**Functional & Non-Functional Requirements**

**Hospital Management System**



**HR AND STAFF MANAGEMENT**

**DEPARTMENT OF COMPUTER SCIENCE**BAHRIA UNIVERSITY, KARACHI, PAKISTAN

# Functional Requirements

## FR01: Staff Registration Workflow

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| **Req. No.** | **Functional Requirements** |
| FR01-01 | The system should allow new employees to register by providing personal and employment information. |
| FR01-02 | It should provide validation checks for data accuracy during registration. |
| FR01-03 | HR staff should be able to view and approve new employee registrations. |
| FR01-04 | It should generate unique employee IDs and login credentials upon successful registration. |

## FR02: Employee Management

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| **Req. No.** | **Functional Requirements** |
| FR02-01 | The system should maintain a centralized database of employee records, including personal details, employment history, and performance evaluations. |
| FR02-02 | It should support updating employee information such as contact details and job title. |
| FR02-03 | Attendance tracking is integrated with employee scheduling to ensure accurate recording of work hours. |
| FR02-04 | HR staff should be able to manage employee leave requests. |
| FR02-05 | Performance appraisal reports are generated using performance data collected from the system. |
| FR02-06 | The system should facilitate performance management processes, including goal setting, performance reviews, and feedback collection. |
| FR02-07 | Capture expense details and attach receipts. |

# Non-functional Requirements

## NFR01: PERFORMANCE

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| --- | --- |
| NFR01-01 | The system should be responsive and capable of handling concurrent user registrations and updates. |
| NFR01-02 | It should have minimal latency in processing registration requests and updating employee records. |

## NFR02: SECURITY

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| NFR02-01 | The system should enforce role-based access control to ensure that only authorized personnel can access and modify employee data. |
| NFR02-02 | It should encrypt sensitive employee information to protect confidentiality during transmission and storage. |

**NFR03**: ***SCALABILITY***

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| --- | --- |
| NFR03-01 | The system should be scalable to accommodate future growth in the number of employees and data volume. |
| NFR03-02 | It should handle increasing user loads without compromising performance or reliability. |

***NFR04: Usability***

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| NFR04-01 | The user interface should be intuitive and easy to navigate for HR staff and employees. |
| NFR04-02 | It should provide clear instructions and prompts for completing registration workflows and updating employee information. |

***NFR05: Reliability***

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| --- | --- |
| NFR05-01 | The system should be available and accessible to users during business hours. |
| NFR05-02 | It should have backup and disaster recovery mechanisms in place to prevent data loss and ensure system availability. |

***NFR06: Integration***

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| --- | --- |
| NFR07-01 | The system should integrate seamlessly with other modules within the hospital management system to facilitate data exchange and workflow automation. |
| NFR07-02 | It should support standard protocols and APIs for integration with third-party systems and services. |

**Team Roles**

|  |  |
| --- | --- |
| **Roles** | **Members** |
| Backend/Programming | Umer Bahadur  Huzaifa Rehan  Faisal |
| UIUX | Qurrat  Umer Bahadur  Hamza Shahid |
| Database Designer | Marium  Qurrat |
| Testing | Umer  Qurrat  Marium |

**Week Plan**

# 1. Week Project Initialization & Kick-off

* Team Meetings for planning and breakdown tasks into manageable units
* Each team selects a team lead and defines team roles.
* Define Roles and tasks.

# Week 2: Sprint Planning & Setup

* Setup project infrastructure including GitHub, JIRA, domain, hosting, and database.
* Begin Sprint 1 development focusing on the core functionalities of the HMS application.

# Week 3: Parallel Development & Design

* UI/UX Design Team works on wireframes and mockups for the user interface.
* Backend Development Team designs the architecture and starts implementing backend functionalities.
* Design Database.

# Week 4: Frontend

* Start working on UIUX.
* Continue the Development process.

# Week 5: Iterative Development

* Continue Sprint 1 development.
* Start Sprint 2 development concurrently.
* Daily stand-up meetings for progress updates and issue resolution within each team.

# Week 6: Testing & Iteration

* Conduct testing: Unit testing, integration testing, and user acceptance testing for Sprint 1 features.
* Iteratively refine designs and requirements based on feedback received during testing.

# Week 7: Deployment & Finalization

* Complete development of the whole project.
* Conduct final testing and bug fixes.
* Deployment: Deploy the HMS application on a server accessible to hospital staff.
* Offer ongoing support, address any issues, and finalize project documentation.

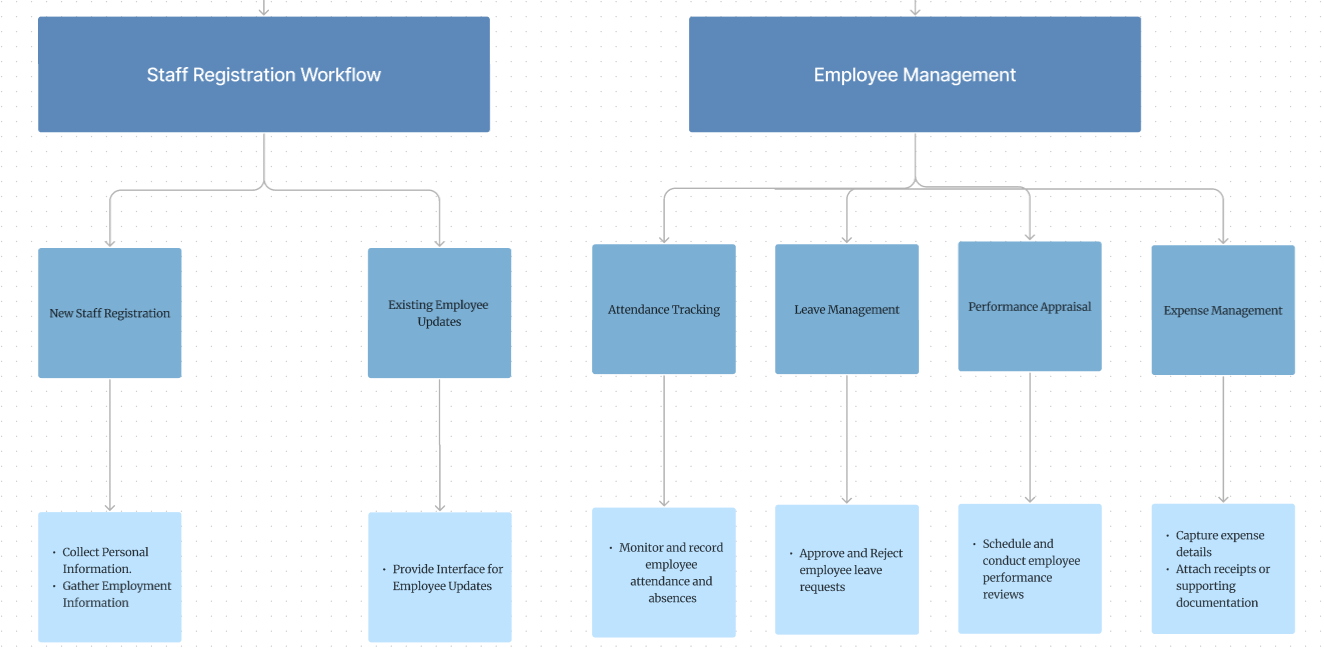
**Work Breakdown structure**

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A diagram of a company

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A group of people wearing surgical masks

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A screenshot of a login page with two men wearing scrubs

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A screenshot of a dashboard

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