1. COMPANY PROFILE

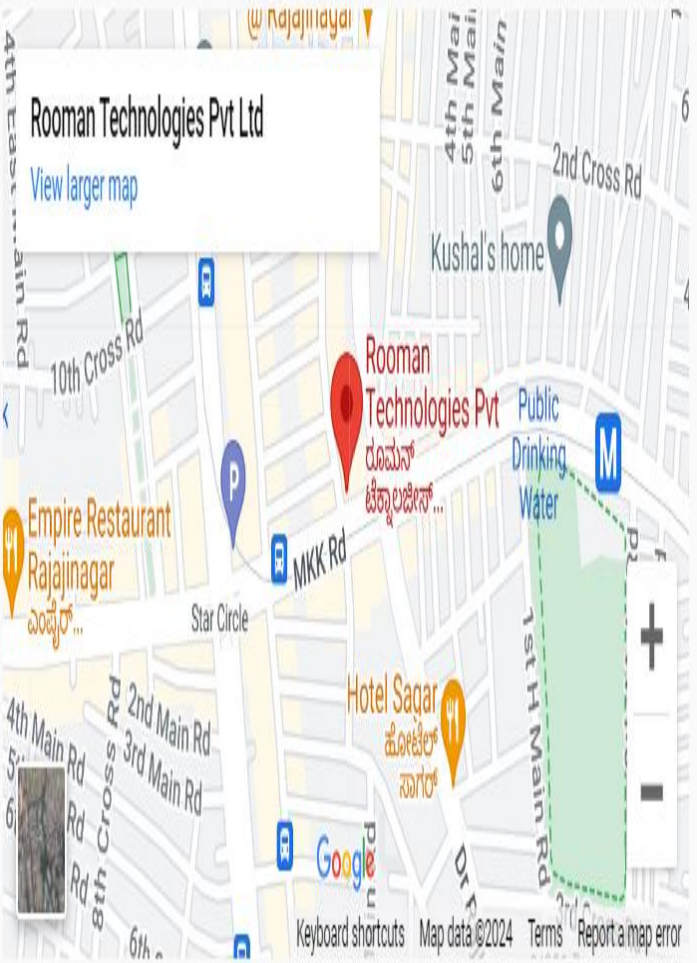
Head Office

#30, 12th Main, 1st Stage Rajajinagar,

Bangalore - 560010

Email : online@rooman.net

Contact : 08040445566



1.1 ABOUT COMPANY

In 1999, a group of technology enthusiasts founded Rooman Technologies to create a training centre of excellence at Bangalore, India.

We started with hiring the best trainers of the day and instilled a vision for the team – to provide training that provides employability, instills confidence and gives a certification that can be valued for years. Our founding team and board members relentlessly scoured the technology spurts happening across the world, and in India. They came up with ideas and innovative concepts to take the training journey further into the coming decades.

We worked with the government to provide upskilling and reskilling to employees and staff. Today, Rooman boasts of an enviable list of government supported training and vocational courses for graduates and students. We have centres pan India to train and generate employment for technicians, operators, and support assistants.

Teaching and Technology is at the heart of each Rooman-ite. We adopt the best train-the-trainer methods to keep our trainers motivated and updated with latest trends. We evolved and reinvented our classroom infrastructure over the years, and today we have the best in-class environment for students to learn and collaborate. Study rooms, discussion lounge areas, knowledge banks, labs – hardware, networking and software. we have them all integrated in our centres across the country.

Rooman has meticulously built a wide array of training services and products to meet the current needs of the industry in networking, software, and hardware. We provide certification courses for Cisco, Microsoft,

Redhat and many more technologies. We develop products in the IOT and ERP domain apart from providing services like cyber security, data security, data center support.

Our Vision:

Integrate Global Innovation, Technology and Skill To Empower People, Society & Businesses

.

Our Mission

Impart quality training for empowerment of youth to make India skill capital of the world. Integrate Global Technologies to introduce innovative Products and Solutions. Increase global presence through Associations, Collaborations and Partnerships. To setup Global Education Campus housing top universities of the world.

REGISTERED DETAILS - ROOMAN TECHNOLOGIES PRIVATE LIMITED

CIN	INCORPORATION DATE / AGE	LAST REPORTED AGM DATE
U72900KA1999PTC025311	09 June, 1999 / 25 yrs	30 September, 2023
AUTHORIZED CAPITAL	**PAIDUP CAPITAL**	**INDUSTRY***
INR 15.0 Lacs	INR 14.83 Lacs	Computer Related Services
TYPE	**CATEGORY**	**SUBCATEGORY**
Unlisted Private Company	Company limited by Shares	Non-govt company

EMAIL ADDRESS
Login for email address. This is to prevent spam.
WEBSITE
Website not known. Click here to let us know.

REGISTERED ADDRESS
NO.129, 1ST MAIN, IST BLOCK,RAJAJINAGAR, BANGALORE
KARNATAKA
KARNATAKA - 560010
Karnataka - India

DIRECTORS - ROOMAN TECHNOLOGIES PRIVATE LIMITED

The company has 3 directors and no reported key management personnel.

The longest serving directors currently on board are Manish Kumar and Nandagopal Siddegowda who were appointed on 09 June, 1999. They have been on the board for more than 24 years. The most recently appointed director is Venkataswamy Jayanth, who was appointed on 10 August, 2022.

Manish Kumar has the largest number of other directorships with a seat at a total of 9 companies. In total, the company is connected to 8 other companies through its directors.

09 June, 1999
MANISH KUMAR
Director

09 June, 1999
NANDAGOPAL SIDDEGOWDA
Director

10 August, 2022
VENKATASWAMY JAYANTH
Director

1.2RESEARCH ACTIVITIES

Research Activities at Rooman Technologies focus on advancing technology education and digital solutions through systematic studies and innovation. The company conducts applied research in areas like AI-driven learning platforms, cloud computing training effectiveness, and adaptive curriculum design to bridge industry skill gaps. By analyzing student performance data, surveying industry needs, and piloting new teaching methodologies, Rooman evaluates the impact of its training programs while developing cutting-edge educational tools. Recent projects include developing chatbot assistants for student support, optimizing certification courses based on job market trends, and researching gamification techniques to enhance technical skill acquisition. These research initiatives not only improve learning outcomes but also strengthen Rooman's position as a leader in IT education by aligning its offerings with evolving technological demands

and employer requirements. Through collaborations with tech companies and continuous pedagogical research, Rooman Technologies ensures its training solutions remain relevant, effective, and responsive to the dynamic IT landscape.

1.3 INTODUCTION

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Redhat and many more technologies. We develop products in the IOT and ERP domain apart from providing services like cyber security, data security, data center support.

2.OBJECTIVIES

During my internship at Rooman Technologies, I aimed to achieve the following key objectives:

1. Gain Hands-on Technical Expertise
    - Develop proficiency in industry-relevant technologies Cloud Computing, through practical projects.
2. Apply Theoretical Knowledge
    - Bridge the gap between academic concepts and real-world implementation by working on live projects or case studies.
3. Enhance Problem-Solving Skills
    - Tackle technical challenges (e.g., debugging code, optimizing algorithms) to improve analytical and critical-thinking abilities.
4. Understand Industry Practices
    - Learn corporate workflows, tools (e.g., Git, Docker), and methodologies (Agile/DevOps) used in professional environments.
5. Contribute to Research/Innovation
    - Assist in research activities (e.g., data analysis, prototype development) to support the company's educational or technological goals.
6. Improve Soft Skills
    - Strengthen communication, teamwork, and time management through collaborative projects and presentations.
7. Build Professional Networks
    - Interact with mentors, industry experts, and peers to gain insights into career opportunities and trends.
8. Evaluate Career Fit

Assess my aptitude and interest in the domain software development, for future career decisions.

CHAPTER:3 TASK PERFORMED

Technology Used for Employee Login and Student

OVERVIEW:

Employee Login and Benefits:

- Rooman Technology uses Keka technology for Employee login method

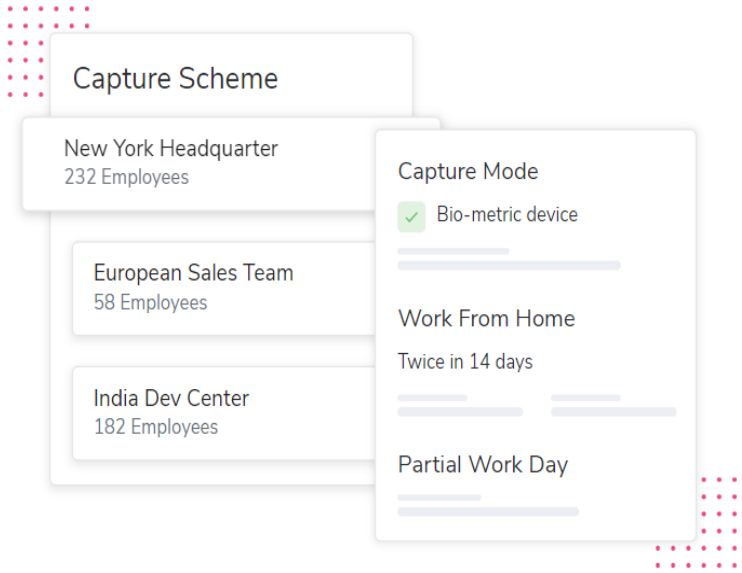
- About Keka: The only cloud attendance software you will ever need-

Keka is the only attendance management system in India that integrates every aspect of time tracking right from capturing time anywhere, scheduling shifts, and tracking over-time which is fully integrated with payroll.

Keka Login

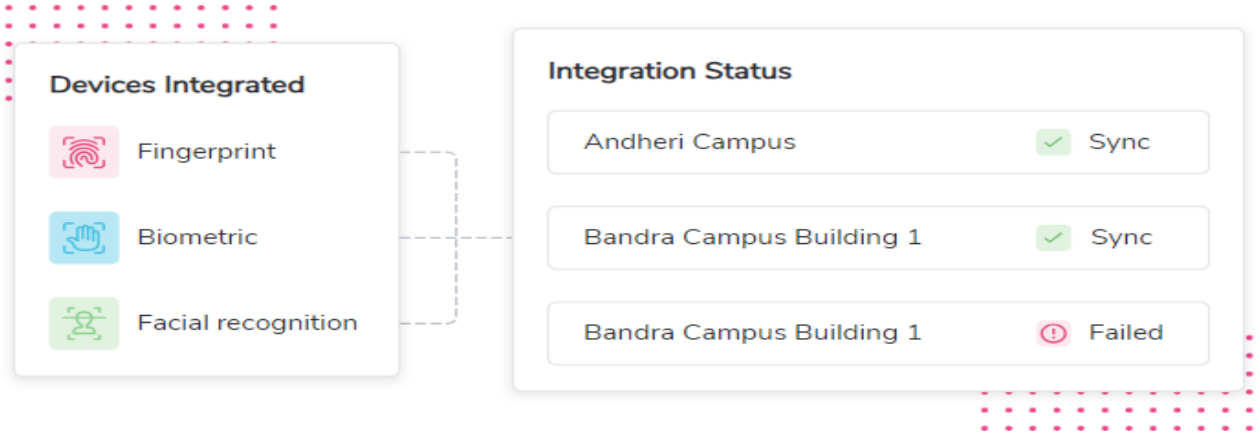
Flexible policies for remote working employees-

Configure your leave policies with a rich set of rules to suit your work culture and business goals across the globe. Keka HR offers the most configurable and flexible leave system to manage any kind of leave - paid, unpaid, sick, statutory, or any leave type.



Real time integration with 200 biometric devices-

Keka's employee attendance management system is the only cloud platform in India that does real-time integration with all attendance device types - Biometric, Smart Card, RFID, Facial recognition devices, Near Field Communication NFC devices. Our universal driver framework supports 200+ hardware devices from vendors across the world.

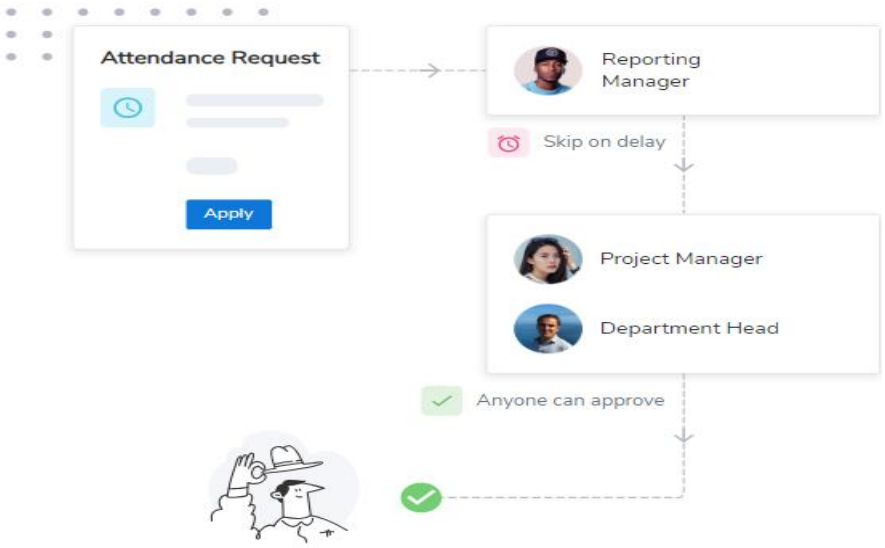


Track time from WIFI or using IoT devices-

Keka's flawless integration enables you to track time using IoT devices such as biometric scanners, facial recognition software, etc. ensuring a hassle-free time-tracking experience.

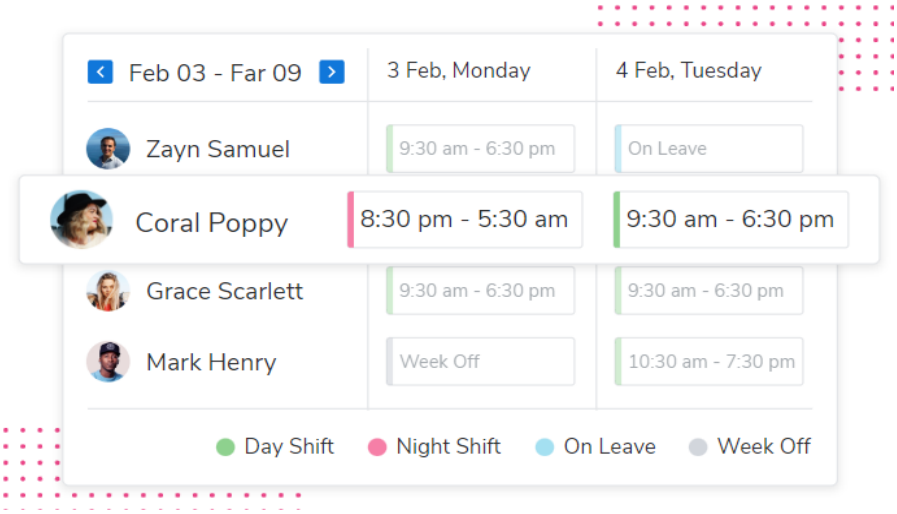
Custom approval workflows-

Control who approves time off requests or even set up replacement persons. Define skips for delayed actions, set up notifications, and as many stages of approval. Set up & track who's doing what.



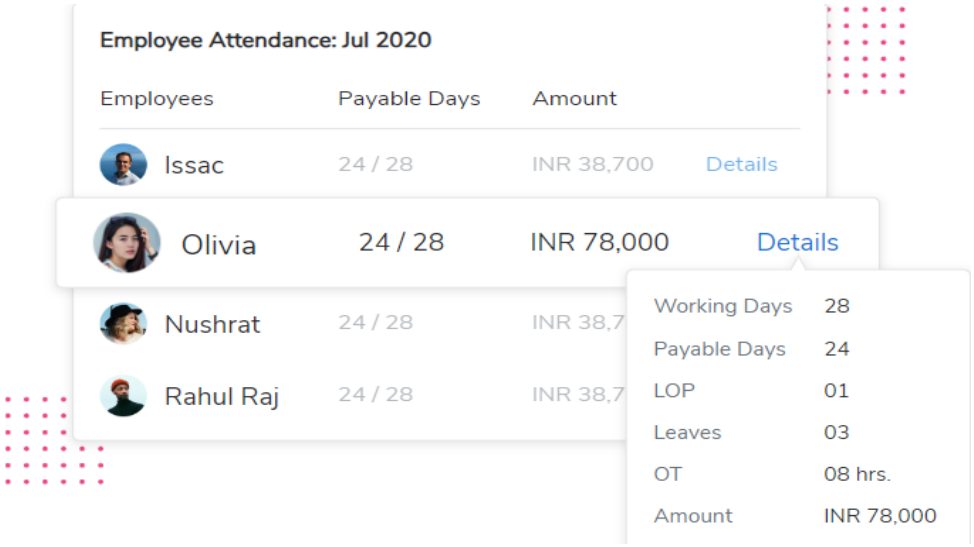
Shift rotations

Keep everyone in the loop by using a shared leave calendar. Multiple users can see who in their team is off from any device to schedule their team meetings, manage project and resource planning.



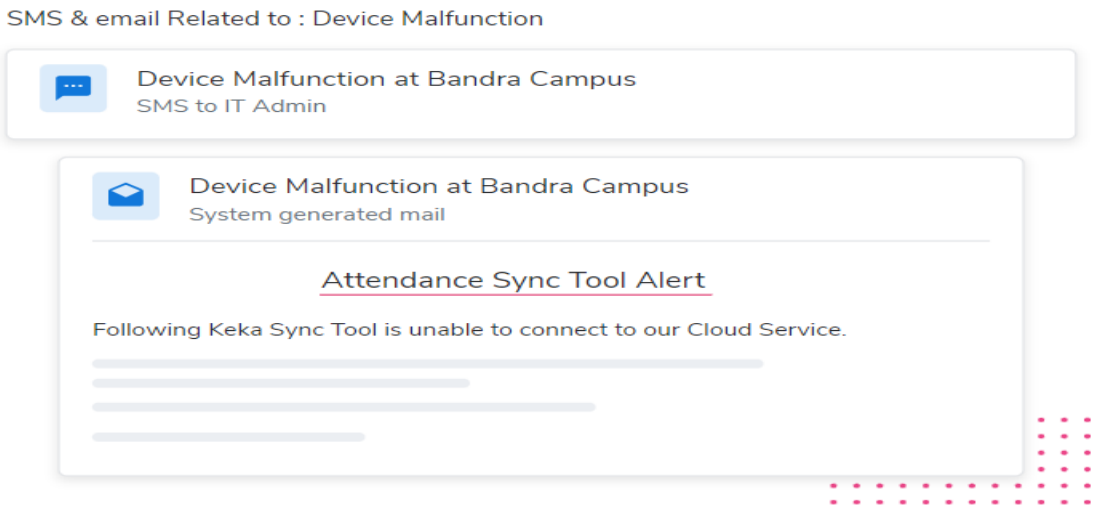
Attendance automation that lets HR focus on people

We want HR to do great things. Tracking attendance manually isn't one of them. Keka Attendance Management Software does end-end automation of tracking, managing, and scheduling employee hours. It does it seamlessly with your existing bio-metric infrastructure.



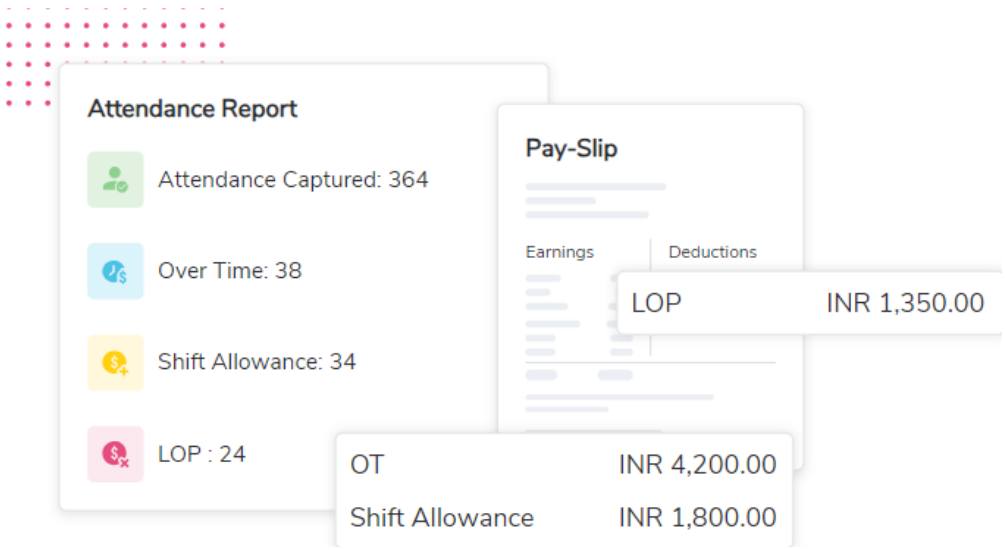
Sends alerts and handles biometric device failures-

Biometric devices abruptly disconnect from the network for various reasons. Keka is the only cloud attendance system that gracefully handles device failures and proactively alerts the IT Admins. Keka gracefully recovers all your past offline logs from the attendance device and restores synchronization. We have customers located in rural areas, hilly terrains, and northeast Indian states successfully using our software without issues.



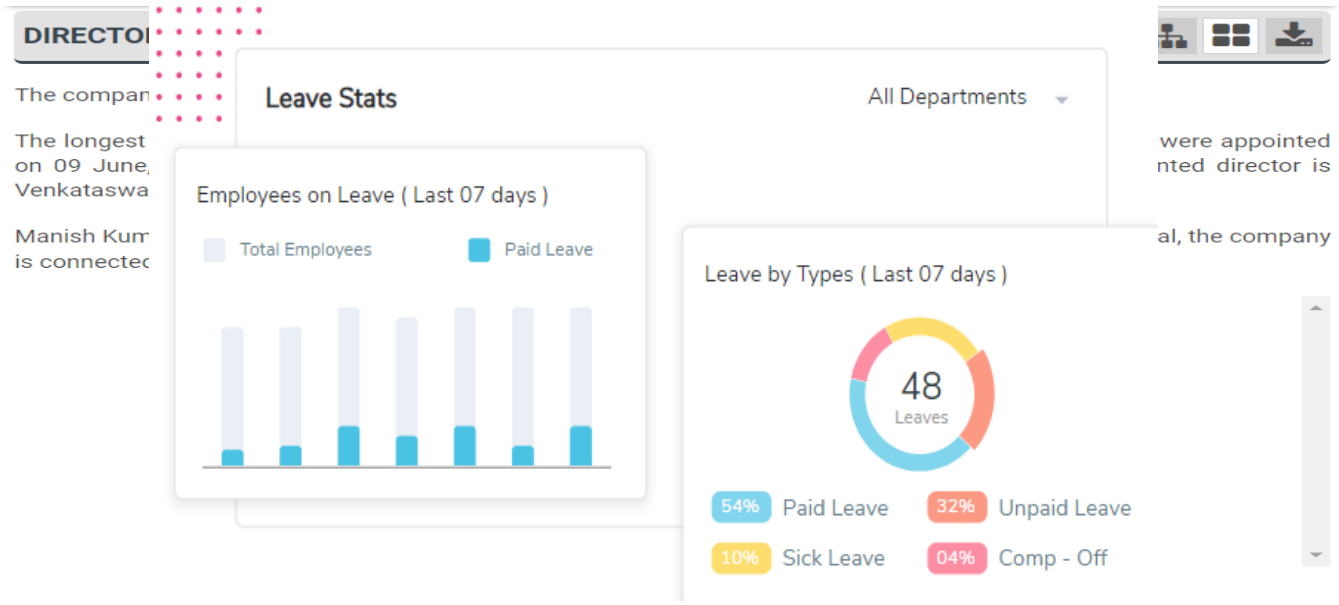
Fully integrated with Keka Payroll

Keka's Leave & Attendance Management System is seamlessly integrated with the payroll management system so that you do not have to keep switching between systems to process payroll monthly payroll!



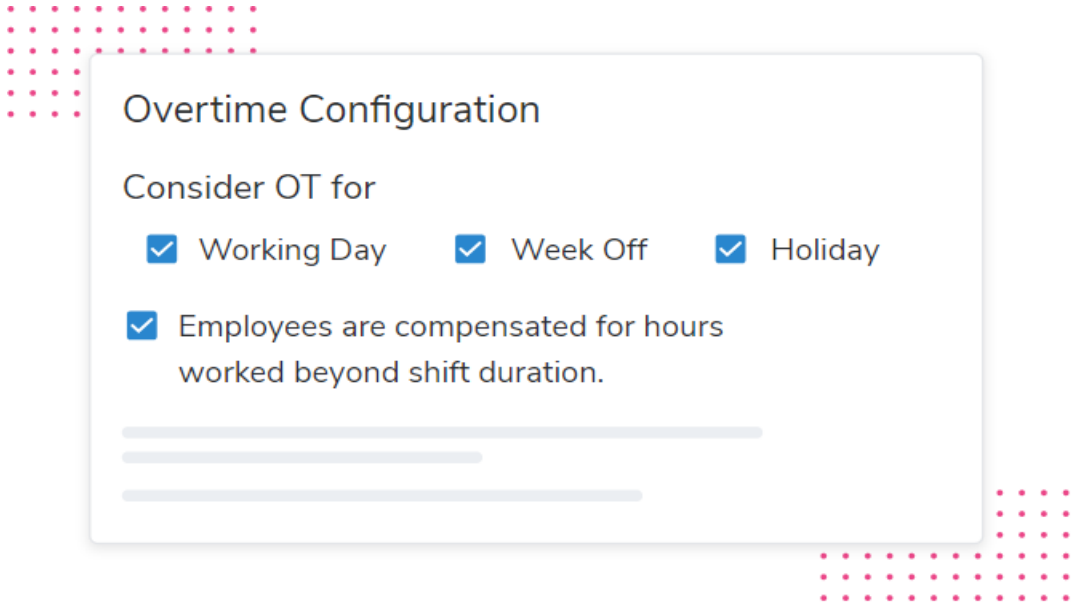
Rich Analytics for executive and middle-

Whether it’s your employees or managers, Keka's rich analytics and dashboards ensure that each of them gets the required information along with the valuable analytics and insightful dashboards. Right from department-based leave stats for managers to a summary of leave types for employees, it is designed to serve the needs of your whole workforce!



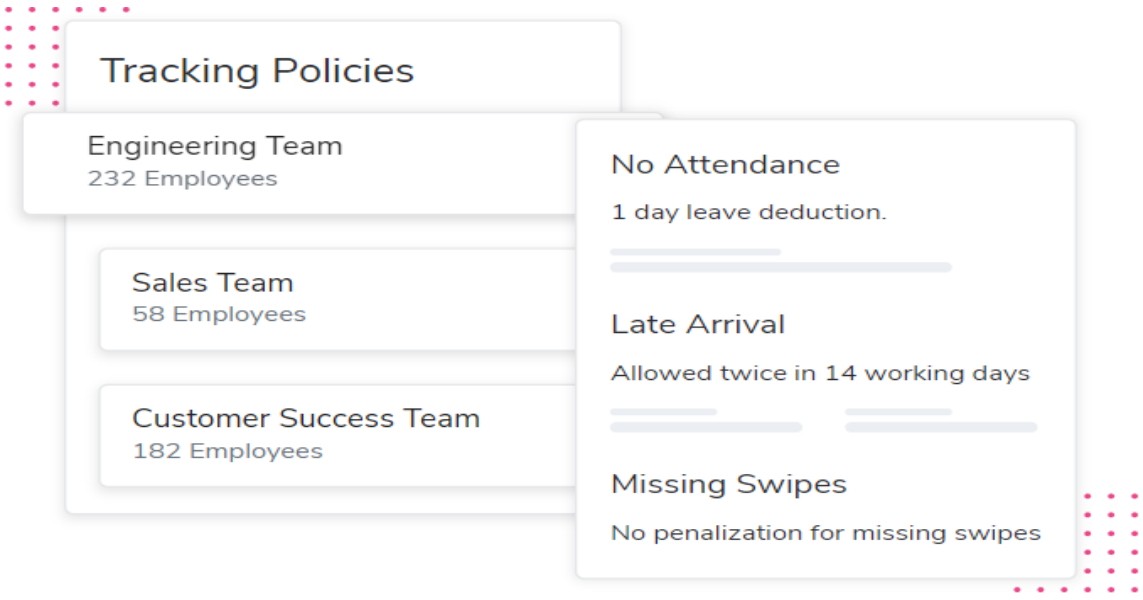
Overtime made easy so you don’t work overtime-

That's right! You don't need sit and track overtime anymore as Keka's Overtime Configuration will do that for you. All you have to do check/uncheck the predefined options based on your overtime polices and it’s all set to start tracking!



Rules engine to shape your employee time habits-

Tracking policies play a vital role in shaping your employee time habits. Set up different tracking rules for different teams/levels as per your organizational requirements through a unified interface.



Working method:

- Monday to Friday- 9am to 6pm
- 15mins Buffer time in morning
- 9hours Employee should be in the office premises
- 1hour lunch break
- Morning and Afternoon 15mins Coffee break
- 1hour Early leave monthly once
- Saturday-9am to 4pm (only 7 hours)
- 1 casual leave monthly once in month
- New employee will not have any benefits until 6 months
- Insurance benefits for Employee

3.2 PROBLEM STATEMENT: With the increasing integration of digital technologies into everyday operations, organizations are facing a growing number of sophisticated cyber threats that can compromise sensitive data, disrupt services, and cause significant financial and reputational damage. Despite the availability of security technologies, a major challenge lies in effectively implementing and managing security measures to protect systems and data in real-time environments.

3.3 REQUIREMENTS

3.3.1 Hardware Requirements:

- Processor: Intel Core i5 / i7 or AMD Ryzen 5 / 7 (Quad-core or higher)
- RAM: Minimum 8 GB (Recommended 16 GB for virtual machines and multitasking)
- Storage: 512 GB SSD or higher for faster I/O and secure data storage
- Operating System: Windows 10/11, Ubuntu 20.04 LTS, or parrotOS.

3.3.2 Software requirements:

- Python (v3.8 or above) – Core programming language for scripting and automation
- Visual Studio Code / PyCharm – Code editor/IDE for development
- Git – Version control system for managing source code
- GitHub – Remote repository hosting for collaboration and code sharing
- Keka HR Software — Cloud-based attendance and payroll management system

3.4 TASK COMPLETED:

variety of tasks were successfully completed that provided both technical exposure and practical understanding of real-world IT systems. Key tasks included gaining hands-on experience with the implementation and management of the E-Learning Management System, particularly focusing on the user authentication module and dashboard interface. I assisted in configuring and managing employee attendance and payroll systems using the Keka HR software, including integration of biometric and IoT-based attendance tracking devices. Additionally, I participated in understanding the deployment and monitoring of smart city solutions, such as the Intelligent Traffic Management System and e-Challan modules implemented in Shivamogga, which involved the use of IoT sensors, ANPR cameras, and real-time data management. I also contributed to data analysis and reporting tasks, observed the backend functioning of Rooman's enterprise products in IoT and ERP, and gained insight into cybersecurity operations conducted for police training centers. Throughout the internship, I engaged in documentation, testing, troubleshooting, and collaborated with team members on live projects, which enhanced both my technical skills and professional communication abilities.

Chapter 4: Technical aspects

1. Tools and Technologies Used in Rooman Technologies

- IoT (Internet of Things):
  Development of IoT-based products and smart solutions (e.g., Smart City projects like Shivamogga Intelligent Traffic Management).

- Artificial Intelligence (AI) and Machine Learning (ML):
  Applied in business solutions and emerging tech projects; Rooman ventured into AI and IoT by acquiring Preva Systems.

- Enterprise Resource Planning (ERP):
  Rooman develops ERP products to streamline business operations.

- Cybersecurity & Data Security:
  Rooman provides services and training in cyber defense, including establishing cybersecurity training centers for the Karnataka Police Department.

- Networking and IT Infrastructure:
  Training and services in networking (Cisco, Microsoft, Red Hat certifications), IT services, and support (e.g., maintenance of IT infrastructure across 1400 police stations in Karnataka).

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2. Internal Technologies (Employee Management)

- Keka HR Software:
  A cloud-based HR and attendance management system integrated with:
  - Biometric, RFID, Facial Recognition devices (200+ device types supported)

- Leave management and payroll integration
- IoT device integration for time tracking
- Real-time alerts and data synchronization

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3. Smart City Technologies (Example: Shivamogga Project)

Intelligent Traffic Management System (ITMS):

- ATCS (Adaptive Traffic Control System): Uses radar-based sensors to control traffic lights dynamically based on real-time traffic conditions.

- E-Challan System: Integrated with ANPR (Automated Number Plate Recognition), Red Light Violation Detection (RLVD), Speed Violation Detection (SVD)
- Vehicle Detectors, Communication Networks, Central Control System
- Variable Message Sign Boards (VMS)
- Public Address System (PAS)

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4. Software & Application Projects

- Tummoc Application:

  A smart commute platform integrating public transport with first and last-mile connectivity.

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5. IT & ITES (Information Technology Enabled Services)

- BPO, KPO, CRM, Data Processing:
  Services such as back-office operations, customer support, legal process outsourcing, cloud services, and digital transformation support.

- IT Consulting & Cloud Computing:
  Solutions for businesses integrating cloud infrastructure, security, and managed IT services.

---

6. Cybersecurity Components

- Network Security, Application Security, Operational Security, Disaster Recovery, End-User Education:
  Comprehensive strategies to protect data, networks, and systems.
- Types of Cyber Threats:
  Malware (virus, trojan, spyware, ransomware), SQL injection, phishing, man-in-the-middle attacks, DoS attacks

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7. Waste Management Technology (Smart City Context)

- Waste-to-Energy, RDF (Refuse Derived Fuel):
  Technologies for recycling dry waste, energy generation, and integrated waste processing.
- 5R Strategy: Reduce, Reuse, Replenish, Recycle, Recover — adopted for sustainable waste management using tech-driven solutions.

Summary of Technical Stack & Focus Areas

Domain	Technologies & Solutions
IT Training	Networking (Cisco, Microsoft, Red Hat), Cybersecurity
Enterprise Solutions	IoT, AI, ERP, Data Center Support
Smart City Projects	IoT sensors, Traffic Management, E-Challan, Waste Management Tech
Employee Management	Keka HR (Biometric & IoT Integration)
Applications	Tummoc (Smart Transit App)
Cybersecurity	Network security, Threat detection, Cyber defense training

4.2 Key Functional Components

- User Authentication Module: ensures secure access control through user registration, login, role-based access, and password management.

- Dashboard Interface: serves as the central hub, providing users with personalized information such as course progress, schedules, announcements, and quick actions.

- Course Management Module: allows administrators and trainers to create, organize, and manage courses, assignments, quizzes, and learning materials.

- Assessment and Evaluation Module: handles online tests, quizzes, grading, and feedback to monitor student performance effectively.

- Analytics and Reporting Module: provides detailed insights into user activity, course completion rates, attendance, and performance trends through visual dashboards and reports.

- Resource Management Module: stores and manages educational resources, such as documents, videos, and downloadable materials, making them easily accessible to users.

- Admin Control Panel: empowers system administrators to manage users, roles, system configurations, and monitor platform usage, ensuring smooth operation and scalability of the system.

CHAPTER 5: IMPLEMENTATION AND RESULT

5.1 Implementation

Implementation involved deploying smart technologies, employee management tools, and skill training programs, while the result was enhanced efficiency, improved urban infrastructure, upskilled youth, and practical learning for interns.

5.2 User Authentication Module

The User Authentication Module is a core component designed to securely manage user access to the E-Learning Management System (ELMS) or any enterprise application. It ensures that only authorized users (students, employees, trainers, admins) can access the system's functionalities and resources.

Functionality	Technology / Tool
Password Hashing	bcrypt (Java, Node.js, Python, etc.)
Session Management	JWT (JSON Web Token) or HttpSession (Java)
2FA	OTP Libraries (e.g., Google Authenticator API, Twilio for SMS)
Database	MySQL, MongoDB, PostgreSQL (for user records)
Frontend	Secure form validation (React, JavaScript, etc.)
Backend	Java (Spring Boot), Node.js (Express), Python (Django/Flask)
Encryption	HTTPS/SSL for all data transmission

5.3 Dashboard Interface:

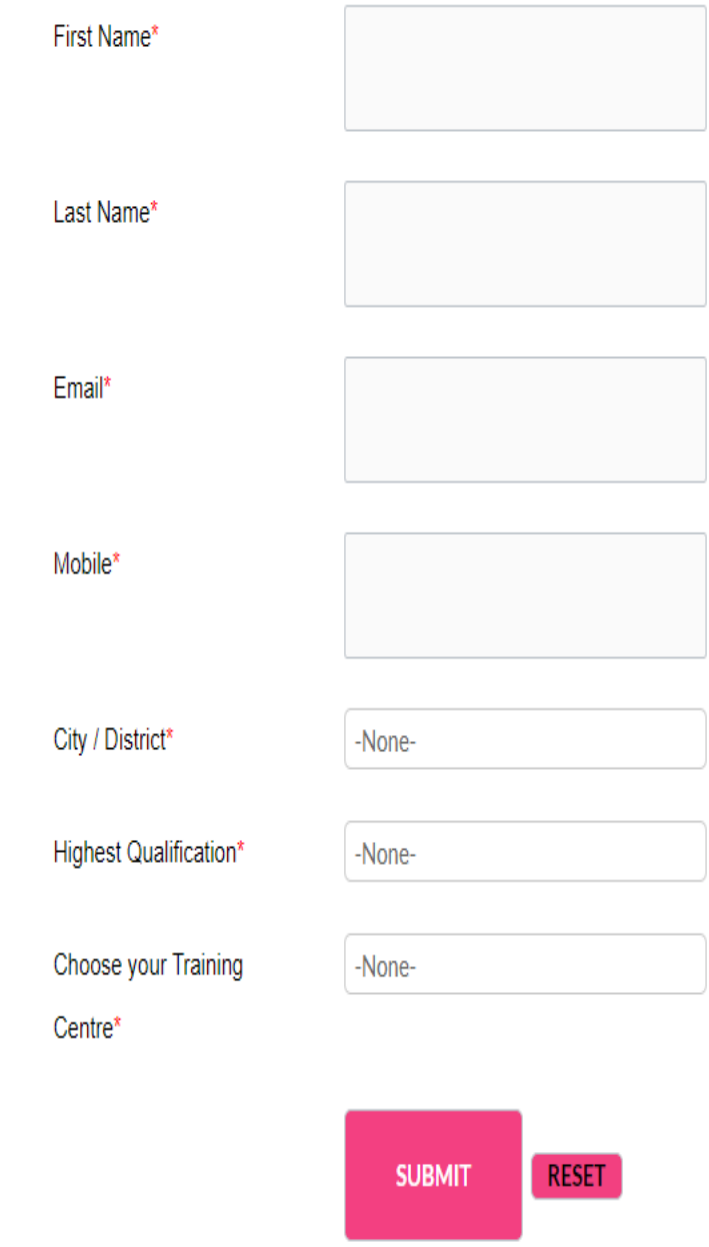
The Dashboard is the central hub that provides users (Students, Trainers, Admins, Employees) with a quick overview of relevant activities, notifications, and actionable items based on their role.

- Role-Based Dynamic Content: Content varies for Admins, Trainers, Students, and Employees.
- User-Friendly Layout: Clean, intuitive design (cards, graphs, tables, quick links).
- Real-Time Updates: Reflects ongoing courses, assignments, attendance, and notifications.

5.4 Network Scanning And Engine:

The Network Scanning and Engine module is a critical component used to assess, monitor, and secure the network infrastructure of an organization. Network scanning involves systematically identifying active devices, open ports, running services, and potential vulnerabilities within a network. This module enables IT administrators to detect unauthorized devices, misconfigured systems, and security weaknesses that could be exploited by attackers. The scanning engine typically uses techniques such as Ping Sweeps, Port Scanning, Service Detection, and Vulnerability Assessment through tools like Nmap, OpenVAS, or Nessus. The engine operates by sending probe packets to target IP addresses and analyzing responses to map the network topology and enumerate services. In the context of Rooman Technologies' smart infrastructure and cybersecurity training centers, such a module aids in securing IT assets, identifying cyber threats, and ensuring compliance with security standards. Results from the scanning engine are used to generate detailed reports, visualize network layouts, and prioritize risk mitigation measures. Furthermore, integration with security information and event management (SIEM) systems enhances real-time monitoring and automated alerting, making the network scanning engine a vital tool in maintaining robust network defense mechanisms.

5.5 **RESULT:**


First Name*
Last Name*
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CHAPTER 6: CONCLUSION

In conclusion, the internship experience provided a comprehensive understanding of both theoretical concepts and their practical applications within the dynamic landscape of IT and e-learning management systems. Through active involvement in projects at Rooman Technologies, I gained valuable exposure to core technologies such as IoT, AI, cybersecurity, enterprise resource management, and smart city solutions. The implementation of modules like user authentication, dashboard interfaces, and network management deepened my technical proficiency, while participation in real-time systems like the Intelligent Traffic Management System and Keka HR software strengthened my understanding of enterprise-level deployments. This experience not only enhanced my technical skills but also improved my problem-solving abilities, teamwork, and professional communication. Overall, the internship has equipped me with the knowledge, confidence, and practical insight necessary to contribute effectively to the IT industry, particularly in the areas of e-learning platforms, smart infrastructure, and digital transformation initiatives. It has also reinforced the importance of continuous learning, innovation, and collaboration in building sustainable and impactful technology solutions.

Additionally, the experience of working on national-level initiatives such as PMKVY, Smart City projects, and NSDC-led skilling programs offered a rare insight into how technology can directly empower individuals and transform communities. This reinforced the real-world impact of IT innovations beyond theoretical frameworks. The internship also honed my soft skills — including teamwork, professional communication, time management, and documentation — by collaborating with multidisciplinary teams of engineers, trainers, and project managers. By contributing to diverse tasks such as system testing, troubleshooting, reporting, and attending stakeholder meetings, I cultivated a more holistic perspective on how technology projects are executed from inception to delivery.

Furthermore, I gained clarity on the emerging trends in the IT industry, such as artificial intelligence, machine learning, cybersecurity, IoT, and enterprise solutions, and understood their significance in driving innovation, efficiency, and competitiveness in today’s fast-evolving market. The rigorous work culture and emphasis on innovation at Rooman Technologies inspired me to continuously upgrade my skills, embrace agility, and adopt a problem-solving mind set, all of which are essential traits in the modern workforce.

Overall, this internship has not only strengthened my technical and professional competencies but also instilled in me a greater sense of confidence, responsibility, and aspiration to contribute meaningfully to future technology-driven initiatives. The lessons and experiences gained here have laid a solid foundation for my career ahead, and I am motivated to further explore, learn, and apply my knowledge to address real-world challenges and create impactful solutions in the IT and e-learning domains.

CHAPTER 7: REFERENCES

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CHAPTER 8: CERTIFICATE

ROOMAN
INNOVATE INTEGRATE EMPOWER
ISO 9001 : 2005 & CMMI LEVEL - 3 COMPANY

www.rooman.com
CIN : U72900KA1999PTC025311

Date: 25th June 2024

CERTIFICATE OF INTERNSHIP

This is to certify that Mr K. V. GOWTHAM has successfully completed the internship Course in the Domain " AWS CLOUD COMPUTING " from 25-06-2024 to 25-07-2024 from our organization, ROOMAN TECHNOLOGIES Pvt., Ltd., 1st Block , Rajajinagar, Bangalore.

His conduct during his stay with us was satisfactory.

We wish all the best for his future endeavours.

The Marks scored by him is 9/10.

ROOMAN TECHNOLOGIES PVT. LTD. BENGALURU

Technical Co-ordinator

Corporate Office : # 130, Dr. Rajkumar Road, 1st Block Rajajinagar, Bangalore - 560010
Phone : +91 80 40416666, Email : info@rooman.net, Web : www.rooman.com