

[Internship Report 2022]

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Remote Software Solutions



Goa University

REPORT OF INTERNSHIP DONE AT REMOTE SOFTWARE SOLUTIONS PVT. LTD

Submitted by Prathmesh Naik

1938

UNDER THE GUIDENCE OF

Ritesh Fulari
(Senior Software Developer)
(Remote Software Solutions)

Wiseman Fernandes
(Senior Software Developer)
(Remote Software Solutions)

Poonam Kokardekar
(Project Manager)
(Remote Software Solutions)



Goa Business School

The Certificate of Evaluation

This is to certify that Mr.Prathmesh Naik has been evaluated for the project work titled
“Report of Internship done at Remote Software Solutions Pvt Ltd”
undertaken at Remote Software Solutions,**Porvorim** in partial fulfillment for the award of the degree in Master of Computer Application.

Examiner 1

Place: Goa University

Date

Examiner 2

Dean



DATE: 3rd June 2022

To whom it may concern

This is to certify that **Prathamesh Naik** is successfully completing the internship program at Remote Software Solutions Pvt Ltd in the Software Department. The Training period is from **17th January 2022** till **17th July 2022**.

This letter is issued on 3rd June 2022 as requested by the student. The training will end on 17th July 2022.

Yours sincerely,

Remote Software Solutions Pvt. Ltd.,

for 
Rajiv Antao
General Manager

ACKNOWLEDGEMENT

Interning in a company is a golden opportunity for learning and self-development specially to have so many wonderful people led me through this internship period. The internship wouldn't be complete without expressing my gratitude and appreciation to all the people who made it possible.

I would like to thank Mr. Russel Dinz(CEO, Remote Software solutions) for giving me the opportunity to intern Remote Software solutions

My sincerest gratitude to Ritesh Fulari (Senior Software Engineer, Remote Software solutions) and Wiseman Fernandes (Senior Software Engineer, Remote Software solutions) for being my mentor and giving me the necessary guidance and support.

My great appreciation to Poonam Kokardekar (Project Manager,Remote Software solutions) for pushing me to the limits in order to enhance and polish my skills.

I would like to extend my gratitude to jyothi shet(HR Manager, Remote Software solutions) for being my friend and always helping me out whenever I was in dire need.

TABLE OF CONTENT

Acknowledgement

Table of content

Introduction

Company profile

Project ShowcaseIndia

Problem Statement :-Weak Password accepting bug

A. Solutions

B. My contribution

C. Tools and technologies used

D. Screenshots

Problem Statement:-

Validation for first-name,last-name and company name

A. Solutions

B. My contribution

C. Tools and technologies used

D. Screenshots

Problem Statement:-As a User I should be able to preview the job application I have made

A. Solutions

B. My contribution

C. Tools and technologies used

D. Screenshots

Problem Statement:-Amount validation for budget

E. Solutions

F. My contribution

G. Tools and technologies used

H. Screenshots

Problem Statement:-Side wide search

I. Solutions

J. My contribution

K. Tools and technologies used

L. Screenshots

Other task:-

- ✧ **Good pricing for hardware report**
- ✧ **Code review tools Research**
- ✧ **Backup and Restore System Research**

Project Timeline

Tools and Research Used

Experience at Internship

References

COMPANY PROFILE

Remote Software Solutions Private Limited

Remote Software Solutions Pvt. Ltd. was incorporated in March 2004. Based in Porvorim, Goa-India, an idyllic holiday state and popular conference destination, from inception our company has run on an open culture - adapting its structure and the personnel to the needs of the time-with open channels of communication.

This culture is reflected in the nature of our development and delivery of our projects. We aim at making life easier and more efficient for our clients-complete transparency in the way we go about a project, and the end product always user friendly without compromising on functionality.

The initial focus was only on desktop solutions, and until October 2005 the company was exclusively doing desktop solutions for its clients – building macros within Office programs, using VBA to customize Office tools like Excel and Access to process repetitive tasks like report and presentation generation. In October 2005 we undertook development of a couple of large web based projects for our sister concern-OnlineClasses24x7.com-a complete training management system and an internal reporting system. Since then we have moved on to undertake projects in several technologies.

The training division was started as a part of Remote Software Solutions Pvt. Ltd., but now has evolved into its own-OnlineClasses 24x7.com a sister concern that specializes in Online Instructor-Led Training, for which we provide all the software support and development.

Like any software development company-our strength is our Human Resources. We cherish and nurture our team and constant training keeps them abreast of the latest technologies. We believe that the learning growth of the individual will be reflected in the growth of the company-and it will be the individuals within it that will take it to new levels.

SHOWCASEINDIA PROJECT

Problem Statement:-weak passwords during Sign-Up was accepted.

Solutions:-

Password should contain:At least one capital letter and at least one small letter, At least one numeric character (0-9), At least one special character (!@#\$%^&_-)

My Contribution:- I was assigned this task to accept strong password

I have achieved the solution by writing if statement to check for pattern match in string

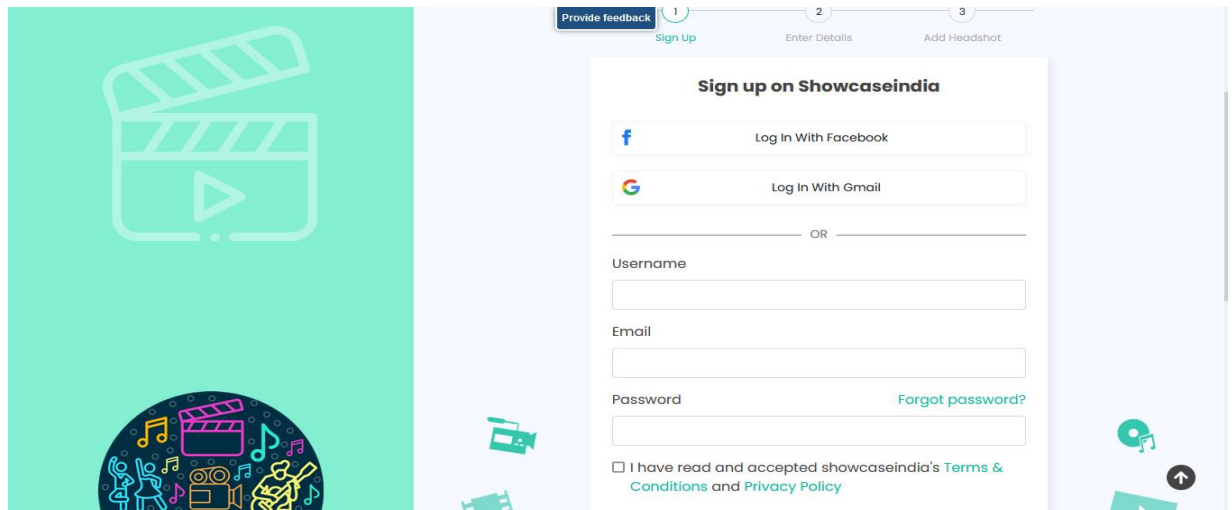
```
if (!preg_match('/^(?=.*[a-z])(?=.*[0-9]).{6,}$/',  
$_REQUEST["password"])) {}
```

preg_match returns 1 if the pattern matches given subject , 0 if it does not, or false on failure.

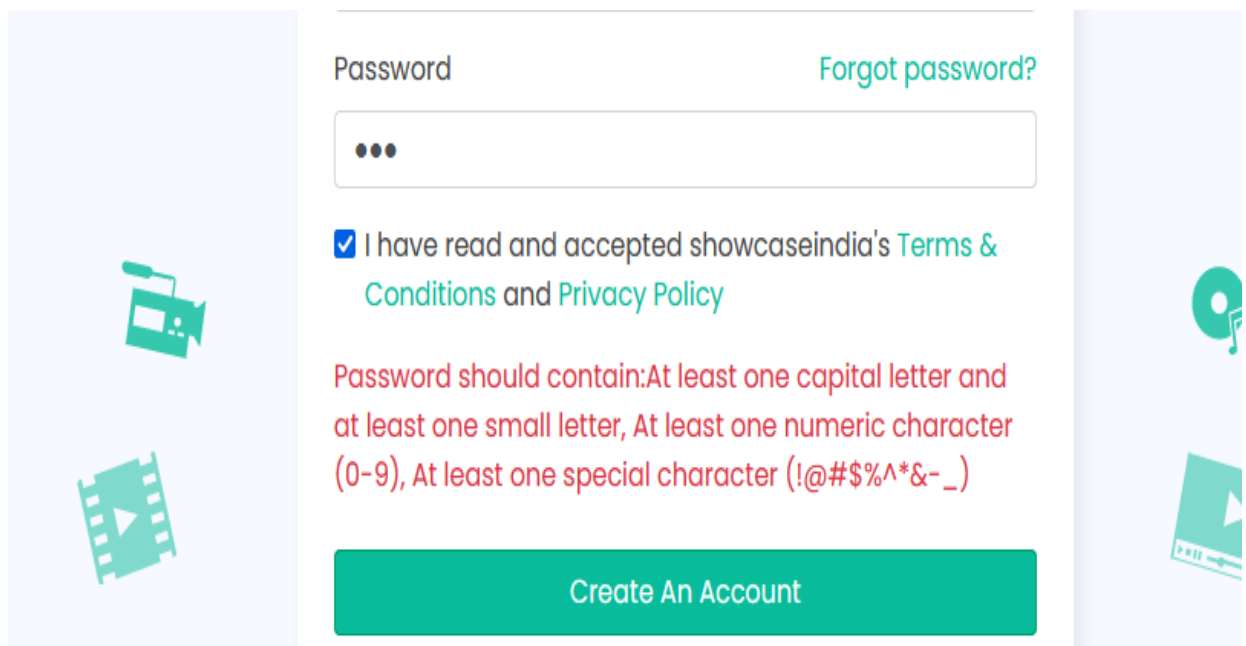
Technologies used

- i) PHP
- ii)Html
- Iii)Javascrpts
- Iv)bootstrap
- V)wordpress

Screenshots



This screenshot shows the 'Sign up on Showcaseindia' page. On the left is a teal sidebar with a clapperboard icon and a circular collage of music and film icons. The main content area has a light blue background. At the top, a progress bar shows three steps: '1 Sign Up' (active), '2 Enter Details', and '3 Add Headshot'. Below the progress bar is a 'Sign up on Showcaseindia' form. The form includes social login options for Facebook and Google, followed by an 'OR' separator. It then has input fields for 'Username', 'Email', and 'Password'. A 'Forgot password?' link is next to the password field. At the bottom of the form is a checkbox labeled 'I have read and accepted showcaseindia's Terms & Conditions and Privacy Policy'. A 'Provide feedback' button is located at the top left of the form area.



This is a close-up screenshot of the bottom portion of the sign-up form. It shows the 'Password' label and a 'Forgot password?' link. Below these is a password input field with three dots indicating masked text. Underneath the field is a checked checkbox with the text 'I have read and accepted showcaseindia's Terms & Conditions and Privacy Policy'. Below this, a red text block specifies password requirements: 'Password should contain: At least one capital letter and at least one small letter, At least one numeric character (0-9), At least one special character (!@#\$\$%^&-_)'. At the bottom is a large teal button labeled 'Create An Account'.

Problem Statement:-Validation for firstname,lastname and company name

Solutions:- firstname and lastname should not contain any numeric and special character. Company name should not contain any special character.

Technologies Used:-

i)Reactjs

ii)Html

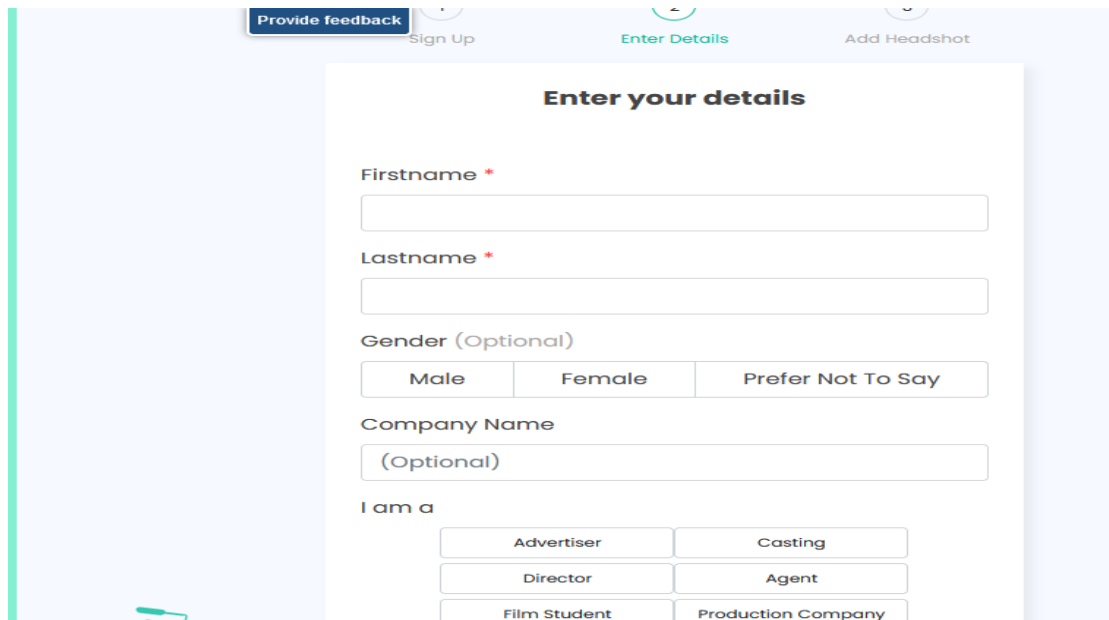
iii)Javascripts

iv)bootstrap

v)wordpress

My Contribution:- I was assigned this task to validate First-name last-name and company name. I have coded it in reactjs.

Screenshots:-



The screenshot shows a web form titled "Enter your details" with a light blue background. At the top, there are three buttons: "Provide feedback" (blue), "Sign Up" (light blue), and "Enter Details" (green). Below the title, there are five input fields: "Firstname *" (required), "Lastname *" (required), "Gender (Optional)" (with buttons for Male, Female, and Prefer Not To Say), "Company Name (Optional)", and "I am a" (with buttons for Advertiser, Casting, Director, Agent, Film Student, and Production Company).

The screenshot shows a web form titled "Enter your details" with a "Provide feedback" button in the top left. The form contains the following fields and options:

- Firstname ***: A text input field containing "12". Below it is a red error message: "Please enter a valid name".
- Lastname ***: A text input field containing "_adi". Below it is a red error message: "Please enter a valid name".
- Gender (Optional)**: Three radio button options: "Male", "Female", and "Prefer Not To Say".
- Company Name**: A text input field containing "&%". Below it is a red error message: "Please Enter a valid Company name."
- I am a**: Four radio button options: "Advertiser", "Casting", "Director", and "Agent".

Problem Statement:-As a User I should be able to preview the job application I have made

Solutions:-The user (candidate) who is applying for the job should be able to see a preview of the job application that they have made.

The preview should show the files they have attached and the answers they have mentioned to the application questions.

In case the user wishes to edit any of these, then the user should be able to click on an edit button to edit the component of the application. Clicking on the edit button should take the user back to that step in the application process.

If everything is okay with the application process, the user has the option of either applying for the job or discarding the application if they change their mind.

Technologies Used:-

i)Reactjs

ii)Html

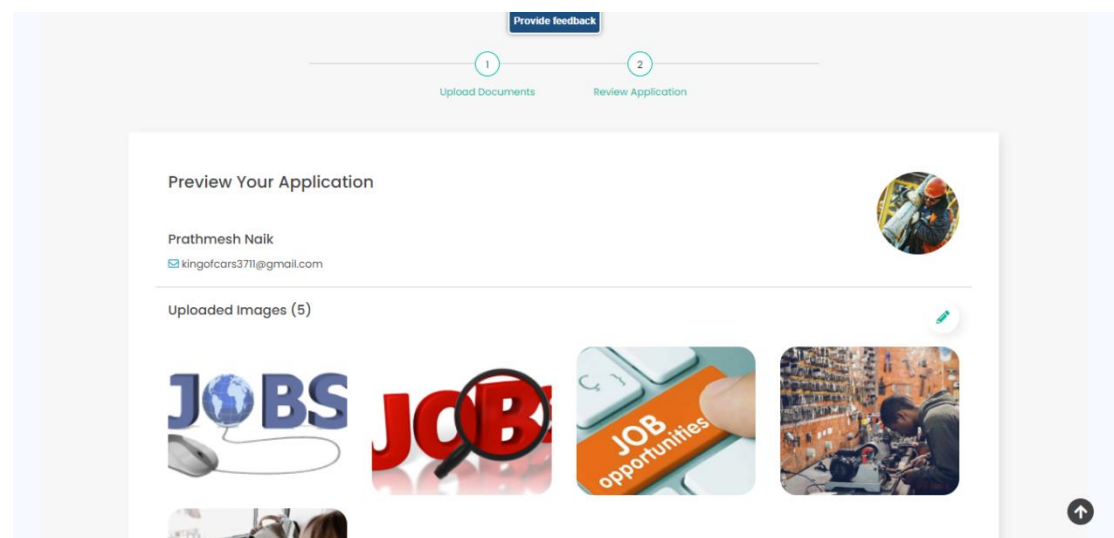
iii)Javascrpts

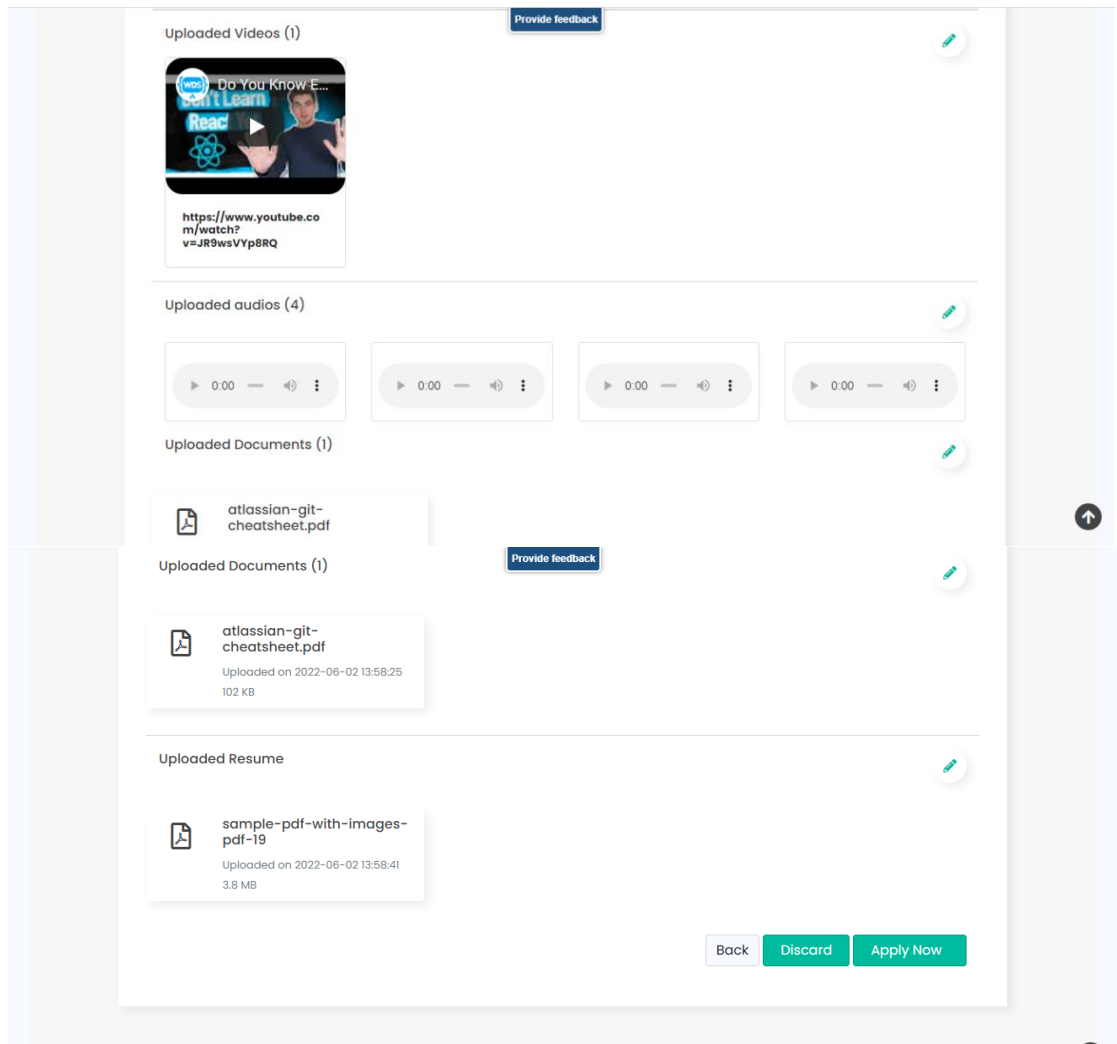
iv)bootstrap

v)wordpress

My Contribution:- I was assigned this task to Display the uploaded images,videos,audios,other documents and Resume files.I was able to write code to edit the job application code with preview application

Screenshots:-





Problem statement:-Amount Validation for budget of the job post

Solutions:- I)No special character should be allowed by user

II)Limit needs to be set for amount

iii) PHP

iv) Html

Iii)Javascrpts

Iv)bootstrap

V)wordpress

My Contribution:- This task was assigned to me I had to set limit for amount to specific number. Also I had to make sure users don't enter an invalid character. I achieved this task by changing the input type to number and set limit and write regular expression to avoid any invalid character and display message invalid amount on incorrect input.

Screenshots:-

This screenshot shows a web form titled "How would you like to pay your freelancer or agency?". It has two main options: "Pay by the hour" and "Pay a fixed price". A modal is open over the "Pay by the hour" option, titled "Set your own hourly range". The modal contains input fields for a minimum value (containing "ghjghjgh"), a unit ("/hr"), a maximum value (containing "9999999"), and a dropdown menu (set to "Per Hour"). There is a "Save" button and a close button (X). Red arrows point to the "ghjghjgh" and "9999999" inputs. Below the modal are "Back" and "Continue" buttons. A "Provide feedback" link is in the top right.

This screenshot shows the same web form as above. The "Pay a fixed price" option is now highlighted with a green border. Below the two options is a section titled "Do you have a specific budget?" with an input field containing "₹" and "10000". There are "Skip for now", "Back", and "Continue" buttons at the bottom. The "Provide feedback" link remains in the top right.

The screenshot shows a web form titled "How would you like to pay your freelancer or agency?". At the top right is a "Provide feedback" button. Below the title, there are two main options: "Pay by the hour" (with subtext "Pay hourly to easily scale up and down") and "Pay a fixed price" (with subtext "Define payment before work begins and pay only when work is delivered."). The "Pay a fixed price" option is highlighted with a green border. Below these options is a section titled "Do you have a specific budget?" containing a text input field with the value "₹-dga". A red error message "Amount Exceeded its limit or have Entered invalid character" is displayed below the input field. At the bottom, there is a "Skip for now" link and two buttons: "Back" and "Continue". A small upward arrow icon is in the bottom right corner.

Problem statement:-Side wide search

Solutions:- Candidate profile should be displayed whenever keyword is searched first followed by jobs and recruiters depending on what is searched.

My Contribution:- I was assigned this task to develop frontend for this functionality.

Technologies used

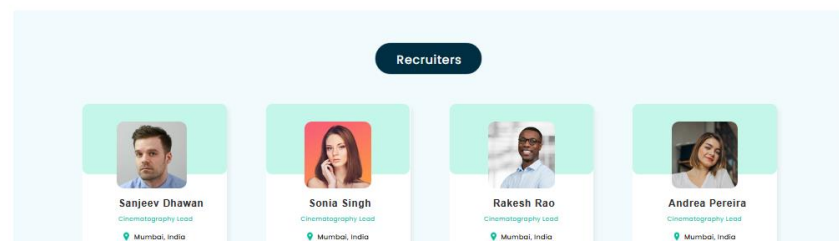
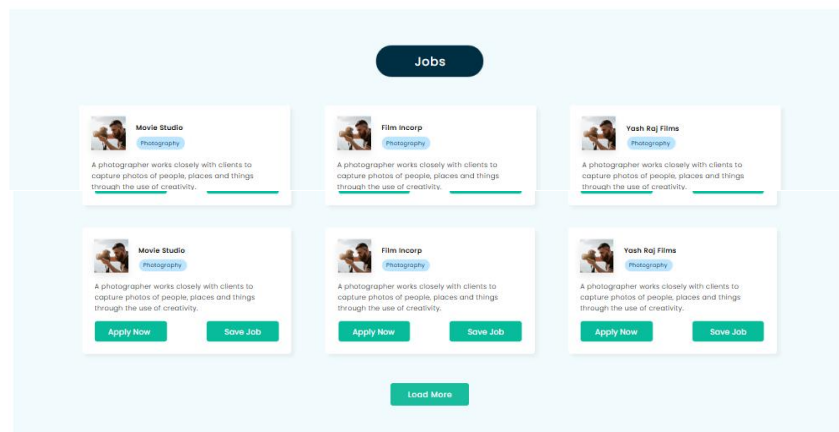
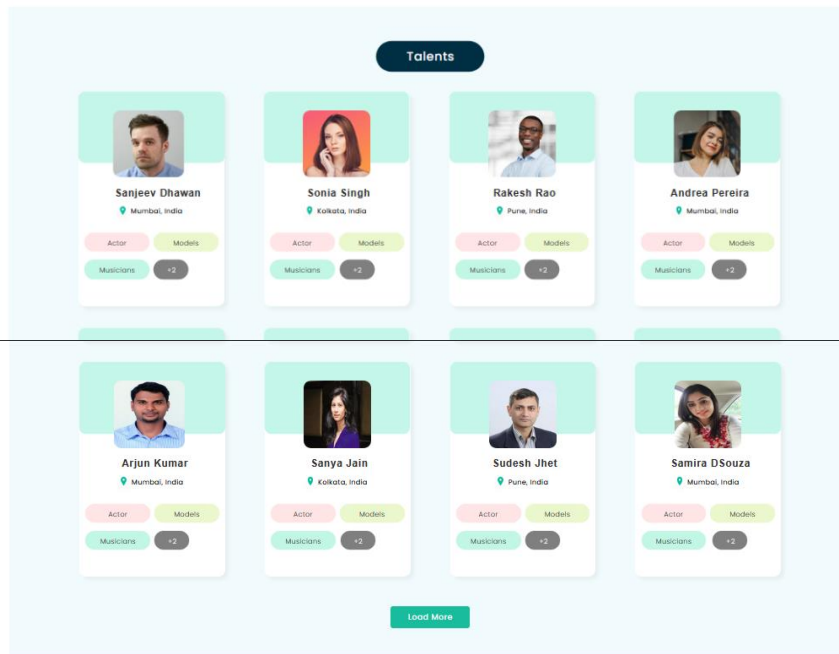
- v) PHP
- vi) Html
- Iii)Javascripts
- Iv)bootstrap
- V)wordpress

Screenshots:-



Search

Displaying results for Cinematographer



GOOD PRICING FOR HARDWARE REPORT

Requirements: -

- ✓ LightSail
- ✓ Load balancers
- ✓ EC2
- ✓ EBS
- ✓ RDS

Pricing Plans: -

For LightSail

Bundle	vCPU	RAM	Load balancer	Storage	Data Transfer Quota	cost
0.5GB	1	0.5GB	Nil	20GB	0.5TB	3.43USD
0.5GB	1	0.5GB	YES	20GB	0.5TB	21.09USD
4GB	2	4GB	Nil	80GB	2TB	19.62USD
4GB	2	4GB	YES	80GB	2TB	37.28USD
8GB	2	8GB	Nil	160GB	2.5TB	39.24USD
8GB	2	8GB	YES	160GB	2.5TB	56.91USD
16GB	4	16GB	NIL	320GB	3TB	78.50USD
16GB	4	16GB	YES	320GB	3TB	96.16USD

EC2 & EBS

Sr.No	instance	vCPU	RAM	Network performance	Storage	cost
1	t3a.nano	2	0.5GB	Up to 5GigaByte	1Tb	118.13USD
2	t3a.medium	2	4GB	Up to 5GigaByte	1TB	128.05USD
3	t3.xlarge	4	16GB	Up to 5GigaByte	1TB	199.16USD
4	t3.xlarge	4	16GB	Up to 5GigaByte	500GB	139.42USD

EC2 AND EBS CALCULATIONS

Calculation for 1

1 instances x 0.0019 USD x 730 hours in month = 1.39 USD (monthly instance savings cost)

1,024 GB x 0.114 USD x 1 instances = 116.74 USD (EBS Storage Cost)

Total= 1.39+116.74=118.13USD

Calculation for 2

1 instances x 0.0155 USD x 730 hours in month = 11.31 USD (monthly instance savings cost)

1,024 GB x 0.114 USD x 1 instances = 116.74 USD (EBS Storage Cost)

Total= 11.31+116.74=128.05USD

Calculation for 3

1 instances x 0.1129 USD x 730 hours in month = 82.42 USD (monthly instance savings cost)

1,024 GB x 0.114 USD x 1 instances = 116.74 USD (EBS Storage Cost)

Total= 82.42+116.74=199.16USD

Calculation for 4

1 instances x 0.1129 USD x 730 hours in month = 82.42 USD (monthly instance savings cost)

500 GB x 0.114 USD x 1 instances = 57.00 USD (EBS Storage Cost)

Total=82.42+57.00=139.42

RDS

Sr.No	instance	RAM	CPU	Storage	cost
1	db.t2.medium	4GB	2	1Tb	368.36USD
2	db.t2.large	8GB	2	1Tb	512.12USD
3	db.t2.xlarge	16GB	4	1TB	806.36USD

RDS CALCULATIONS

Calculation for 1

1 instance(s) x 0.196 USD hourly x (100 / 100 Utilized/Month) x 730 hours in a month = 143.08 USD

1,024 GB x 0.22 USD x 1 instances = 225.28 USD (EBS Storage Cost)

TOTAL=143.08+225.28=368.36

Calculation for 2

1 instance(s) x 0.398 USD hourly x (100 / 100 Utilized/Month) x 730 hours in a month = 290.54 USD

1,024 GB x 0.22 USD x 1 instances = 225.28 USD (EBS Storage Cost)

TOTAL=290.54+225.28=512.12USD

Calculation for 3

1 instance(s) x 0.796 USD hourly x (100 / 100 Utilized/Month) x 730 hours in a month = 581.08 USD

1,024 GB x 0.22 USD x 1 instances = 225.28 USD (EBS Storage Cost)

TOTAL=581.08+225.28=806.362USD

CODE REVIEW TOOLS RESEARCH



[PHPStan](#) PHPStan is a static code analysis tool that focuses on finding errors in the source code without having to actually run it. It catches whole classes of bugs even before you write tests for the code. PHPStan might be the most commonly used tool and also one of the newest.



[Sonarqube](#): is another widely-known option for static code analysis. It incorporates thousands of automated code analysis rules, protecting code on multiple fronts, and guiding development teams toward quality. They also provide an IDE extension, Sonarlint which works well to supplement the CI offerings.



[Psalm](#) is another great static code analysis tool for finding errors in PHP codebases. It was released in 2016 and has grown in popularity a little more slowly than others. This tool also fixes bugs automatically, allowing developers to improve their code without too much extra work.



[Scrutinizer](#) Scrutinizer is another widely used analysis tool. It seamlessly integrates into the software development workflow, and continuously builds and deploys application code. It's free for open-source projects but is only available as a hosted solution. This makes Scrutinizer the most popular option for open-source development.



[PHPCheckstyle](#): is a static code analysis tool used in software development. Its main purpose is checking whether PHP source code complies with coding rules. It basically automates the lengthy process of checking code and helps PHP developers enforce coding standards.

It can find anything from class or method design problems to code layout and formatting issues. You can find the complete list of checks [here](#).

Checkstyle has a large number of [plug-ins](#) as well that let teams integrate continuous code checks into their projects.

DeepScan, a cutting-edge static analysis tool for JavaScript code.

JavaScript has become the most popular language, but static analysis for it has not been around because of the dynamic features of JavaScript.

We have researched JavaScript code analysis for years, and now released DeepScan analyzing JavaScript code by data-flow analysis and precise rule sets. By this, we want to help JavaScript developers to write more robust and clean code.

Backup and restore

Backup and restore is a suitable approach for mitigating against data loss or corruption. This approach can also be used to mitigate against a regional disaster by replicating data to other AWS Regions, or to mitigate lack of redundancy for workloads deployed to a single Availability Zone. In addition to data, you must redeploy the infrastructure, configuration, and application code in the recovery Region. To enable infrastructure to be redeployed quickly without errors, you should always deploy using infrastructure as code (IaC) using services such as

AWS

CloudFormation

or the

AWS Cloud Development Kit (CDK). Without IaC, it may be complex to restore workloads in the recovery Region, which will lead to increased recovery times and possibly exceed your RTO. In addition to user data, be sure to also back up code and configuration, including

Amazon Machine Images (AMIs)

you use to create Amazon EC2 instances. You can use AWS CodePipeline to automate redeployment of application code and configuration.

Snapshots in Amazon Lightsail

You can create point-in-time snapshots of instances, databases, and block storage disks in

Amazon Lightsail, and use them as baselines to create new resources or for data backup. A snapshot contains all of the data that is needed to restore your resource (from the moment when the snapshot was taken). When you restore a resource by creating it from a snapshot, the new resource begins as an exact replica of the original resource that was used to create the snapshot. You will be billed a snapshot storage fee for snapshots on your Lightsail account; whether they are manual snapshots, automatic snapshots, copied snapshots, or system disk snapshots. Your resources can fail at any time—create snapshots frequently to avoid permanently losing your data.

Manual snapshots

Create manual snapshots of instances, managed databases, and block storage disks at any time. Manual snapshots are stored indefinitely until you delete them.

Automatic snapshots

If you're hosting critical information on your Lightsail instance or block storage disk, you should back them up often by creating manual snapshots. However, it's not always easy to find the time to perform frequent administrative tasks. If that's the case for you, then

use automatic snapshots to have Lightsail create daily backups of your instance or

block storage disk on your behalf, without manual interaction. The latest seven daily automatic snapshots are stored before the oldest one is replaced with the newest one.

System disk snapshots

If your instance becomes unresponsive and you need to access the files on the system disk, you can back up the instance root volume by creating a snapshot of it. Then, you can access the files in the system disk by creating a new block storage disk from the snapshot and attaching it to another instance. For more information, see

Creating a snapshot of an instance root volume in Amazon Lightsail.

PROJECT TIMELINE

Week 1:-

1. Formal Orientation and onboarding process
2. Started Learning React
3. Reading on php and wordpress

Week 2:-

1. Hooks, themes, Ajax, jQuery etc.
2. .wordpress template hierarchy, coding standards
2. php regular expression, quantifier metacharacter

Week 3:-

1. Creating custom plugins for wordpress, creating wordpress admin page for plugin, php coding etc.
2. Shortcode, Showcase india get cloning, and installation. working of login and signup, ultimate plugin

Week 4:-

1. localization of scripts, modifying code etc
2. install nodejs packages, resolving wordpress errors, learning react js
3. learn react js, reading and understanding code of showcase India

Week 5:-

1. studying react js code
2. Resolving bugs

Week 6-10:-

1. **Testing and resolving Bugs**

Week 10:-

1. Deployment of the code live server
2. Testing on live server

Week 11:-

- 1) Amount validation bug fixing
- 1) Pagination bug fixing
- 2) UI bug fixing

Week 12:-

- 1) Side wide search functionality
- 2) Preview Job application

Week 13:-

- 1) Email invitation functionality

Week 14:-

- 1) Fixing Date bug
- 2) Fixing image preview bug

Week 15:-

- 1) Fixing image preview bug

Week 16:-

- 1) Version 2.1 deployment
- 2) Testing

Week 17-18:-

- 1) invite to button bug fix
- 2) Testing of site

Week 19:-

- 1) UI Bug fixing
- 2) Filter functionality

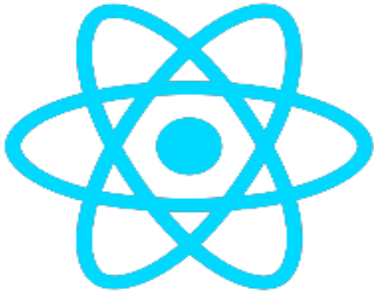
Week 20:-

- 1) Good Hardware research
- 2) Code review tools research

Week 21:-

- 1) system backup and restore research

TOOLS AND RESEARCH USED



ReactJs

React is an open-source JavaScript library for building user interfaces. It is maintained by Facebook and a community of individual developers and companies.



Node.js

Node.js is an open-source, cross-platform, JavaScript runtime environment that executes JavaScript code outside a web browser.



npm

npm is a package manager for the JavaScript programming language. It is the default package manager for the JavaScript runtime environment Node.js.



Git

Git is a distributed version-control system for tracking changes in source code during software development. It is designed for coordinating work among programmers, but it can be used to track changes in any set of files



MySQL

MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.



Postman

Simplify each step of building an API and streamline collaboration so you can create better APIs—faster



SonarQube

SonarQube is an open-source platform developed by SonarSource for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells, and security vulnerabilities on 20+ programming languages.



Jira

Jira is a proprietary issue tracking product developed by Atlassian that allows bug tracking and agile project management.



TypeScript

TypeScript is an open-source programming language developed and maintained by Microsoft. It is a strict syntactical superset of JavaScript and adds optional static typing to the language. TypeScript is designed for development of large applications and transcompiles to JavaScript

MY EXPERINCES OF INTERSHIP

My Internship at REMOTE SOFTWARE SOLUTIONS has been a wonderful and growing experience. Facing newer challenges every day is a norm here at REMOTE SOFTWARE SOLUTIONS.

An un-dying hunger to learn more is something that is cultivated in employees here. Being in industry and working on live projects is not something one learns but experiences.

At REMOTE SOFTWARE SOLUTIONS, I was never restricted to just my project team. I was provided freedom to interact, consult seek help and guidance, etc. from any colleague. At REMOTE SOFTWARE SOLUTIONS, there were many events like:

WOMENS DAY
PICNICS

Overall, I'm very happy to be part of REMOTE SOFTWARE SOLUTIONS. My best of wishes to everyone here.

REFERNCES

<https://reactjs.org/docs/getting-started.html>

<https://wordpress.org/>

<https://www.php.net/>

<https://www.w3schools.com/php/>

<https://www.rabbitse.com/blog/5-php-code-analysis-tools/>

<https://nodejs.org/en/docs/>