# Software Requirements Specification

for

# Attrition Analysis System,

By Team Pythonista

Mookambika S Shalini T

**December 20, 2023** 

# **Table of Contents**

Revision History  1. Introduction  1.1 Purpose  1.2 Project Scope and Product Features  1.3 References  2. Overall Description  2.1 Product Perspective  2.2 User Classes and Characteristics  2.3 Operating Environment  2.4 Design and Implementation Constraints  2.5 User Documentation  2.6 Assumptions and Dependencies  3. System Features  3.1 Order Meals  3.2 Create, View, Modify, and Delete Meal Subscriptions  3.3 Register for Meal Payment Options  3.4 Request Meal Delivery  3.5 Create, View, Modify, and Delete Cafeteria Menus		
1. Introduction  1.1 Purpose		
1.1 Purpose 1.2 Project Scope and Product Features 1.3 References  2. Overall Description 2.1 Product Perspective 2.2 User Classes and Characteristics 2.3 Operating Environment 2.4 Design and Implementation Constraints 2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
1.2 Project Scope and Product Features 1.3 References  2. Overall Description 2.1 Product Perspective 2.2 User Classes and Characteristics 2.3 Operating Environment 2.4 Design and Implementation Constraints 2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
1.3 References  2. Overall Description  2.1 Product Perspective  2.2 User Classes and Characteristics  2.3 Operating Environment  2.4 Design and Implementation Constraints  2.5 User Documentation  2.6 Assumptions and Dependencies  3. System Features  3.1 Order Meals  3.2 Create, View, Modify, and Delete Meal Subscriptions  3.3 Register for Meal Payment Options  3.4 Request Meal Delivery  3.5 Create, View, Modify, and Delete Cafeteria Menus		
2. Overall Description 2.1 Product Perspective 2.2 User Classes and Characteristics 2.3 Operating Environment 2.4 Design and Implementation Constraints 2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
2.1 Product Perspective  2.2 User Classes and Characteristics  2.3 Operating Environment  2.4 Design and Implementation Constraints  2.5 User Documentation  2.6 Assumptions and Dependencies  3. System Features  3.1 Order Meals  3.2 Create, View, Modify, and Delete Meal Subscriptions  3.3 Register for Meal Payment Options  3.4 Request Meal Delivery  3.5 Create, View, Modify, and Delete Cafeteria Menus		
2.2 User Classes and Characteristics 2.3 Operating Environment 2.4 Design and Implementation Constraints 2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
2.3 Operating Environment 2.4 Design and Implementation Constraints 2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
2.5 User Documentation 2.6 Assumptions and Dependencies  3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
3. System Features 3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
3.1 Order Meals 3.2 Create, View, Modify, and Delete Meal Subscriptions 3.3 Register for Meal Payment Options 3.4 Request Meal Delivery 3.5 Create, View, Modify, and Delete Cafeteria Menus		
<ul><li>3.3 Register for Meal Payment Options</li><li>3.4 Request Meal Delivery</li><li>3.5 Create, View, Modify, and Delete Cafeteria Menus</li></ul>		
<ul><li>3.3 Register for Meal Payment Options</li><li>3.4 Request Meal Delivery</li><li>3.5 Create, View, Modify, and Delete Cafeteria Menus</li></ul>		
3.5 Create, View, Modify, and Delete Cafeteria Menus		
A TO A 1 I . A C D A		
4. External Interface Requirements		
4.1 User Interfaces		
4.2 Hardware Interfaces		
4.3 Software Interfaces		
4.4 Communications Interfaces		
5. Other Nonfunctional Requirements		
5.1 Performance Requirements		
5.2 Safety Requirements		
5.3 Security Requirements		
5.4 Software Quality Attributes		
Appendix A: Data Dictionary and Data Model		
Appendix B: Analysis Models1		

# 3. System Features

#### 3.1 Track Employee Attrition

#### 3.1.1 Description and Priority

- The system shall track employee attrition (employee quitting) within the organization over specified time periods (quarterly, yearly)
- It shall collect and store data on reasons for attrition, numbers of employee leaving, and levels within the organization where attrition is highest/lowest.
- It shall provide various reports and visualizations to analyze attrition trends.

#### 3.1.2 Stimulus/Response Sequences

Stimulus: User requests to view attrition data for a given period.

Response: System displays attrition data in the request format (e.g., table,

chart).

Stimulus: User requests to generate specific attrition report.

Response: System generates the report based on the specified criteria

Stimulus: User requests to export attrition data

Response: System exports the data in a chosen format (e.g., CSV, Excel)

#### 3.1.3 Functional Requirements

Attrition Track: separations, including:	The system shall maintain a record of all employee  Employee ID Separation Date Reason for separation Department Job Title Tenure
Attrition Filter:	The system shall allow users to filter attrition data by: Time period (e.g. quarterly, yearly) Department Job Title Reason for separation Other relevant criteria
Attrition Report:	The system shall generate various reports such as: Attrition rate by time period Reason for attrition Attrition by department Attrition by Job Title Attrition by Tenure

Attrition Export:
various formats

Visualization (charts, graphs)

The system shall allow users to export attrition data in

Manage Employee Data:

Employee. Add: The system shall allow authorized users to add new employee

records

Employee. Edit: The system shall allow authorized users to edit existing

employee records

Employee. Delete: The system shall allow authorized users to delete employee records

(if applicable, considering data retention policies)

Manage Reasons for Attrition:

Reasons. Add: The system shall allow authorized users to add new reasons

for attrition.

Reason. Edit: The system shall authorize users to edit existing reason for

attrition.

Reason. Delete:

attrition

The system shall allow authorized users to delete reasons for

Set User Access Permission:

Access. Assign The system shall allow administrators to assign different

levels of access permission to users (e.g., view only, edit, admin)

## **4.External Interface Requirements**

- **Integration with HR System**: The system may need to integrate with the organizations HR system to retrieve employee data.
- Hardware Interfaces

No hardware interfaces have been identified.

## **5.Other Nonfunctional Requirements**

- •**Performance Requirements:** The system shall be able to handle large amounts of data and generate reports efficiently.
- •Security Requirements: The system shall protect sensitive employee data from unauthorized access.
- •Usability: The system shall be easy to use for users with varying levels of technical expertise
- **Reliability:** The system shall reliable and available to users when needed.
- •Maintainability: The system shall be easy to maintain and update