# Software Requirements Specification (SRS) Document

## Recruitment Portal – Team 8

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## Brief problem statement

Current manual and offline employee recruitment processes hinder organisational efficiency, leading to disparate workflows, limited candidate engagement, and ineffective screening. IIITH lacks a centralised, user-friendly web application to streamline recruitment, resulting in prolonged time-to-hire, increased operational costs, and compromised data security. A need exists for an integrated, secure, and analytics-driven web-based recruitment system to enhance collaboration, engagement, and decision-making throughout the hiring process.

## System requirements

1. **Web Based Platform**: The solution must be accessible via a web browser to ensure universal access to all stakeholders involved in the recruitment process.

2. **Centralized Database**: A centralized database to store details of applicants, positions for hiring, employees and status of application.

3. **User Authentication**: CAS Verification to ensure access to only IIITH authorized accounts.

4. **Candidate Management**: Provide functionalities to allow viewing candidate profile information who have applied for a position and updating the status of their application (shortlisted / round 1 / round 2)

5. **Job Posting Management**: HR can add a new open position from the admin dashboard and candidates can apply for this position using the application form.

6. **Application Tracking System**: HR can update the progress of candidate applications, including status updates, interview scheduling and selection information.

7. **Communication Integration**: Integrating mail services to communicate status information to the applicant and options to view and modify existing mail templates.

8. **Analytics**: HR can view statistics about positions, candidates, etc in in the form of graphs and charts.

9. **Integration with existing system**: The platform should be integrable with the existing IMS portal to facilitate easy transfer of data between the two platforms.

10. **Technology to be used**: MERN stack, featuring MongoDB for the database, ExpressJS for the backend, ReactJS for the frontend, and NodeJS as the runtime environment.

## Users profile

**Recruiters**:

1. HR professionals and recruitment managers with varying levels of technical expertise.
2. They will be provided with an intuitive interface for posting job openings and managing candidate profiles.
3. Log in to the system with secure credentials using CAS verification.
4. Access a dashboard displaying ongoing recruitment activities, analytics regarding open positions and applicants.
5. Post new job openings with detailed descriptions and requirements.
6. Email templates to communicate with candidates.
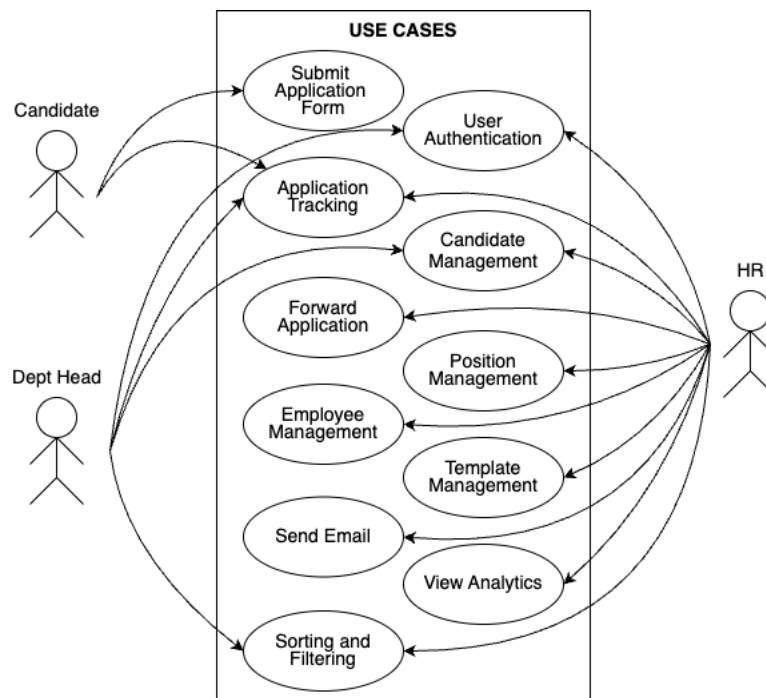
**Candidates**:

1. Job seekers with diverse technical proficiencies and backgrounds.
2. They require a user-friendly application with easy navigation, clear job descriptions, and seamless application processes.
3. Receive automated notifications on application status and interview schedules.

## Feature requirements (described using use cases)

| No. | Use Case Name | Description | Release |
|-----|---------------|-------------|---------|
| 1. | Submit Application Form | Candidates can fill and submit the application form applying to their desired position | R1 |
| 2. | User Authentication | Log in feature to the admin dashboard to restrict recruitment access based on account. | R2 |
| 3. | Candidate Management | View all applications along with the position they applied and all other details filled in the form like resume, experience and skills. | R1 |
| 4. | Application Tracking | Feature to select/reject a candidate's application after reviewing or track the status of the applied application. | R2 |
| 5. | Forward Application | Forwarding a candidate's application to the respective department head for further review before | R2 |

| | | shortlisting. | |
|---|---|---|---|
| 6. | Position Management | Creating new open positions as well as view/modify/close existing positions. | R1 |
| 7. | Employee Management | View details about existing department heads. | R2 |
| 8. | Template Management | Creating a new email template as well as view existing email templates. | R2 |
| 9. | Send Email | Notify candidates by sending an email based on the template. | R2 |
| 10. | View Analytics | View analytics and charts about positions and candidates applied in the portal. | R2 |
| 11. | Search, Sorting and Filtering | Feature to search, sort and filter viewing positions/applications/employees. | R2 |

## Use case diagram

## Use case description

| Use Case Number: | UC-01 |
|---|---|
| Use Case Name: | Submit Application Form |
| Overview: | Candidates can fill and submit the application form applying to their desired position |
| Actors: | Candidates |
| Pre condition: | Form should be released for at least one open position. |
| Flow: | Main Flow:<br><br>1. Application form released.<br>2. Atleast all mandatory fields in the application form are filled and all field values are valid.<br>3. Candidate submits the application form. |
| | Alternate Flow:<br><br>1. Application form released.<br>2. Not all mandatory fields are filled or some field input constraint is violated. |
| Post Condition: | Main Flow: Application details should be visible in the HR Portal and candidate gets a response with the reference id of the application.<br><br>Alternate Flow: Submit button should be disabled and user will be prompted to fix the problem. |

| Use Case Number: | UC-02 |
|---|---|
| Use Case Name: | User Authentication |
| Overview: | Log in feature to the admin dashboard to restrict recruitment access based on account. |
| Actors: | HR, Department Heads |
| Pre condition: | User should have a IIITH email account |
| Flow: | Main Flow:<br><br>1. Open admin recruitment portal login page.<br>2. User enters email and password of account which has access permissions. |

| | Alternate Flow 1:<br><br>   1.  Open admin recruitment portal login page.<br><br>   2.  User enters email and password of non-existing account or account does not have access permissions. |
|---|---|
| | Alternate Flow 2:<br><br>   1.  Open admin recruitment portal login page.<br><br>   2.  User has already signed in recently (within timeout limit). |
| **Post Condition:** | Main Flow: User should be signed in and recruitment portal dashboard is visible.<br><br>Alternate Flow 1: Access should be denied to the portal.<br><br>Alternate Flow 2: User should be signed in and recruitment portal dashboard is visible. |

| **Use Case Number:** | UC-03 |
|---|---|
| **Use Case Name:** | Candidate Management |
| **Overview:** | View all applications along with the position they applied and all other details filled in the form like resume, experience and skills. |
| **Actors:** | HR and Department Heads |
| **Pre condition:** | User has logged in to the portal |
| **Flow:** | Main Flow:<br><br>   1.  User navigates to the 'Applications' section |
| **Post Condition:** | Main Flow: List of all candidate applications should be shown along with their details and options to update the application status. |

| **Use Case Number:** | UC-04 |
|---|---|
| **Use Case Name:** | Application Tracking |
| **Overview:** | Feature to select/reject a candidate's application after reviewing. |
| **Actors:** | HR and Department Heads |
| **Pre condition:** | User has logged in to the portal and is in the 'Applications' section or is viewing an application |
| **Flow:** | Main Flow:<br><br>   1.  User chooses between 'Select for next round' and 'Reject' for the |

| | |
|---|---|
| | applicant |
| **Post Condition:** | Main Flow: The status of the candidate's application should be updated accordingly |

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|---|---|
| **Use Case Number:** | UC-04 |
| **Use Case Name:** | Application Tracking |
| **Overview:** | Feature to track the status of an applied application |
| **Actors:** | Candidate |
| **Pre condition:** | Candidate has opened the track status page. |
| **Flow:** | Main Flow:<br><br>    1.  User enters the reference id provided to them at the time of application and clicks on the Track button<br><br>Alternate Flow:<br><br>    1.  User enters an invalid reference id and clicks on the Track button |
| **Post Condition:** | Main Flow: The current status of the application is displayed along with details filled at the time of application.<br><br>Alternate Flow: An error messaging regarding invalid reference id is displayed. |

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|---|---|
| **Use Case Number:** | UC-05 |
| **Use Case Name:** | Forward Application |
| **Overview:** | Forwarding a candidate's application to the respective department head for further review before shortlisting. |
| **Actors:** | HR |
| **Pre condition:** | User has logged in to the portal and is in the 'Applications' section and is viewing an application |
| **Flow:** | Main Flow:<br><br>    1.  User selects the "Forward" option<br><br>    2.  User selects the respective department head from the dropdown |
| **Post Condition:** | Main Flow: The status of the application should be updated as 'Forwarded' on the HR's account. The department head should receive an email for reviewing the application and application should be visible in the selected department head's account under the 'Applications' section. |

| Use Case Number: | UC-06 |
| --- | --- |
| Use Case Name: | Position Management |
| Overview: | Creating new open positions as well as view/modify/close existing positions. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal |
| Flow: | Main Flow:<br><br>1. User navigates to the 'Positions' section<br><br>Alternate Flow 1:<br><br>1. User navigates to the 'Positions' section<br>2. User selects 'Create new' option<br>3. User fills and submits all the details about the new position.<br><br>Alternate Flow 2:<br><br>1. User navigates to the 'Positions' section<br>2. User selects 'Modify' option of an existing position<br>3. User modifies and submits the details. |
| Post Condition: | Main Flow: All positions should be visible along with their status (open/closed) and options to create new or modify existing.<br><br>Alternate Flow 1: The new position should visible as an open position in the list of positions<br><br>Alternate Flow 2: The selected position details should be modified accordingly. |

| Use Case Number: | UC-07 |
| --- | --- |
| Use Case Name: | Employee Management |
| Overview: | View details about existing department heads. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal |
| Flow: | Main Flow:<br><br>1. User navigates to the 'Employees' section |
| Post | Main Flow: List of all department heads should be shown. |

| Condition: | |
|---|---|

| Use Case Number: | UC-08 |
|---|---|
| Use Case Name: | Template Management |
| Overview: | Creating a new email template as well as view existing email templates. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal |
| Flow: | Main Flow:<br><br>1. User navigates to the 'Templates' section<br><br>Alternate Flow 1:<br><br>1. User navigates to the 'Templates' section<br>2. User selects 'Create new' option<br>3. User fills and submits all the details about the new template. |
| Post Condition: | Main Flow: List of all existing templates should be visible and options to create new or modify existing.<br><br>Alternate Flow 1: The new template should visible in the list and its preview should be seen as well. |

| Use Case Number: | UC-09 |
|---|---|
| Use Case Name: | Send Email |
| Overview: | Notify candidates by sending an email based on the template. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal and has opened an application. |
| Flow: | Main Flow:<br><br>1. User selects 'Send Email' option<br>2. User selects the template from the dropdown<br>3. User clicks the 'Send' button |
| Post Condition: | Main Flow: The selected candidate should receive an email with the template fields filled out with their details. |

| Use Case Number: | UC-10 |
|---|---|
| Use Case Name: | View Analytics |
| Overview: | View analytics and charts about positions and candidates applied in the portal. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal |
| Flow: | Main Flow:<br><br>   1. User navigates to the 'Dashboard' section |
| Post Condition: | Main Flow: Statistics regarding the number of applications, positions and shortlisted candidates in each round should be shown |

| Use Case Number: | UC-11 |
|---|---|
| Use Case Name: | Search, Sorting and Filtering |
| Overview: | Feature to sort and filter viewing positions/applications/employees. |
| Actors: | HR |
| Pre condition: | User has logged in to the portal |
| Flow: | Flow 1:<br><br>   1. User navigates to the 'Applications' section<br>   2. User selects desired filtering and sorting options or search text<br><br>Flow 2:<br><br>   1. User navigates to the 'Positions' section<br>   2. User selects desired filtering and sorting options or search text<br><br>Flow 3:<br><br>   1. User navigates to the 'Employees' section<br>   2. User selects desired filtering and sorting options or search text |
| Post Condition: | Flow1: Only applications matching the filtering and search criteria are shown in the sorting order.<br><br>Flow2: Only positions matching the filtering and search criteria are shown in the sorting order.<br><br>Flow3: Only employees matching the filtering and search criteria are shown in the sorting order |