

DECLARATION

We, the undersigned, solemnly declare that the report of the training work entitled “**Visionary System**” is based on our own work carried out during the course of my study under the supervision of **Ms. Bholi Piperia** from ‘**Pylons Technology Pvt. Ltd.**’. I assert that the statements made and conclusions drawn are an outcome of the training work. We further declare that to the best of our knowledge and belief that the report does not contain any part of any work which has been submitted for the award of any other degree certificate in this University or any other University.

(Signature of the Candidate)
Shashank Kumar Shrivastava
300302222301
CA7090

(Signature of the Candidate)
Yash Tripathi
300302222301
BH9790

ACKNOWLEDGEMENT

I would like express my gratitude towards **MR. KRANTI KUMAR JAIN**, Department of Computer Science CSIT, Durg for his valuable guidance and support. It was indeed an invaluable journey for me.

Now, I would like to extend my gratitude to **MR. PRABHASH GUPTA**, Head & Professor, Department of Computer Science and Engineering & Information Technology CSIT, Durg for providing motivation and valuable guidance throughout the development of the project.

Also, I want thanks to principal **DR. SANTOSH SHARMA** who support us for every creative idea and works. He always tries to encourage us and help for any technical Work which is very important for us.

I express my sincere gratitude towards **ER. AJAY PRAKASH VERMA**, Chairman, Chhatrapati Shivaji Institute of Technology, Durg for providing adequate infrastructure to carry out the project and also motivating for research work, which has been an inspiration.

Lastly, I would like to thank my parents and friends who were a constant source of motivation and support

Yash Tripathi
300302222301
Shashank Kumar Shrivastava
300302221007

ABSTRACT

In the dynamic landscape of workforce management, the evolution of leave request structures is essential for fostering organizational efficiency, supporting employee well-being, and ensuring financial sustainability. This abstract explores potential avenues for innovation in leave management systems, highlighting the integration of predictive analytics, wellness modules, remote work features, and blockchain technology as promising areas for future development. Predictive analytics offer opportunities to forecast leave patterns accurately, enabling proactive planning and resource allocation. Wellness modules can promote holistic health and resilience by integrating stress tracking, mental health resources, and wellness challenges into leave management systems. Features tailored to remote work arrangements, such as virtual collaboration tools and time zone management utilities, aim to facilitate seamless communication and coordination across distributed teams. Additionally, the incorporation of blockchain technology holds promise for enhancing security and transparency within leave management systems through tamper-proof records and secure identity verification. By embracing these innovations, organizations can create more robust, efficient, and employee-centric leave request structures that meet the evolving needs of the modern workforce.

TABLE OF CONTENTS

DECLARATION.....	I
Acknowledgement	II
Abstract.....	II
Chapter 1. Introduction.....	1
1.1 Overview on ERP System of IT company.....	1
1.2 IT Company leave Structure.....	3
1.3 Objective	4
1.3.1 Asset for an IT company	4
1.3.2 Perks for an IT company Employ	5
Chapter 2. Technology Used	7
2.1 CORE PHP	7
2.1.1 About Core PHP.....	7
2.1.2 History of CORE PHP.....	8
2.1.3 Versions of CORE PHP	8
2.2 MySQL.....	9
2.2.1 About MySQL	9
2.2.2 Versions of MySQL.....	10
CHAPTER 3. MODULE	11
3.1 Master	11
3.1.1 Candidate	11
3.1.2 Employee.....	12
3.1.3 Supplier.....	13
3.1.4 Costumer.....	13
3.2 Opportunity	14
3.3 Proposal	15
3.4 Work Order and other module	15
3.4.1 Other Module	16
3.5 About Me: Employee Dashboard.....	16
3.5.1 Asset Module:	17

3.5.2 Reimbursements.....	18
3.5.3 Time Sheet Module.....	18
3.5.4 Leave Module	19
3.5.5 Finance Module:	21
CHAPTER 4.....	22
Conclusion	22
CHAPERT 5 Future Work.....	23
References.....	24

LIST OF FIGURES

Figure 1 1.1 ERP SYSTEM OF IT COMPANY	1
Figure 23.5.1 About me Module	17
Figure 3.5.4.1 Landing page for a leave module page.....	20
Figure 4 3.5.4.2 Leave request page	20

Chapter 1. Introduction

1.1 Overview on ERP System of IT company

Enterprise resource planning (ERP) refers to a type of software that organizations use to manage day-to-day business activities such as accounting, procurement, project management, risk management and compliance, and supply chain operations. A complete ERP suite also includes enterprise performance management, software that helps plan, budget, predict, and report on an organization's financial results.

ERP systems tie together a multitude of business processes and enable the flow of data between them. By collecting an organization's shared transactional data from multiple sources, ERP systems eliminate data duplication and provide data integrity with a single source of truth.

Today, ERP systems are critical for managing thousands of businesses of all sizes and in all industries. To these companies, ERP is as indispensable as the electricity that keeps the lights on.

Enterprise resource planning (ERP) is a software system that helps organizations manage their day-to-day business activities. ERP can help with processes in finance, human resources, manufacturing, supply chain, services, procurement, and more.



Figure 1 ERP SYSTEM OF IT COMPANY

An Enterprise Resource Planning (ERP) system for an IT company would be designed to streamline and integrate various business processes within the organization. Here are some key components and features that might be included in an ERP system tailored for an IT company:

- I. **Project Management:** Integration of project management tools to track project progress, allocate resources, manage budgets, and monitor timelines. This can include features like Gantt charts, task tracking, resource allocation, and project scheduling.
- II. **Resource Management:** Centralized management of human resources, including employee data, skill sets, certifications, and workload allocation. This module may also include features for performance evaluation, training management, and workforce planning.
- III. **Financial Management:** Integration with accounting systems to manage finances, including invoicing, billing, budgeting, expense tracking, and financial reporting. This module may also include features for managing contracts, vendor payments, and revenue recognition.
- IV. **Customer Relationship Management (CRM):** A CRM module to manage customer interactions, sales pipelines, marketing campaigns, and customer support tickets. This can include features such as lead management, contact management, opportunity tracking, and customer service automation.
- V. **Supply Chain Management (SCM):** Integration with supply chain management systems to optimize procurement, inventory management, and order fulfillment processes. This module may include features such as demand forecasting, supplier management, inventory tracking, and order processing.
- VI. **HR & Payroll:** A module dedicated to human resources and payroll management, including employee onboarding, payroll processing, benefits administration, leave management, and compliance tracking.
- VII. **Business Intelligence (BI) and Analytics:** Built-in reporting and analytics tools to provide insights into key business metrics, trends, and performance indicators. This can include customizable dashboards, data visualization tools, and ad-hoc reporting capabilities.
- VIII. **Integration and Customization:** Support for integrating with third-party applications and systems commonly used in the IT industry, such as development tools, collaboration platforms, and communication tools. Additionally, the ERP system should offer customization options to adapt to the unique needs and workflows of the IT company.
- IX. **Security and Compliance:** Robust security features to protect sensitive data and ensure compliance with industry regulations and standards. This may include role-based access controls, data encryption, audit trails, and compliance reporting functionalities.
- X. **Mobility and Accessibility:** Support for mobile access and remote work capabilities to enable employees to access the ERP system from anywhere, using various devices. This can include mobile apps, responsive web interfaces, and offline access options.

Overall, an ERP system for an IT company should be flexible, scalable, and customizable to accommodate the dynamic and complex nature of IT business operations. It should enable efficient collaboration, streamline processes, improve productivity, and provide actionable insights to drive business growth and innovation.

The top 5 ERP Solution providers not in a particular order are Epicor, Infor, Microsoft, Oracle and SAP. Epicor: This company has been in the enterprise solution market for a very long time. The company was founded in 1972 and since then it has introduced several reputable products.

1.2 IT Company leave Structure

In any IT company, managing leave requests efficiently is crucial for maintaining productivity and ensuring employee well-being. The leave request structure serves as a framework for employees to formally request time off while enabling employers to effectively manage staffing and project timelines. Here's an introduction to the typical leave request structure in an IT company:

- I. **Leave Request Form:** Employees fill out a form with name, department, leave dates, type (e.g., vacation, sick leave), and comments.
- II. **Approval Workflow:** After submission, the leave request goes to the employee's supervisor for initial approval. Further approval from HR or higher management may be needed for extended or critical leave periods.
- III. **Notification and Communication:** Updates on the leave request's status are communicated to both the employee and relevant stakeholders after each approval stage. This transparent process facilitates adjustments or clarifications as needed.
- IV. **Leave Balance Tracking:** IT firms typically employ a centralized leave management system to track employees' leave balances and usage. This aids employees in monitoring their remaining entitlements and assists managers in making informed decisions when approving leave requests to mitigate scheduling conflicts or excessive absences within teams.
- V. **Emergency Leave Protocol:** The leave request system should include provisions for unforeseen circumstances like illness or family emergencies. Companies may have expedited approval processes for emergency leave requests while ensuring adequate coverage.
- VI. **Legal Compliance:** The leave request structure must comply with labor laws and company policies regarding employee entitlements, including minimum leave allowances, paid time off, and eligibility criteria. This ensures fair treatment of employees and reduces the risk of legal issues.
- VII. **Documentation and Record-Keeping:** Approved leave requests and related correspondence must be documented and stored for future reference. Accurate record-keeping enables reporting, auditing, and analysis of leave trends, informing workforce planning and policy enhancements.

By establishing a well-defined leave request structure, IT companies can streamline the leave management process, foster employee satisfaction, and maintain operational continuity even during periods of employee absence.

"Leave" in the context of employment refers to authorized time off from work granted to an employee for various reasons, such as vacation, illness, personal matters, or other specific circumstances. Leave policies vary by company and may be influenced by local labor laws, industry standards, and organizational culture.

1.3 Objective

1.3.1 Asset for an IT company

In an IT company, assets can refer to various tangible and intangible resources that contribute to the organization's operations, productivity, and value creation. Here are some common types of assets in an IT company:

- I. **Hardware Assets:** These include physical equipment such as computers, servers, networking devices (routers, switches, etc.), storage devices (hard drives, SSDs, etc.), printers, scanners, and other peripheral devices used in the company's IT infrastructure.
- II. **Software Assets:** Software assets encompass licensed applications, operating systems, development tools, productivity software, enterprise resource planning (ERP) systems, customer relationship management (CRM) software, and any other software used to support the company's operations and deliver services to clients.
- III. **Data Assets:** Data is a valuable asset for IT companies. This includes databases, datasets, proprietary algorithms, data analytics models, customer information, intellectual property, and any other data generated, collected, or processed by the company as part of its operations.
- IV. **Intellectual Property (IP):** Intellectual property assets include patents, copyrights, trademarks, trade secrets, and other forms of proprietary knowledge or creative work developed by the company. These assets can provide competitive advantages and contribute to the company's innovation and market positioning.
- V. **Infrastructure Assets:** Infrastructure assets encompass physical facilities such as data centers, server rooms, network closets, and other IT infrastructure components required to support the company's technology operations and service delivery.
- VI. **Human Capital:** Employees are also considered assets in an IT company. Skilled professionals, including software developers, engineers, IT specialists, project managers, sales and marketing personnel, and support staff, contribute their expertise, knowledge, and creativity to the company's success.
- VII. **Financial Assets:** Financial assets include cash reserves, investments, accounts receivable, and other financial instruments that contribute to the company's liquidity, solvency, and financial stability.
- VIII. **Contracts and Agreements:** Contracts with clients, vendors, suppliers, and partners represent valuable assets for an IT company. These agreements define the terms of business relationships, service level agreements (SLAs), licensing agreements, and other legal obligations that impact the company's revenue streams and operations.

- IX. **Training and Knowledge Assets:** Training programs, documentation, best practices, and institutional knowledge accumulated within the company represent valuable assets that contribute to employee development, process improvement, and organizational growth.

Managing and optimizing these assets effectively is essential for maximizing the IT company's performance, profitability, and long-term success. Asset management practices involve tracking, evaluating, maintaining, and leveraging these resources strategically to achieve business objectives and create sustainable value.

1.3.2 Perks for an IT company Employ

Perks for employees in an IT company can vary widely depending on the company's culture, size, location, and budget. Here are some common perks and benefits that IT companies often offer to attract and retain top talent:

- I. **Competitive Salary:** Offering competitive salaries is essential for attracting skilled professionals in the highly competitive IT industry. Employees appreciate being fairly compensated for their skills and contributions.
- II. **Health Insurance and Wellness Programs:** Comprehensive health insurance coverage, including medical, dental, and vision plans, helps employees take care of their health and well-being. Wellness programs, such as gym memberships, mental health support, and wellness initiatives, promote employee wellness and work-life balance.
- III. **Flexible Work Schedule:** Flexible work arrangements, such as remote work options, flexible hours, and compressed workweeks, give employees greater control over their schedules and help them achieve a better work-life balance.
- IV. **Paid Time Off (PTO):** Generous PTO policies, including vacation days, sick leave, and holidays, allow employees to take time off to recharge, relax, and spend time with family and friends without worrying about work-related responsibilities.
- V. **Professional Development and Training:** Investing in employee training and development programs, such as workshops, seminars, certifications, and tuition reimbursement, helps employees enhance their skills, stay updated on industry trends, and advance their careers.
- VI. **Career Growth Opportunities:** Providing opportunities for career advancement, mentorship programs, career coaching, and internal promotion pathways motivates employees to grow within the company and fosters loyalty and commitment.
- VII. **Stock Options or Equity Grants:** Offering stock options, equity grants, or profit-sharing programs allows employees to share in the company's success and aligns their interests with the company's long-term growth and performance.

- VIII. **Employee Assistance Programs (EAP):** EAPs provide confidential counseling, mental health support, financial planning services, and resources to help employees manage personal and work-related challenges effectively.
- IX. **Tech Allowance or Discounts:** Providing employees with allowances for purchasing or upgrading personal technology devices, such as laptops, smartphones, or tablets, or offering discounts on tech gadgets and accessories demonstrates the company's commitment to supporting employees' professional needs.
- X. **Company Events and Social Activities:** Organizing company-sponsored events, team-building activities, happy hours, and social gatherings fosters camaraderie, strengthens team bonds, and creates a positive work culture.
- XI. **Onsite Amenities:** Amenities such as onsite cafeterias, coffee bars, recreational facilities, game rooms, and relaxation areas enhance the employee experience and contribute to a more enjoyable work environment.
- XII. **Parental Leave and Family Support:** Offering parental leave policies, childcare assistance, flexible parental leave options, and family-friendly benefits supports employees who are balancing work and family responsibilities.
- XIII. **Employee Recognition Programs:** Recognizing and rewarding employee achievements, milestones, and contributions through formal recognition programs, employee awards, and appreciation events boosts morale, motivation, and job satisfaction.

By offering a combination of these perks and benefits, IT companies can attract, motivate, and retain talented professionals, fostering a positive work culture and driving organizational success.

Chapter 2. Technology Used

While working on this project, we were introduced to many technologies like JS, HTML, CSS, PHP, and MySQL, etc. However, this project is solely done in Core PHP and MySQL, so now we will discuss it.

2.1 CORE PHP

Core PHP is a free, open-source server-side scripting language used to create dynamic web pages. It is the foundation of all PHP frameworks, including Laravel.

2.1.1 About Core PHP

Core PHP refers to the basic, foundational programming language itself, without relying on any external frameworks or libraries. It is the original PHP scripting language, which forms the core functionality of PHP. Here are some key points to understand about Core PHP:

- I. **Basic PHP Language:** Core PHP provides the fundamental syntax, constructs, and features of the PHP scripting language. This includes variables, data types, operators, control structures (such as loops and conditionals), functions, and classes.
- II. **Server-Side Scripting:** PHP is primarily used for server-side scripting, meaning that PHP code is executed on the server to generate dynamic web content. Core PHP allows developers to write server-side scripts to handle tasks such as processing form data, interacting with databases, and generating dynamic web pages.
- III. **Database Integration:** Core PHP includes built-in support for interacting with databases, particularly MySQL, which is a popular choice for web development. Developers can use Core PHP to establish database connections, execute SQL queries, fetch and manipulate data, and handle transactions.
- IV. **Web Development:** Core PHP is commonly used for web development to create dynamic and interactive websites and web applications. Developers can embed PHP code directly within HTML pages or use PHP to generate HTML output dynamically based on user input or other conditions.
- V. **Flexibility and Control:** Core PHP offers developers flexibility and control over their code, as they are not constrained by the conventions or limitations of any specific framework. This allows for more customized solutions tailored to the specific needs of the project.
- VI. **Performance:** Core PHP is known for its performance and efficiency, as it does not introduce the overhead associated with additional layers of abstraction present in frameworks. This can be advantageous for applications that require high performance or have strict resource constraints.

- VII. **Learning Curve:** Learning Core PHP is often considered a fundamental step for aspiring web developers, as it provides a solid understanding of the underlying principles of server-side scripting and web development. It serves as a foundation upon which developers can build their skills and explore more advanced PHP frameworks and technologies.

Overall, Core PHP serves as the backbone of PHP development, offering a powerful and versatile platform for building dynamic web applications and websites. While it may require more manual coding compared to using frameworks, it provides developers with greater flexibility and control over their projects.

2.1.2 History of CORE PHP

Core PHP, also known as "vanilla PHP" or simply "PHP," has a rich history intertwined with the evolution of the web and server-side scripting languages. Here's a brief overview of the history of Core PHP:

- I. **1994-1995:** PHP (Hypertext Preprocessor) was created by Rasmus Lerdorf for managing his website's traffic tracking.
- II. **1995-1997:** PHP/FI (Personal Home Page/Forms Interpreter) was released, adding features like form handling and database integration.
- III. **1997-2000:** PHP 3 introduced OOP and built-in database support, solidifying PHP as a powerful server-side scripting language.
- IV. **2000-2014:** PHP 4 and PHP 5 brought performance improvements, better OOP support, and new features like exception handling and namespaces.
- V. **2015-present:** PHP 7 introduced significant performance enhancements, scalar and return type declarations, and ongoing updates continue to strengthen its position as a leading server-side scripting language for web development.

2.1.3 Versions of CORE PHP

here's a concise overview of the major versions of PHP:

- I. **PHP 1 (1995):** The initial version of PHP created by Rasmus Lerdorf. It was a collection of CGI binaries for basic web tasks.
- II. **PHP/FI (1995-1997):** PHP/FI (Personal Home Page/Forms Interpreter) was an early version that added form handling and database integration.
- III. **PHP 3 (1997):** PHP 3 introduced significant improvements, including support for object-oriented programming (OOP) and built-in database support.
- IV. **PHP 4 (2000):** PHP 4 brought better performance, improved OOP support, and new features like sessions and output buffering.

- V. **PHP 5 (2004):** PHP 5 introduced the Zend Engine 2, which significantly improved performance and added features like exception handling, better OOP support, and improved memory management.
- VI. **PHP 7 (2015):** PHP 7 marked a major leap in performance and introduced features such as scalar type declarations, return type declarations, anonymous classes, and the Zend Engine 3.
- VII. **PHP 8 (2020):** PHP 8 introduced major language enhancements, including named arguments, union types, JIT (Just-In-Time) compilation, and improvements in error handling and type system.

Each major version brought significant improvements, new features, and enhancements to the language, making PHP more powerful, efficient, and versatile for web development.

Our major work in the project is done in version PHP 7 (2015). And there is the subversion in PHP 7 so Our version was PHP 7.3

2.2 MySQL

MySQL is a relational database management system (RDBMS) developed by Oracle. It is an open-source, free, and cross-platform database that is based on structured query language (SQL). MySQL is used for many applications, including small-scale projects, large-scale websites, and enterprise-level solutions.

MySQL is fast, reliable, scalable, and easy to use. It is compliant with the ANSI SQL standard and was first released in 1995.

Relational databases are a type of database that use a structure that allows users to identify and access data in relation to other data in the database. This format is often organized as tables

2.2.1 About MySQL

MySQL is a widely-used open-source relational database management system (RDBMS) that is known for its reliability, scalability, and performance. Here are some key points about MySQL:

1. **Open Source:** MySQL is an open-source relational database management system (RDBMS) known for its reliability and scalability.
2. **History:** Developed in 1995, MySQL has remained open-source despite ownership changes, maintaining its popularity and active development.
3. **Performance:** MySQL offers high performance and efficiency, making it suitable for handling large volumes of data and high concurrency.

4. **Compatibility:** It is compatible with various operating systems and programming languages, making it widely adopted across different platforms.
5. **Community and Support:** MySQL has a large community providing support, documentation, and commercial offerings from Oracle Corporation.
6. **Ecosystem:** MySQL's ecosystem includes tools, utilities, and extensions for database administration, replication, clustering, and more.

In summary, MySQL is a reliable, scalable, and widely adopted RDBMS with strong community support and a rich ecosystem of tools and extensions.

2.2.2 Versions of MySQL

1. **MySQL 1.0 (1995):** Initial release by MySQL AB, featuring basic relational database functionality.
2. **MySQL 3.0 (1998):** Introduced key features like BLOB and TEXT data types, UNION, and indexing enhancements.
3. **MySQL 4.0 (2003):** Major improvements including stored procedures, triggers, and views.
4. **MySQL 5.0 (2005):** Introduced important features like stored routines, cursors, and triggers, along with improved scalability and performance.
5. **MySQL 5.1 (2008):** Added features such as partitioning, event scheduler, and plugin APIs.
6. **MySQL 5.5 (2010):** Focused on performance and scalability improvements, including InnoDB as the default storage engine.
7. **MySQL 5.6 (2013):** Enhanced features for scalability, performance, and replication, including NoSQL support with memcached integration.
8. **MySQL 5.7 (2015):** Introduced JSON support, improved InnoDB performance, and enhanced security features.
9. **MySQL 8.0 (2018):** Major release with significant improvements, including atomic data definition statements, window functions, and improved security features.

MySQL continues to evolve with regular updates and improvements, providing users with enhanced functionality, performance, and security features.

CHAPTER 3. MODULE

3.1 Master

Master is a module under operation which contain four main operation of an IT company and those are Candidate, Employees, Supplier, Customers.

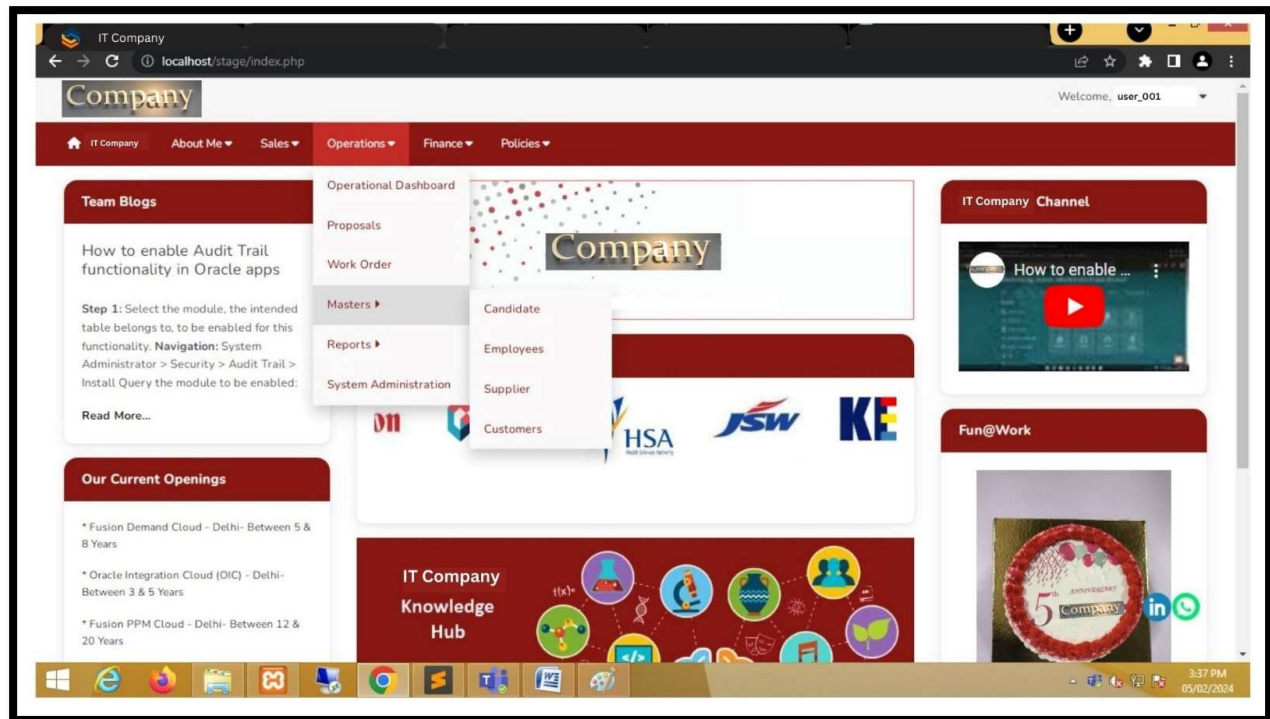


Figure 2 Dashboard for master module

3.1.1 Candidate

In an IT company, a "candidate" typically refers to an individual who is being considered for a job opportunity within the organization. Here's an overview of the candidate process in an IT company:

- I. **Recruitment and Sourcing:** IT companies actively seek candidates through job postings, social media, and networking events, aiming to attract skilled professionals who align with their needs.
- II. **Application and Screening:** Candidates submit resumes and cover letters, which are reviewed to assess qualifications and suitability for the role based on experience, skills, and education.

- III. **Interviews:** Qualified candidates participate in interviews, including phone screenings and in-person meetings, to evaluate their fit for the position and assess their technical and interpersonal skills.
- IV. **Technical Evaluation:** In IT, candidates undergo technical assessments like coding challenges or problem-solving exercises to gauge their proficiency and suitability for specialized roles.
- V. **Reference Checks and Background Verification:** Employers verify candidate credentials, employment history, and character through reference checks and background verification processes.
- VI. **Job Offer:** Successful candidates receive formal job offers outlining terms such as compensation, benefits, and start date, signaling the company's intent to hire them.
- VII. **Onboarding:** New hires complete paperwork, receive access to company systems, and undergo orientation sessions to familiarize themselves with the company culture, policies, and procedures.
- VIII. **Retention and Career Development:** Companies invest in ongoing training, mentorship, and career development opportunities to support employees' long-term growth, engagement, and success within the organization.

Overall, the candidate process in an IT company aims to identify and attract top talent, assess their suitability for the role, and ultimately onboard and retain employees who can contribute to the company's success and growth.

3.1.2 Employee

An employee in an IT (Information Technology) company is an individual who is employed by the organization to contribute to various aspects of technology-related products, services, and solutions. These individuals work within the company to develop, maintain, support, and manage IT systems, applications, networks, and infrastructure. Employees in an IT company may hold a wide range of roles and responsibilities, including software development, system administration, network engineering, cybersecurity, project management, technical support, data analysis, and more. They collaborate with colleagues, clients, and stakeholders to innovate, solve problems, and deliver value through technology.

To become an employee in an IT company:

1. **Education and Training:** Get relevant education or training in IT fields like computer science or cybersecurity.
2. **Skills Development:** Acquire practical skills in programming, networking, or data analysis.
3. **Experience:** Gain experience through internships or entry-level roles.

4. **Portfolio:** Showcase your work through a portfolio of projects.
5. **Networking:** Connect with professionals in the industry for opportunities.
6. **Job Search:** Apply for IT jobs online or through referrals.
7. **Interview Preparation:** Prepare for interviews by researching and practicing.
8. **Continuous Learning:** Stay updated with industry trends and advancements.

By following these steps, you can pursue a career in an IT company.

3.1.3 Supplier

In an IT company, suppliers are external entities that provide goods and services necessary for operations. This includes:

1. **Hardware and Software Suppliers:** Providing IT hardware components, licensed software, and cloud computing services.
2. **Third-Party Vendors and Service Providers:** Offering specialized IT services such as consulting, maintenance, support, and managed services.
3. **Component and Telecommunications Providers:** Supplying electronic parts and communication services.
4. **Manpower Suppliers:** Sometimes, IT companies also engage with manpower suppliers or staffing agencies to fulfill temporary or contract staffing needs for specific projects or roles.

These suppliers play a crucial role in supporting IT companies' operations, ensuring access to essential resources, expertise, and infrastructure needed to deliver products and services effectively. Effective supplier management is vital for maintaining quality, reliability, and efficiency in the IT company's supply chain.

3.1.4 Customer

In an IT company, a customer is anyone who purchases or uses the company's products, services, or solutions. This includes:

1. **End Users:** Individuals or employees who directly use the company's software, applications, or IT infrastructure.
2. **Enterprises and Businesses:** Organizations that procure IT products and services to support their operations.

3. **Government Agencies:** Local, state, or federal entities that require IT solutions for public administration, law enforcement, healthcare, and more.
4. **Nonprofit Organizations:** NGOs and nonprofits that utilize IT for fundraising, program management, and advocacy efforts.
5. **Educational Institutions:** Schools, colleges, and universities that need technology for teaching, learning, and administrative tasks.
6. **Healthcare Providers:** Hospitals, clinics, and medical practices that rely on IT for patient management and medical records.
7. **Retail and E-commerce Businesses:** Retailers and online stores that use IT for sales platforms, inventory management, and customer service.
8. **Financial Institutions:** Banks, insurance companies, and fintech firms that require IT for banking systems and financial transactions.
9. **Manufacturing and Industrial Companies:** Manufacturers that use IT for process automation, supply chain management, and predictive maintenance.

Understanding and meeting the diverse needs of these customers is crucial for the IT company's success and growth.

3.2 Opportunity

In an IT company, an "opportunity" can mean:

- I. **Business Growth:** Expanding market presence, entering new markets, or diversifying offerings.
- II. **Innovation:** Developing new technologies or solutions to meet evolving customer needs.
- III. **Career Development:** Advancing skills, taking on leadership roles, or participating in cross-functional projects.
- IV. **Collaboration:** Partnering with other companies or institutions for joint projects or initiatives.
- V. **Market Trends:** Capitalizing on emerging trends or shifts in consumer behavior.
- VI. **Strategic Initiatives:** Executing plans aligned with long-term company goals, such as mergers or alliances.
- VII. **Operational Efficiency:** Improving internal processes or adopting new technologies for better performance.
- VIII. **Employee Opportunities on Projects:** Employees may get the chance to lead projects, contribute innovative ideas, or develop new skills, enhancing their career growth and job satisfaction while benefiting the company's projects and objectives.

3.3 Proposal

In an IT company, a "proposal" is a concise document outlining a potential project, solution, or service offering tailored to meet a customer's specific needs. It typically includes:

- I. **Project Scope:** Clearly defined objectives, deliverables, and timelines for the proposed project or engagement.
- II. **Solution Overview:** Description of the proposed solution, including technologies, methodologies, and approaches to address the customer's requirements.
- III. **Benefits and Value Proposition:** Explanation of the benefits and value that the proposed solution will deliver to the customer, such as cost savings, increased efficiency, or improved performance.
- IV. **Cost Estimation:** Breakdown of costs associated with the project, including fees for services, licensing, hardware, and any additional expenses.
- V. **Implementation Plan:** High-level plan outlining the steps, milestones, and resources required to implement the proposed solution successfully.
- VI. **Risk Management:** Identification of potential risks or challenges associated with the project and strategies to mitigate them effectively.
- VII. **Customer Engagement Opportunities:** In addition to proposing projects to customers, employees may also have the opportunity to contribute to proposal development by providing insights, expertise, or innovative ideas that enhance the proposal's quality and competitiveness. This involvement not only strengthens employee engagement but also improves the company's chances of winning projects and satisfying customer needs effectively.

In IT company some time the customer proposes to select the employee base on his/her expertise and experience in this process there are several steps that are as follow:

- I. Customer gives requirement notice or letter to company with how many and with which expertise he wants the employee for its project.
- II. After that the IT company arrange an interview round with its handpicked employee.
- III. After selection customer create a work order for the selected employee and it company. And decide on pay for employee and commission or incentive for the company.

3.4 Work Order and other module

In an IT company, a work order is a formal document or request that outlines the specific tasks, projects, or services that need to be completed by employees or contractors. It serves as a directive or instruction for carrying out a particular job or assignment within the company's IT infrastructure or projects.

Work orders typically include details such as:

1. **Description of the work to be performed:** This includes specifics about the task or project, including any relevant requirements, objectives, or goals.
2. **Timeline or deadline:** Work orders often specify when the work needs to be completed by, providing a clear timeframe for delivery.
3. **Resources required:** This may include equipment, software, tools, or other resources necessary to complete the work.
4. **Budget or cost estimates:** Depending on the nature of the work, a work order may include information about the budget allocated for the project or task.
5. **Contact information:** Work orders usually include contact details for the person or team responsible for completing the work, as well as any other relevant stakeholders.
6. **Approval signatures:** In some cases, work orders may require signatures from managers or supervisors to authorize the work to be carried out.

Work orders play a crucial role in ensuring that tasks and projects are completed efficiently and effectively within an IT company, helping to streamline communication, manage resources, and track progress. They provide a structured framework for organizing and prioritizing work, helping teams stay focused and aligned with the company's goals and objectives.

3.4.1 Other Module

Other Module which are include in the project are not introduced to us right now like finance and HR and other important module.

3.5 About Me: (Employee Dashboard)

Welcome to your personal dashboard, where you can manage various aspects of your work life conveniently in one place. This dashboard is designed to provide you with easy access to essential information and tools related to your assets, reimbursements, timesheets, and leaves.

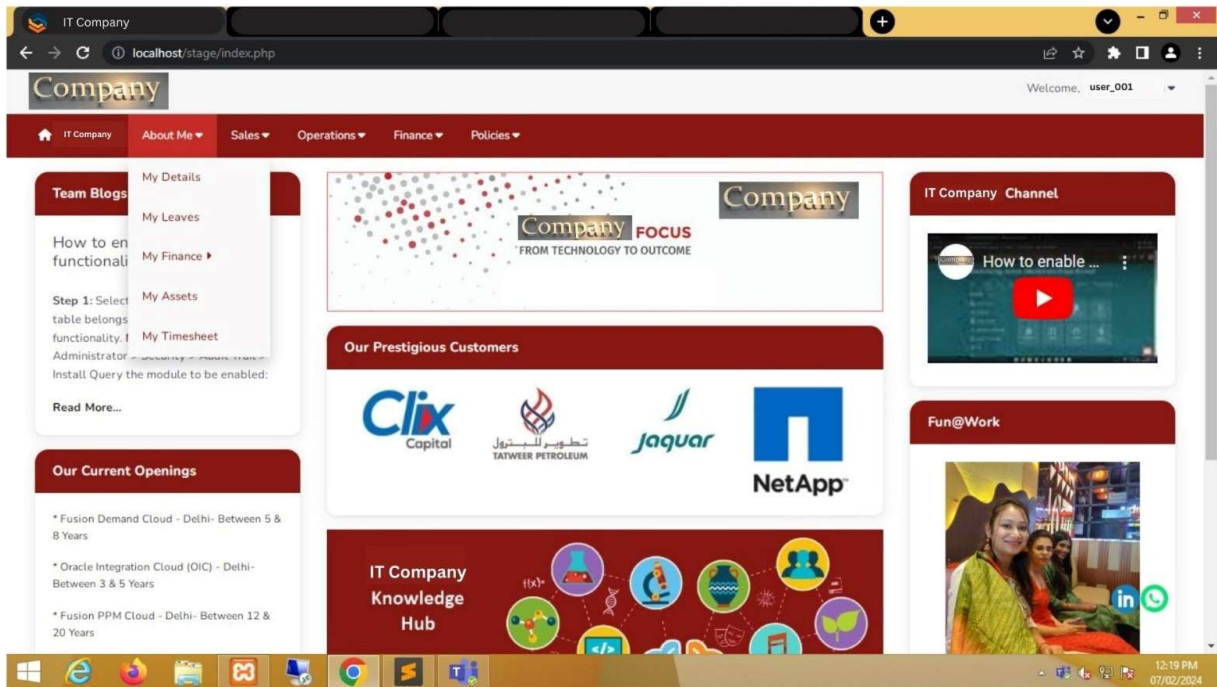


Figure 3 About me Module

3.5.1 Asset Module:

In the Assets module, you can view and manage the IT assets assigned to you by the company. This includes hardware such as laptops, desktops, mobile devices, and any other equipment necessary for your work. You can track the status of your assets, report issues or requests for maintenance, and even request new equipment if needed. This module ensures that you have the necessary tools to perform your job efficiently.

Manage your IT assets effortlessly. View, report, request, track, and view asset history conveniently.

- I. **View Assigned Assets:** See all assigned assets at a glance. Access details and status quickly for efficient management.
- II. **2. Report Asset Issues:** Report hardware or software issues instantly. Initiate support tickets for prompt resolution.
- III. **3. Request New Assets:** Need additional equipment? Request new assets easily. Streamlined process for faster approval.
- IV. **Track Asset Status:** Stay updated on asset status in real-time. Monitor repairs, replacements, and changes seamlessly.
- V. **View Asset History:** Access comprehensive asset history anytime. Track lifecycle and make informed decisions.

3.5.2 Reimbursements

Managing reimbursements for business expenses is made simple with the Reimbursement module. Here, you can submit reimbursement requests for expenses incurred during official duties, such as travel expenses, accommodation, meals, or any other approved expenditures. You can track the status of your reimbursement requests, view past requests and payments, and ensure timely processing of your claims.

Streamline your expense management. Submit, track, and manage reimbursements with ease.

- I. **Submit Reimbursement Requests:** Submit expense claims effortlessly. Provide details and upload receipts for quick processing.
- II. **Track Reimbursement Status:** Monitor the status of your reimbursement requests. Stay informed on approval and payment progress.
- III. **View Past Reimbursements:** Access a history of past reimbursements. Review payments and track expenses conveniently.
- IV. **Manage Expense Categories:** Categorize expenses efficiently. Organize and track different types of reimbursable expenditures.
- V. **Receive Notifications:** Stay updated on reimbursement status. Receive notifications for approvals and payments.

3.5.3 Time Sheet Module

Tracking your work hours and projects is essential for both you and the company. In the Timesheet module, you can record your daily work hours, assign them to specific projects or tasks, and submit them for approval. This module streamlines the timesheet management process, ensuring accurate reporting of billable hours, project progress, and resource allocation. You can also view your timesheet history and monitor your productivity over time.

Effortlessly track your work hours. Record, submit, and monitor timesheets for accurate project management.

- I. **Record Work Hours:** Log your daily work hours easily. Assign hours to specific projects or tasks for precise tracking.
- II. **Submit Timesheets for Approval:** Submit timesheets for approval promptly. Ensure accurate billing and project progress reporting.
- III. **Monitor Timesheet History:** Access a comprehensive history of submitted timesheets. Review past entries for reference and analysis.
- IV. **Receive Timesheet Reminders:** Get reminders to submit timesheets on time. Stay organized and compliant with company policies.

3.5.4 Leave Module

Balancing work and personal time are crucial for employee well-being. In the Leaves module, you can manage your vacation days, sick leaves, and other types of leave entitlements. You can request leaves, check the status of your leave requests, and view your leave balances. This module helps you plan your time off effectively while ensuring compliance with company policies and maintaining transparency in leave management.

In an IT company, the leave request structure is a vital component of ensuring smooth operations and employee satisfaction. It outlines the process by which employees can request time off from work for various reasons, such as vacation, personal matters, or medical issues. A well-defined leave request structure establishes clear guidelines, facilitates efficient communication, and helps maintain productivity levels within the organization.

The leave request structure typically includes the following elements:

- I. **Leave Types:** It defines different categories of leave, such as annual leave, sick leave, maternity/paternity leave, bereavement leave, and others. Each type of leave may have specific eligibility criteria and entitlements.
- II. **Leave Policies:** It outlines the company's policies regarding leave entitlements, accrual rates, carry-over rules, and any other relevant regulations. This ensures that employees understand their rights and responsibilities when it comes to taking time off.
- III. **Leave Request Process:** It delineates the procedure for employees to request leave, including the required documentation, submission deadlines, and approval channels. This process may involve submitting leave requests through an online portal, email, or designated forms.
- IV. **Approval Workflow:** It defines the hierarchy of approval for leave requests, indicating who is responsible for reviewing and approving requests at each level of the organization. This helps ensure consistency and accountability in the approval process.
- V. **Leave Balances and Tracking:** It specifies how leave balances are maintained and tracked, allowing employees to monitor their accrued leave and usage over time. This transparency helps employees plan their time off effectively and minimizes conflicts.
- VI. **Communication Protocols:** It establishes communication protocols for notifying managers and team members about planned absences, ensuring that workloads are managed efficiently and deadlines are met during the employee's absence.
- VII. **Return-to-Work Process:** It outlines the procedure for employees to follow when returning to work after taking leave, including any required documentation or meetings to facilitate a smooth transition back into the workflow.

Overall, a well-structured leave request system promotes transparency, fairness, and employee satisfaction by providing clear guidelines for requesting and managing time off. By implementing an effective leave request structure, IT companies can better balance the needs of their employees with the demands of their business operations.

The screenshot displays a web application interface for managing leave requests. At the top, there's a navigation bar with links like 'Home', 'About Me', 'Sales', 'Operations', 'Finance', and 'Policies'. The main content area is titled 'Leave Balance' and shows three categories of leave: 'Casual Leave' (3.00), 'Earned Leave' (3.00), and 'Sick Leave' (3.00). Below this, there's a 'View Leaves' section. It includes a search bar with 'Employee Number*' (2021-96) and 'Employee Name*' (user_001). A table lists leave entries with columns: Leave Description, Days, Leave Day Type, Reason, Start On, End On, and Status. The table shows three entries, all with a status of 'PENDING'.

Leave Description	Days	Leave Day Type	Reason	Start On	End On	Status
Casual Leave	0.5	Half Day	FE - Family emergency	2024-02-16	2024-02-16	PENDING
Casual Leave	0	Full Day	SL - Sick/Not feeling well	2024-02-03	2024-02-04	PENDING
Casual Leave	1	Full Day	MR - Marriage	2024-02-24	2024-02-25	PENDING

Figure 4 Landing page for a leave module page

In above FIG as we can see it is a landing page of leave module in about me module. In fig we can see about employee leave status and how many leave he had left after saving it up. And the leave request status which has to be approved by the superior management or get rejected.

The screenshot displays a web application interface for adding a new leave request. It features a 'Leave Balance' section at the top with three categories: 'Casual Leave' (3.00), 'Earned Leave' (3.00), and 'Sick Leave' (3.00). Below this is the 'Add Leave' section, which contains a form with the following fields: 'Employee Number*' (2021-96), 'Employee Name*' (user_001), 'Leave Type*' (a dropdown menu), 'Day Type*' (a dropdown menu), 'Reason*' (a dropdown menu), 'Comment' (a text area), 'Start Date*' (05/02/2024), and 'End Date*' (dd/mm/yyyy). At the bottom of the form are two buttons: 'Clear' and 'Submit'.

Figure 5 Leave request page

Above page is where an employee can request for leave according to its leave balance. Leave duration depend upon the leave balance of the employee.

Employee can request full day/ half day etc. base on his choice but your leave request is get accepted or not depend upon superiors' choice.

3.5.5 Finance Module:

The finance module within the leave request structure focuses on tracking the financial impact of employee absences due to various types of leave. It provides insights into the costs associated with employee leave, including paid time off, unpaid leave, overtime expenses for covering absences, and any other related expenditures. By integrating finance into the leave management process, organizations can budget effectively, forecast labor costs, and maintain financial stability while ensuring adequate staffing levels.

Example:

Suppose an IT company implements a finance module within its leave request structure. Here's how it might work:

- I. **Budget Allocation:** At the beginning of each fiscal year, the finance department allocates a budget for employee leave based on historical data, projected staffing levels, and anticipated leave trends.
- II. **Cost Estimation:** The finance module calculates the cost of employee leave based on factors such as hourly wages, salaries, benefits, and any additional expenses incurred during the absence, such as hiring temporary replacements or paying overtime to cover shifts.
- III. **Real-time Tracking:** The finance module updates instantly as leave requests are submitted, providing real-time insights into budgetary impacts and enabling adjustments to staffing or budgets to prevent overspending.
- IV. **Reporting and Analysis:** Detailed reports generated by the finance module offer valuable insights into leave-related expenses, facilitating data-driven decisions on resource allocation, workforce planning, and budget management.
- V. **Integration with Payroll:** Seamlessly integrated with the payroll system, the finance module ensures accurate compensation for leave-taken employees, automatically adjusting payroll calculations to comply with labor laws and company policies.

Forecasting and Planning: Leveraging historical leave data and financial analysis, the finance module assists in forecasting future leave patterns and associated costs, empowering proactive planning to optimize resource allocation and mitigate financial risks.

By incorporating a finance module into the leave request structure, the IT company can effectively manage the financial implications of employee absences while promoting transparency and accountability in leave management practices.

CHAPTER 4

Conclusion

In conclusion, the integration of a finance module into the leave request structure of an IT company represents a strategic approach to leave management. By combining financial considerations with operational efficiency and employee satisfaction, organizations can achieve a harmonious balance between workforce planning and budgetary constraints.

The comprehensive leave request structure outlined earlier encompasses essential elements such as leave types, policies, approval workflows, communication protocols, and return-to-work processes. Adding the finance module further enhances this structure by providing insights into the financial impact of employee absences, facilitating budget allocation, cost estimation, real-time tracking, reporting, and integration with payroll systems.

Ultimately, the goal of implementing such a robust leave request structure, including the finance module, is to optimize resource allocation, maintain financial stability, and ensure uninterrupted operations while supporting employee well-being. By leveraging data-driven insights and efficient processes, IT companies can navigate leave management challenges effectively, driving organizational success in the long term.

Additionally, the integration of a finance module into the leave request structure fosters transparency and accountability within the organization. By tracking leave-related expenses and comparing them against budgeted amounts, stakeholders can make informed decisions regarding resource allocation and workforce planning. This transparency ensures that financial resources are utilized efficiently and responsibly, aligning with the company's strategic objectives and maximizing return on investment.

Moreover, the finance module serves as a valuable tool for strategic planning and forecasting. By analyzing historical leave data and trends, organizations can anticipate future leave patterns, identify potential bottlenecks, and implement proactive measures to mitigate risks. This forward-thinking approach enables IT companies to adapt to changing business conditions, optimize staffing levels, and maintain competitiveness in the industry. Ultimately, the integration of a finance module into the leave request structure empowers organizations to achieve operational excellence while prioritizing employee well-being and financial sustainability.

CHAPERT 5 Future Work.

As the landscape of workforce management continues to evolve, there are numerous opportunities to explore and develop additional modules within the leave request structure that have yet to be introduced. These potential modules hold the promise of enhancing organizational efficiency, promoting employee engagement, and addressing emerging needs in the workplace.

One area ripe for exploration is the integration of predictive analytics into leave management systems. By leveraging machine learning algorithms and historical data, organizations can forecast leave patterns with greater accuracy, allowing for more proactive planning and resource allocation. Predictive analytics can help identify trends, such as seasonal fluctuations in leave usage or patterns of absenteeism, enabling HR departments to implement targeted interventions and strategies to minimize disruptions.

Furthermore, the incorporation of wellness modules into leave management systems could revolutionize how organizations approach employee well-being. These modules could include features such as stress tracking, mental health resources, and wellness challenges to promote a culture of holistic health and resilience. By integrating wellness initiatives with leave management, companies can foster a supportive work environment that prioritizes the physical, mental, and emotional well-being of employees.

Additionally, the rise of remote and flexible work arrangements presents an opportunity to develop modules tailored to the needs of distributed teams. Features such as virtual collaboration tools, time zone management utilities, and remote work policy trackers could streamline communication and coordination across geographically dispersed teams. By addressing the unique challenges of remote work within the leave request structure, organizations can facilitate seamless collaboration and ensure that employees feel supported regardless of their location.

Lastly, the emergence of blockchain technology holds promise for enhancing security and transparency within leave management systems. Blockchain-based modules could provide tamper-proof records of leave transactions, ensuring the integrity of data and enhancing trust between employees and employers. Moreover, blockchain could facilitate secure identity verification and authentication, simplifying the leave request process while safeguarding sensitive information.

In conclusion, the future of leave management holds exciting possibilities for innovation and advancement. By exploring new modules and leveraging emerging technologies, organizations can create more robust, efficient, and employee-centric leave request structures that meet the evolving needs of the modern workforce.

REFERENCES

- <https://youtu.be/1SnPKhCdlsU?si=J0AiqLy6kilB89Yo>
- https://youtube.com/playlist?list=PLu0W_9lII9aikXkRE0WxDt1vozo3hnmtR&si=b3Qbt2PKE6H1KGSH
- <https://www.youtube.com/watch?v=MVEAYafrgKM&list=PL0b6OzIxLPbwoi6Urr4LZTz2AMMCtzqDt&pp=iAQB>
- <https://www.php.net/>
- <https://www.w3schools.com/php/>
- <https://www.tutorialspoint.com/php/index.htm>
- <https://www.geeksforgeeks.org/php-tutorial/>
- <https://javatpoint.com/php-tutorial>
- <https://www.w3schools.com/MySQL/default.asp>
- https://www.w3schools.com/mysql/mysql_intro.asp
- <https://www.oracle.com/mysql/what-is-mysql/>
- <https://www.hostinger.com/tutorials/what-is-mysql>
- <https://www.techtarget.com/searchoracle/definition/MySQL>
- https://www.youtube.com/watch?v=nnBMsGrwuUE&list=PLjVLYmrlmjGeyCPgdHL2vWmEGKxcpsC0E&ab_channel=WsCubeTech
- Head First PHP & MySQL by Michael Morrison
- The Joy of PHP: A Beginner's Guide to Programming Interactive Web Applications with PHP and MySQL by Alan Forbes
- PHP and MySQL Web Development, Second Edition Luke Welling