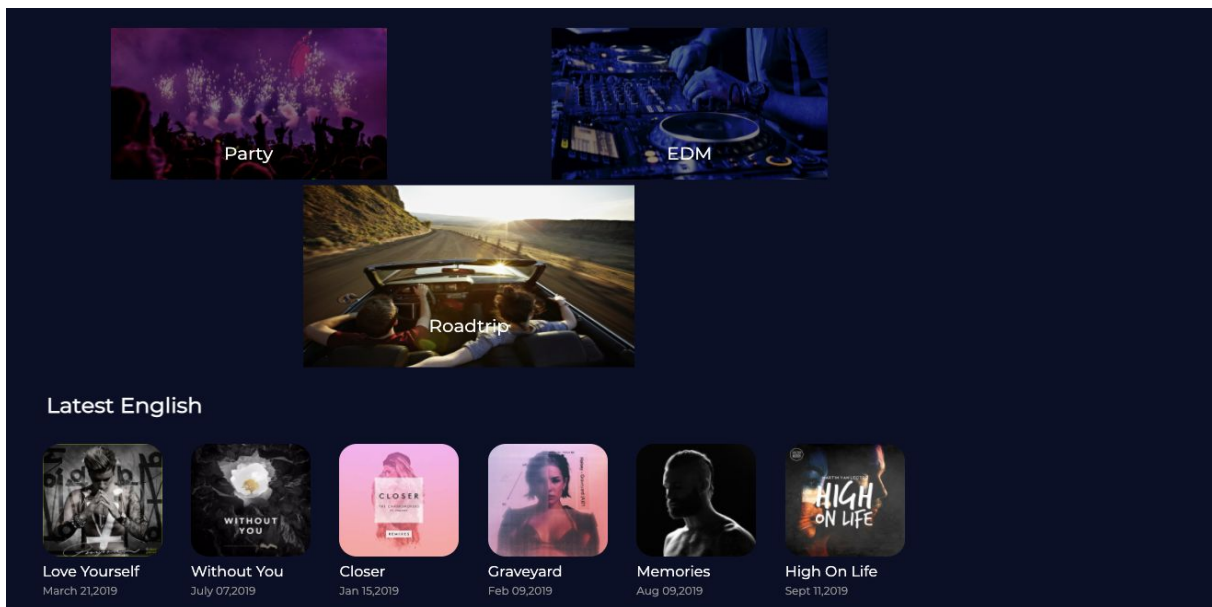
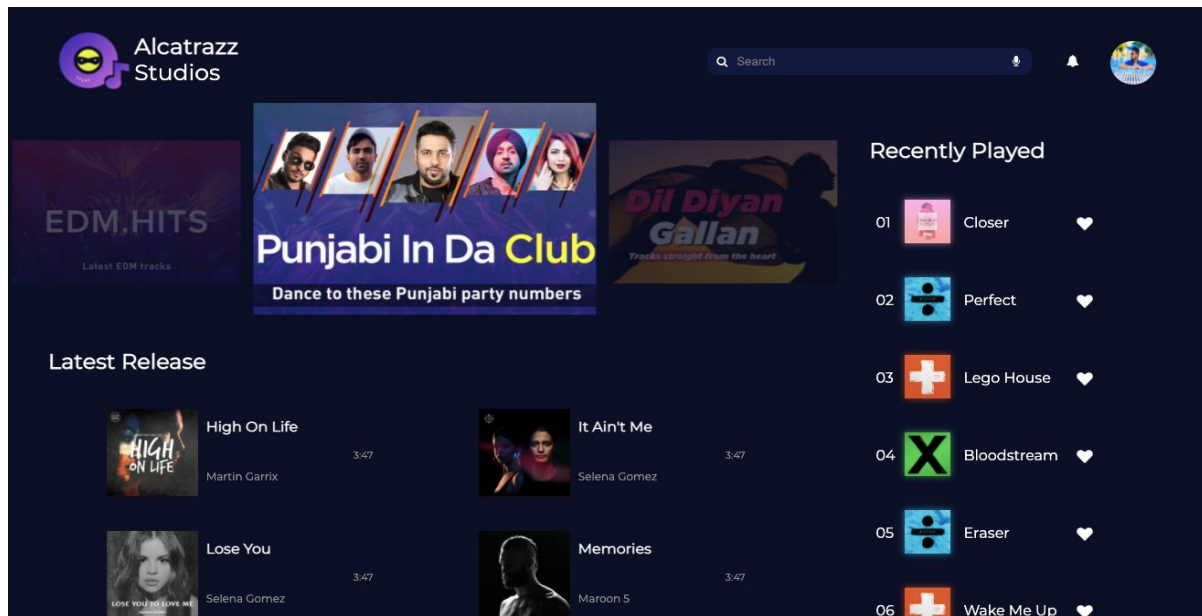
- Introduction
- Glancing through and Installing Pass...
- Passport.js Strategy • 10.0/10
- Passport.js Middleware? • 10.0/10
- Setting up Passport.js
- Passport JS Authentication
- Express sessions and using passport...

## PROJECTS

### 📺 Music Player:

Developed a full frontend-based music player interface using HTML5 and CSS. A responsive web design that has been created using reference of websites like spotify.

Along with that i have also created a bottom Music player, single playlist screen and a Home Carousel.



**Code Snippet** - Worked in Submine Text Editor



```
OPEN FILES  Index.html x
x Index.html 1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Home Page</title>
5 <!-- Linking CSS File -->
6 <link rel="stylesheet" type="text/css" href="styles.css"></link>
7 <!-- Including Font Awesome -->
8 <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
9 <!-- Including the Font that I have used -->
10 <link href="https://fonts.googleapis.com/css?family=Montserrat&display=swap" rel="stylesheet">
11 <!-- Including Friconix, alternative to Font Awesome -->
12 <script defer src="https://friconix.com/cdn/friconix.js"></script>
13
14 <meta name="viewport" content="Width=device-width, initial-scale=1">
15 </head>
16 <body>
17
18 <!-- HEADER SECTION BEGINS -->
19 <header>
20 <div>
21 <!-- Adds the Logo and Name of the Home Page -->
22 <!-- Clicking the Logo also redirects to the Home Page -->
23
24 <a href="Index.html"></a>
25 <div id="studiotext">
26 <span><i>Alcatraz</i></b> <br>Studios</br> </span>
27 </div>
28
29 <!-- Adds Search Bar to the Home Page -->
30 <div class="wrap">
31 <div class="search">
32 <input type="text" class="searchTerm" placeholder="Search">
33 <button type="submit" class="micButton">
34 <i class="fa fa-microphone"></i>
35 </button>
36 <button type="submit" class="searchButton">
37 <i class="fa fa-search"></i>
38 </button>
39
40 </div>
41 </div>
42
43 <!-- Adds the Notification Button to the Home Page -->
44 <div class="Notifications">
45 <button type="button" class="noti">
46 <i class="fa fa-bell"></i>
47 </button>
48 </div>
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69 <!-- MAIN SECTION BEGINS -->
70
71 <main>
72
73 <!-- Carousel which works with Hover -->
74 <section id="carousel">
75 <div class="carousel">
76 <div class="carousel-row">
77 <div class="carousel-tile">
78 
79 </div>
80 <div class="carousel-tile">
81 
82 </div>
83 <div class="carousel-tile">
84 
85 </div>
86 </div>
87 </div>
88
89 </section>
90
91 <!-- Latest Release Section with 4 Latest Releases -->
92
93 <section id="latest_release">
94 <h1 class="headings">
95 Latest Release
96 </h1>
97 <div class="latest-release-container">
98
99 <div class="flex-item">
100 <a href="#show">
101 </a>
102
103
104
105
106
107
108
109
110
111
112
```

Github Repo - <https://github.com/AmanJha199/MusicPlayer>



## ❏ TODO APP :

Developed a TODO App in which users can create to-do lists, where they can add list of Tasks. The Task created by user then should be stored in the Database. Here i have used Node Js, Express Js and Mongo DB as the database.

# TODO App

DESCRIPTION  
What do you need to do?

CATEGORY  
Choose a category

DUE DATE  
dd/mm/yyyy

+ ADD TASK

🗑 DELETE TASKS

☐ Why not add a task?  
📅 MAY 2, 2019

☐ Let's make a TODO App  
📅 APR 28, 2019

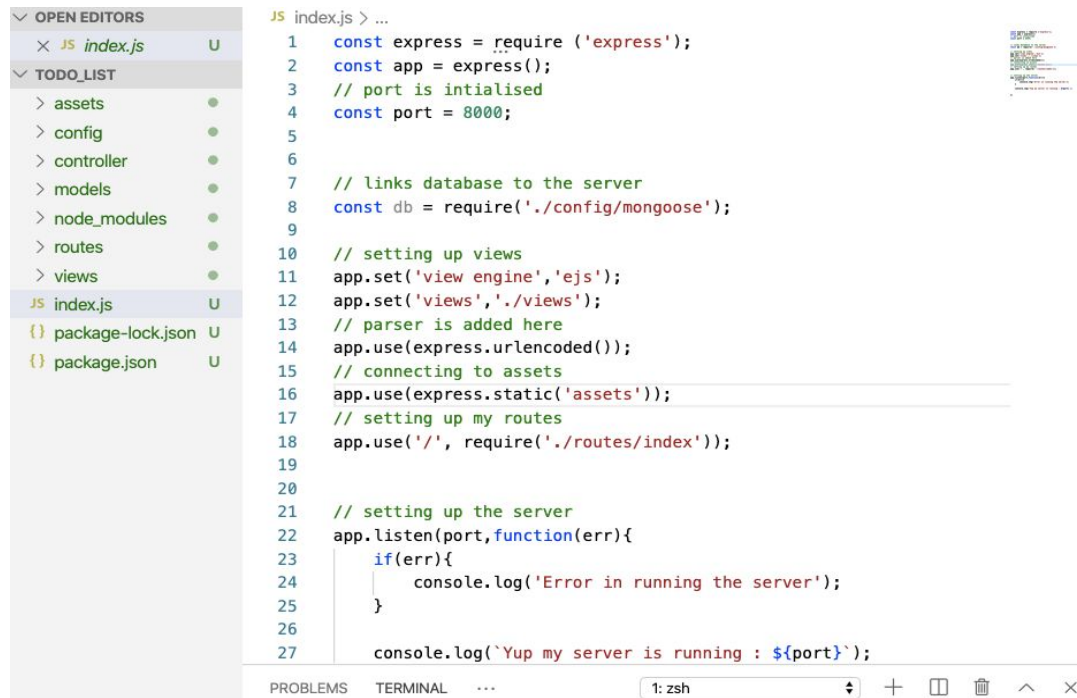
☐ Annual report submission deadline  
📅 JUN 1, 2019

SCHOOL

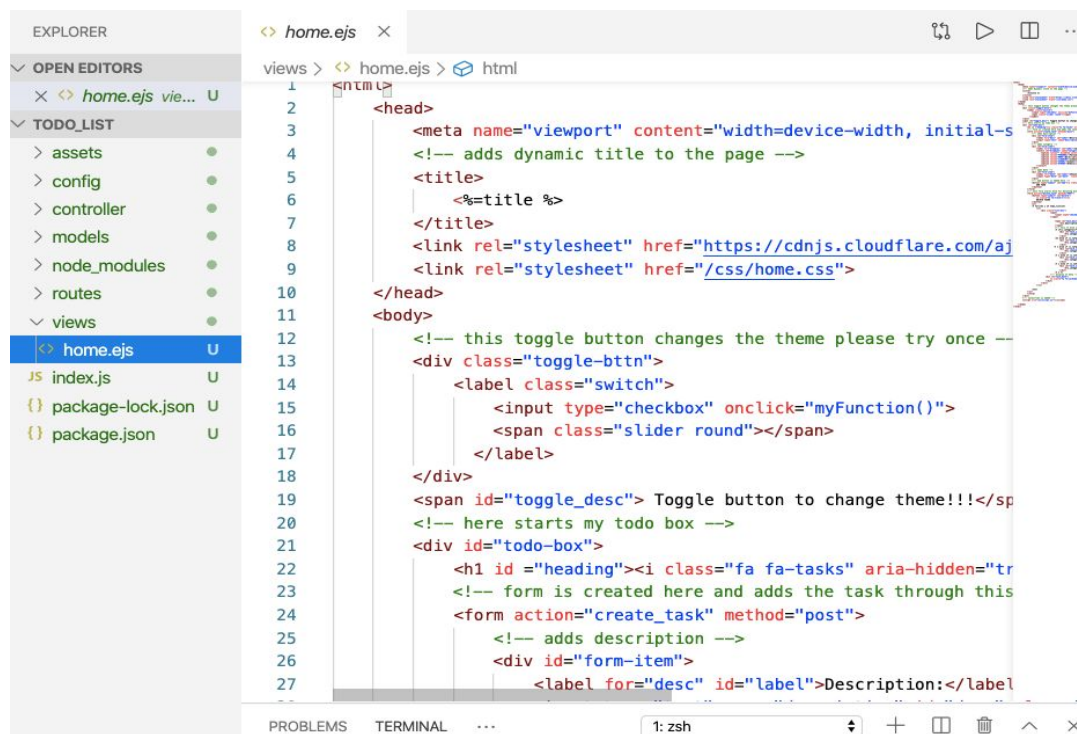
WORK

Gif Video of Todo App - [TODO-APP.gif](#)

## Code Snippet - I used VS Code to write the code.



```
JS index.js > ...
1  const express = require ('express');
2  const app = express();
3  // port is initialised
4  const port = 8000;
5
6
7  // links database to the server
8  const db = require('./config/mongoose');
9
10 // setting up views
11 app.set('view engine','ejs');
12 app.set('views','./views');
13 // parser is added here
14 app.use(express.urlencoded());
15 // connecting to assets
16 app.use(express.static('assets'));
17 // setting up my routes
18 app.use('/', require('./routes/index'));
19
20
21 // setting up the server
22 app.listen(port,function(err){
23   if(err){
24     console.log('Error in running the server');
25   }
26
27   console.log(`Yup my server is running : ${port}`);
28 }
```





```
<? home.ejs >
views > <? home.ejs > html
1  <html>
2  <head>
3    <meta name="viewport" content="width=device-width, initial-s
4    <!-- adds dynamic title to the page -->
5    <title>
6      <%=title %>
7    </title>
8    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/aj
9    <link rel="stylesheet" href="/css/home.css">
10  </head>
11  <body>
12    <!-- this toggle button changes the theme please try once --
13    <div class="toggle-bttn">
14      <label class="switch">
15        <input type="checkbox" onclick="myFunction()">
16        <span class="slider round"></span>
17      </label>
18    </div>
19    <span id="toggle_desc"> Toggle button to change theme!!</sp
20    <!-- here starts my todo box -->
21    <div id="todo-box">
22      <h1 id="heading"><i class="fa fa-tasks" aria-hidden="tr
23      <!-- form is created here and adds the task through this
24      <form action="create_task" method="post">
25        <!-- adds description -->
26        <div id="form-item">
27          <label for="desc" id="label">Description:</label>
28        </div>
29      </form>
30    </div>
31  </body>
32 </html>
```

Github Repo : <https://github.com/AmanJha199/TODO-App>


## BUYFFERS :

[buyffers.com](https://buyffers.com) is an Amazon Affiliate Website and is another spot for all Offers and Deals on Amazon and we offer the absolute best in Commercial wellness gear at reasonable costs using HTML, CSS, Bootstrap and Wordpress.



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# Home Gym



**We Provide Best Product Reviews and Buying Guide**

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## Best Products Reviews

All   Blog   Gadgets   Kids   Kitchen & Home Appliances   Uncategorized


**BEST WIRELESS BLUETOOTH SPEAKERS WITH HIGH BASS**




**BEST OFFERS AMAZON GREAT FESTIVAL SALE**



**AMAZON FIRE TV STICK**



<https://amzn.to/33yQAUk>



## Code Snippet :

```
45         // Archive Post Count for clearing float
46         $oceanwp_count = 0;
47         while ( have_posts() ) : the_post();
48             $oceanwp_count++;
49             get_template_part( 'partials/edd/archive' );
50             if ( oceanwp_edd_entry_columns() == $oceanwp_count ) {
51                 $oceanwp_count=0;
52             }
53         endwhile; ?>
54     </div>
55
56     <?php
57     do_action( 'ocean_after_archive_download' );
58 } else { ?>
59     <div id="blog-entries" class="<?php oceanwp_blog_wrap_classes(); ?>">
60
61         <?php
62         // Define counter for clearing floats
63         $oceanwp_count = 0; ?>
64
65         <?php
66         // Loop through posts
67         while ( have_posts() ) : the_post(); ?>
```

---

```
8 <!DOCTYPE html>
9 <html class="<?php echo esc_attr( oceanwp_html_classes() ); ?>" <?php language_attributes(); ?>>
10 <head>
11     <meta charset="<?php bloginfo( 'charset' ); ?>">
12     <link rel="profile" href="https://gmpg.org/xfn/11">
13
14
15     <?php wp_head(); ?>
16 </head>
17
18 <body <?php body_class(); ?> <?php oceanwp_schema_markup( 'html' ); ?>>
19
20     <?php wp_body_open(); ?>
21
22     <?php do_action( 'ocean_before_outer_wrap' ); ?>
23
24     <div id="outer-wrap" class="site clr">
25
26         <a class="skip-link screen-reader-text" href="#main"><?php esc_html_e( 'Skip to content', 'oceanwp' ); ?></a>
27
28         <?php do_action( 'ocean_before_wrap' ); ?>
29
30         <div id="wrap" class="clr">
31
```

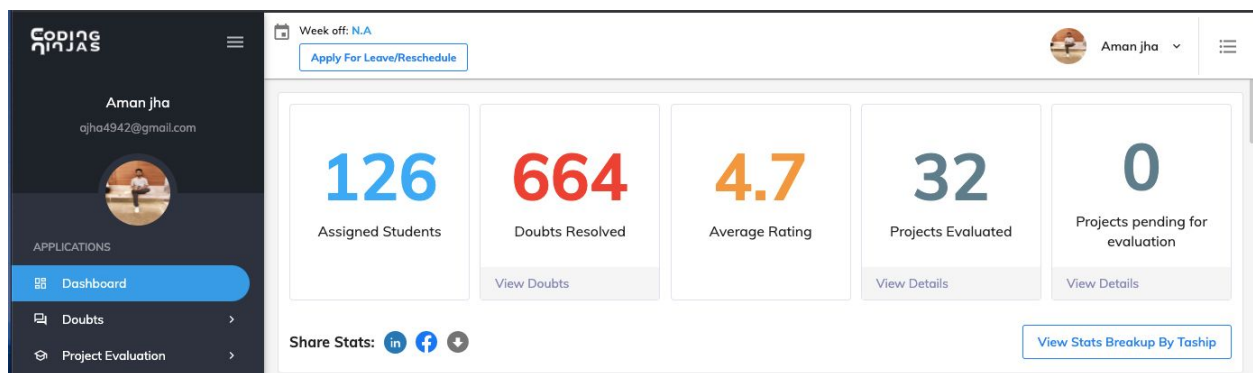
Link - <https://www.buyoffers.com/>

## CONCLUSION :

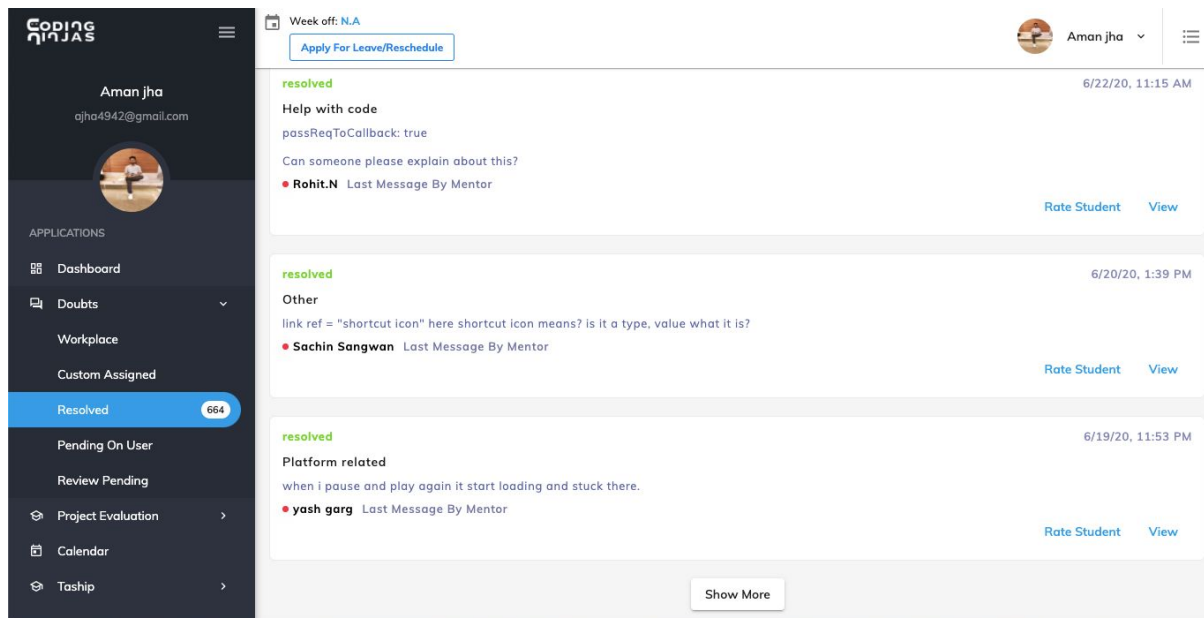
During the internship in Coding Ninjas there was 126 Students assigned to me and my Key Responsibilities were -

- Taking doubt session.
- Debugging codes
- Helping students in their assignments & various projects.

I have to complete weekly tasks and also guide students during there course in debugging codes and during Projects.



During the Course i Resolved more that 664+ Doubts and Evaluated 32 Projects -



## What Did I LEARN ? & CERTIFICATE

During the course of my training, I gained a lot of knowledge about Data structures and Algorithms(DSA) and also build a lot of confidence in my problem solving skills. This training was more fruitful than I had imagined. It was not boring or monotonous, rather I loved training. The learning experience was unparalleled and I'm glad that I decided to train in a ed-tech startup.



**Certificate Link - [Internship-Certificate.pdf](#)**

## BIBLIOGRAPHY :

- <https://www.wikipedia.org>
- <https://www.geeksforgeeks.org/>
- <https://www.tutorialspoint.com/index.htm>
- <https://www.w3schools.com/>