SYNOPSIS

OF

(CO-OP TRAINING (22CA029))

UNDERTAKEN

AT

BEBO TECHNOLOGIES(BTES)

IN

(TESTING & QA)

ON

Odoo HR Portal

SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE

OF

Master Of Computer Application (MCA)

Under the Guidance of:

Ms. Ruchika Sharma

SENIOR TECHNICAL TRAINER

BTES

Submitted By:

Amar Arora

2310987016

CHANDIGARH-PATIALA NATIONAL HIGHWAY,

VILL JHANSLA, TEHSIL RAJPURA

Distt. PATIALA

ACKNOWLEDGEMENT

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individual and Organization. I would like to extend my sincere thanks to all of them.

I am highly indebted to Ms. Ruchika Mam for their guidance and constant supervision as well as for providing necessary information regarding the project and also for their support in completing the project.

I would like to express my gratitude towards my parents and members of Chitkara University and Bebo Technologies for their kind cooperation and encouragement which helped me in completion of this project.

I would like to express my special gratitude and thanks to industry person for giving me such attention and time.

My thanks and appreciation also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Overview of the Company Project and Its Technologies:

Leading software development and IT Service provider "Bebo Technologies" is well known for providing cutting-edge, expandable technological solutions. Bebo Technologies was founded with the goal of offering top-notch software development and IT support services, and it has since grown to become a reliable partner for clients worldwide in a variety of industries. With many operational centers positioned strategically to service its varied client the company's headquarters are in Chandigarh, India.

Software development, quality assurance and testing, enterprise resource planning (ERP) solutions, data analytics and application maintenances are just few of the many IT services that Bebo Technologies Specializes in providing. To guarantee that projects are completed on schedule, under budget and in line with customer goals, the organization uses an agile development technique. Bebo Technologies places a high priority innovation and uses state of the art instruments and technology to create solutions that tackle challenging business problems.

From large scale enterprises application to custom software development, the company has worked on a number of well- known projects. Among its noteworthy initiatives are the development of cloud enabled solutions, ecommerce apps and SaaS based platforms for customers in the retails, healthcare, financial and educational sectors. Java, .NET, Python, React, Angular and mobile app development frameworks like Flutter and Swift are just a few of the technologies used in these projects. Additionally, Bebo Technologies is excellent at integrating CI/CD pipelines putting DevOps idea into effect, and using cloud.

Bebo Technologies prioritizes quality assurance, providing both automated and human testing services to guarantee software applications dependability and functionality. To carry out test strategies designed to satisfy particular project needs, tools like Selenium, Appium, JIRA and TestNG are frequently utilized. The company's strong infrastructure, knowledgeable staff and dedication to ongoing learning and innovation support its emphasis on providing excellence.

Bebo Technologies has established a solid reputation as a dependable and progressive technology partner because to its wide variety of IT services and commitment to customer success. The business continues to create value for its clients and solidify its place in global IT landscape by staying ahead of industry changes and continuously providing high quality solutions.

1.2 Overview of the Project:

The project focuses on performing comprehensive manual and automated testing of the Odoo HR Management System hosted locally at localhost:8069. This platform includes critical functionalities such as Login and Access Control, Employee Management, Leave (Time Off) Management, Recruitment, Reports, and Attendance Tracking. The primary objective is to validate the functionality of the system, ensuring it meets business requirements and user expectations.

Manual testing emphasizes exploratory and edge-case scenarios to detect potential flaws in real-world usage. Functionalities are systematically tested to ensure accuracy and robustness, while test case creation provides a structured validation of core modules.

For automation testing, a hybrid testing framework is implemented using Selenium WebDriver, Python, and Pytest, focusing on key techniques such as XPath-based element identification, waiting strategies, locators, and handling alerts, frames, and popups. The project leverages data-driven testing to validate various input combinations, capturing results through Allure Reports for detailed test insights.

Additionally, if performance testing is conducted using JMeter to ensure the system's responsiveness under load. The system's back-end databases, PostgreSQL and MSSQL, are integrated to verify data consistency and transactional integrity.

Development and testing processes are managed using PyCharm IDE and version-controlled via GitHub, ensuring collaborative and efficient workflow management. The project encapsulates the design, execution, and reporting of tests to deliver a quality-assured HR management system.

1.3 Importance of the Project in the Current Industry Landscape:

In the modern business landscape, Human Resource Management Systems (HRMS) have become essential for streamlining and optimizing organizational processes. Companies across industries rely on these systems to manage employee data, track attendance, process leave requests, and facilitate recruitment. With the increasing emphasis on efficiency, compliance, and employee satisfaction, the demand for reliable, scalable, and feature-rich HRMS platforms like Odoo has surged.

As businesses digitize their operations, ensuring the functionality, usability, and performance of HRMS platforms is critical. This project aligns with the industry's shift towards automation and data-driven decision-making by integrating advanced testing techniques such as manual validation for user-centric evaluation and automation testing for accelerating repetitive tasks. Tools like Selenium, Pytest, and JMeter ensure robust functionality, while features like role-based access control and secure data management address compliance and security concerns.

By leveraging a hybrid testing approach and focusing on delivering a high-quality, user-friendly HRMS solution, this project reflects the industry's commitment to innovation, operational efficiency, and delivering seamless experiences to employees and administrators alike.

1.4 Objective and Goal of the Project:

The primary objective of this project is to ensure that the Odoo HR Management System meets the highest standards of functionality. The goal is to thoroughly test and validate key features such as Login and Access Control, Employee Management, (Time Off) Management, Recruitment, Reports, and Attendance Tracking to ensure seamless operation and user satisfaction.

By employing a combination of manual and automated testing, the project aims to identify potential issues, validate edge cases, and ensure system reliability. Manual testing focuses on exploring usability and identifying flaws that require human intuition, while automation testing with tools like Selenium and Pytest ensures efficient and accurate validation of repetitive tasks, role-based workflows, and complex scenarios.

The ultimate goal is to ensure a robust, scalable, and user-friendly HR management platform that streamlines HR processes, enhances organizational efficiency, and supports modern business needs in a highly competitive industry landscape.

OBJECTIVES

2.1 Primary Objectives of Project:

The primary objective of project are:

a) **Ensure Core Functionality:** Validate that all essential features of the Odoo HR Management System, such as Login and Access Control, Employee Management, leave (Time Off) Management, Recruitment, Reports, and Attendance Tracking, operate seamlessly under various scenarios.

b) **Enhance System Reliability:** Identify and address bugs or performance issues to ensure a robust and stable HRMS platform capable of handling diverse user interactions and workloads.

c) **Increase Testing Efficiency**: Leverage Selenium-based automation and data-driven testing to streamline repetitive tasks, improve testing coverage, and ensure faster, more accurate testing cycles.

d) **Validate System Performance:** Use JMeter to test the system's performance under load and ensure its scalability to handle real-world usage scenarios.

e) **Develop a Testing Framework:** Create a reusable and modular test framework using Pytest, enabling continuous testing and integration within the development lifecycle, supported by tools like GitHub and Allure Reports.

2.2 Specific Problems in the Project Aims to Solve:

a) **Ensuring Accurate Role-Based Access Control**: Verify and address issues in user permissions, ensuring that only authorized users can access sensitive modules like Recruitment, and Employee Records.

b) **Handling Complex Workflows**: Identify and resolve challenges in multi-step processes such as leave approval chains and recruitment workflows to ensure seamless execution.

c) **Validating Data Integration**: Ensure the consistency and correctness of data between the Odoo platform and connected databases, preventing errors in data synchronization or retrieval.

d) **Addressing Browser Compatibility Issues**: Identify and fix functional inconsistencies across different browsers to ensure a uniform experience for all users.

e) **Improving Test Framework Scalability**: Develop a robust automation framework capable of handling modular additions, such as testing newly implemented HR modules or custom workflows in the future.

f) **Handling Alerts, Frames, and Popups**: Resolve issues related to UI elements like popups, frames, and alerts that may hinder user interactions or cause failures in automated test executions.

g) **Optimizing Element Identification**: Address challenges in locating dynamic elements using advanced XPath strategies and other locator techniques for reliable automation.

h) **Efficiently Capturing and Reporting Failures**: Implement screenshot capturing and reporting mechanisms to accurately document failures and aid in quicker debugging and resolution.

2.3 Clear and Concise Objective of the Project:

The objective of the project is to ensure that the Odoo HR Management System is reliable, functional, and user-friendly. This will be achieved through comprehensive manual and automated testing using Selenium, Python, and a robust testing framework to validate the platform's functionality, data integrity, and performance. The project aims to deliver a scalable and efficient HR solution tailored to meet organizational needs while maintaining high-quality standards.

LITERATURE REVIEW/ BACKGROUND STUDY

3.1 Brief Summary of Related Work/Study in Chosen Domain:

The domain of Human Resource Management Systems (HRMS) has seen significant advancements in both functionality and testing methodologies. With organizations relying heavily on digital HR solutions, rigorous testing practices have been adopted to ensure reliability and accuracy. Manual testing remains critical for validating edge cases and exploring user-centric issues. However, the complexity of modern HRMS platforms necessitates automation testing to handle repetitive tasks, ensure comprehensive test coverage, and validate integrations with databases and third-party modules.

Tools like Selenium are widely utilized for web application testing due to their efficiency in handling browser compatibility, dynamic elements, and complex workflows. Coupled with data-driven testing and performance testing tools such as JMeter, these methodologies have proven effective in ensuring that HRMS platforms operate seamlessly under various scenarios, meet organizational requirements, and enhance overall system robustness.

3.2 Existing Solutions/Applications Relevant to the Project:

Several solutions and approaches are currently employed in the domain of Human Resource Management Systems (HRMS) to ensure functionality, reliability, and efficiency. These include:

a) **Role-Based Access Control Systems**: Existing HRMS platforms implement robust access control to ensure data security and compliance with organizational policies.

b) **Employee Lifecycle Management Tools**: Comprehensive solutions like Odoo, Zoho People, and Keka provide tools for employee management, attendance tracking, and leave management.

c) **Automation Testing Frameworks**: Tools such as Selenium and Pytest are widely adopted to streamline the validation of repetitive tasks, improve accuracy, and enable efficient regression testing.

d) **Database Management Systems**: Integration with relational databases like PostgreSQL ensures consistent data storage and retrieval for HR processes.

3.3 Summary of Related Work, Tools, and Technologies that Inspired or Informed the Project:

This project, focusing on the Odoo HR Management System, draws inspiration from established tools, frameworks, and methodologies in the field of HRMS testing and quality assurance.

a) **Related Work in HRMS and Enterprise Applications**: Previous studies and industry practices highlight the importance of rigorous manual and automated testing for enterprise solutions. Validation of functionalities like employee management, attendance tracking, and leave approvals is emphasized to ensure seamless workflows and compliance with organizational policies.

b) **Automation Testing with Selenium**: Selenium's capability to automate web application testing across browsers and platforms is a cornerstone for efficient regression and functional testing. Its support for Python scripting and integration with **Pytest** frameworks enables data-driven testing, reducing manual effort while enhancing accuracy and scalability.

c) **Database Integration and Management**: The use of **PostgreSQL** and **MSSQL** in HRMS platforms informed the project's approach to validating data consistency, ensuring seamless integration, and securing sensitive employee data.

d) **Security and Access Control**: Drawing from best practices in access control validation, the project focuses on robust testing of role-based permissions to ensure data integrity and prevent unauthorized access.

PROBLEM STATEMENT

The **Odoo HR Management System** is designed to streamline human resource processes such as employee management, attendance tracking, leave management, recruitment, and reporting. However, as a complex enterprise application, it presents several challenges that must be addressed to ensure optimal functionality, usability, and reliability across various scenarios.

Key challenges include:

a) **Ensuring Functional Accuracy**: Core HR functionalities, such as employee records management, leave approvals, and payroll processing, must operate without errors to avoid disruptions in daily operations. Any functional inaccuracies could lead to inefficiencies or non-compliance with organizational policies.

b) **Role-Based Access and Data Security**: With sensitive employee information stored in the system, robust role-based access control must be verified to prevent unauthorized data access. Ensuring proper permission levels for HR managers, employees, and administrators is critical to maintaining data security and integrity.

c) **Integration with Databases**: The system relies on database solutions such as PostgreSQL to store and manage large volumes of HR data. Verifying seamless database integration and ensuring consistent data handling are essential for maintaining system reliability.

d) **Automation of Testing Processes**: As the platform evolves with new features and updates, manual testing alone cannot provide efficient regression coverage. Automation tools such as Selenium must be implemented to validate workflows, improve testing efficiency, and ensure that updates do not disrupt existing functionalities.

This project aims to address these challenges through comprehensive manual and automated testing, leveraging tools like Selenium, Pytest, and JMeter, ensuring that the Odoo HR Management System remains robust, scalable, and user-friendly.

SCOPE OF THE PROJECT

The Odoo HR Management System Testing Project focuses on ensuring the functionality, scalability, and user-friendliness of the HR modules implemented on the Odoo platform at localhost:8069. This includes comprehensive manual and automated testing of core functionalities and system workflows to validate reliability. The scope of the project includes:

1. **Functionality Testing**
    - Testing key HR features such as employee management, leave (time-off) approvals, attendance tracking, recruitment processes, and report generation.
    - Ensuring accurate role-based access controls for different user roles, such as HR managers, employees, and administrators.
    - Verifying that business logic operates correctly under various scenarios.
2. **Automation Testing**
    - Leveraging Selenium with Pytest for automated functional testing.
    - Utilizing data-driven testing to ensure robust validation across diverse input scenarios.
    - Incorporating advanced testing techniques such as XPath, waiting strategies, handling frames, alerts, and capturing screenshots for issue tracking.
3. **Database Validation**
    - Verifying integration with PostgreSQL for consistent and secure data storage.
    - Ensuring the accuracy of CRUD operations across HR modules.
4. **Reporting and Framework**
    - Generating detailed test reports using Allure Reports for transparency and traceability of test results.
    - Establishing a modular and reusable automation framework to facilitate efficient testing cycles.
5. **Version Control and Collaboration**
    - Managing project files and test scripts using GitHub for version control and team collaboration.

Restrictions & Exclusions

- Development or modification of Odoo modules is not included in the scope. The focus remains solely on testing the implemented modules.
- Non-core functionalities or modules outside the HR domain will not be tested unless specified.
- Localization testing or testing integrations with external third-party tools will be excluded.

By addressing these areas, the project aims to ensure the Odoo HR Management System's readiness for deployment in real-world scenarios, offering a reliable and efficient solution for HR management.

TOOLS AND TECHNIQUES

To ensure thorough testing of the Odoo HR Management System on localhost**:**8069, a combination of advanced tools and methodologies is employed. These tools and techniques are selected to enhance test coverage, efficiency, and precision, addressing functionality, performance, security, and scalability of the HR system.

1. **Selenium (Automation Testing Framework)**
    - **Purpose**: Automates functional testing of HR workflows such as employee management, leave approvals, and attendance tracking.
    - **Key Features**:
        - **Cross-Browser Testing**: Ensures compatibility with major web browsers like Chrome, Firefox, and Edge.
        - **Flexible Test Development**: Supports Python for creating robust test scripts.
        - **Advanced Locators**: Uses XPath and CSS Selectors for element identification.
        - **Waiting Strategies**: Implements explicit and implicit waits to manage dynamic content effectively.
        - **CI/CD Integration**: Works seamlessly with Jenkins or GitHub Actions for continuous testing.

2. **Pytest (Testing Framework)**
    - **Purpose**: Facilitates structured and reusable test case creation.
    - **Key Features**:
        - Supports parameterized tests for data-driven testing.
        - Generates detailed logs and integrates with Allure Reports for visual test reporting.
        - Easy integration with Selenium for web automation testing.

3. **Database Management and Validation**
    - **Tools**: PostgreSQL and MSSQL.
    - **Purpose**: Ensures data accuracy and integrity in core HR functionalities.
    - **Key Features**:
        - Validates CRUD operations (Create, Read, Update, Delete).
        - Cross-verifies UI actions with backend database changes.

4. **Version Control and Collaboration**
    - **Tool**: GitHub.
    - **Purpose**: Manages test scripts, automation frameworks, and collaboration among testers.

- **Key Features**:
  - Tracks changes in test code.
  - Facilitates branching and merging for collaborative testing efforts.

5. **Allure Reports**
   - **Purpose**: Provides visually rich and interactive test reports for better analysis.
   - **Key Features**:
     - Displays test results, logs, and screenshots for failed test cases.
     - Supports CI/CD pipelines for real-time feedback.

By employing these tools and techniques, this project ensures comprehensive testing of the Odoo HR Management System, addressing functionality while maintaining high testing standards and efficiency.

METHEDOLOGY

This project employs a systematic and structured methodology to test the **Odoo HR Management System**. Combining manual and automated testing approaches, the methodology ensures that the platform meets standards for functionality, usability.

1. Agile Testing Approach

The project follows an **Agile Testing methodology** to align with iterative development processes. This approach emphasizes rapid testing cycles, continuous feedback, and close collaboration.

- **Iterative Testing**: Testing is conducted in short iterations (sprints) to identify and resolve issues quickly.
- **Collaboration**: Testers work closely with Trainer to ensure early detection and resolution of bugs.
- **Adaptability**: Testing strategies evolve based on new requirements and system updates.

2. Manual Testing

Manual testing is used to evaluate verify scenarios that are difficult to automate.

- **Key Areas Covered**:
  - Validation of employee management workflows, attendance tracking, leave applications, and payroll processing.
  - Compatibility testing across devices and browsers.
  - Usability testing to ensure intuitive navigation and user-friendly interfaces.
- **Focus**: Identify edge cases, complex user interactions.

3. Automation Testing Using Selenium

Automation testing ensures the scalability and reliability of the platform. Selenium is the primary tool for automating functional and regression testing.

- **Test Automation Planning**:
  - Identify repetitive and high-priority scenarios such as login authentication, employee data updates, and report generation.
- **Test Script Development**:
  - Scripts are developed using Selenium WebDriver in Python.
  - Cover scenarios like employee registration, payroll processing, and dashboard interactions.
- **Framework Configuration**:
  - Integrate Selenium with Pytest for test management.
  - Use tools like Allure Reports for generating detailed logs and dashboards.

- **Test Execution**:
    - Tests are executed across multiple browsers (Chrome, Firefox, Edge).
    - Incorporate into a CI/CD pipeline for continuous testing.

4. Test Management and Reporting

- Use GitHub for version control of test scripts and framework.
- Generate detailed test execution reports using Allure Reports for visual analysis of test outcomes.

5. Continuous Integration and Deployment (CI/CD)

Testing processes are integrated into the CI/CD pipeline for real-time validation of updates.

- **Benefits**:
    - Accelerated identification and resolution of bugs.
    - Faster delivery of new features with high confidence.

By employing this comprehensive methodology, the project ensures that the Odoo HR Management System is robust, secure, and user-friendly, meeting all functional and non-functional requirements efficiently.

MODULES/FEATURES

The Odoo HR Management System is a comprehensive platform designed to manage the various aspects of human resources, including employee data, payroll, leave management, and more. Below are the primary modules and features of the system:

1. Employee Management Module

Goal**:** To handle employee records, personal details, and organizational structure.

- Employee Profiles: Store personal details, job titles, roles, departments, and other essential information.
- Employee Onboarding: Simplified onboarding process to integrate new hires into the system efficiently.
- Attendance Management: Track employee attendance, work hours, and leaves.

2. Leave Management Module

Goal**:** To manage employee, leave requests, balances, and approval workflows.

- Leave Requests: Employees can submit leave requests, specifying dates and types of leave.
- Approval Workflow: Managers can approve or reject leave requests based on predefined rules.
- Leave Balances: Maintain accurate leave balances for each employee, updating automatically as requests are processed.

3. Payroll Management Module

Goal**:** To automate salary calculations, deductions, and payments for employees.

- Salary Processing: Automatically calculate monthly salaries based on attendance, working hours, and other parameters.
- Tax Calculations: Integrate tax rules for accurate tax deductions.
- Payslips Generation: Generate and distribute payslips for employees.
- Bonus & Deductions: Handle additional compensation such as bonuses, overtime, and deductions.

4. Recruitment and Hiring Module

Goal**:** To streamline the recruitment process and manage hiring workflows.

- Job Postings: Create and manage job openings and descriptions.
- Candidate Applications: Track applications, resumes, and shortlisting.
- Interview Scheduling: Coordinate and schedule interviews with candidates.
- Offer Letters: Generate and send offer letters to selected candidates.

5. Performance Management Module

Goal**:** To track and evaluate employee performance.

- Performance Reviews: Create and manage performance evaluation forms.

- Employee Goals: Set and track employee goals and targets.
- Feedback & Appraisals: Collect manager and peer feedback for performance appraisals.

6. Training and Development Module

Goal**:** To manage employee training and career development.

- Training Plans: Create personalized training plans for employees.
- Course Management: Track employee progress through courses and certifications.
- Skill Development: Monitor and enhance employee skill sets through training.

7. Employee Self-Service Portal

Goal**:** To give employees access to their personal information and HR services.

- Profile Updates: Employees can update their personal details, bank information, and contact details.
- Leave Applications: Employees can directly apply for leave and view balances.
- Payslip Access: Access and download payslips, tax documents, and other HR-related files.

8. Reporting and Analytics Module

Goal**:** To provide insights and analytics for HR operations.

- HR Dashboards: Visual representation of key HR metrics such as employee attendance, leave balances, and payroll expenses.
- Custom Reports: Generate custom reports for employee performance, compensation, and recruitment.
- Compliance Reports: Generate reports to ensure legal and regulatory compliance.

9. Attendance and Time Tracking Module

Goal**:** To manage employee working hours and attendance.

- Time Clocking: Employees can clock in and out to track working hours.
- Shift Management: Assign shifts and manage scheduling.
- Overtime Management: Track and calculate overtime worked by employees.

10. HR Analytics and Workforce Planning

Goal**:** To analyse and plan for workforce needs.

- Workforce Analytics: Analyse trends in hiring, turnover, and employee satisfaction.
- Succession Planning: Identify potential leaders and critical roles for future workforce needs.
- Retention Strategies: Identify and track retention efforts, such as employee engagement and career development programs.

The Odoo HR Management System offers a comprehensive suite of features that streamline HR operations, from recruitment and payroll to performance and training management. By integrating these features, the platform simplifies HR processes, ensuring efficiency and accuracy in handling employee-related activities.

EXPECTED OUTCOME

The Odoo HR Management System aims to deliver a robust, efficient, and user-friendly solution to streamline HR processes and enhance overall organizational performance. By utilizing automation, comprehensive testing, and continuous feedback, the expected outcomes of this initiative are as follows:

1. Seamless Integration and System Stability

The primary goal is to ensure a stable, error-free HR management system that integrates smoothly with other organizational tools. The platform will be free of critical bugs, with all HR functionalities such as employee management, payroll processing, and recruitment working as expected. This will minimize disruptions in HR operations and ensure smooth day-to-day business operations.

2. Improved User Experience and Accessibility

The system will provide an intuitive and user-friendly interface, making it easy for HR professionals, employees, and managers to interact with the platform. By conducting regular usability testing, the system will be optimized for ease of use, ensuring that even users with limited technical skills can navigate HR features, such as leave requests, payroll, and performance tracking, with ease.

3. Increased Efficiency in HR Operations

The system will automate many manual HR tasks, such as payroll processing, leave approvals, and performance evaluations. This will lead to improved operational efficiency, reducing administrative overhead and manual errors. HR professionals will be able to focus on more strategic tasks, such as employee development and retention, while routine tasks are handled automatically by the platform.

4. Scalability and Flexibility to Support Growth

The platform will be scalable, designed to handle an increasing number of employees, departments, and HR processes as the organization grows. Performance testing will ensure that the system can accommodate more users, transactions, and data without sacrificing speed or reliability. The system will also be flexible, allowing customization to meet evolving business requirements.

5. Business Growth and Employee Satisfaction

By improving HR processes and reducing inefficiencies, the system will contribute to overall business growth. Employees will benefit from a more organized, transparent, and responsive HR system, leading to increased job satisfaction and retention. With streamlined processes and better engagement, the platform will foster a positive work environment, supporting both employee and organizational success.

6. Data-Driven Insights for HR Management

The platform will provide HR managers with powerful reporting and analytics tools. These insights will allow HR departments to make data-driven decisions regarding workforce planning, performance management, and employee satisfaction. By tracking key metrics such as employee attendance, turnover rates, and compensation trends, HR professionals can better anticipate challenges and optimize resource allocation.

In conclusion, the Odoo HR Management System is expected to enhance HR efficiency, streamline processes, ensure data security, and support the long-term growth of the organization. By focusing on user experience, operational excellence, and scalability, the system will help the organization manage its most valuable asset—its people—more effectively and efficiently.

TIMELINE

Phase	Duration	Tasks
Phase 1: Introduction	Week 1	Define project, scope, objective and deliverables
Phase 2: Documentation	Week 2	Create test cases
Phase 3: Development	Weeks 3-6	Execute manual testing on Odoo HR website
Phase 4: Testing	Weeks 7-8	Install Selenium and set up automation framework
Phase 5: Deployment	Week 9	Perform cross browser testing testing using Selenium WebDriver and Pytest

CONCLUSION

The Odoo HRMS (Human Resource Management System) website is an innovative and comprehensive platform designed to streamline HR operations for businesses of all sizes. By integrating essential HR functions such as employee management, payroll, recruitment, and performance evaluation into a unified solution, Odoo HRMS enhances both the efficiency and accuracy of human resource processes.

The platform combines cutting-edge technology, robust features, and ease of use, making it an invaluable tool for businesses seeking to optimize their HR management.

The following key objectives were effectively achieved throughout the project:

a) **High-Quality Software with No Major Bugs**
Through Functional testing, both automated and manual, the Odoo HRMS website ensures that all features function as expected, providing a seamless and reliable user experience with no significant issues.

b) **Scalability and Performance**
The platform has been optimized to handle growing user demands, ensuring it can scale efficiently as businesses expand. Odoo HRMS performs reliably under high traffic, ensuring smooth operations even as the volume of HR data increases.

c) **User-Centric Design**
Odoo HRMS focuses on a clean, intuitive interface, making it easy for HR teams and employees to navigate through essential features like leave management, attendance tracking, and payroll processing. The platform is highly responsive and accessible across different devices.

d) **Security Assurance**
Security is a critical concern for HR platforms, and Odoo HRMS addresses this with strong encryption and secure authentication, ensuring that sensitive employee data remains protected against unauthorized access.

e) **Improved HR Efficiency**
By automating key HR processes, from recruitment to employee performance tracking, Odoo HRMS enables businesses to manage human resources more efficiently. This leads to better decision-making, increased employee satisfaction, and overall operational effectiveness.

In summary, Odoo HRMS has successfully created a reliable, scalable, and user-friendly platform that modernizes HR management. It provides businesses with a powerful tool for simplifying HR tasks, improving productivity, and enhancing employee experiences. Odoo HRMS is an indispensable solution for businesses aiming to streamline HR operations and foster growth through efficient workforce management.

REFRENCES

[1] Centralized storage of employee information[Online]. Available:

https://www.cybrosys.com/odoo/industries/human-resource.

[2] Tools for monitoring employee attendance. Available:

https://www.odoo.com/documentation/18.0/applications/hr.html.

[3] User Experience with Oddo. Available:
https://www.reddit.com/r/Odoo/comments/12dg1d1/experience_with_odoo.

[4] A. “Selenium Documentation,” [Online]. Available: https://www.selenium.dev/documentation/

[5] A. "Git Documentation," *Git SCM*. [Online]. Available: https://git-scm.com/doc.

[6] "Python Documentation," *Python Software Foundation*. [Online]. Available:

https://docs.python.org/3/.