Project done under Rahmani-30 on web development using ColdFusion

SUBJECT CODE (CSEN4131)
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Technologies Worked on:

- HTML
- CSS
- Bootstrap
- Javascript
- AlaSQL
- AWS
- ColdFusion
- Cfml

Introduction to ColdFusion

Adobe **ColdFusion** offers you a single platform for building and deploying web and mobile applications. Language used is cfml (coldfusion markup laguage) It is a scripting language for web development that runs on the JVM, the . NET framework, and Google App Engine.

Introduction to Project.

Task was to develop a robust form for the organization to on board students.

The form itself include google authentication to log in to the form page.

Then a strong javascript controlled form for various validation.

Login page

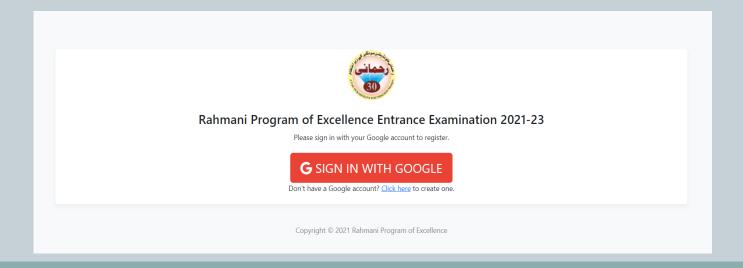
Link to the form is:

https://forms.renro.org/rpe 2123 batch/

It's a fully google authenticated form where we are required to login with gmail account.

The login information is logged in the db.

The detailed is cashed within the users system so that when the same user login the prefilled details appear there as it is.



Login continued...

We used google Oauth 2.0 for google authentication.

Google APIs use the OAuth 2.0 protocol for authentication and authorization. Google supports common OAuth 2.0 scenarios such as those for web server, client-side, installed, and limited-input device applications.

o begin, obtain OAuth 2.0 client credentials from the Google API Console. Then your client application requests an access token from the Google Authorization Server, extracts a token from the response, and sends the token to the Google API that you want to access. For an interactive demonstration of using OAuth 2.0 with Google (including the option to use your own client credentials), experiment with the OAuth 2.0 Playground.

Javascript Validation

All the fields of the form is strongly validated and checked.

For example the phone number is checked according to the laws which govern it like it should be of 10 digit and many more validation.

Aadhar number validation is also done according to the laws which govern it.

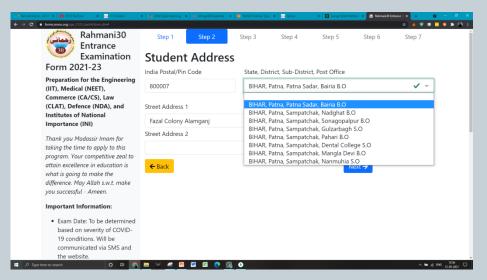
We have different country code option. Those country code are not hardcoded. We have created an APIfor it and every time it is called in the background to fill the dropdown menu.



Using AlaSQL

Some fields like address require suggestion, for example we require suggestion according to pin code. Previously we were using an API call to get suggestion but sometimes the server get busy as a result our application was getting dependent on it.

To solve it we collected all the data at once and stored it as a JSON file. And used Alasql to parse the json file according to the primary field here it is pin code it find all the fields related to it and selects the fields concatenate it and display it as dropdown.





The backend language used here is cfml to connect frontend to the backend server and store the data into the database.

Database used here is noSQL db dynamoDB provided by AWS.

CFML (ColdFusion Markup Language) is a Web <u>page</u> markup language that allows a <u>Web site</u> developer to create <u>pages</u> with variable information (text or graphics) that is filled in dynamically (<u>on the fly</u>) in response to variables such as user input. Along with the usual Hypertext Markup Language (<u>HTML</u>) tags that determine page layout and appearance, the page creator uses CFML <u>tags</u> to bring in content based on the results of a database <u>query</u> or user input. CMFL is a proprietary language developed for use with <u>ColdFusion</u>, a product from Allaire.

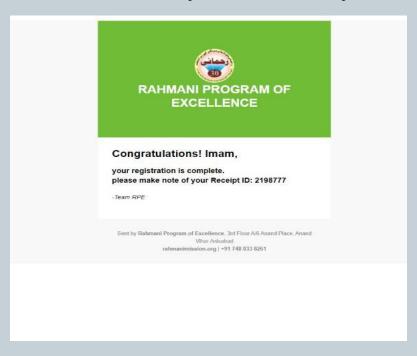
Cfml continue....

CFML tags perform all server-side tasks (such as <u>database</u> queries) by condensing complex processes, that would normally require knowledge of programming languages such as Java or C++, into four basic tags: CFQUERY, which is used to submit a structured query language (<u>SQL</u>) request to the database; CFOUTPUT, which is used to display the result of a query; and CFTABLE or CFCOL, which are used to display a preformatted table containing the results of a set of queries. Files created with CFML are saved as ColdFusion <u>templates</u> and use a ".cfm" extension.

```
citie class="key-value-pair">
       <ipun class="slign-labels">3rd Friday of September Status:
       <: thirdFridayOfSeptemberStatus @0 ''>
           <imput name="thirdFridayOfSeptemberStatus" type="hidden"</pre>
           <input type="text" value="Not Enrolled" disabled style="will
</p>
       *cfelses
           coffeet isReceivingServices true>
           ccfif IsDefined('thisWassoc.receivingServices')>
               <cfloop array="#thisWassoc.receivingServices#" index="</pre>
                   Receiving Services >
                      cofset isReceivingServices - False>
                   C/CFES>
               </r>
           </arist>
           <multiple name="thirdFridayOfSeptemberStatus">
               define value="ethirdFridayOfSeptemberStatus=">=third
               contion value="Not Receiving Services" #isReceivingSer
               Services (/option)
```

AWS-SES

On proper filling up of the form the user is sent with a confirmation email, here it is done through AWS-SES (<u>Simple Email Service</u>). This service is provided by AWS (amazon web services) it's a simple e-mailing service. The major reason for using this platform was cost-efficiency and reliability.



AWS-SNS

On proper filling up of the form the user is sent with a confirmation message, here it is done through AWS-SNS (<u>Simple Notification Service</u>). This service is provided by AWS (amazon web services) it's a simple messaging service. The major reason for using this platform was costefficiency and reliability.

Hi Imam Greetings from Rahmani Program of Excellence - Your application is complete. Please make note of your Receipt ID: 2198777.

Rahmani30

(Rahmani Program of Excellence, RAHMANI FOUNDATION, Munger, Bihar, India)

Jb. Modassir Imam sb.

South 24 paragnas, 36 Topsiya Road Kolkata 700039, West Bengal.

Tel: +91 911 34 51 623

Email: modimam123@gmail.com

Date: 13 July, 2020

Subject: Internship certificate.

Congratulation Jb. Md Modassir Imam sb.,

On completing six month internship under

Rahmani 30 in the field mentioned below.

We heartly wish you a great future ahead.

Title: Software Development Internship

Job Description: See below Start Date: 20 January, 2020 End Date: 20 June, 2020

Sincerely,

Fahad Rahmani, CEO Rahmani30

Note:

- Please note that the internship certificate is a two-page packet.
- Please scan the signed copy and send it to info@rahmanimission.org

Fahad Rahmani

Chief Executive Officer

A/6 Anand Place, Anand Vihar Opp: Police Colony, Anisabad Patna, Bihar – 800002, India



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info@rahmanimission.org



Rahmani30

Fahad Rahmani

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(Rahmani Program of Excellence, RAHMANI FOUNDATION, Munger, Bihar, India)

Job Title: Software Development Internship

Department: Information Technology

Reports to: IT Director

Job Summary:

Server side programming using coldfusion.

web automation using python.

Duties and Responsibilities done:

- Understand the Vision, Mission, and the criticality of this role to Rahmani Program of Excellence
- Learn new tools and technologies to support R30 information technology ecosystem
- Attain expertise in Lucee ColdFusion, ColdBox Framework, SQL/NoSQL, Git, Bootstrap, Power BI, Excel, Moodle, and others as required
- Collaborate with direct supervisor and volunteers to design, develop, implement, test, and deploy functions and systems using prescribed means and methods.
- Document "to-be" systems architecture, data flow, code, and other details for sufficient and proper communication for managers and other developers
- Train as necessary other team members on relevant systems
- Safeguard practices, frameworks, code, and systems
- Performs other related duties as assigned

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Jb. Modassir Imam sb. | 13 July, 2020