**COMSATS University Islamabad,**

**Abbottabad,Campus**

**SOFTWARE REQUIREMENTS SPECIFICATION   
(SRS DOCUMENT)**

**for**

**<AI-Based Interviewer Facilitator Application>**  
Version 1.0

***By***

**Hamdan Ali Tahir CIIT/FA20-BCS-008/ATD**

**Danish Nasar CIIT/FA20-BCS-006/ATD**

**Khubaib-ur-Rehman CIIT/FA20-BCS-141/ATD**

***Supervisor*Mam Bushra Mushtaq**

***Bachelor of Science in Computer Science (2020-2024)***

**Table of Contents**

**Revision History 4**

**1.** **Introduction 6**

1.1 Purpose 6

1.2 Scope 6

**2.** **Overall description 6**

2.1 Product perspective **Error! Bookmark not defined.**

2.2 Operating environment **Error! Bookmark not defined.**

2.3 Design and implementation constraints **Error! Bookmark not defined.**

**3.** **Requirement identifying technique 9**

3.1 Use Case Diagram 9

3.2 Use Case Description 10

**4.** **Specific Requirements 13**

4.1 System feature X 19

**5.** **Quality attributes** Error! Bookmark not defined.

5.1 Usability 25

5.2 Performance 26

**6.** **External interface requirements 35**

6.1 User interfaces 35

6.2 Software interfaces 35

6.3 Hardware interfaces 35

6.4 Communications interfaces 35

**7.** **Project Gantt chart 35**

**8.** **References** Error! Bookmark not defined.

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for changes** | **Version** |
|  |  |  |  |
|  |  |  |  |

**Application Evaluation History**

|  |  |
| --- | --- |
| **Comments (by committee)**  **\*include the ones given at scope time both in doc and presentation** | **Action Taken** |
|  |  |
|  |  |

**Supervised by**

**<Supervisor’s Name>**

Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Introduction**

The system will have a web-based user interface. It is an interviewer facilitator application that enhances the interview process for the candidate and interviewer both. Both interviewer and candidate will have their portal first of all they will register and after then after login candidate will upload his resume by using the form which will be given in his portal then at interviewer's side he will create a session for an interview and add job description and to fetch resume of candidate he will add his email to fetch his resume information then both of these things are analyzed by using gbt model and it will provide a pool of questions after first pool it will start analyzing the conversation between interview using transcription module and keep on updating the pool of question depending upon the conversation there will also an option of updating pool of question by using that interviewer can update the pool of questions and then when interview is finished a candidate evaluation report will be generated and interviewer can also generate reports of previous interviews by using there session id.

**Purpose**

The AI-Based Interview Facilitator Application is designed to modernize the job interview process by leveraging AI technologies. Purpose of this project includes:

**Minimize Subjectivity:** The software leverages natural language processing (NLP) to provide objective assessments of candidates, reducing the influence of human bias in the evaluation process.

**Enhance Evaluation Depth:** By analysing speech, motivation, and other relevant attributes in real time, the software enriches candidate evaluations, providing a more holistic view.

**Structured Follow-up:** It offers real-time, context-aware follow-up questions generated by AI models to ensure interviews are structured and insightful.

**Scope**

The AI-Based Interview Facilitator Application encompasses the following key functionalities and modules:

### Functionality Overview:

* Objective, data-driven candidate assessment.
* Enhancement of interview depth through real-time analysis.
* Structured follow-up question generation for comprehensive interviews.
* Job compatibility assessment and report generation.
* Emphasis on data security and privacy throughout the interview process.

### Core Modules:

1. Candidate Resume Analysis: Extraction and organization of essential information from candidate resumes.
2. Job Description Analysis: Identification of key job requirements and skills in job descriptions.
3. Real-Time Transcription: Conversion of spoken interviews into text format.
4. Conversation Analysis: Continuous assessment of transcribed text for speech style, sentiment, and other qualities.
5. Follow-Up Question Generation: AI-driven generation of context-aware follow-up questions.
6. Job Compatibility Report: Compilation of comprehensive reports assessing candidate suitability.
7. User and Candidate Management (Database): Secure storage, retrieval, and management of user and interview data.
8. VPS Setup: Configuration and management of Virtual Private Servers for application hosting.

This scope section provides an overview of the AI-Based Interview Facilitator Application's functionality and the critical modules that constitute the software.

# Overall Description

## Product Perspective

The AI-Based Interview Facilitator Application represents a addition candidate assessment and interview facilitation. It stands as a unique and innovative product designed to modernize and improve the traditional job interview process. This application is not the next iteration of an existing system or a member of a product line but is an entirely new product, purpose-built to address the longstanding challenges associated with traditional interviews.

## Operating Environment

The AI-Based Interview Facilitator Application is expected to operate in a diverse and dynamic environment, catering to a wide range of users and scenarios. Key aspects of the operating environment include:

* **Hardware Platform**: The application is designed to run on standard computing hardware, including desktops, and laptops, ensuring broad accessibility for users.
* **Operating Systems**: It is platform-agnostic, compatible with various operating systems, including Windows, macOS, and Linux, to accommodate a wide user base.
* **Geographical Locations**: The software is intended for use globally, and it is designed to adapt to different geographical regions.
* **Servers and Databases**: The application relies on secure, scalable server infrastructure and database systems to ensure uninterrupted service and data management. These components may be hosted on cloud-based platforms or on-premises, based on user requirements.
* **Web-Based Interaction**: The application's web-based interface makes it accessible via modern web browsers, facilitating user interaction across different devices and platforms.
* **Organizations Hosting Data**: Depending on the implementation, organizations may host the related databases, servers, and websites. These organizations are expected to maintain data security and privacy measures to align with the application's core principles.

## Design and Implementation Constraints

The development of the AI-Based Interview Facilitator Application is influenced by key constraints:

**CO-1:** The application must use Python due to its rich AI and library support, streamlining development.

**CO-2:** ChatGPT API is selected for analysis and question generation due to its real-time conversation capabilities.

**CO-3:** Google Cloud's Speech-to-Text service ensures reliable voice-to-text transcription.

**CO-4:** React is chosen for front-end development, enabling dynamic and responsive user interfaces.

**CO-5:** Firebase serves as the database system for secure and scalable data management.

These constraints are essential for optimizing development and aligning with the application's core objectives and functionality.

**Requirement identifying technique.**

**Storyboard:**

**1. Login Screen:**

* The user is prompted to enter their login credentials, including email and password, to access the app.

**2. Job Description Submission:**

* Interviewers submit job descriptions for analysis. The system processes the job requirements for future reference.

**3. Resume Upload:**

* Interviewers upload candidate resumes for analysis. The system extracts and stores key information from the resumes.

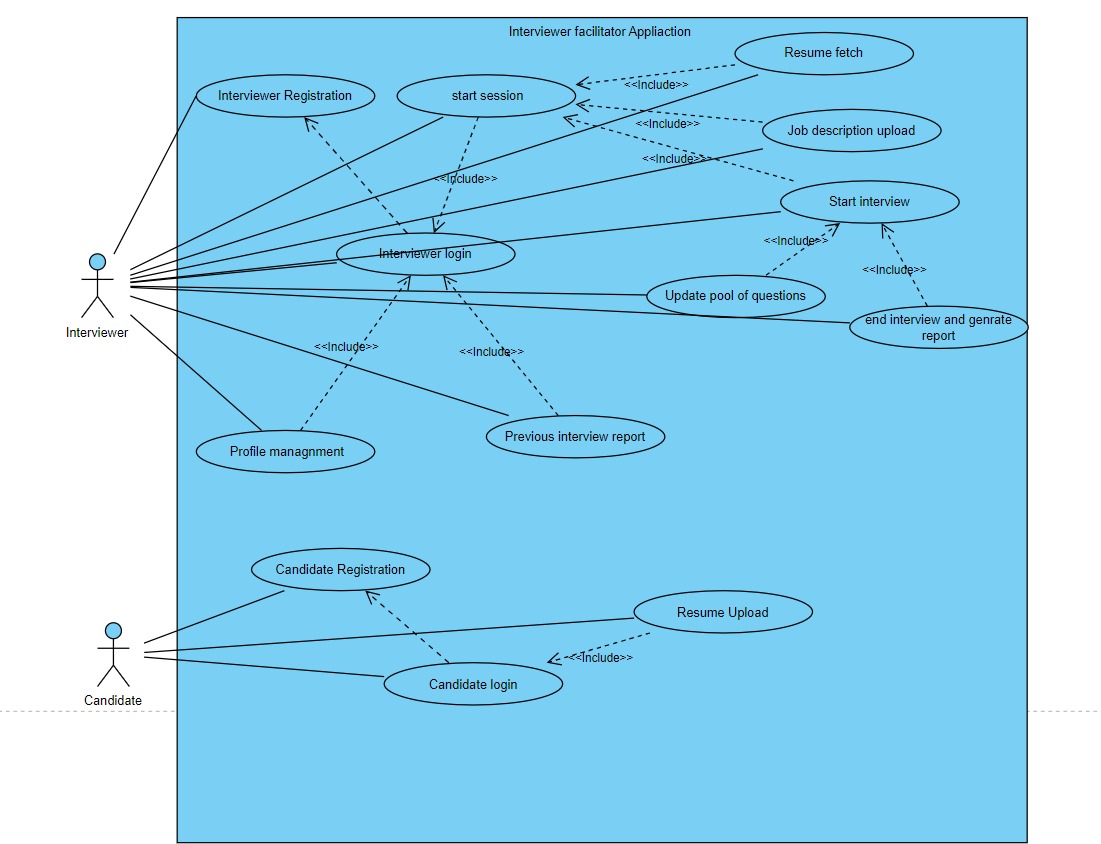
**4. Start Interview:**

* Interviewers initiate interviews by providing a session name and basic candidate information. The system identifies the interview session for future reference.

**5. End Interview and Generate Report (Automated):**

* The interview concludes, and the system automatically generates a report summarizing the interview.

**Use case diagram**



**Use case description.**

**Table 1 Detail of use case Candidate Registration**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-01 |
| **Use Case Name:** | Candidate Registration |
| **Actors:** | Candidate |
| **Description:** | A candidate creates an account by providing necessary information, and facilitating access to additional features and interview processes. |
| **Trigger:** | The candidate selects "Register" on the application. |
| **Preconditions:** | The candidate is not registered. |
| **Postconditions:** | The candidate has a registered account. |
| **Normal Flow:** | The candidate launches the application and selects the "Register" option.  The application displays a registration form.  The candidate enters personal details, including name, email, and password.  The candidate submits the registration form.  The system validates the information and creates a new candidate account. |
| **Alternative Flows:** | If the candidate cancels the registration process, the application returns to the main menu.  If the entered email is already in use, the application displays an error message and allows the candidate to retry. |
| **Exceptions:** | None |
| **Business Rules** | Only users who have a valid email address can register.  Each user must provide a unique email address during the registration process. |
| **Assumptions:** | The candidate has a valid email address. |

**Table 1 Detail of use case Candidate Login**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-02 |
| **Use Case Name:** | Candidate Login |
| **Actors:** | Candidate |
| **Description:** | A registered candidate logs in to access personalized features and participate in interviews. |
| **Trigger:** | Candidate selects "Log In" on the application. |
| **Preconditions:** | Candidate is not logged in. |
| **Postconditions:** | Candidate is logged in. |
| **Normal Flow:** | Candidate selects "Log In" on the application.  The application displays a login form.  Candidate enters their email and password.  The system validates the credentials and logs in the candidate. |
| **Alternative Flows:** | If the candidate cancels the login process, the application returns to the main menu.  If the entered credentials are incorrect, the application displays an error message and allows the candidate to retry. |
| **Exceptions:** | None |
| **Business Rules** | Users can log in only if they have a valid registered account.  The system validates user credentials during the login process. |
| **Assumptions:** | The candidate has a valid registered account. |

**Table 3 Detail of use case Submit Resume**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-03 |
| **Use Case Name:** | Submit Resume |
| **Actors:** | Candidate |
| **Description:** | A candidate submits their resume through the application, providing additional details relevant to their work experience. |
| **Trigger:** | The candidate selects "Submit Resume" on the application. |
| **Preconditions:** | The candidate is logged in. |
| **Postconditions:** | Resume is successfully submitted. |
| **Normal Flow:** | Candidate selects "Submit Resume" on the application.  The application displays a form with fields such as registration number, previous experience, and a description of work experience.  Candidate fills in the required information.  Candidate submits the resume form.  The system stores the submitted resume data. |
| **Alternative Flows:** | If the candidate cancels the submission process, the application returns to the main menu. |
| **Exceptions:** | None |
| **Business Rules** | Candidates can submit a resume only if they are logged into the system.  The system stores the submitted resume data for future reference. |
| **Assumptions:** | Candidate has relevant information prepared for submission. |

**Table 4 Detail of use case Interviewer Registration**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-04 |
| **Use Case Name:** | Interviewer Registration |
| **Actors:** | Interviewer |
| **Description:** | Users create an account by providing personal information (e.g., name, email, password). The app validates the email and creates an account. |
| **Trigger:** | The user selects "Register" |
| **Preconditions:** | The user is not logged in |
| **Postconditions:** | The user has a new account and is logged in |
| **Normal Flow:** | The user selects "Register".  The app displays a form for personal information.  The user enters information and submits.  The app creates the account and logs in |
| **Alternative Flows:** | If user cancels, return to main menu.  If email is in use, display error. |
| **Exceptions:** | None |
| **Business Rules** | Only users with a valid email and internet access can register as interviewers.  Each interviewer must provide unique registration information. |
| **Assumptions:** | User has a valid email and internet access. |

**Table 5 Detail of use case Interviewer Login.**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-05 |
| **Use Case Name:** | Interviewer Login |
| **Actors:** | Interviewer |
| **Description:** | Registered users log in to their accounts by providing their credentials. The app verifies the credentials and grants access. |
| **Trigger:** | User selects "Log In" |
| **Preconditions:** | User is Registered |
| **Postconditions:** | User enter his account can perform different functions. |
| **Normal Flow:** | User selects "Log In".  App displays a login form.  User enters email and password.  App validates the credentials and logs in. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | If user cancels, return to main menu.  If credentials are incorrect, display an error. |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can log in only with valid registered accounts and internet access.  The system validates interviewer credentials during the login process. |
| **Assumptions:** | User has a valid registered account and internet access |

**Table 6 Detail of use case Start session**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-06 |
| **Use Case Name:** | Start session |
| **Actors:** | Interviewer |
| **Description:** | Interviewers initiate interviews session by providing a session name and basic candidate information. The app identifies the interview session for future reference. |
| **Trigger:** | Interviewer selects "Start Interview" |
| **Preconditions:** | Interviewer is logged in |
| **Postconditions:** | Interview session is created |
| **Normal Flow:** | The interviewer selects "Start Interview".  App prompts the interviewer to enter a session name and candidate information.  The interviewer provides the session details.  App creates the interview session. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can start an interview session only if they are logged into the system.  Interview sessions are identified and created by providing a session name and basic candidate information. |
| **Assumptions:** | The interviewer has a valid account and internet access. |

**Table 7 Detail of use case Job Description Submission**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-07 |
| **Use Case Name:** | Job Description Submission |
| **Actors:** | Interviewer |
| **Description:** | Interviewers submit job descriptions for analysis. The app processes and stores the job requirements. |
| **Trigger:** | Interviewer selects "Submit Job Description" |
| **Preconditions:** | Interviewer is logged in and started the session |
| **Postconditions:** | Job description is submitted and stored |
| **Normal Flow:** | Interviewer selects "Submit Job Description".  App displays a form for job description.  Interviewer enters job details and submits.  App stores the job description. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can submit job descriptions for analysis.  The system processes and stores job requirements submitted by interviewers. |
| **Assumptions:** | Interviewer is logged in and have internet access. |

**Table 8 Detail of use case Fetch Resume**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-08 |
| **Use Case Name:** | Fetch Resume |
| **Actors:** | Interviewer |
| **Description:** | Interviewers enter the candidate's email to fetch the candidate's resume and perform analysis. The app extracts and stores information from the resumes. |
| **Trigger:** | None |
| **Preconditions:** | The interviewer is logged in |
| **Postconditions:** | Resume is uploaded and information extracted |
| **Normal Flow:** | Interviewer selects "Upload Resume".  App provides an option to upload a resume file.  Interviewer uploads the resume file.  App extracts and stores resume information. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | Candidate has not submitted their resume. |
| **Business Rules** | Interviewers can fetch resumes by entering the candidate's email.  Resumes can be fetched only if the interviewer is logged in and the candidate has submitted their resume. |
| **Assumptions:** | The interviewer has a valid account and internet access and the candidate have submitted their resume. |

**Table 9 Detail of use case Start interview**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-09 |
| **Use Case Name:** | Start Interview |
| **Actors:** | Interviewer |
| **Description:** | Interviewers initiate interviews by providing a session name and basic candidate information. The app identifies the interview session for future reference. |
| **Trigger:** | Interviewer selects "Start Interview" |
| **Preconditions:** | Interviewer is logged in |
| **Postconditions:** | Interview session is created |
| **Normal Flow:** | The interviewer selects "Start Interview".  App prompts the interviewer to enter a session name and candidate information.  The interviewer provides the session details.  App creates the interview session. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can start an interview session by providing a session name and basic candidate information.  The system creates the interview session for future reference. |
| **Assumptions:** | The interviewer has a valid account and internet access and the candidate have submitted their resume. |

**Table 10 Detail of use case Refresh Question Pool (Automated)**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-10 |
| **Use Case Name:** | Refresh Question Pool |
| **Actors:** | Interviewer |
| **Description:** | The interviewer can refresh the pool of interview questions during an ongoing interview session. |
| **Trigger:** | Interviewer selects "Refresh Question Pool" during an interview. |
| **Preconditions:** | Interviewer is conducting an interview. |
| **Postconditions:** | Question pool is refreshed. |
| **Normal Flow:** | The interviewer, during an ongoing interview, selects the option to "Refresh Question Pool."  The system processes the request and updates the pool of interview questions based on the current context, candidate responses, and analysis.  The refreshed pool of questions is displayed to the interviewer for consideration. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can refresh the pool of interview questions during an ongoing interview session.  The system updates the pool of questions based on the current context, candidate responses, and analysis. |
| **Assumptions:** | The interview session is ongoing. |

**Table 11 Detail of use case End Interview and Generate Report (Automated)**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-11 |
| **Use Case Name:** | End Interview and Generate Report (Automated) |
| **Actors:** | Interviewer |
| **Description:** | Interviews conclude, and the app automatically generates a report summarizing the interview. |
| **Trigger:** | Interviewer selects "End Interview" |
| **Preconditions:** | Interviewer is conducting an interview |
| **Postconditions:** | Interview report is generated |
| **Normal Flow:** | I Interviewer selects "End Interview".  App concludes the interview session.  App automatically generates a report summarizing the interview. |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can end an interview session, and the system automatically generates a report summarizing the interview.  Internet access is required for the automated report generation process. |
| **Assumptions:** | Interviewer is conducting an interview and has internet access. |

**Table 12 Detail of use case User Profile Management**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-12 |
| **Use Case Name:** | User Profile Management |
| **Actors:** | user |
| **Description:** | Users access their profiles, update login credentials, view interview reports, and access submitted job descriptions and resumes. |
| **Trigger:** | User selects "User Profile" |
| **Preconditions:** | User is logged in |
| **Postconditions:** | User profile is updated |
| **Normal Flow:** | User selects "User Profile".  App displays the user's profile and options for management (e.g., update credentials, view reports, access job descriptions and resumes). |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | none |
| **Exceptions:** | None |
| **Business Rules** | Users can access and update their profiles only if they are logged in with a valid account and internet access.  User profiles include options to update login credentials, view interview reports, and access submitted job descriptions and resumes. |
| **Assumptions:** | User is logged in with a valid account and internet access. |

**Table 13 Detail of use case View Previous Interview Reports**

|  |  |
| --- | --- |
| **Use Case ID:** | UC-13 |
| **Use Case Name:** | View Previous Interview Reports |
| **Actors:** | user |
| **Description:** | The interviewer can access and view reports and information from previous interview sessions conducted through the system. |
| **Trigger:** | The interviewer selects the "View Previous Interviews" option in the application. |
| **Preconditions:** | The interviewer is logged into the system. |
| **Postconditions:** | The interviewer has successfully viewed the selected interview report. |
| **Normal Flow:** | The interviewer navigates to the "View Previous Interviews" section in the application.  The system displays a list of previous interview sessions, organized by candidate name, date, or other relevant criteria.  The interviewer selects a specific interview session to view detailed information and the generated report.  The system presents the interviewer with a detailed report, including candidate details, interview questions, responses, and the overall assessment.  The interviewer has the option to download or print the report for reference or sharing. |
| **Alternative Flows:** | If there are no previous interviews available, the system informs the interviewer and provides an option to return to the main menu. |
| **Exceptions:** | None |
| **Business Rules** | Interviewers can view reports and information from previous interview sessions only if they have the necessary permissions.  The system must have stored data from previous interviews in a secure and organized manner |
| **Assumptions:** | The system has stored data from previous interviews in a secure and organized manner.  The interviewer has the necessary permissions to access and view previous interview reports. |

**Functional Requirements**

**Functional Requirement 1**

**Table 14: Candidate Registration**

|  |  |
| --- | --- |
| **Identifier** | FR-01 |
| **Title** | Candidate Registration |
| **Requirement** | The system shall allow a candidate to register by selecting the "Register" option on the application. |
| **Source** | Candidate Registration Use Case |
| **Rationale** | To enable candidates to access additional features and interview processes. |
| **Business Rule (if required)** | Candidates must provide valid information |
| **Dependencies** | None |
| **Priority** | High |
|  |  |

**Functional Requirement 2**

**Table 15: Candidate Login**

|  |  |
| --- | --- |
| **Identifier** | FR-02 |
| **Title** | Candidate Login |
| **Requirement** | The system shall allow a registered candidate to log in by selecting the "Log In" option on the application. |
| **Source** | Candidate Login Use Case |
| **Rationale** | To provide registered candidates access to personalized features. |
| **Business Rule (if required)** | Candidates must provide valid credentials. |
| **Dependencies** | FR-01 (Candidate Registration) |
| **Priority** | High |

**Functional Requirement 3**

**Table 16: Submit Resume**

|  |  |
| --- | --- |
| **Identifier** | FR-03 |
| **Title** | Submit Resume |
| **Requirement** | The system shall allow a logged-in candidate to submit their resume by selecting the "Submit Resume" option. |
| **Source** | Submit Resume Use Case |
| **Rationale** | To collect additional details relevant to the candidate's work experience. |
| **Business Rule (if required)** | Candidates must fill in required information. |
| **Dependencies** | FR-02 (Candidate Login) |
| **Priority** | Medium |

**Functional Requirement 4**

**Table 17: Interviewer Registration**

|  |  |
| --- | --- |
| **Identifier** | FR-04 |
| **Title** | Interviewer Registration |
| **Requirement** | The system shall allow an interviewer to register by selecting the "Register" option on the application. |
| **Source** | Interviewer Registration Use Case |
| **Rationale** | To enable interviewers to access additional features and conduct interviews. |
| **Business Rule (if required)** | Interviewers must provide valid information. |
| **Dependencies** | None |
| **Priority** | Medium |

**Functional Requirement 5**

**Table 18: Interviewer Login**

|  |  |
| --- | --- |
| **Identifier** | FR-05 |
| **Title** | Interviewer Login |
| **Requirement** | The system shall allow a registered interviewer to log in by selecting the "Log In" option on the application. |
| **Source** | Interviewer Login Use Case |
| **Rationale** | To provide registered interviewers access to personalized features. |
| **Business Rule (if required)** | Interviewers must provide valid credentials. |
| **Dependencies** | FR-04 (Interviewer Registration) |
| **Priority** | High |

**Functional Requirement 6**

**Table 19: Start Session**

|  |  |
| --- | --- |
| **Identifier** | FR-06 |
| **Title** | Start Session |
| **Requirement** | The system shall allow an interviewer to start a session by selecting "Start Interview." |
| **Source** | Start Session Use Case |
| **Rationale** | To initiate interview sessions and collect basic candidate information. |
| **Business Rule (if required)** | None |
| **Dependencies** | FR-05 (Interviewer Login) |
| **Priority** | Medium |

**Functional Requirement 7**

**Table 20: Job Description Submission**

|  |  |
| --- | --- |
| **Identifier** | FR-07 |
| **Title** | Job Description Submission |
| **Requirement** | The system shall allow an interviewer to submit a job description for analysis by selecting "Submit Job Description." |
| **Source** | Job Description Submission Use Case |
| **Rationale** | To provide job details for analysis and future reference. |
| **Business Rule (if required)** | Interviewer must be logged in and have started the session. |
| **Dependencies** | FR-06 (Start Session) |
| **Priority** | Medium |

**Functional Requirement 8**

**Table 21: Resume Analysis**

|  |  |
| --- | --- |
| **Identifier** | FR-08 |
| **Title** | Fetch resume |
| **Requirement** | The system shall allow an interviewer to fetch a candidate's resume and perform analysis by selecting "Upload Resume." |
| **Source** | Resume Analysis Use Case |
| **Rationale** | To extract and store information from candidate resumes for analysis. |
| **Business Rule (if required)** | Interviewer must be logged in and have the candidate's resume. |
| **Dependencies** | FR-07 (Job Description Submission) |
| **Priority** | Medium |
|  |  |

**Functional Requirement 9**

**Table 22: Start interview**

|  |  |
| --- | --- |
| **Identifier** | FR-09 |
| **Title** | Start Interview |
| **Requirement** | The system shall allow interviewers to start interviews by providing a session name and basic candidate information. |
| **Source** | Start Interview Use Case |
| **Rationale** | To initiate and identify interview sessions for future reference. |
| **Business Rule (if required)** | Session name and basic candidate information must be provided. |
| **Dependencies** | Interviewer must be logged in. |
| **Priority** | High |

**Functional Requirement 10**

**Table 23: Initial Question Generation**

|  |  |
| --- | --- |
| **Identifier** | FR-10 |
| **Title** | Initial Question Generation |
| **Requirement** | The System shall give Initial set of question depending upon the resume and Job description Analysis. |
| **Source** | Start Interview Use case . |
| **Rationale** | To Give initial set of question depending upon the initial analysis. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | Interviewer start interview. |
| **Priority** | High |

**Functional Requirement 11**

**Table 24: Refresh Question Pool**

|  |  |
| --- | --- |
| **Identifier** | FR-11 |
| **Title** | Refresh Question Pool |
| **Requirement** | The system shall allow interviewers to refresh the pool of interview questions during an ongoing interview session. |
| **Source** | Refresh Question Pool Use Case |
| **Rationale** | To update the pool based on the current context, candidate responses, and analysis. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | Interview session must be ongoing. |
| **Priority** | High |

**Functional Requirement 12**

**Table 25** **: End Interview and Generate Report (Automated)**

|  |  |
| --- | --- |
| **Identifier** | FR-12 |
| **Title** | End Interview and Generate Report (Automated) |
| **Requirement** | The system shall allow interviewers to end interviews, and automatically generate a report summarizing the interview. |
| **Source** | End Interview and Generate Report Use Case |
| **Rationale** | To conclude interviews and provide a summary report. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | Interviewer must be conducting an interview. |
| **Priority** | High |

**Functional Requirement 13**

**Table 26** **: User Profile Management**

|  |  |
| --- | --- |
| **Identifier** | FR-13 |
| **Title** | User Profile Management |
| **Requirement** | The system shall allow users to access their profiles, update login credentials, view interview reports, and access submitted job descriptions and resumes through the "User Profile" option. |
| **Source** | User Profile Management Use Case |
| **Rationale** | To enable users to manage their profiles and access relevant information. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | User must be logged in. |
| **Priority** | High |

**Functional Requirement 14**

**Table 27** **: View Previous Interview Reports**

|  |  |
| --- | --- |
| **Identifier** | FR-14 |
| **Title** | View Previous Interview Reports |
| **Requirement** | The system shall allow interviewers to view reports and information from previous interview sessions through the "View Previous Interviews" option. |
| **Source** | View Previous Interview Reports Use Case |
| **Rationale** | To access and review information from previous interview sessions. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | Interviewer must be logged in. |
| **Priority** | High |

**Functional Requirement 15**

**Table 28** **: Transcription from voice to text**

|  |  |
| --- | --- |
| **Identifier** | FR-15 |
| **Title** | Transcription from voice to text |
| **Requirement** | The system shall enable Transcription as the interview is started |
| **Source** | Start interview Use case |
| **Rationale** | To save the conversation of the candidate and interviewer and do analysis for updating pool of questions. |
| **Business Rule (if required)** | None specified. |
| **Dependencies** | The interviewer must be started. |
| **Priority** | High |

**Non-Functional Requirements**

**Usability**

**Usability-1: User-Friendly Interface**

The system must have a user-friendly interface that is easy to navigate and understand.

**Rationale:** To ensure a positive user experience and easy adoption.

**Verification:** User testing and feedback.

**Usability -2: Clear Instructions**

The system must provide clear and concise instructions for using each feature.

**Rationale:** To facilitate user understanding and reduce the learning curve.

**Verification:** Documentation and user feedback.

**Usability -3: Intuitiveness**

The system must be intuitive and allow users to easily perform tasks and access information.

**Rationale:** To enhance user productivity and satisfaction.

**Verification:** User feedback and usability testing.*.*

**Performance**

**PER-1: Fast Loading and Execution**

The system must be optimized for fast loading and execution.

**Rationale:** To provide a responsive user experience.

**Verification:** Measured system response times.

**PER-2: Scalability**

The system must be able to handle a high volume of requests without experiencing significant delays.

**Rationale:** To accommodate potential growth in usage.

**Verification:** Load testing and response time measurements.

**PER-3: Large Data Handling**

The system must be able to handle large data sets.  
**Rationale:** To ensure efficient processing of substantial amounts of data.

**Verification:** Performance testing with large datasets

**Gantt Chart:**

