

Software Engineering

FACULTY SELECTION PROCESS DATA MAINTANENCE

Group 2

Group Members:

Roll Number	Name	Roles Assigned
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About the project:

This project serves the purpose of a middleman in the process of Faculty selection by helping to initiate communication between the job provider and the job seeker providing with user-friendly functionalities that help in smooth functioning and proper Data Maintenance. This platform also helps its users in finding the right jobs matching their experience and its client in finding the right candidates for the vacancies posted.

Stake Holders:

1. Registered members/ Users of the platform
2. Faculty Selection committee (HR department)

REQUIREMENTS

USER – Registered Member Requirements:

1. Simple and easy to use UI.
2. Notification services

- 1) Profile not updated
- 2) Application in draft state
- 3) New vacancy posted
3. Enable/disable options for filtered notification (Interested in jobs only from certain departments)
4. Filter based Job search
5. Bucket list should be visible
6. Application status should be visible.
7. Fields for specifying preferable slot for interviews and preferable joining date
8. Mail services – communication/feedback regarding further interview processes.
9. Contact address of the person behind posting a vacancy in the portal to be mentioned.

CLIENT (HR Department) Requirements:

1. Extension of the platform for future adaptation should be possible.
2. Colors in the frontend to be chosen keeping in mind the color blind people.
3. One user can create an account with only one mail ID
4. Only people with suitable designation should be allowed to register with the portal.
5. Only people who have published at least 2 Research paper should be allowed to register with the portal.
6. Only people with Language proficiency – English – Professional & Fluent should be able to Register in the portal.
7. Area of Interest and the highest achievement in the same is a mandatory information
8. 'Work status check & clear' module's rules should be agreed by applicant before applying (that is after selection he/she has 1 month time to join and resign from previous job.)
9. Other security policies should be accepted before applying
10. Filter based Record Retrieval
11. Retrieve the records based on Timeline (last 10 applications/ first 20 applications etc.)
12. Registered members of the portal should be able to apply for multiple jobs at the same time

MODULES:

COMMON MODULES:

1. Login/Register (3 logins):
 - HR (using College mail ID)
 - Admin (using College mail ID)
 - Users (Personal mail)
2. Change User credentials (username/ password)
3. Logout
4. Delete Account
5. Feedback/ Reviews

USER Modules:

1. Create/update personal details
2. File management:
 1. Upload/ Update Resume
 2. Upload /Update Teaching Video sample
 3. Upload/ Update Research paper (2 mandatory)
3. Area of Interest & Highest accomplishment in the same
(Proof: certificate, video, photo, any file supported)
4. Enable/Disable filters (from which department they would like to be notified on job offers)
5. Notification enable /disable option.
6. Filtering module for job search based on department, no. of vacancy etc
7. 'Work status check & clear' module (has to check if the policies are accepted before applying)
8. Job apply module
9. Job application status check module
10. Preferable slot (start date & end date can have a gap of 7 days) for round 1 and preferable start date for the job if selected.
11. Bucket list (user can see all the positions applied to)
12. Mail service module
 - 1) Application received mail (Receiver)
 - 2) Slot confirmational mail (Receiver)
 - 3) Mail regarding subsequent rounds. (Receiver)
 - 4) Job offer mail (Receiver)
 - 5) Rejection mail (Receiver)
 - 6) Job Acceptance Mail. (Sender)

HR Modules:

1. Create/update personal details
2. Create/Update Vacancy post
3. Filtering module to filter applicants based on various fields.
4. Scheduling Management
5. Mail service module
 - 1) Application received mail (Sender)
 - 2) Slot confirmational mail (Sender)
 - 3) Mail regarding subsequent rounds. (Sender)
 - 4) Job offer mail (Sender)
 - 5) Rejection mail (Sender)
 - 6) Job Acceptance Mail. (Receiver)

ADMIN MODULES:

1. Updates (Create, Append, Update, Delete) the list of faculty under each department based on new Recruitment.
2. Update members of the HR team (add/ delete)

FUTURE WORK (EXTENSION):

1. Universities / bodies registered in the portal **to be extended from 1 to many.**
2. Service available as **mobile application**

Tables:

1. Registration table(applicants/faculties):

This table is specifically for applicants or faculties who are registering for the first time.

Attributes:

- Registration_id(primary key)
- Username(unique)
- Email(unique)
- Password
- Mobile Number

2. Faculty Positions:

These are the different positions available in particular institute/organization

Attributes:

- Position_id
- Position_name
- Position_description

Values:

Position name:

- Assistant Professor
- Associate Professor
- Additional Professor
- Professor
- Lecturer
- HOD
- Chairperson
- Lab assistant
- Lab supervisor

3. Vacancy Table:

This table contains HR department posts vacancies in particular position.

Attributes:

- Position_id(foreign key from position table)
- Post_id(primary key)
- Number_of_vacancies
- Posted on(date)
- Apply by(date)

4. Profile table:

This table contains profiles of respective faculties who are registered in the portal.

Attributes:

- Profile_id(primary key)
- Registration_id(foreign key from Registration table)
- Photo (need to upload in firebase)
- 10th Certificate (need to upload in firebase)
- 12th Certificate (need to upload in firebase)
- Degree Certificate (need to upload in firebase)
- Resume (need to upload in firebase)
- Video Sample (need to upload in firebase)
- Research Papers (need to upload in firebase)
- Address
- Highest level of qualification
- Institution Name
- Expertise
- Years of Experience in teaching
- Date

REPORTS:

- 1) Results (Display status of Applicants i.e Selected, Rejected, Wait list)
- 2) Software Updates (From developers to business analyst / project manager regarding the software updates)
- 3) SRS (Software Requirement Specification)
- 4) Testing Report (Testing Objectives, Activities, and Requirements)
- 5) Time tracking Report (Track Overall time spent for each task)
- 6) Project Health Report (Updating Stakeholders the status of the project)
- 7) Feedback (From users, HR manager regarding their feedback on using the software)

ASSUMPTIONS:

- 1) The portal is in use only in our college and not commonly by any other organization currently.
- 2) The selection process is as follows:
 - Round 1: friendly talk (30 min)
 - Round 2: Technical Interview (45 mins)
 - Round 3: Discussion on Achievement, Project, Paper publication (30 mins)
 - Round 4: HR Interview (20 mins)
- 3) Round 1 is mandatory for all the applicants and is a Screening round.
- 4) Those who qualify round 2 will be screened for the next round and similarly applies to Round 3 and 4 as well.
- 5) The selection of any applicant is done manually and not by the software. The software helps in the process by storing the Applicant's records and acts as a platform that helps applicants to notice vacancies and start a communication with the opportunist and same ways for the HR department. This software serves the purpose of a middle man.
- 6) The processes that comes aftermath of selecting the candidates such as document verification, Acceptance mail etc will not be handled. That is between the candidate and Hirer.

Software Requirements:

1. Webpage:

- Frontend: React
- Backend: Nodejs

2. Database storage: MySQL

Hardware Requirements:

1. A PC or Laptop with a stable internet connection.
2. A mobile with a stable internet connection

REGISTERED MEMBER'S POINT OF VIEW

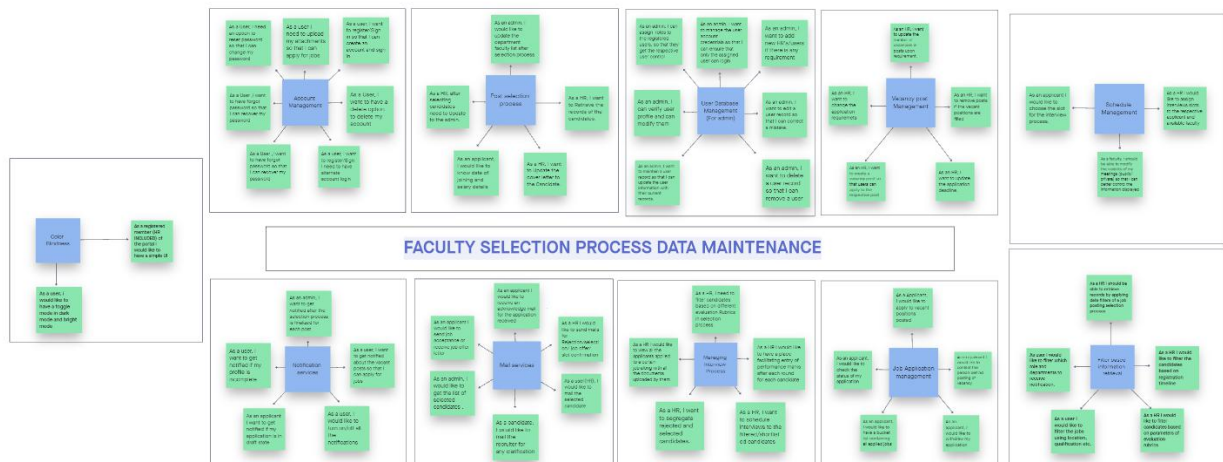
- 1) As the client requirement suggests, there are certain criterions followed to allow registration of members to the portal. The users satisfying those criterions will be allowed to register to the portal.
- 2) After the user has registered, they will be directed to the profile building page wherein they are supposed to enter their details and all the mandatory files asked by the Client
- 3)The Notification services will be enabled by default and hence if the profile is not complete/updated, the user gets a notification
- 4)The user will also receive notifications as new vacancies are posted.
- 5)The user can select the departments from which he is happy to receive job notification and can search for jobs through the filter
- 6)If the user finds the right job, he/she can apply for the job provided he/she accepts for all the privacy policies and other policies of the organization posting the job
- 7)The user can apply to multiple jobs at the same time. And hence the user can check all the jobs applied under the heading 'Bucket list' and also can simultaneously check the application status.
- 8)The user will be allowed to mention his/her available time to take the interviews
- 9)All further communication regarding the applied job and further rounds will be communicated via Mail

CLIENT'S POINT OF VIEW (HR department)

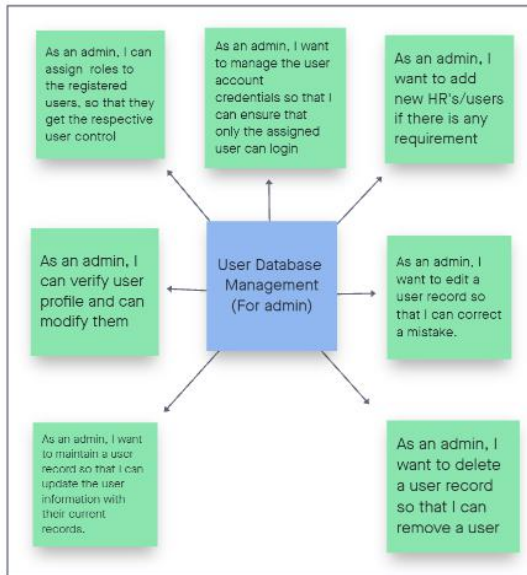
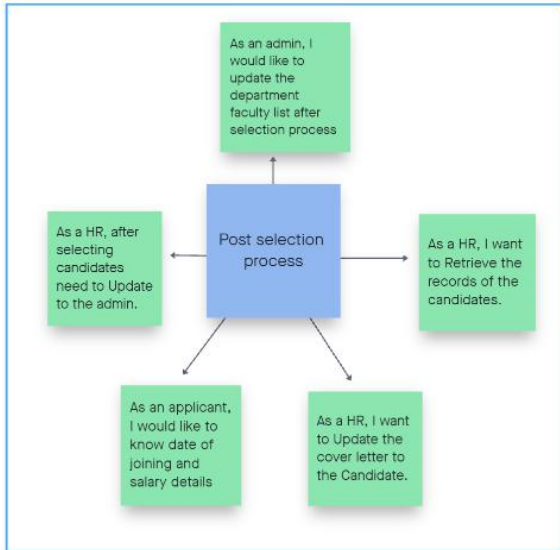
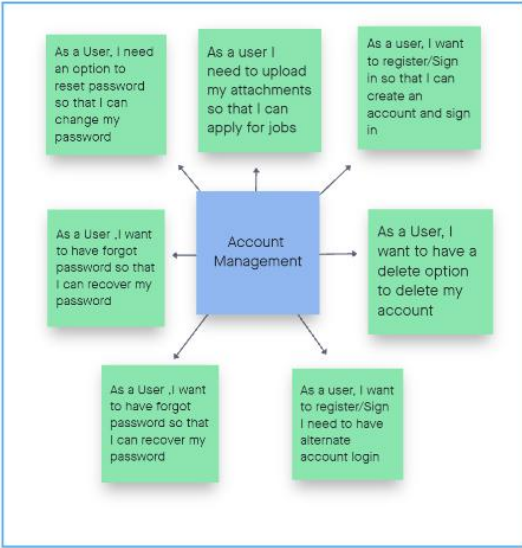
- 1)The members of the selection committee of the HR department will be logging in using college ID and password.
- 2)They will be able to update an existing or create a new post on vacancy with all the necessary details.
- 3)As soon as the application deadline for a certain post exceeds, the committee members will now be able to view the list of applicants who have applied for the post
- 4)The mail saying application reached will be sent out.
- 5)Next a mail for slot confirmation will be sent out based on the preference given by the Applicant during the application process.
- 6)After this, since Round 1 is mandatory, with the help of the scheduling management module they assign applicants to a set of interviews and send out the mail with the meeting link/test link, date, and time.

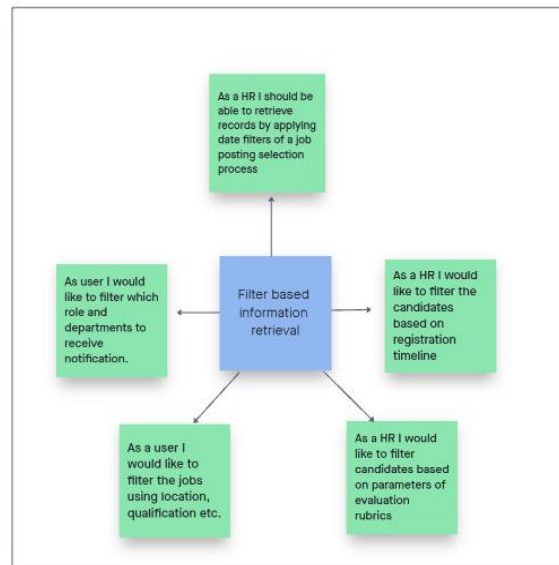
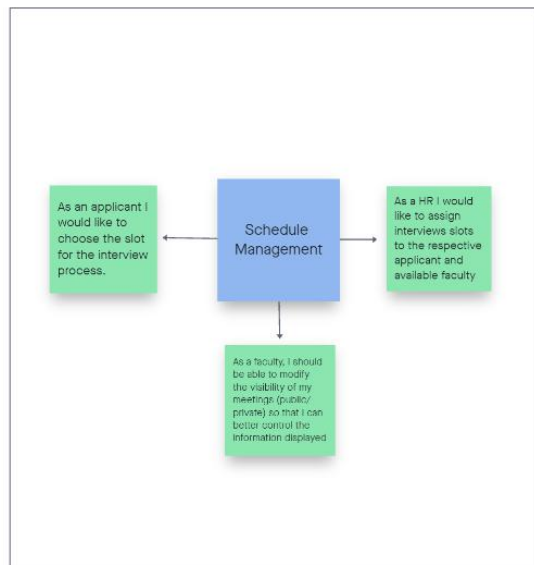
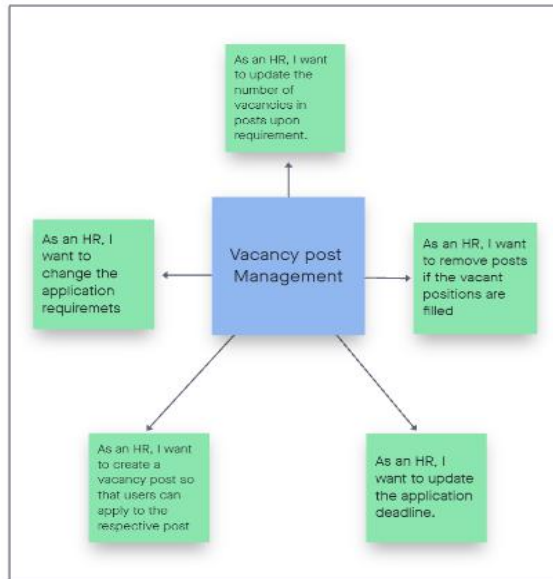
- 7) The selection committee has the authorization to drop candidates as the selection process proceeds to further rounds and respective mails will be sent to the respective applicants either regarding selection for subsequent rounds or rejection.
- 8) Finally selected candidates will be intimidated via mail
- 9) The list of the selected candidates will be sent to the admin for updating in the list of Faculties under each department.

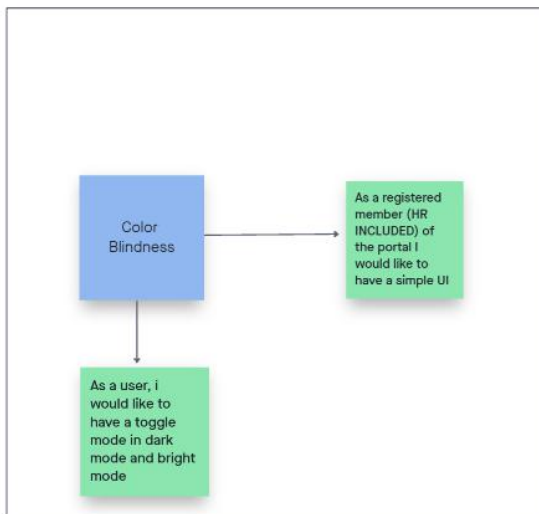
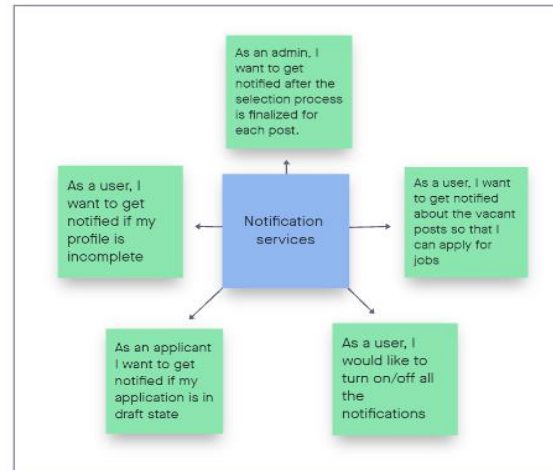
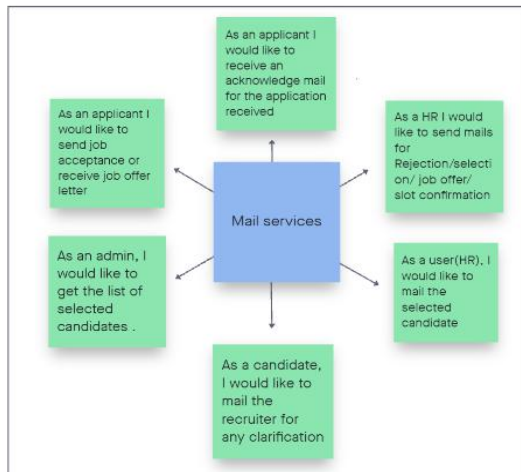
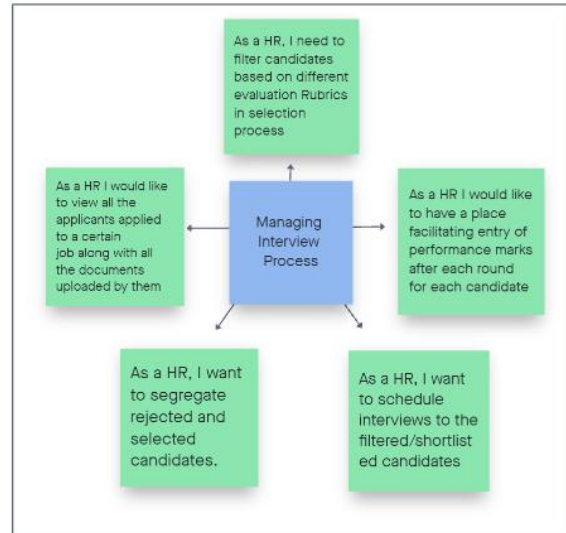
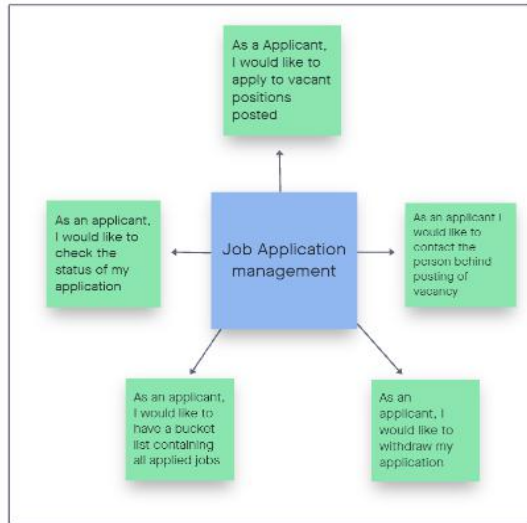
User Stories:



[Link](#) for Invision







Features (blue- feature, Black – story, Sub story – violet, green – tasks, Orange - subtasks)

1)Account/Profile Management

1) As a user I would like to Register/sign in

1) Creation of username & password

- a. Design login page.
- b. Cut SVG icons and images.
- c. Implement the login page using HTML/CSS/JS.
- d. Create MySQL scripts to create tables to import, store and retrieve user credentials.
- e. Create MySQL scripts for stored procedures in backend.

2) Authentication of password and captcha

- a. Design and implement a 'Captcha bot verification' page using HTML/CSS/JS.
- b. Get key for reCAPTCHA v3 Google API and integrate using JavaScript code
- c. Reflect changes on UI notifying the user whether he passed the bot test or not
- d. If a test is not passed, allow up to 6 tests by (calling the reCAPTCHA function 5 more times). If all tests failed, lock the user, and redirect him to the 'user locked' page, stating "we suspect some unauthorized activities"
- e. To unlock, Code JavaScript to send email from user to admin, requesting to enable the user
- f. Code JavaScript to update the flag for the user in MySQL database.
- g. Code JavaScript to reflect change on the user's UI by allowing him to login.

3) Feedback on password properties

- a. Validate the password credentials with JavaScript
- b. Throw error if the conditions for a valid password is not met
- c. Display the password requirement after 3 attempts

4) Agree to the terms and conditions

- a. A checkbox to be created using HTML, CSS.
- b. Response given by the user to act as trigger
- c. Checkbox to be clicked mandatorily to proceed to further steps.
- d. The text beside the checkbox should be hyper linked to the privacy policies etc.

2) As a user I would like to login using Alternate account/ third party logins

1) As a user I would like to login using GoogleAccount

2) As a user I would like to login using LinkedIn Account

- a. Design and implement a 'Third party authentication' page using HTML/CSS/JS.
- b. Code JavaScript to enable user to choose either google account or LinkedIn account to login
- c. Use OAuth facility to verify user credentials
- d. Insert user in list of users Database in MySQL (if not already present)
- e. Direct user to his homepage

3) As a user, I would like to Update my profile details

1) As a user I would like to Update specific details after registration

- 1. Design a HTML form which takes inputs required for building a profile.

2) As a user I would like to Upload proof/ attachment

1. Design a form, which takes users proofs or attachments
2. Code backend using NodeJS which takes users documents
3. After backend we need to store user's files in database i.e., MySQL/firebase.

3) As a user I would like to Change/ edit attachment submitted earlier

1. Retrieve files from user's profile table which user wants change/update
2. If user updates his files/attachments then we need to replace the previous file with the new one and store it in the database

4) As a user I would like to Check size of attachment

1. Use JavaScript code to check the size of the document being uploaded
2. If document size exceeds limit show alert message (alerts description refer in notification services)
3. If document size is correct then accept

5) As a user I would like to view preview of uploaded details

6) As a user I would like to have a Save and click option before submit

1. After getting inputs using backend then we need to store details in our database
2. Profile details are to be stored in Profile table and there will be foreign key from primary table which contains a list of registered users

4) As a user, there should be a provision for me to reset my password using the 'Forgot password' option.

1) Submit basic intimation regarding forgotten password

1) Design and implement a 'forgot password' page using HTML/CSS/JS.

2) Code JavaScript module to verify the user by accessing the Database in MySQL and sending him an email.

2) Enter mode of receiving password SMS/ email

1) Code JavaScript module to accept confirmation through which mode to accept.

3) Multilevel authentication through OTP

1) Code JavaScript module to accept confirmation through automated email sent.

4) Send security alert message to linked accounts

5) Enter/ retrieve answer to secret question

1. Design an entry field using HTML/CSS to enter answer to the secret question
2. Secret question (which is taken from user at the time of registration) is to retrieved from database using backend services (I.e. NodeJS)
3. Verifying whether the answer given by user and the answer from database is matching or not with backend

6) Prompt for entering new password details upon authentication

1) Code JavaScript module to reset the password by modifying the database in MySQL.

2) Code JavaScript to direct back to the login page to allow the user to login through his new credentials.

5) As a user, there should be a provision for me to Change/Reset my password using the 'Change/reset password' Option

1) Send alert for upcoming password change/ expiry prompt

2) Ask user to enter old password, new password & confirm new password

a. Design and implement a 'change/reset password' page using HTML/CSS/JS.

b. Validate freshness of new password viz., last two passwords using JavaScript.

3) Comment on strength of new password created

1. Code JavaScript to check the requirement for a strong password

2. Verify user credentials

3. Update new password in the backend database

4) Communicate acceptance of new password to user

a) Using JavaScript prompt

6) As a user I would like to Delete my account

1) Provide option to delete account

We need to Delete account from Database permanently using Delete Query in backend i.e., NodeJS

2) Warn about loss of data upon account deletion

a) Using JavaScript Prompt

3) Seek reason for account deletion

a. Design and implement a 'Feedback' page using HTML/CSS/JS.

b. After getting reason from user we need to store in database i.e., (feedback table)

4) Authentication of user before account deletion

1. Verify the user details with the backend

5) Intimation to admin team for account deletion

6) Intimation to HR/ recruitment team

2) Notification services

1) As a Registered member of the portal I would like to be notified if my profile is Incomplete

1) Alert via SMS/ Email to complete application

2) Prompt user to complete profile in dashboard

3) Restrict user access until profile completion

A) Code JavaScript to restrict access (check the if all the fields are filled) and then proceed

4) Alert deactivation of account if profile not completed within a month

5) Update mandatory fields in profile

1. Code JavaScript to check if all the mandatory fields are filled

6) Verify mobile number and email

2) As a Registered member of the portal I would like to be notified if my Application is in draft state

1) Save last application state

2) Send alert to complete the application via email/ SMS

3) Warn application draft rejection upon session expiry

4) Allow preview of application before submission

5) Notify if any mandatory field is missing

a. Code JavaScript and check if the required fields are filled.

6) Notify if attachment is missing

a. Code JavaScript and check if the attachment is uploaded.

b. If not uploaded show alert

3) As a Registered member of the portal I would like to be notified if a New vacancy is posted

- 1) Find upcoming vacancies from database in MySQL
- 2) Implement a function to send Notification
 - A) That accepts response
 - B) That allows to express disinterest in further notification of the vacancy
- 3) Link Notification to specific event from database to cause trigger
- 4) Find time remaining and display in Notification
- 5) Display the contact address for a particular post
- 6) Implement module to delete Notification from database

4) As an Admin I would like to be notified after the completion of a selection process so that I can update the list of faculties.

3) User Database Management (For admin)

1) As an admin, I want to create a new user so that I can add a registered member to the system. (HR)

- 1) Ask new user to enter basic details
- 2) Verify whether user already exists
 - a. Code JavaScript and verify with the backend database if the exists
- 3) Allow creation of user id and password if unique user
 - a. If user doesn't exist in backend database allow creation of new user id and password.
- 4) Capture role/ type of user
- 5) Role based data to be captured from user
 - a. Code JavaScript and validate the role from the database at the backend

6) Confirmation message upon authentication of new user

2) As an Admin I would like to update the faculty list after selection process

- 1) Create an 'Update List' Button using HTML/CSS/JS.
- 2) Implement a module to retrieve information from the faculty list database.
- 3) Code JavaScript module to assign/remove faculties in the faculty list database.
- 4) Update the Faculty list database with the modified Faculty list database.
- 5) Implement a module to generate a new faculty list After the changes made and make sure is that available to all the university department.

3) As an admin, I want to manage the user account credentials so that I can ensure that only the assigned user can login.

- 1) Verify user id exists (registered)
 - a. Code JavaScript and verify with the backend database if the user exists/ has registered
- 2) Verify password matches
 - a. Code JavaScript and verify with the backend database if the user password matches with the corresponding user
- 3) Check if multilevel authentication required (OTP, captcha, etc.,)
- 4) Send alert message if failed login attempt exceeds 3
- 5) Lock account and seek additional information if suspected misuse

- i. Design and implement a 'Lock/ Unlock' page for admin using HTML/CSS/JS stating the reason "we suspect some unauthorized activities"
- ii. Code JavaScript to disable the user by updating user's flag in MySQL
- iii. Code JavaScript to customize the number of hours/days to disable the user
- iv. Reflect the changes on the user's UI using the 'account locked' page
- v. Code JavaScript to send email to admin, requesting to unlock the user

6) Suspend account if illegal/ unauthorized user

- i. Code JavaScript to update the flag for the user in MySQL database (enable to user)
- ii. Code JavaScript to reflect change on the user's UI by allowing him to login.

4)As an admin, I want to edit a user record so that I can correct a mistake.

1) Verify data of every field of every user

- a. Code JavaScript and verify with the backend database to verify the user fields, with the records entered in application

2) If incorrect, alert user about incorrect entry of record

3) Obtain correct details from user

- a. Redirect user to update incorrect record in profile

4) Cross-verify the validity of the data

- a. Verify with the backend record with JavaScript

5) Accept entry

5) As an admin, I want to maintain a user record so that I can update the user information with their current records.

1) Verify with the user registered details

a. Code JavaScript to validate user credentials with the backend database

2) Seek information to be updated

a. Redirect to HTML/ CSS page 'Profile' to update the required record

3) Ask for documentary proof to be uploaded

4) Permit upload after checking for format compatibility

a. Code JavaScript and check for file compatibility

b. If compatible allow upload of document

c. Else show alert file not compatible

5) Perform verification of data submitted after confirmation

6) Update record and intimate user about the same

i. Update details in the backend

ii. Show alert record updated

6) As an admin, I want to delete a user record so that I can remove a user.

1) Check for reason for deletion of an account

2) Initiate authenticity of user deletion request

3) Send warning to user, admin that the account will be deleted within 24 hours

4) Wait for stipulated timeframe for response from user/ admin

5) Delete user record if confirmed

6) Once confirmed, enter details in account deletion register

7)As an admin, I can assign roles to the registered users, so that they get the respective user control

1) Verify the authenticity of user

a. Code JavaScript and verify user exists in the backend

2) Verify the role of the user – applicant/admin/HR

3) Send confirmation mail regarding assigned role

4) Verify credentials of assigned role of the user

a. Code JavaScript and verify user role in the backend

5) Send approval mail giving details of allocation, active features

6) Assign appropriate control with commensurate dashboard display upon login

a. Redirect to HTML/CSS page ‘Dashboard’ with the corresponding user role

4)Application Management

1) As a user I would like to Apply for a vacant job

1) Design a search bar for searching vacancies on a separate page.

2) Implement the search bar using HTML/CSS/JS.

3) The filtering module within searching can be referred to filtering module

4) Retrieve data from backend ‘Vacancy post’ table

5) Implement a JavaScript module to search for records that match with the database in MySQL.

6) Implement a module to that has ‘Apply Now’ button which redirects to. HTML/CSS page ‘Apply ‘to apply for the vacancy

- 7) Update the current details in the backend
- 8) Allow users to preview the application before submit
- 9) On clicking the applicant should have applied for the job
- 10) On clicking the Apply button the job will be added to the bucket list
- 11) Implement a module to add available Interviews slots (refer 10.1.(A, B, C)).

2) As an applicant I would want to Withdraw my submitted application

- 1) Site for reason of application withdrawal
 - a. Redirect to HTML/CSS page 'Apply'
 - b. Select the application user has applied for
 - c. Select the option for Withdrawal.
 - d. Redirect HTML/ CSS page for 'Withdrawal' and site reason for withdrawal
- 2) Initiate authenticity of application withdrawal request
- 3) Send warning to the applicant that the application will be withdrawn
- 4) Wait for response/ confirmation regarding application withdrawal
- 5) Withdraw the application
 - a. Update the application status in the backend
- 6) Send confirmation regarding application withdrawal

3) As an Applicant I would like to check the Status of my Application

- 1) Display the list of application
 - a. Redirect to HTML/CSS page 'Apply'
 - b. Retrieve data from backend 'Application' table

c. Display the list of applied applications

2) Provide options for selecting applications for checking status

a. Provide options to check application status using HTML

3) Display status of application – overall

a. Display HTML/CSS page to view overall status of all applications

4) Display status of application – individually

a. Display HTML/CSS page to view status of a particular application

5) Display status of application based on action date

a. Display HTML/CSS page to view application status on action date

6) Notify admin regarding any application status discrepancy

4) As an Applicant I would like to view all the jobs applications submitted so far (Bucket list)

1) Display the available vacancy posts to create bucket list

a. Retrieve data from backend 'Vacancy' table

b. Display HTML/CSS page to view vacancy posts

c. Display the list of vacancies

2) Choose and select the appropriate ones required for the bucket

a. Provide options to select vacancy posts to apply using HTML

3) Display bucket list after selection is confirmed

4) Provide option to edit/ modify/ append to bucket list

a. buttons to be designed using HTML,CSS and coded.

5) Provide option to remove item from bucket list

- a. Delete button to be designed using HTML,CSS and coded.
- b. On click to be prompted/ warn the loss of data
- c. Delete from the bucket list table If clicked okay on the prompt

6) Provide option for reordering and display of items in bucket list

- a. Display HTML/CSS page to view bucket list
- b.Design a filter bar using HTML, CSS to sort the list based on the timeline/ no.of vacancies etc.

5) As a user I would like to Contact the person who has posted a vacancy

- 1) Search for application/ vacancy for which person needs to be contacted
- 2) Create a form using HTML, CSS to Provide reason for contacting
- 3) Seek appointment (design a Calendar and on clicking a date and upon clicking the confirmation prompt, the date is set)/ clarification

5) Vacancy Post Management

1) As a HR I would like to create a post on Vacancy

- 1) Create a page using HTML/CSS on clicking a Create post button
- 2) Fields to enter the vacancy, details of requirement, attachment uploads and all details to be available in the page.
- 3) After the HR finishes filling in the form, the submit button is enabled
- 4) On clicking the submit button, the post is visible to all the users of the portal
- 5) The respective details are updated to the vacancy Table

2) As a HR I would like to Remove posts

- 1) Implement a code for each post that will have a delete button.
- 2) The Delete button will prompt the user with "Are you sure?" With yes or no options.
- 3) The posted vacancy record will be Removed from the Vacancy table

3) As a HR I would like to change application closing deadline

- 1) Implement and create a deadline card that will have an edit button. This will transform the schedule back to an auto filled schedule.
- 2) The deadline card edit will have all the typical attributes to be updated, plus the ability to change the day that the calendar is on.
- 3) Upon successful form submission, the form schedule is transformed back into an updated deadline card.

4) As a HR I would like to update number of vacancies

- 1) Implement and create a update vacancy button that will have an edit button.
- 2) this will show a drop down to choose the exact number
- 3) Upon successful form submission, the form schedule is transformed back into an updated vacancy.

5) As a HR I would like to modify the details such as qualifications required etc.

- 1) check the additional data is to add or remove
- 2) confirm the data to add/ remove
- 3) when add the data into table/ remove the data from post

4) Update the data to the vacancy table

6) Filter Based Information Retrieval

1) As a user, I would like to apply filter to see things available and go through the process

a) As user I would like to filter for which roles and from which departments, I would like to receive notification.

b) As a user I would like to filter the jobs using keywords, location, date posted, qualification etc.

1) Search bars designed using HTML, CSS for filtering through jobs, keywords, department, location, posted, qualification, etc.

2) Search any roles, location, date etc. to apply filter/notification

3) After selecting display the list of filters that user has selected to verify

4) after applying changes, obtaining data that user has filtered through

5) display the list of roles/jobs available after applying filter

2) As an HR I should be able to apply filters to go through candidate process selection

a) As a HR I would like to filter the candidates based on registration timeline (first 100, last 100 etc.)

b) As a HR I would like to filter candidates based on various parameters of the evaluation rubrics

c) As a HR I should be able to retrieve records by applying date filters of a particular job posting selection process

- 1) Search bars designed using HTML, CSS for filtering through timeline, evaluation rubrics, dates.
- 2) Select any process to apply filter
- 3) After selecting display the list of processes that HR has selected to verify
- 4) after applying changes, obtaining data of processes that HR has filtered through
- 5) display the list of candidates from that filter

7) Frontend Design (NON - FUNCTIONAL)

- 1) Frontend colors with respect to the color blind people to be kept in mind
 - a. Design a HTML/CSS page which will be done in ReactJS
 - b. Colors like Red, Blue, Yellow shouldn't be involved in frontend
- 2) As a user, i would like to have a toggle mode in dark mode and bright mode
- 3) As a registered member (HR INCLUDED) of the portal I would like to have a simple UI

8) Managing Interview Process

- 1) As a HR I would like to view all the applicants applied to a certain job along with all the documents uploaded by them
 - 1) Connect this module with database
 - 2) Enable the option for searching
 - 3) Sorting out candidates based on different parameters
- 2) As a HR I would like to have a place facilitating entry of performance marks after each round for each candidate

- 1) Add parameter for evaluation
 - 2) Minimum/ maximum score for the parameter
 - 3) Actual score of the candidate
 - 4) If actual score less than minimum, reject candidate, else select candidate
- 3) As a HR I would like to filter out the candidates using various performance rubrics and other features
- 1) Minimum/ maximum score for the parameter
 - 2) Actual score of the candidate
 - 3) If actual score less than minimum, reject candidate, else select candidate
- 4) As a HR I would like to segregate rejected and selected candidates after each round
- 5) As a HR, I want to schedule interviews to the filtered/shortlisted candidates

9) Mail Services

- 1) As the admin, I should send an email to the candidate with an auto generated body
 - 1) Create a Send button using HTML/CSS
 - 2) Build search bar for people (to select with whom to share)
 - 3) Write function to send default message to the receiver's database
 - 4) Implement module to read form receiver side.
- 2) As an Applicant I would like to receive an Acknowledgment mail for Application received

1) Implement module to read

2) Make sure the mail sent and received are updated to the Mail Table

3) As an Applicant I would like to receive Slot confirmational mail

1) Implement module to read and add meeting to calendar

2) Make sure the mail sent and received are updated to the Mail Table

4) As an Applicant I would like to Receive Rejection / Selection mail of subsequent Rounds.

1) Refer to 9.2.(1,2)

5) As an Applicant I would like to Receive Job offer mail

1) Refer to 9.2.(1,2)

6) As an Applicant I would like to send Job offer Acceptance Mail.

1) Refer to 9.2.(1,2)

7) As a HR I would like to send mails for Rejection/selection/ job offer/ slot confirmation

1) Create a share button using HTML/CSS

2) Build search bar for searching for whom you would like to send mail

3) Write Separate functions to send Rejection mail/Selection Mail, Job offer/ slot confirmation

4) Create a drop down with the Rejection mail/Selection Mail, Job offer/ slot confirmation option when clicked on 'Share Button'

5) On click of any of these leads to dynamic entries to the default body of the msg

A) Name of the receiver – for Rejection/selection mails/Job offer

B) Name of the receiver, date, time, slot number – slot confirmational mails

6) Create Send button using HTML/CSS and on clicking the mails are sent to the respective people.

7) When the mail for job offer / rejection is sent, this act acts as the trigger for change in the application status

10) schedule management module

1) As an applicant I would like to choose the slot for the interview process.

A) Design and implement UI to get date range (start date, end date) time slot duration from user

B) Code JavaScript module to establish connection with MySQL database

c) Each list item should be clickable, OnClick method should implement steps 2u(a-c)

2) As a HR I would like to assign interviews slots to the respective applicant and available faculty

1.Design “Populate schedule” page - should allow user to upload an excel file

2. Implement “Populate Schedule” page using HTML/CSS/JS

3. Code JavaScript module to update MySQL database

4. Code JavaScript module to populate faculty time table from excel sheet (can be implemented asynchronously as this is a batch process)

a. Notify user when asynchronous function completes execution

5. Design calendar page with clickable cells for each date/time slot

6. Implement “Calendar” Page using HTML/CSS/JS - JavaScript code to have onClick event defined

7. Code OnClick method for each cell which redirects to schedule meeting page

- b. Design and Code UI using HTML/CSS/JS to get meeting details and schedule meeting
- c. Code JavaScript module to insert meeting details in MySQL database
- d. Code JavaScript module to send meeting notification to invited attendees - notifications should be queued in temporary data structure if attendee is offline (use of Firebase Cloud Messaging)

3) As a faculty, I should be able to modify the visibility of my meetings (public/private) so that I can better control the information displayed

- a) Design and Code JavaScript module to insert meeting details in MySQL database.
- b) Implement JS module to update visibility of meeting in UI
- c) Implement JS module to update visibility setting on DB

11) Post selection process

1) As an HR I should be able to forward the list of selected members to the admin for update in the list

- 1) Make list of selected candidates
- 2) Send request to admin to update selected list
- 3) Update the details in the database
- 4) Get notification after update

2) As an HR I should be able to request the admin to add / remove members from the HR Team

1) Send request to admin to add/ remove the HR member from team

2) Update the details in the database

3) Get notification after update

4) Get alert/ notification after add/ remove

3)As an HR I should be able to retrieve records, (for this job, how many were selected, who were they, how many were rejected, how many were rejected after each process and who where they. I,e, if you type a job that has been posted month/years back you should be able to see the records each process after process for that particular job)

MoSCoW Priorities

MoSCoW Priorities

- M - Must Have
- S - Should Have
- C - Could Have
- W - Will Not Have

EPIC: Account Management

User Story	MoSCoW Priority level
As a user, I would like to register or sign in to the portal	M
As a user, I should have the provision	S

to login through third party authentication providers.	
As a user, I want to update my profile details	S
As a user, there should be a provision for me to change/ reset my password.	C
As a user, there should be a provision for me to set a new password by clicking on forget password	S
As I user I would like to delete my account	M

EPIC: Notification Services

User Story	MoSCoW Priority level
As an admin, I want to get notified after the selection process is finalized for each post.	M
As a user, I want to get notified about the vacant posts so that I can apply for jobs	S
As a user, I would like to turn on/off all the notifications	C
As an applicant I want to get notified if my application is in draft state	C
As a user, I want to get notified if my profile is incomplete	C

EPIC: User Database Management

User Story	MoSCoW Priority level
As an admin, I want to manage the user account credentials so that I can ensure that only the assigned user can login	M
As an admin, I want to add new HR's/users if there is any requirement	M
As an admin, I want to edit a user record so that I can correct a mistake.	S
As an admin, I want to delete a user record so that I can remove a user	S
As an admin, I want to maintain a user record so that I can update the user information with their current records.	S
As an admin, I can verify user profile and can modify them	S
As an admin, I can assign roles to the registered users, so that they get the respective user control	S

EPIC: Job Application management

User Story	MoSCoW Priority level
As a Applicant, I would like to apply to vacant positions posted	M
As an applicant I would like to contact the person behind posting of vacancy	S
As an applicant, I would like to withdraw my application	W

As an applicant, I would like to have a bucket list containing all applied jobs	S
As an applicant, I would like to check the status of my application	S

EPIC : Vacancy Post Management

User Story	MoSCoW Priority level
As an HR, I want to update the number of vacancies in posts upon requirement.	M
As an HR, I want to remove posts if the vacant positions are filled	M
As an HR, I want to update the application deadline.	S
As an HR, I want to create a vacancy post so that users can apply to the respective post	S
As an HR, I want to change the application requirements	S

EPIC: Filter based information retrieval

User Story	MoSCoW Priority level
As a HR I should be able to retrieve records by applying date filters of a job posting selection process	S
As a HR I would like to filter the	C

candidates based on registration timeline	
As a HR I would like to filter candidates based on parameters of evaluation rubrics	S
As a user I would like to filter the jobs using location, qualification etc.	C
As a user I would like to filter which role and departments to receive notification.	W

EPIC: Screen Appearance (Frontend Desing)

User Story	MoSCoW Priority level
As a registered member (HR INCLUDED) of the portal I would like to have a simple UI	S
As a user, i would like to have a toggle mode in dark mode and bright mode	S
As a user, i would like to have colors in the frontend keeping in mind the color blind people	C

EPIC: Managing Interview Process

User Story	MoSCoW Priority level
As a HR, I need to filter candidates based on different evaluation Rubrics in selection process	S

As a HR I would like to have a place facilitating entry of performance marks after each round for each candidate	S
As a HR, I want to schedule interviews to the filtered/shortlisted candidates	M
As a HR, I want to segregate rejected and selected candidates.	C
As a HR I would like to view all the applicants applied to a certain job along with all the documents uploaded by them	S

EPIC: Mail Services

User Story	MoSCoW Priority level
As a candidate, I would like to mail the recruiter for any clarification	S
As the admin, I should send an email to the candidate with an auto generated body	C
As an Applicant I would like to receive Slot confirmational mail	S
As an Applicant I would like to Receive Rejection / Selection mail of subsequent Rounds.	S
As an Applicant I would like to Receive Job offer mail	M
As an Applicant I would like to send Job offer Acceptance Mail.	S
As a HR I would like to send mails for Rejection/selection/ job offer/ slot	S

confirmation	
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EPIC: Schedule management

User Story	MoSCoW Priority level
As an applicant I would like to choose the slot for the interview process.	S
As a HR I would like to assign interviews slots to the respective applicant and available faculty	S
As a faculty, I should be able to modify the visibility of my meetings (public/private) so that I can better control the information displayed	C

EPIC : Post Selection Process

User Story	MoSCoW Priority level
As an admin, I would like to update the department faculty list after selection process	C
As a HR, I want to Retrieve the records of the candidates.	C
As a HR, I want to Update the cover letter to the Candidate.	S
As an applicant, I would like to know date of joining and salary details	S
As a HR, after selecting candidates need to Update to the admin.	S

Time Estimation

Estimates are essentially story points which say the amount of effort needed to get that work done. A guideline to be followed when estimating story points are:

Effort in hours	Story points
4	1
8	2
12	3
16	4
20	5
24	6
28	7
32	8
>32 hours effort means split that story in two smaller stories	

EPIC: Account Management

User Story	Estimated Time
As a user, I would like to register or sign in to the portal	2
As a user, I should have the provision to login through third party authentication providers.	3
As a user, I want to update my profile details	2
As a user, there should be a provision for me to change/ reset my password.	1
As a user, there should be a provision for me to set a new password by	1

clicking on forget password	
As I user I would like to delete my account	1

EPIC: Notification Services

User Story	Estimated Time
As an admin, I want to get notified after the selection process is finalized for each post.	1
As a user, I want to get notified about the vacant posts so that I can apply for jobs	1
As a user, I would like to turn on/off all the notifications	1
As an applicant I want to get notified if my application is in draft state	1
As a user, I want to get notified if my profile is incomplete	1

EPIC: User Database Management

User Story	Estimated Time
As an admin, I want to manage the user account credentials so that I can ensure that only the assigned user can login	2
As an admin, I want to add new HR's/users if there is any requirement	1
As an admin, I want to edit a user record so that I can correct a mistake.	1
As an admin, I want to delete a user	1

record so that I can remove a user	
As an admin, I want to maintain a user record so that I can update the user information with their current records.	1
As an admin, I can verify user profile and can modify them	1
As an admin, I can assign roles to the registered users, so that they get the respective user control	1

EPIC: Job Application management

User Story	Estimated Time
As a Applicant, I would like to apply to vacant positions posted	1
As an applicant I would like to contact the person behind posting of vacancy	1
As an applicant, I would like to withdraw my application	1
As an applicant, I would like to have a bucket list containing all applied jobs	2
As an applicant, I would like to check the status of my application	1

EPIC: Vacancy Post Management

User Story	Estimated Time
As an HR, I want to update the number of vacancies in posts upon requirement.	2
As an HR, I want to remove posts if the vacant positions are filled	1

As an HR, I want to update the application deadline.	2
As an HR, I want to create a vacancy post so that users can apply to the respective post	2
As an HR, I want to change the application job requirements	1

EPIC: Filter based information retrieval

User Story	Estimated Time
As a HR I should be able to retrieve records by applying date filters of a job posting selection process	2
As a HR I would like to filter the candidates based on registration timeline	3
As a HR I would like to filter candidates based on parameters of evaluation rubrics	3
As a user I would like to filter the jobs using location, qualification etc.	1
As a user I would like to filter which role and departments to receive notification.	1

EPIC: Screen Appearance (Frontend Desing)

User Story	Estimated Time
As a registered member (HR INCLUDED) of the portal I would like to have a simple UI	3
As a user, i would like to have a toggle mode in dark mode and bright mode	2
As a user, i would like to have colors in the frontend keeping in mind the color blind people	2

EPIC: Managing Interview Process

User Story	Estimated Time
As an HR, I need to filter candidates based on different evaluation Rubrics in selection process	1
As an HR I would like to have a place facilitating entry of performance marks after each round for each candidate	1
As a HR, I want to schedule interviews to filtered/shortlisted candidates	1
As a HR, I want to segregate rejected and selected candidates.	1
As a HR I would like to view all the applicants applied to a certain job along with all the documents uploaded by them	1

EPIC : Mail Services

User Story	Estimated Time
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As a candidate, I would like to mail the recruiter for any clarification	1
As the admin, I should send an email to the candidate with an auto generated body	1
As an Applicant I would like to receive Slot confirmational mail	2
As an Applicant I would like to Receive Rejection / Selection mail of subsequent Rounds.	2
As an Applicant I would like to Receive Job offer mail	1
As an Applicant I would like to send Job offer Acceptance Mail.	1
As a HR I would like to send mails for Rejection/selection/ job offer/ slot confirmation	2

EPIC: Schedule management

User Story	Estimated Time
As an applicant I would like to choose the slot for the interview process.	2
As a HR I would like to assign interview slots to the respective applicant and available faculty	1
As a faculty, I should be able to modify the visibility of my meetings (public/private) so that I can better control the information displayed	2

EPIC: Post Selection Process

User Story	Estimated Time
As an admin, I would like to update the	1

department faculty list after selection process	
As a HR, I want to Retrieve the records of the candidates.	1
As a HR, I want to Update the cover letter to the Candidate.	1
As an applicant, I would like to know date of joining and salary details	1
As a HR, after selecting candidates need to Update to the admin.	1

ENGINEERING TASKS:

- Set up GitHub repo
- Create Express server connection using NodeJS
- Analyse database requirements and identify an optimal Database Management Tool
- Create schema and populate Databases
- Design overall system architecture
- Identify/Implement an efficient calendar API
- Identify captcha API for login verification

Roles:

Scrum Master: V S Tharunika

Application Developer(s): Vaishnav and Varadharajan K

Testing: P S Ganesan and Madhav Sankar

Report writer: Krishna Teja

Tech Stack:

Front End: HTML, CSS, JavaScript, ReactJS

Back End: NodeJS, Express Framework

Database: MySQL

Development Tools: VS Code, Invision, Firebase

Project Tracking Tool: Jira

Version Control: GitHub