

SOFTWARE REQUIREMENTS SPECIFICATION (SRS)

Project Title	HR REFERENCE CHECKER SYSTEM
Version	1.0
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1. INTRODUCTION

1.1. Purpose

This document is to outline the requirements and steps of developing the ***HR Reference Checker System***, a web-application based system, in order to ease the process of staff in the Human Resource (HR) Department to construct a thorough background check of job applicants via their referees through a digitised method of questioning and evaluating the individuals who seek opportunities of being employed to their workplace of interest. The traditional way of having to manually do a phone call ought to be significantly time consuming which tones down the efficiency of working, which leads to lesser productivity. Moreover, with the possibilities of contacted referees not picking up their devices for a call, will just be a major time waste for respective staff and may leave a bad reputation towards them. Thus lowering the odds of their applicant's employment. Hence, this system was brought up to be developed.

1.2. Scope

This system will allow users to browse applicants' records, view associated referees and manage their contact information, primarily their email address. Users may create a template of questions which consists of answering formats such as typing their responses, rating capabilities through a numeric measuring scale, and choosing one or more options in a multiple-choice question. These templates can be shared to referees via a uniquely generated link and is forwarded through their email address. All collected responses can be exported into a Portable Document Format (PDF) file, ready to be evaluated by staff. However, the system will not be able to conduct resume parsing, followed by applicant tracking functions beyond referee feedback.

1.3. Definitions, Acronyms, and Abbreviations

Term / Acronym	Definition
HR	Human Resources; the department responsible for recruitment, employee relations, and organizational development.
Referee	A person who provides feedback or a reference about an applicant's qualifications and character.
Applicant	A candidate who has applied for a job and whose referees are being contacted.
Template	A predefined set of questions created by HR staff to be sent to referees for feedback.
Form Link	A unique URL generated for each referee, linking to their assigned question form.
PDF	Portable Document Format; a file format used for exporting and viewing referee responses.
UI	User Interface — the visual part of the system that users interact with.
SRS	Software Requirements Specification — this document, which outlines all requirements of the system.
Response Format	The type of input expected for a question (e.g., short text, scale, multiple choice).
Rating Scale	A numeric or descriptive scale used by referees to evaluate an applicant (e.g., 1–5 or Poor to Excellent).
Multiple Choice	A question format that allows referees to select one or more predefined options.
System	Refers to the HR Reference Checker

	System being developed.
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1.4. References

- I. IEEE. (2018). ISO/IEC/IEEE 29148:2018 Systems and software engineering—Life cycle processes— Requirements engineering.
<https://www.iso.org/standard/72089.html>

1.5. Overview of Document

This document provides a structured outline of the requirements for the development of the ***HR Reference Checker System***. It is organized into the following main sections:

- I. **Section 1: Introduction**
 - A. Describes the purpose, scope, definitions, references, and this document overview.
- II. **Section 2: Overall Description**
 - A. Gives a high-level view of the system, including its context, users, operating environment, constraints, and key diagrams such as use case, UML, data flow, and entity relationships.
- III. **Section 3: Specific Requirements**
 - A. Details the system's functional and non-functional requirements, user interface expectations, data requirements, and supporting diagrams.
- IV. **Section 4: Appendices**
 - A. Contains supporting materials such as sample forms, question templates, exported PDFs, and compliance references.

2. OVERALL DESCRIPTION

2.1. Product Perspective

The ***HR Reference Checker System*** is a standalone web-based application designed to streamline the referee-checking process in the hiring workflow. It replaces traditional, manual reference checks (e.g., phone calls) with a digital solution that collects structured feedback from referees via email links and online forms. The system will interact with users (HR staff) through a web interface and utilize a database to store questions, templates, and responses.

2.2. Product Functions

Key features of the system include:

- I. Managing applicant and referee records
- II. Creating question templates with flexible answer formats (text, scale, multiple choice)
- III. Sending automated emails with unique response links to referees
- IV. Viewing and exporting referee responses as PDF reports
- V. Filtering completed vs. pending responses

2.3. User Classes and Characteristics

- I. **HR Staff:**
 - A. Main users of the system. Responsible for creating templates, sending links, and reviewing responses. Should be familiar with basic web apps.

II. **Referees:**

- A. External users who only access the questionnaire link. No login required. Must be able to understand and respond accurately.

2.4. Operating Environment

- I. Platform: Web-based application
- II. Frontend: HTML, CSS, JavaScript
- III. Backend: Django
- IV. Database: SQL
- V. Client devices: Desktop browsers (Chrome, Firefox, Edge)
- VI. Email service: SMTP or external email API for sending links

2.5. Design and Implementation Constraints

- I. The system will use only email (not SMS or phone) for referee contact
- II. The frontend must be responsive for desktop, but not optimized for mobile
- III. Only PDF format is supported for exporting responses
- IV. No authentication or resume parsing modules will be implemented

2.6. User Documentation

- I. A brief internal user guide will be provided for HR staff (via PDF)
- II. On-screen tooltips and labels will assist users in navigating the system

2.7. Assumptions and Dependencies

- I. Referees have internet access and are able to open email links
- II. The organization has a working SMTP email server or equivalent API setup
- III. The system will be deployed on an internal server or secure hosting platform
- IV. HR staff will manually input applicant and referee details into the system

2.8. Use Case Diagram

2.9. UML Diagrams

2.10. Data Flow Diagram

3. SPECIFIC REQUIREMENTS

3.1. Functional Requirements

3.1.1. User Authentication and Management

F001 User Login

Requirement ID	REQ_F001
Version	1.0
Description	System shall authenticate HR staff using username and password credentials
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Requirement ID	REQ_F002
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Version	1.0
Description	System shall display error message for invalid login credentials
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Requirement ID	REQ_F003
Version	1.0
Description	System shall redirect authenticated users to the main dashboard
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Table 3.1.1 Use Case Specification - User Login

Use Case ID	UC001
Version	1.0
Feature	User Login
Purpose	Allow HR staff to access the system
Actor	HR Staff
Trigger	Actor navigates to login page and enters credentials

Scenario Name	Step	Action
Main Flow	1.	Actor enters username and password on login form
	2.	Actor clicks "Login" button
	3.	System validates credentials against user database
	4.	System creates user session and redirects to dashboard
	5.	System logs successful login event
Alternative Flow - Invalid Credentials	3.1	Username/password combination is invalid
	3.2	System displays error message: "Invalid username or password"

	3.3	System returns to login form
Alternative Flow - Account Inactive	3.1	User marked as inactive
	3.2	System displays error message: "Account is deactivated"

Rules	Only active HR staff accounts may login. Failed login attempts are logged for security.
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Use Case ID	UC002
Version	1.0
Feature	Password Rest
Purpose	Allow users to reset forgotten passwords
Actor	HR Staff
Trigger	Actor clicks "Forgot Password" link on login page

Scenario Name	Step	Action
Main Flow	1.	Actor clicks "Forgot Password" link
	2.	System displays email input form
	3.	Actor enters email address
	4.	System validates email exists in user database
	5.	System generates secure reset token
	6.	System sends reset link via email
	7.	System displays confirmation message
Alternative Flow - Email Not Found	4.1	Email address does not exist in system
	4.2	System displays message: "Email not found"

Rule	Reset links expire after 24 hours. Only registered email
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	addresses receive reset links.
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3.1.2 Referee Management

F003 Add Referee

The functional requirements for Add Referee are as followed:

Requirement ID	REQ_F006
Version	1.0
Description	System shall allow HR staff to create new referee records
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Requirement ID	REQ_F007
Version	1.0
Description	System shall validate referee email address format and uniqueness
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Requirement ID	REQ_F008
Version	1.0
Description	System shall display success message after referee creation
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Table 3.1.3 Use Case Specifications - Add Referee

Use Case ID	UC003
Version	1.0

Feature	Add Referee
Purpose	Allow HR staff to register new referees in the system
Actor	HR Staff
Trigger	Actor clicks "Add Referee" button from referee management page

Scenario Name	Step	Action
Main Flow	1.	Actor clicks "Add Referee" button
	2.	System displays referee creation form
	3.	Actor enters referee details (name, email, phone)
	4.	Actor clicks "Save" button
	5.	System validates input data (email format, required fields)
	6.	System checks email uniqueness in database
	7.	System creates new referee record

3.2. Non-Functional Requirements

3.3. User Interface Requirements

3.4. Data Requirements

3.5. Entity Relationship Diagram

4. APPENDICES

4.1. Sample Questionnaire Template

4.2. Sample Referee Form

4.3. Sample Exported PDF

4.4. Regulatory Compliance References