

Software Requirements Specification



HR Management System

Introduction

Vision:

It is the mission of the human resources department to develop, implement and support programs and processes that add value to **Namal University** and its employees, leading to improved employee welfare, empowerment, growth and retention, while remaining committed to **Namal University's** key business drivers, its management and prosperity for its customers, employees and shareholders.

Scope:

The scope of HRM is very wide:

HRM software helps businesses to control the activities of employees. The software can save an organisation's time as its user-friendly interface helps the HR department greatly in maintaining core business objectives as well as daily activities.



EXECUTIVE SUMMARY:

Small and medium businesses, as well as large enterprises, have stood witness to the ever-increasing need to integrate technology into business processes and workflows. One such technology that has stood in the spotlight in recent years is the human resources management system (HRMS).

HR provides strategic management by improving the company's bottom line with its knowledge of how human capital affects organisational success. Leaders with expertise in HR strategic management participate in corporate decision-making that underlies current staffing assessments and projections for future workforce needs based on business demand.

HR compensation specialists develop realistic compensation structures that set company wages competitive with other businesses in the area, in the same industry or companies competing for employees with similar skills. They conduct extensive wage and salary surveys to maintain compensation costs in line with the organisation's current financial status and projected revenue.

HR professionals work closely with hiring managers to effect good hiring decisions, according to the organisation's workforce needs. They provide guidance to managers who aren't familiar with HR or standard hiring processes to ensure that the company extends offers to suitable candidates.

HOW TO IMPROVE OUR HRMS FROM OTHER EXISTING SOFTWARES:

1) Training the Employees:

The first step to improving your HR software is to train your employees in the art of using them. Regardless of the overall ability of artificial intelligence, a system is still reliant on the skills of the users. More than anything, it is a give-and-take relationship between the HR employee and the HR software.

2) Make Use of analytical capabilities:

One of the benefits of an HR software is its analytical capabilities. Through the data available on the platform, it can churn out reports that detail how our employees are doing or where your hiring process is at. These analytics and statistics are necessary for improving our HR software than other systems.

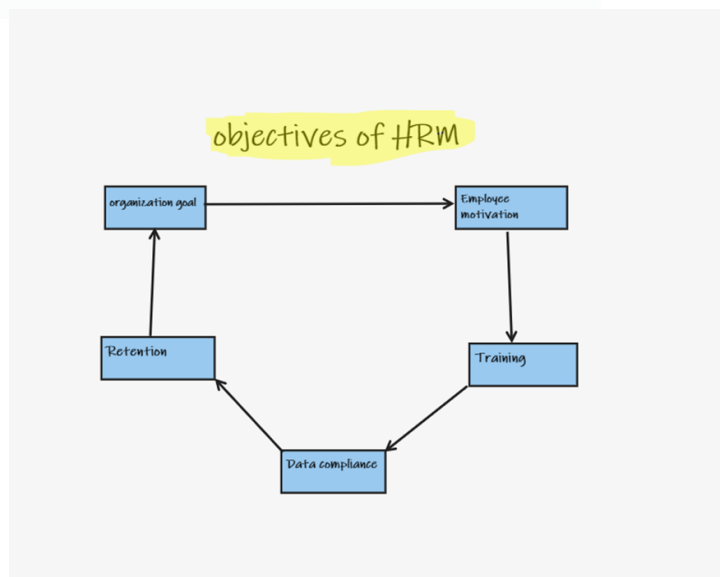
3) Implementing quality controls:

Given the amount of data that a cloud HR software needs to operate to its full potential, the final strategy we can use to improve the system is to implement quality controls. This means taking the necessary steps to ensure security, privacy, and compliance.

An HR software that is equipped with an employee management platform will allow us to change permissions and access depending on their status. For instance, a person who has left the company should be removed from the system as a preemptive measure in protecting the company's data.

OBJECTIVES:

The primary objective of the human resource management system is to ensure data of staff, faculty, and other departments in an organization. Second objective of HRM is to make data available for organization of different departments as mentioned above. Another objective of the HRM system is to ensure a stable environment with data for organization. HRM also ensures Retention, providing leadership qualities and opportunities and employee retention as the same prime objectives and deliverables of HRM. Keeping employees retained and motivated needs to be a top priority objective of HRM.



Functional Requirements:

Functional Requirement is actually the description of the services provided by the HR Management System. It describes the components and functions of the system. A function is nothing but inputs to the software system, its behavior, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality. For this project, we have a lot of functional requirements that will be listed below.

User Interface

The user interface (UI) is the point where human-computer interaction is considered. In this project, we tried our best to present a simple and reliable interface to the users. As the UI plays an important role in any software application, we kept in mind some key points to design the user interface.

These key points are described below.

- ❖ Made buttons and other elements perform actions
- ❖ Different form are created
- ❖ Maintained high discoverability, label icons
- ❖ Respected the user's eye and attention to create beautiful web pages
- ❖ Minimized the number of tasks performed the actions again and again
- ❖ Kept users informed about the system's behavior
- ❖ Used appropriate UI pattern

● User Login/Registration

The project should have registration and login pages to create a user account and authentication before access to this platform. The form in the registration page should get respective inputs from the users like full name, email, password, age, etc. The login screen allows registered users to login to the site to access all of the features that their account gives them access to. If they type in their username and password and click submit the users credentials are validated and if correct they are logged in. If they are incorrect they should get an error message.

If the user has forgotten their password they click "Forgot Password?" which takes them to a password recovery screen. If the user does not have an account then they click the register button and be taken to the registration. In the registration screen a new user types in all of their information and clicks submit, the data is then validated to make sure there is not an existing user with those credentials. If there is an existing user then the user is asked to enter a new username. If there is no conflict with the credentials then the user is registered and is sent an email to verify registration.

There should be a password reset option or a link to reset the password. If the user clicked "Forgot Password?" on the login screen then a new window should appear to reset his password through his email or any other related credentials.

● **Home and Dashboard Design**

To design a beautiful home and dashboard pages according to the requirements, we have used HTML, CSS and python programming language. Homepage or index of any system or website is always very crucial, it is the impression of the system that falls on the visitor. It almost tells the description about the system, allowing the users to explore in depth. There should be a logo of the brand, buttons that are directed towards sign up and sign in pages. In the navigation bar there should be some referenced pages and should target the audience.

After designing an attractive homepage, we also have designed a beautiful dashboard helping different types of users to meet their requirements. In requirements, we are asked to design a dashboard for different roles such as admin and users or workers. There should be different functionalities for different users. Admin has more authority to view the record of other users while users have limited access to the dashboard. When a user clicks the buttons or icons it should work all. Keep in mind that every functionality is related with other functionalities. The data displayed on the dashboard is basically authorized from the database.

We have designed different dashboards for different roles.

❖ **Admin Dashboard**

In the admin dashboard, only admin can login or access the functionalities of the admin dashboard. In our project of HRMS, the admin has rights to manage different users and keep their record. On the admin dashboard, there are different functionalities that are discussed in detail.

❖ **User Dashboard**

The users (except admin) that have created their accounts in the registration page, can only access the user dashboard. The details of different functionalities such as e-recruitment, payroll, pay slip, event management and others will be discussed separately.

● **E-Recruitment**

A major functionality of this project is the implementation of e-recruitment. E-recruitment, also called online recruitment, refers to the use of web-based technology to attract, screen, select, recruit and on-board job candidates for various jobs. Through e-recruitment, employers reach out to a large number of potential employees. Companies can build their own e-recruitment platforms domestically, use e-recruitment HR software or hire recruitment agencies that use e-recruitment as part of their package.

In this project, we gave more access regarding recruitment to the HR manager. The HR has access to create new forms as job postings or any other regarding news about jobs, this job then will be displayed to the users who can apply on them according to their will. The jobs have different inputs as managed by the HR. This form is then filled by users and will give their information. This information is then forwarded to HR who can react to them.

- **Payroll**

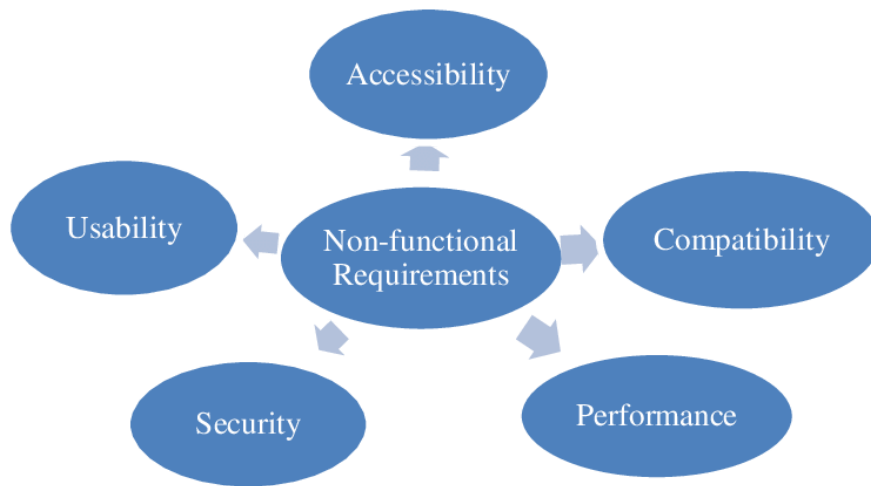
Payroll is the compensation that a business must pay its employees on a fixed term or a fixed date. It is usually managed through a company's accounting or human resources department. Small business payrolls can be handled directly by the owner or a partner. Payroll is the procedure of paying a company's employees, which incorporates monitoring hours worked, calculating employees' pay, and dispensing bills through direct deposit to worker financial institution bills or through check. However, groups should additionally carry out accounting features to report payroll, taxes withheld, bonuses, extra time pay, unwell time, and holiday pay. Companies should be placed apart and report the quantity to be paid to the authorities for Medicare, Social Security, and unemployment taxes.

- **Database Connectivity**

After getting detailed data from the sign up page, this data should be stored in a database for further usage. It should have the details of all users who registered. For sign in, the user should enter his username and password, if his username and password are stored in the database and are the same then he should be logged in.

Non-Functional Requirements:

Non-Functional Requirement (NFR) specifies the quality attribute of a software system. They judge the software system based on Responsiveness, Usability, Security, Portability and other non-functional standards that are critical to the success of the software system. Example of nonfunctional requirement, *"how fast does the website load?"* Failing to meet non-functional requirements can result in systems that fail to satisfy user needs.



Constraints:

Some of the limitations of HRM system are as follows,

- ☐ lack of support of top management
- ☐ improper actualisation
- ☐ inadequate development programmes
- ☐ inadequate information!

1. Lack of Support of Top Management:

HRM should have the support of top level management. The change in attitude at the top can bring good results while implementing HRM. Owing to passive attitude at the top, this work is handled by personnel management people. Unless there is a change in approach and attitude of top management nothing remarkable will happen.

2. Improper Actualisation:

HRM should be implemented by assessing the training and development requirements of employees. The aspirations and needs of people should be taken into account while making human resource policies. HRM is actuated half-heartedly. The organising of some

training programmes is considered as the implementation of HRM. With this, management's productivity and profitability approach remains undisturbed in many organisations.

3. Inadequate Development Programmes:

HRM needs implementation of programmes such as career planning, on the job training, development programmes, MBO, counselling etc. There is a need to create an atmosphere of learning in the organisation. In reality HRM programmes are confined to classroom lectures and expected results are not coming out of this approach.

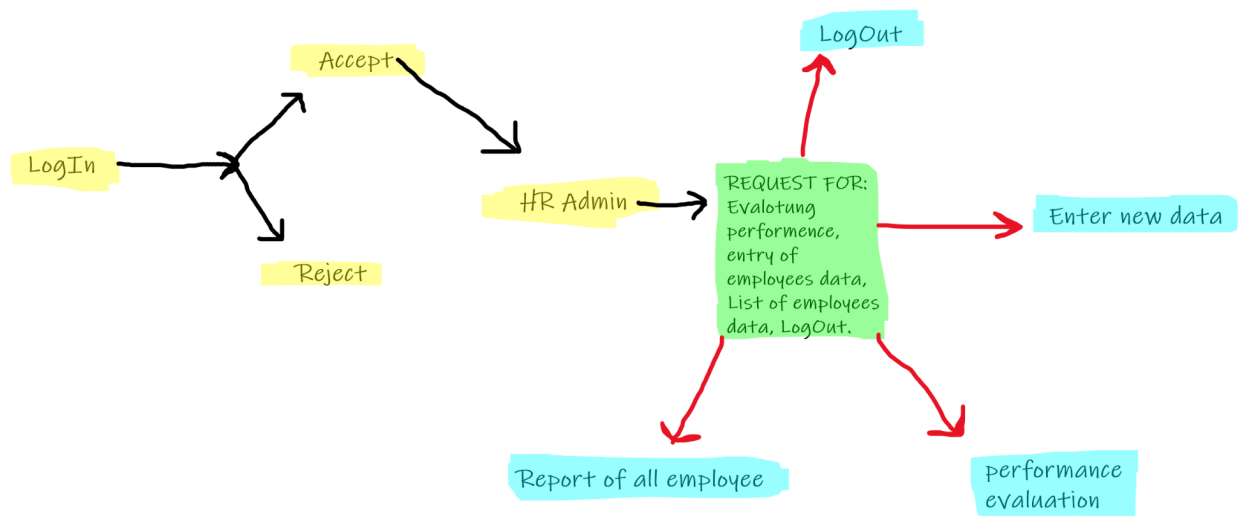
4. Inadequate Information:

Some enterprises do not have requisite information about their employees. In the absence of adequate information and database, this system cannot be properly implemented. So there is a need to collect, store and retrieve information before implementing human resource management.

Description for software behaviour:

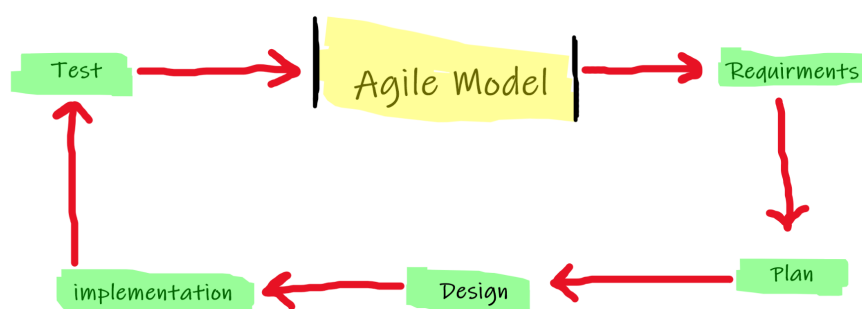
Every representative will be added to the framework by entering the individual information of a worker by HR. At the making state, HRMS will give an id to the recently added worker. In the wake of being added by HR, every worker has an option to be acquainted with the framework by the administrator. At this express, the administrator decides the job sort of the client, and this client is given a secret word consequently. At the entering condition of the framework, every client sees a similar interface which asks for a username and a secret word.

HR can search employees who have the properties he/she desires. Get a report about an employee. Add an employee by entering some specific personal data of that employee. Edit employee data.

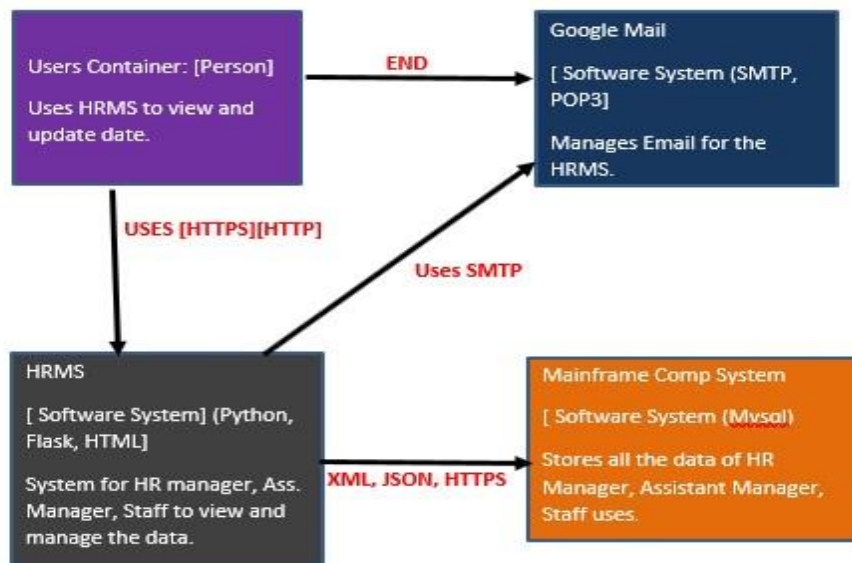


Process Model:

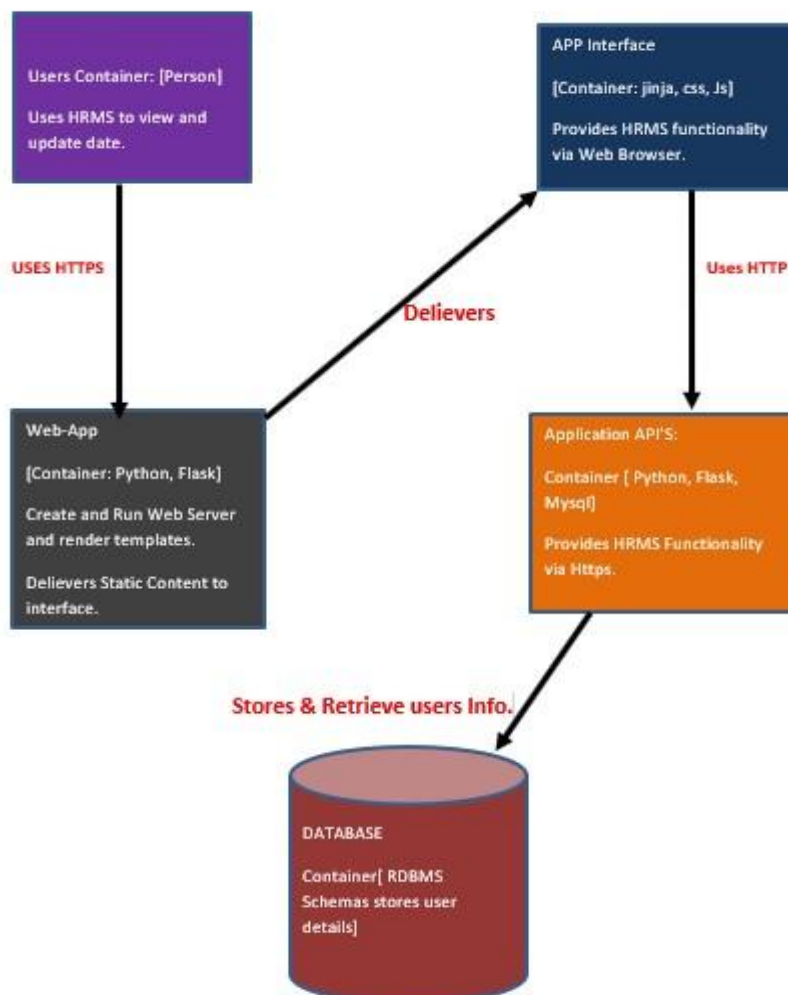
We will follow agile methodology in our project, which is represented below in the diagram



Context Diagram:



Container Diagram:



Component Diagram:

