**ERP - Hiring Tracker**

**What is the problem or requirement?**

We are facing issues in tracking the hiring requests across the organization for the projects and the responses and status of the same from the hiring team. So, we need a digital platform where the people can request their need of the resources and the hiring team can work on the same while updating the status regularly.

**What is the solution?**

In the existing ERP product of the organization, we can build a new module named Hiring. Because the requests of resources are to the projects/teams, only Managers will have the access to create the hiring requests. Hiring team is notified of the requests and they can start working on them while updating the status every time there is an update. So, the hiring requests will be transparent across the organization and easy to track each of their status on demand.

**Technical Details**

**Workflow:**

* Hiring module will be a new module added to ERP to which can be navigated through the left side nav bar to the modules.
* Users (Managers/HRs) can see a table with the list of all hiring requests (none if no requests). Provision to add a new hiring request through an Add (+) button which navigates to the form.
* Only the managers can add a new hiring request and hence the button should be visible/enabled only to the Managers.
* On clicking the Add (+) button, a form requesting to fill the required fields will open.
* Once the request is submitted, a notification email triggers to the hiring team of the same with the unique request ID.
* One of the persons from hiring team based on the request details will take it up and mention their name as the Point of Contact.
* Managers & Hiring team personnel can update the request details based on the requirement changes and status. An edit action button is provided to do the same where the form with the prefilled values will be displayed.
* Once the required positions are hired, the request status will be updated to Closed.

**Technical Details:**

The required fields of a hiring request are below.

Manager Accessible Fields:

* Project Name – Select Dropdown
* Project Manager – Prefill based on the selected project
* No. of Resources - Number
* Designation – Text Input
* Status – Select Drop Down (Defaults to Open while creating a new request)
* Minimum Experience - # Years & # Months
* Maximum Experience - # Years & # Months
* Type – New or Replacement (Select Dropdown)
* Required Skills – Text Input
* Duration - # years & # months
* Probability of conversion – From contract to permanent (0 – 100%)
* Salary Range - #Min. & #Max.

Hiring Team Accessible Fields:

* Point of Contact (POC) - Hiring person name from the hiring team
* Hiring Status – Text Input
* HR Comments – Text Input

**Project Development Process**

* We use GitHub for the version management of the code and for the team collaboration.
* The basic tech stack we could use for this module are:
* **Frontend:** HTML5, CSS3, JavaScript, jQuery, Bootstrap, Fontawesome.
* **Backend:** NodeJS, Apache Tomcat.
* **Database:** MySQL.
* Team will have the development platform setup on their local machines while contributing their codes through pull requests on GitHub.
* A final deployment will be done on a cloud/shared server.
* Frontend will be deployed on a web server
* Backend will be deployed on the node server itself which exposes the API end points.
* Final project is deployed on AWS EC2 instance and RDS instance is connected to MySQL workbench.

**Designs**

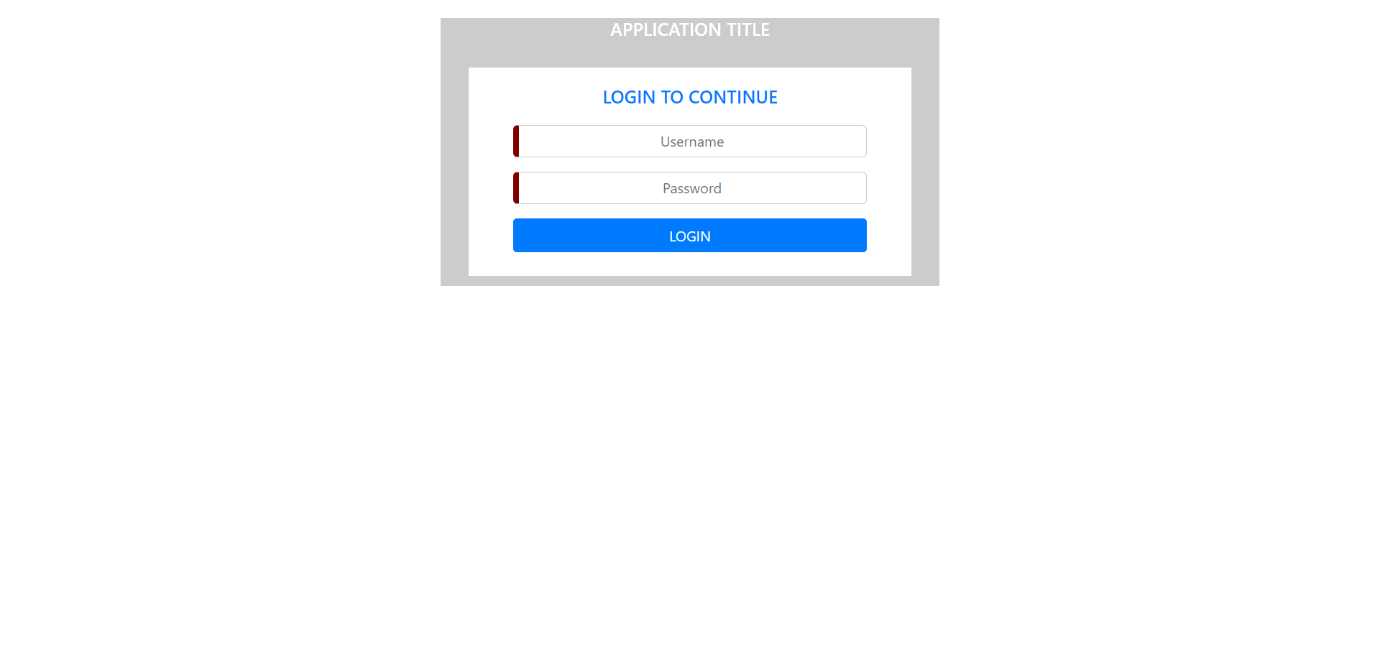


Fig 1. Login Page

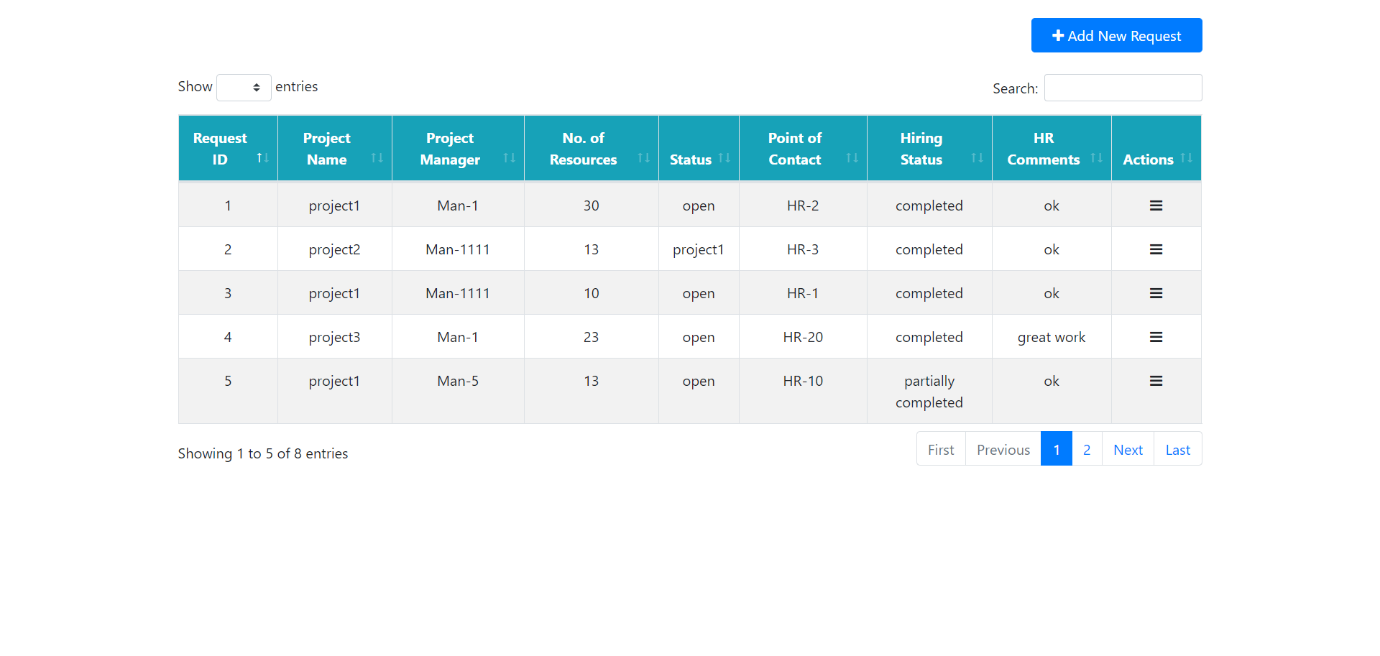


Fig.2 Manager Logged in Table

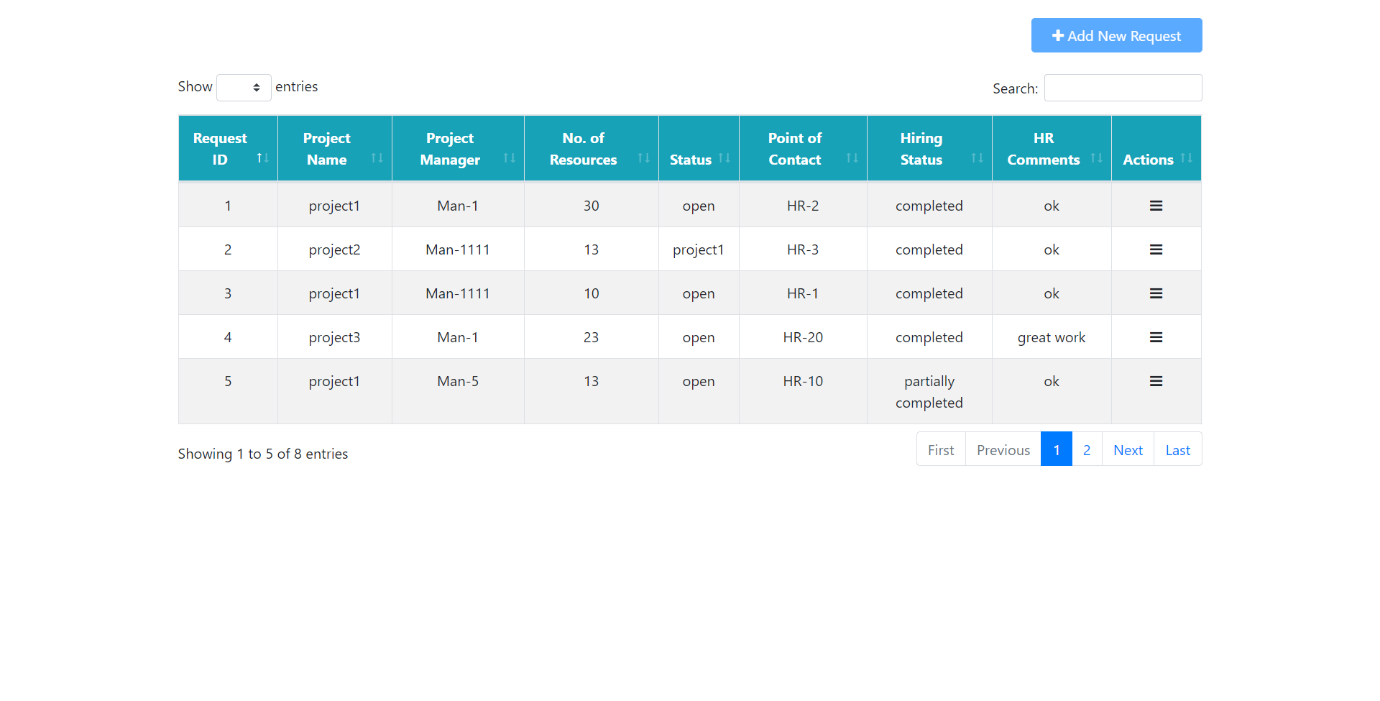


Fig.3 HR logged in Table

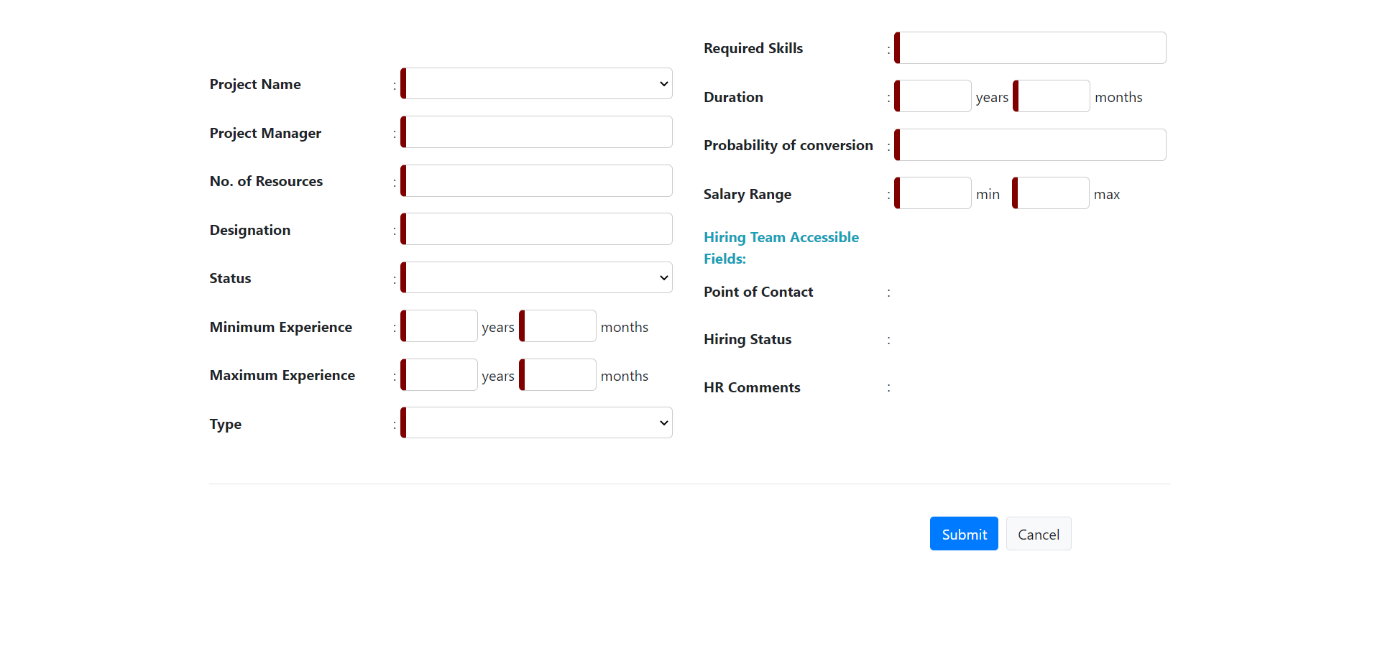


Fig.4 Add Request Form

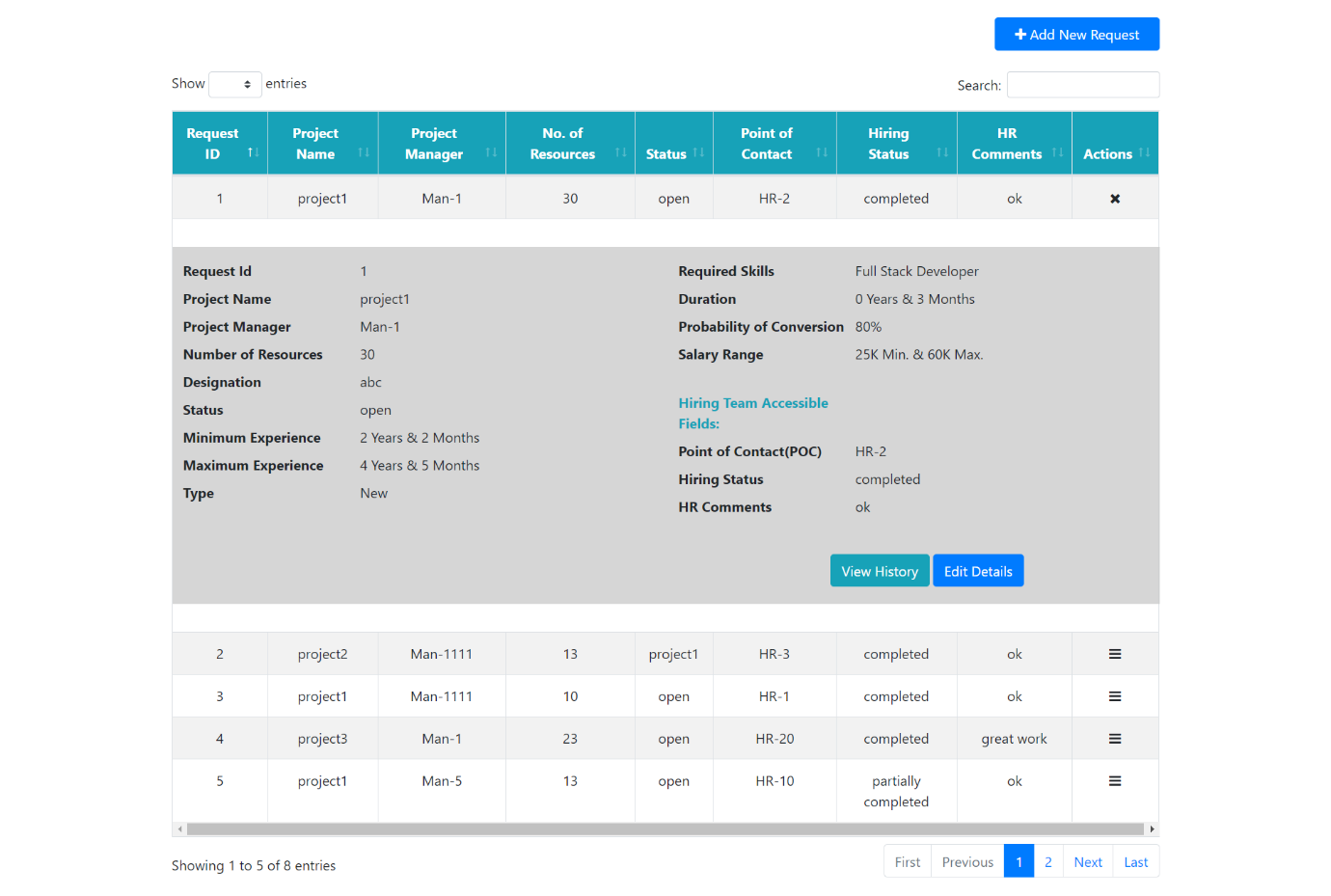


Fig.5 Details Module

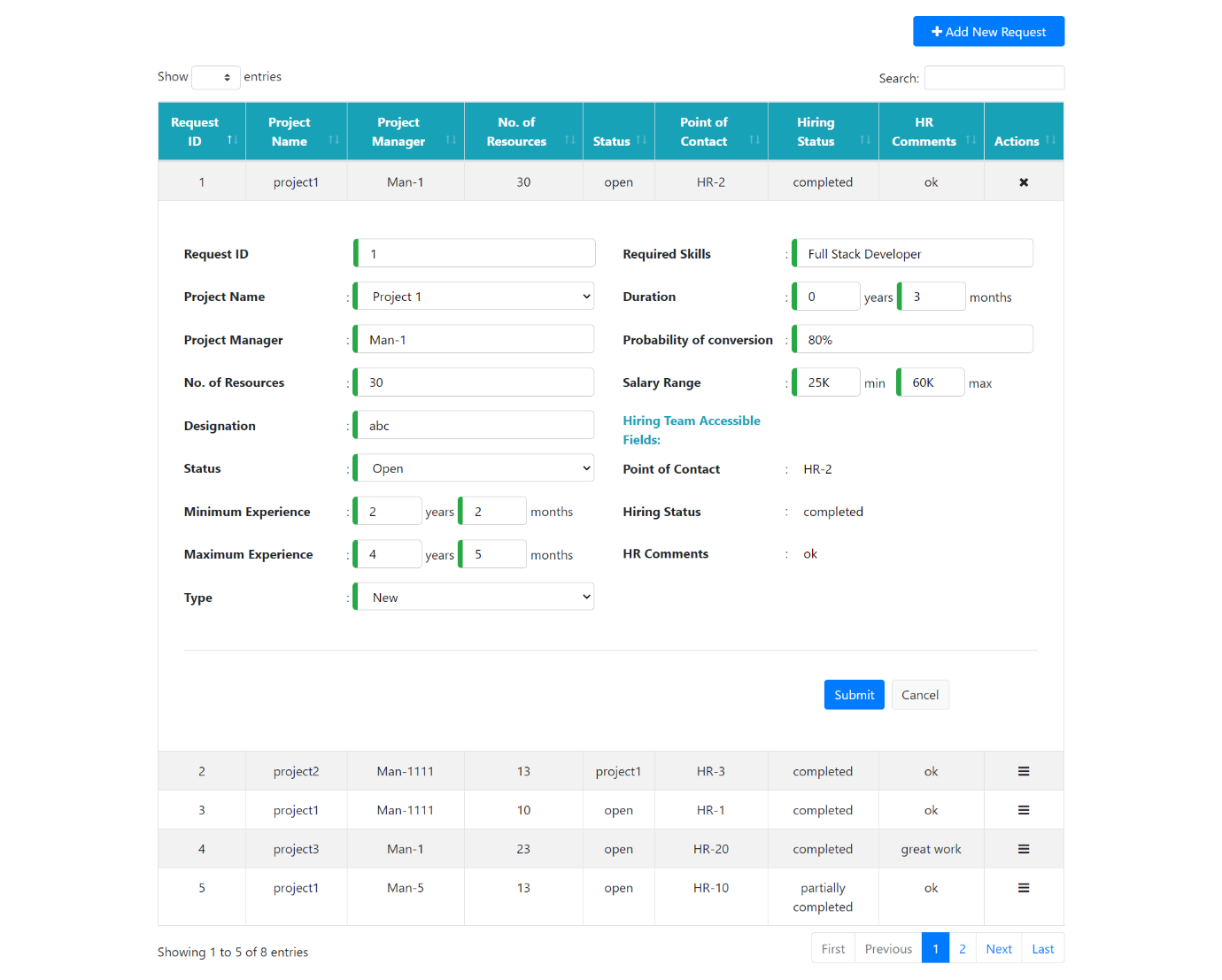


Fig.6 Edit Form

* **Difficulties Table**

|  |  |
| --- | --- |
| **Difficulties Placed** | **Solutions for same** |
| 1. Building two sided forms. | 1. Creating forms inside table with two td’s. 2. Using bootstrap col class, specifying class= col-sm-6 for dividing into equal width. |
| 1. Login as Manager and HR | I used WebStorage for storing the value true whenever Manager logs in and vice versa for HR. |
| 1. Whenever clicked on action column of the table, respective request Id should to displayed in console. | This is tackled by creating a global variable and collecting object for that particular Id. |
| 1. Managing fontawesome icon, whenever clicked on bars icon details module should show up and bars icon should turn into times icon. | I created a function called handleicon and specified hide and show function to handle the icons whenever clicked. |
| 1. Whenever clicked on times icon the new tr should get removed. | This is solved by removing closest tr of particular details module. |
| 1. Integrating frontend and backend | This is done my using ajax function to integrated backend APIs with frontend. |
| 1. Using pagination jQuery plugin | This is solved by adding datatable plugin in head section of index.html and call datatable function in jQuery. |
| 1. Hosting on cloud | Creating EC2 instance in AWS management console of Ubuntu AMI and using that IP address to run the application on Apache Server |
| 1. Integration MySQL with cloud instance | By creating RDS instance and creating database. Adding new inbound rules for port 3306 and specifying this credentials to MySQL Workbench. |