**CingleVue Coding Challenge Brief Documentation about the projects.**

**Oracle APEX**

1. Application Name: Employee Maintenance Details
2. Application ID: 39515
3. Workspace Name: Model
4. URL login to Workspace: [*https://apex.oracle.com/pls/apex/f?p=4550:1:0*](https://apex.oracle.com/pls/apex/f?p=4550:1:0)*:::::*
5. Username: [GOPALKJHA88@GMAIL.COM](mailto:GOPALKJHA88@GMAIL.COM)
6. Password: 12345

About the Application: This application is a maintenance application to maintain all the details of employees of the organization. Application users are the people from HR department of the company.

**Features:**

* After successful login to application Home page will appear. Login credential is same as the workspace login credential.
* Home page contains the brief introduction about the application and a navigation link named as Employee Details.
* This link will redirect to the interactive report page. This report contains all the information about the employees with edit link for each record on the report.
* There are three buttons on this report page Action, Create and Quick Salary Update.
  + - Action 🡪 So many different options to customization the Report.
    - Create 🡪 To make the entry for a new employee.
    - Quick Salary Update 🡪 To update the salary and commission of an employee.
* Edit icon with each record will redirect to a form page with all the values in editable format. Users can update the information for any existing employee from this form.
* This page also contains a delete button to delete the details of an employee.
* Create button will redirect to the same editable form page with all the fields as blank except employee ID. Employee ID will be in read only mode and an auto generated number.
* After providing all the values and clicking on create will make the new entry to the database with the details of a new employee.
* This page will redirect to Report page after successfully adding the information.
* Quick Salary Update is to update only the salary and commission for an employee without going into detail edit page.
* After clicking on this button a model form will appear on the screen with three fields Employee ID, Salary and commission as Yes or No.
* Commission Yes = .5% and No = NULL.
* After clicking on update button salary and commission for that particular employee will be updated and report will show the updated value.
* All the cancel buttons will return back to report without making any change.
* Logout link will take the users out of the application.

**Technology Used:**

* Oracle Application Express (APEX) 4.2
* Oracle Database 11g
* SQL and PL/SQL
* JavaScript
* Jquery
* HTML Tags

Source code of Application exported has been pushed to github.

**Jasper iReport**

This is report designed in Jasper Report designer. Report contains the same data as the report in previous application. Data source for both the reports are same.

**Features:**

* Report contains all the detail information about employees of the organization.
* At thebottom of the report count of the employees and a total of the salary will appear.
* Source code for this report is in JRXML format.
* From jasper tool it can be exported to many formats as per the user requirement.
* JRXML source code and output report in pdf format has been pushed to the github.

**Technology Used:**

* Jaspersoft Studio Professional
* SQL
* Oracle JDBC data source
* Oracle Database

**Java Programming:**

This task can be accomplished with the help of jsp and servlet. The application will have different layers abstracted from each other. The view will be the JSP, the controller being the Servlet and DTOs to transfer data from one layer to another.

The webpage will have following attributes as follows.

* A JSP Page with a button to display the list of schools in a tabular form. This can be done my calling a JavaScript function onclick() and returning a list of schools and iterating it through in jsp page.
* A combo-box in the jsp page which will sort the school list in tabular form onchange(). The id of the dropdown value will be sent to call a json object which call a method in servlet to get the list of schools in tabular form from database with a query like 'select school\_name, school\_id from Table\_Name order by ...'
* On getting the value the json is returned to the jsp page and displayed in tabular form.
* All the http requests from the jsp page will be directed to the Controller Servlet and communication of values via the DTO.

**Technology:**

* Java
* JavaScript
* JSP and Servlet
* JSON
* JBOSS
* Oracle Database
* JDBC Data source

**Note:** I have not pushed source code for this java web application. Technically I am not a java expert. My expertise is in Oracle APEX and PL/SQL. I have some basic knowledge about Java Struts frame work. I have written an approach to accomplish the challenge given but I am not sure how much this approach is correct or will work or not.

**GIT Public Repository Details:**

**URL:** [*https://github.com/gkjha18/CingleVue\_Challenge.git*](https://github.com/gkjha18/CingleVue_Challenge.git)

Repository Name: [CingleVue\_Challenge](https://github.com/gkjha18/CingleVue_Challenge)

Thanks.

Prepared By:-

Gopal Kumar Jha

Email: [gopalkjha18@gmail.com](mailto:gopalkjha18@gmail.com)

Cell: +91-9883618341