

KL PULSE: EMPLOYEE AND LEAVE MANAGEMENT SYSTEM

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INTRODUCTION

- Knowledge Lens is a US and India based product and services technology company.
- They builds innovative solutions on niche technology areas such as Big Data Analytics, Data Science, Artificial Intelligence, IoT, Blockchain, AR/VR and Cloud.
- KL Pulse is the office and leave management system of Knowledge Lens.

PROPOSED SYSTEM

- KL Pulse uses Google SSO Login filtered by user roles to access in to the system.
- KL Pulse allows employees to share their work status for each day with their leads.
- Employees can set weekly goals and work based on that to complete their works.
- Employees can view their goals and the statuses of their works they have added in the system.
- KL Pulse also provides Leave Management System for making it easier for both employees and HRs to manage leaves.

PROPOSED SYSTEM

- Employees can view their available leave information in the dashboard.
- They can apply for leave from the KL Pulse System and see the status of their application.
- HRs have the privilege to view the leave requests of employees and then approve or reject them.
- Admins and leads can review the work status of the employees with the help of the system.

TECHNOLOGIES USED

- FRONT-END:

The UI of KL Pulse is designed using React JS which is a free and open-source front-end JavaScript library for building user interfaces based on UI components.

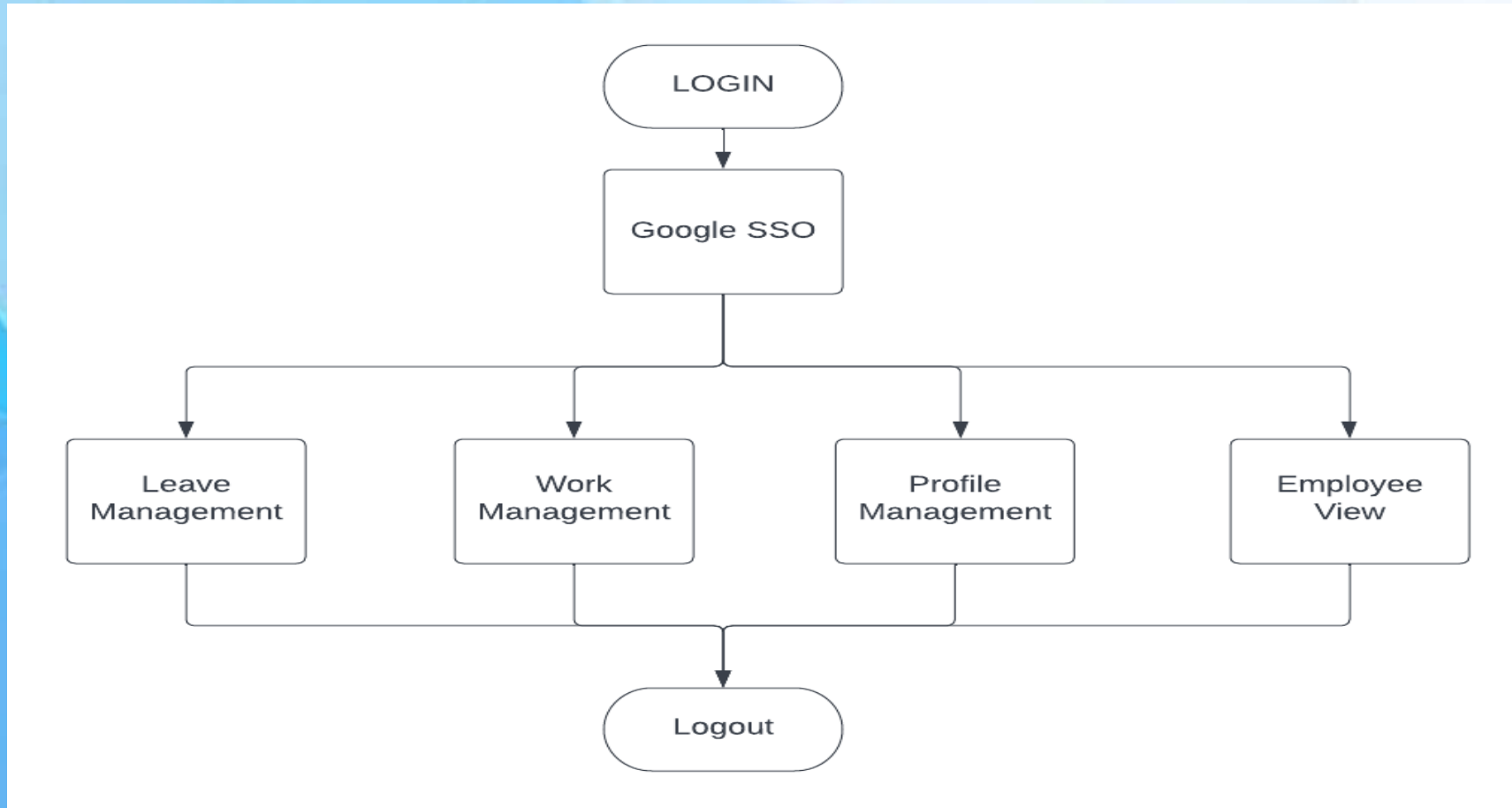
- BACK-END:

The Back-end of KL Pulse is designed using FastAPI which is a modern, fast (high-performance), web framework for building APIs with Python 3.6+ based on standard Python type hints.

MODULES

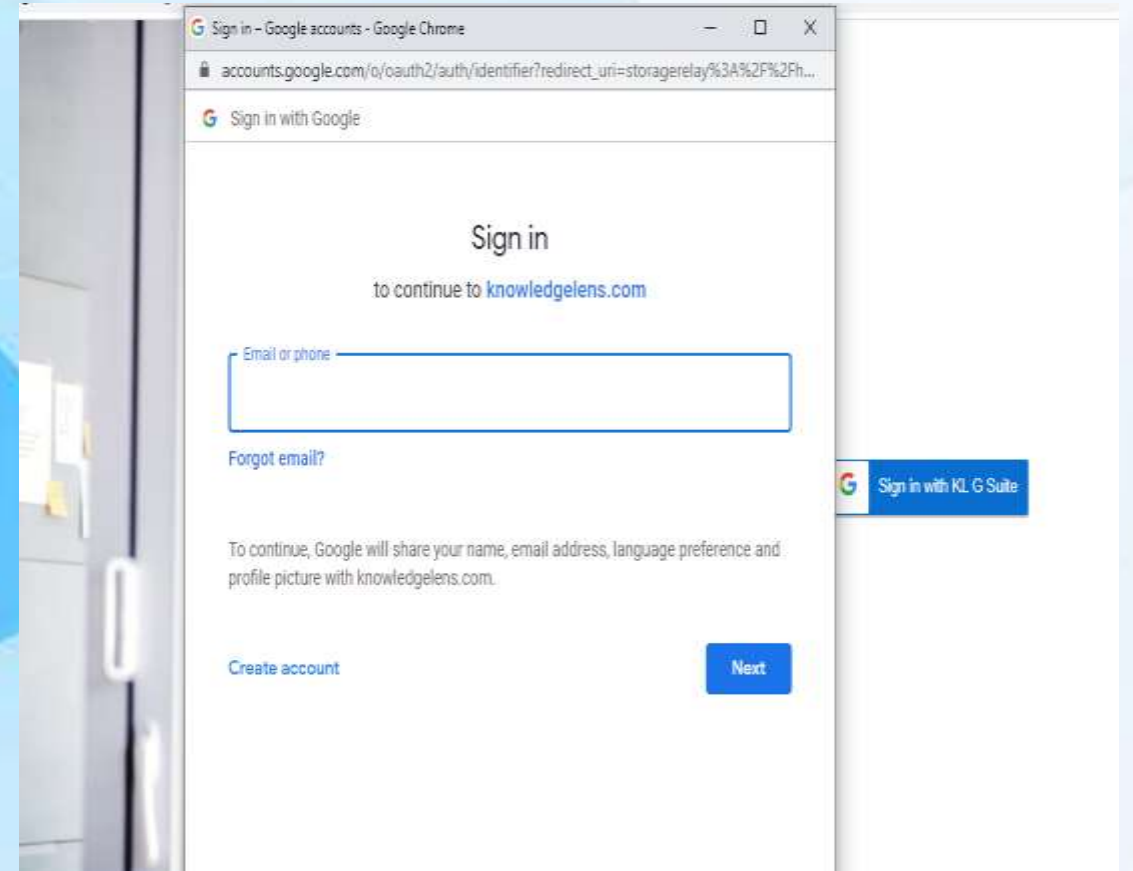
1. Login Module
2. Status Module
3. Leave Management Module
4. Profile Module
5. Employee Data Module
6. Apps Module
7. Logout Module

Flow Diagram Of KL Pulse



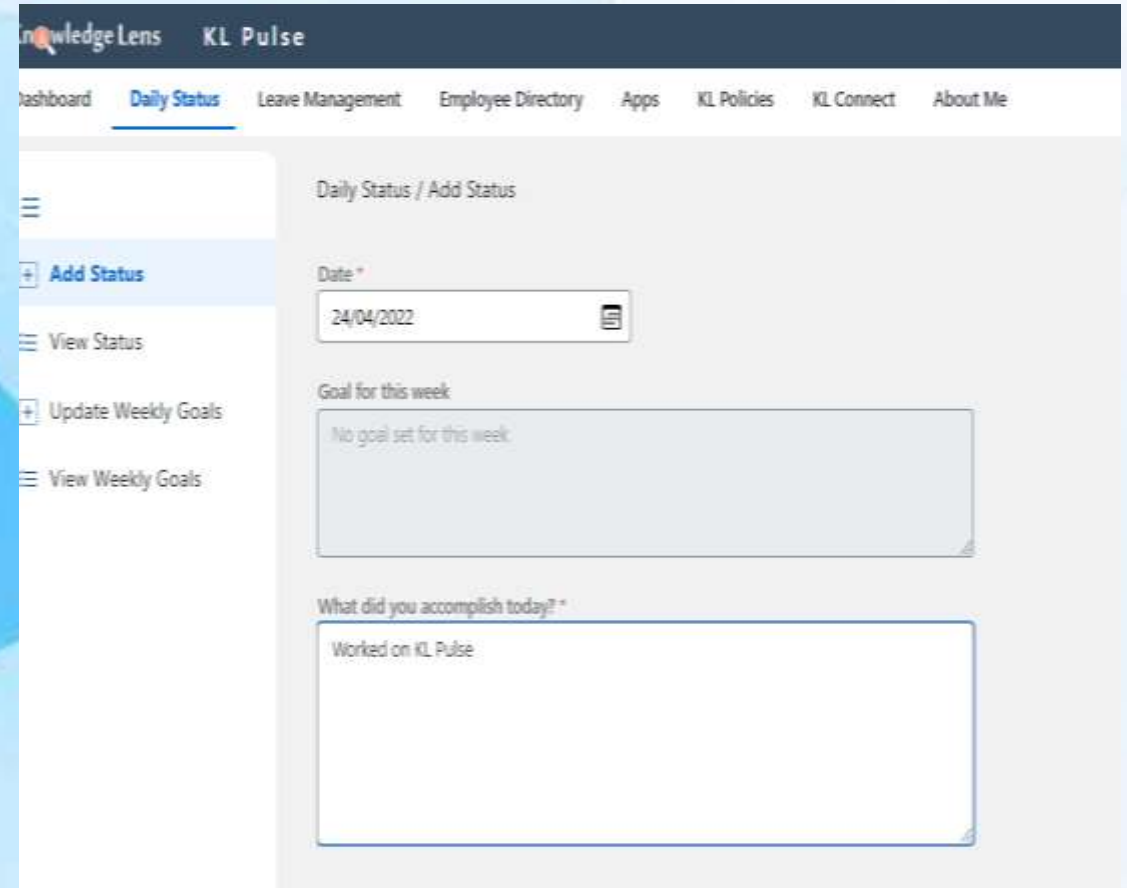
Login Module

- The login module uses Google SSO (Single Sign-On) login filtered based on user roles.
- The different roles in the system are User, Admin, HR and Managers.
- Admin can control the working of the application.
- HR can view and take necessary actions on the employee requests.
- Managers can view and analyze the employee performance and generate employee reports.
- The users are the employees.



Status Module

- The Status Module contains four parts.
- User can add, update, view or delete weekly goals and under it user can add, update, view or delete status.
- The managers can view and evaluate the works and status of the employees by logging in into their portal.



The screenshot shows the 'Knowledge Lens KL Pulse' interface. The top navigation bar includes links for Dashboard, Daily Status (active), Leave Management, Employee Directory, Apps, KL Policies, KL Connect, and About Me. A left sidebar contains a menu with 'Add Status' (highlighted), 'View Status', 'Update Weekly Goals', and 'View Weekly Goals'. The main content area is titled 'Daily Status / Add Status' and contains three input fields: a 'Date *' field with the value '24/04/2022', a 'Goal for this week' field with the placeholder text 'No goal set for this week', and a 'What did you accomplish today? *' field with the text 'Worked on KL Pulse'.

Leave Management Module

- User can view available leaves, apply for leave, view status of the leave, cancel leave, apply for work from home etc
- HR can approve or reject leave requests.
- User and HR can view all employees leaves and work from home in calendar format.

Knowledge Lens KL Pulse

Sreelekshmi Sunish User

Dashboard Daily Status **Leave Management** Employee Directory Apps KL Policies KL Connect About Me

Leave Tracker / Dashboard

Leave Requests Attendance Requests

Summary

Apply for leave

Holiday List

Leave Calendar

Total Leaves 2

Taken Leaves 1.5

Available Leaves 0.5

Work From Home 0

Search within the current page

Hide/Show Columns From To Days +4 selected

From	To	Days	Applied On	Type	Reason	Status
25 Apr 2022	28 Apr 2022	4	24 Apr 2022	Full Day Leave	Project review in college	Pending
28 Mar 2022	28 Mar 2022	0.5	28 Mar 2022	Second Half Leave	As I am having severe stomach ache and vomiting, I request you to grant me half day leave.	Taken
17 Mar 2022	17 Mar 2022	1	07 Mar 2022	Full Day Leave	As I have to go to my college for my final project's review, I kindly request you to grant me leave for the above mentioned day.	Taken
22 Feb 2022	22 Feb 2022	1	03 Mar 2022	Deduct	Leave deducted by HR	Taken

Profile Module

- All users can manage their details.
- View attendance history including punch-in time and punch-out time.
- View leave history

The screenshot shows the 'About Me' page in the Knowledge Lens KL Pulse system. The page is titled 'About You / Profile / View Employee' and includes an 'Edit' button. The left sidebar contains navigation links for Profile, Attendance History, and Leave Audit. The main content area is divided into three sections: Basic Information, Permanent Address, and Current Address. Each section contains a table of user details.

Basic Information			
Employee Id	First Name	Middle Name	Last Name
INT-615	Sreelekshmi		Sunil
Gender	Date of birth	Contact Number	Alternate Number
Female	09 Jun 1990	9645002302	
Emergency Contact Number 7594935266			

Permanent Address			
House Number	Street	City	State
Country	Postal Code		
India			

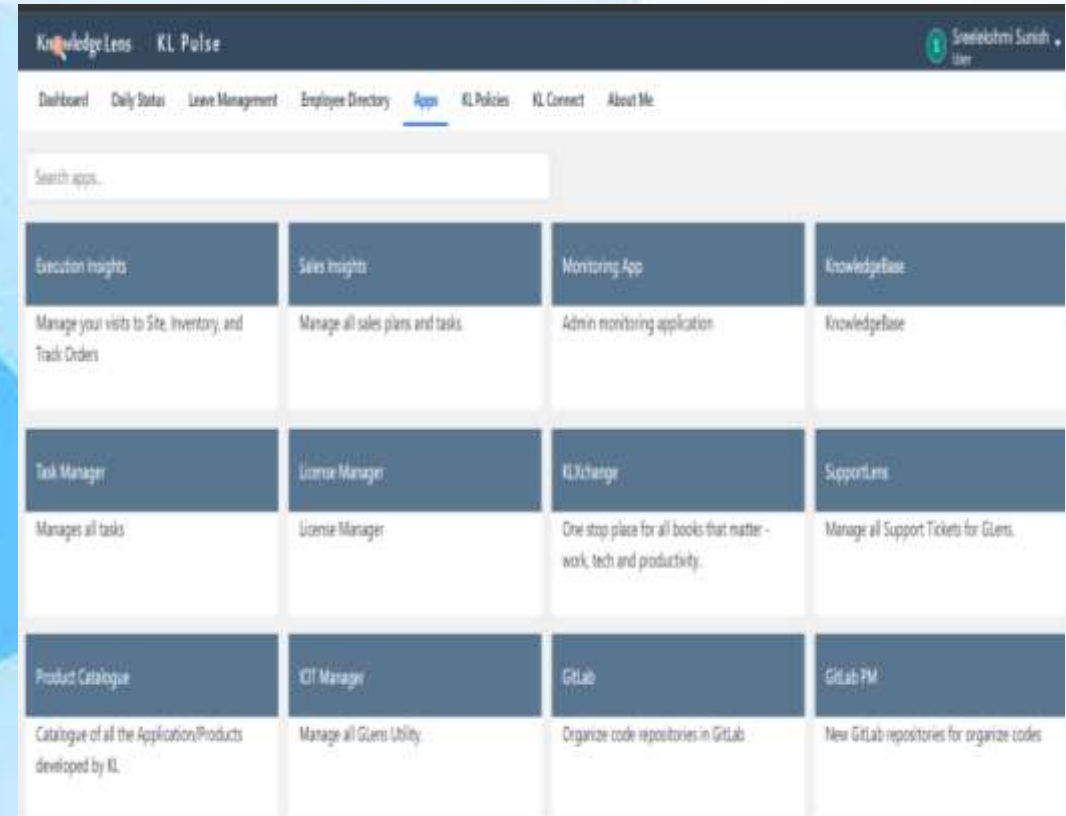
Current Address			
House Number	Street	City	State

Employee Data Module

- Contains list of all employees and basic details like designation, date of joining, work location, contact etc.

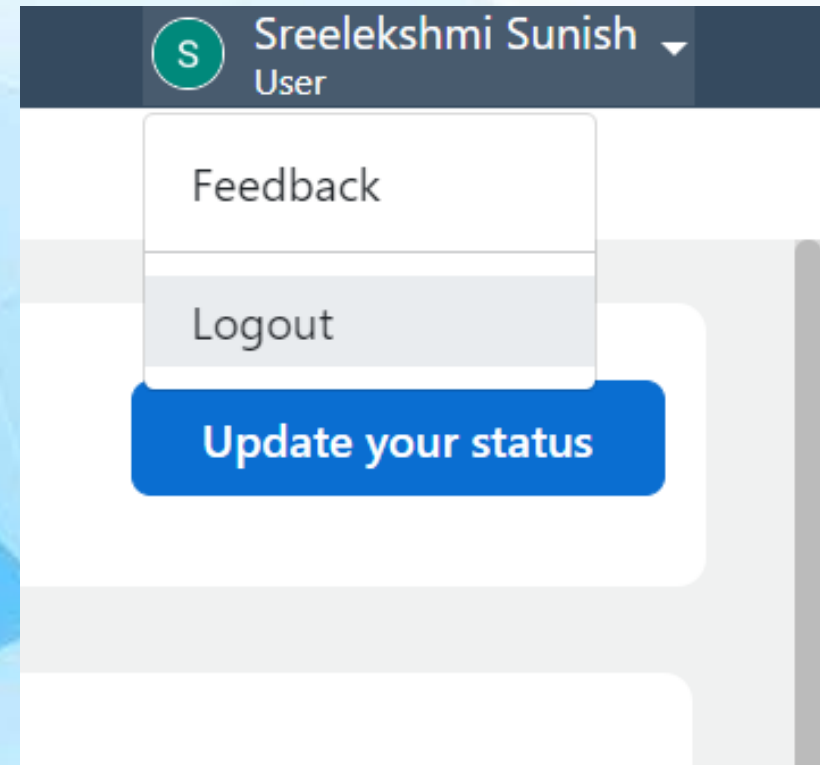
Apps Module

- Different other applications are integrated with the system through links.

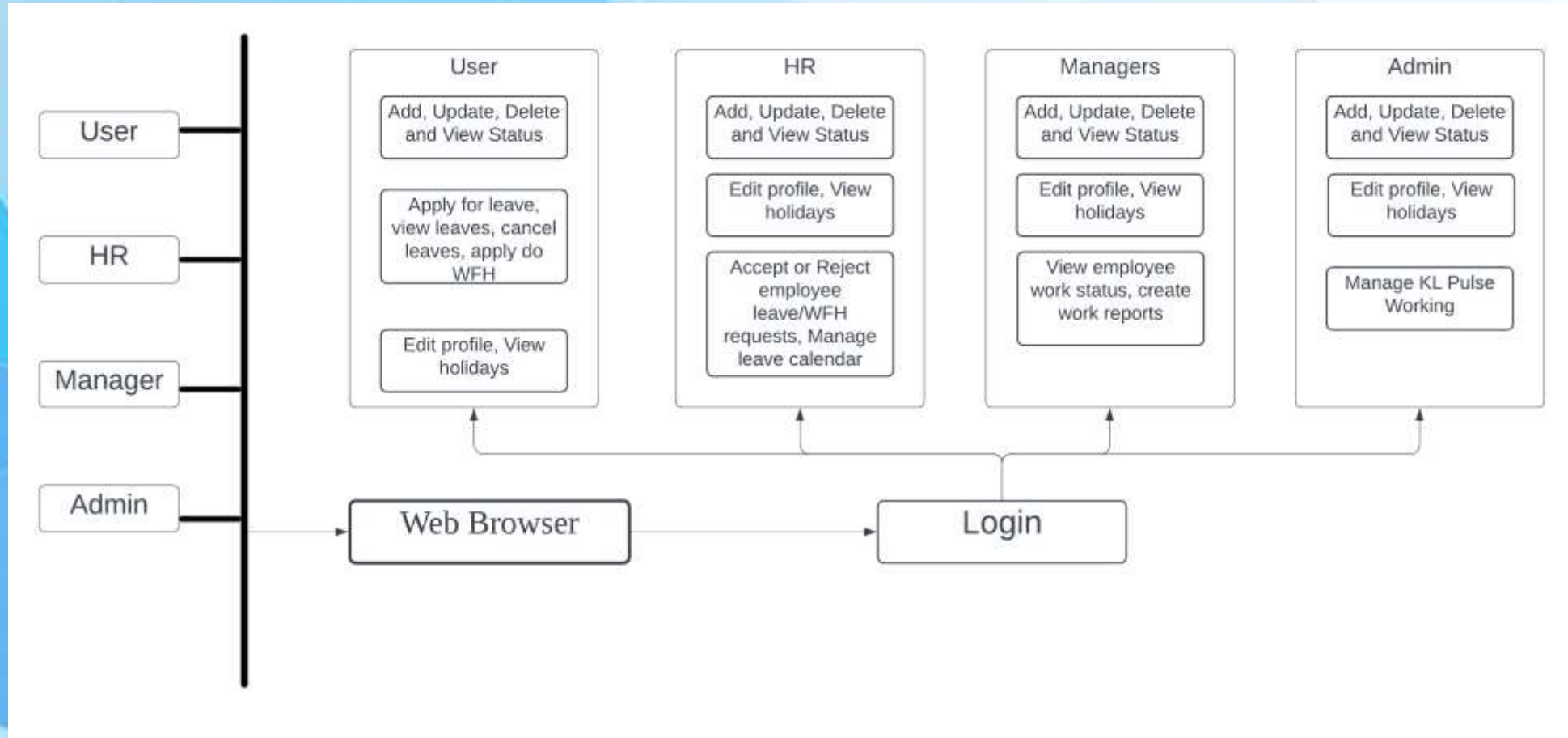


Logout Module

- Facilitates the user to logout from the system.



System Design of KL Pulse



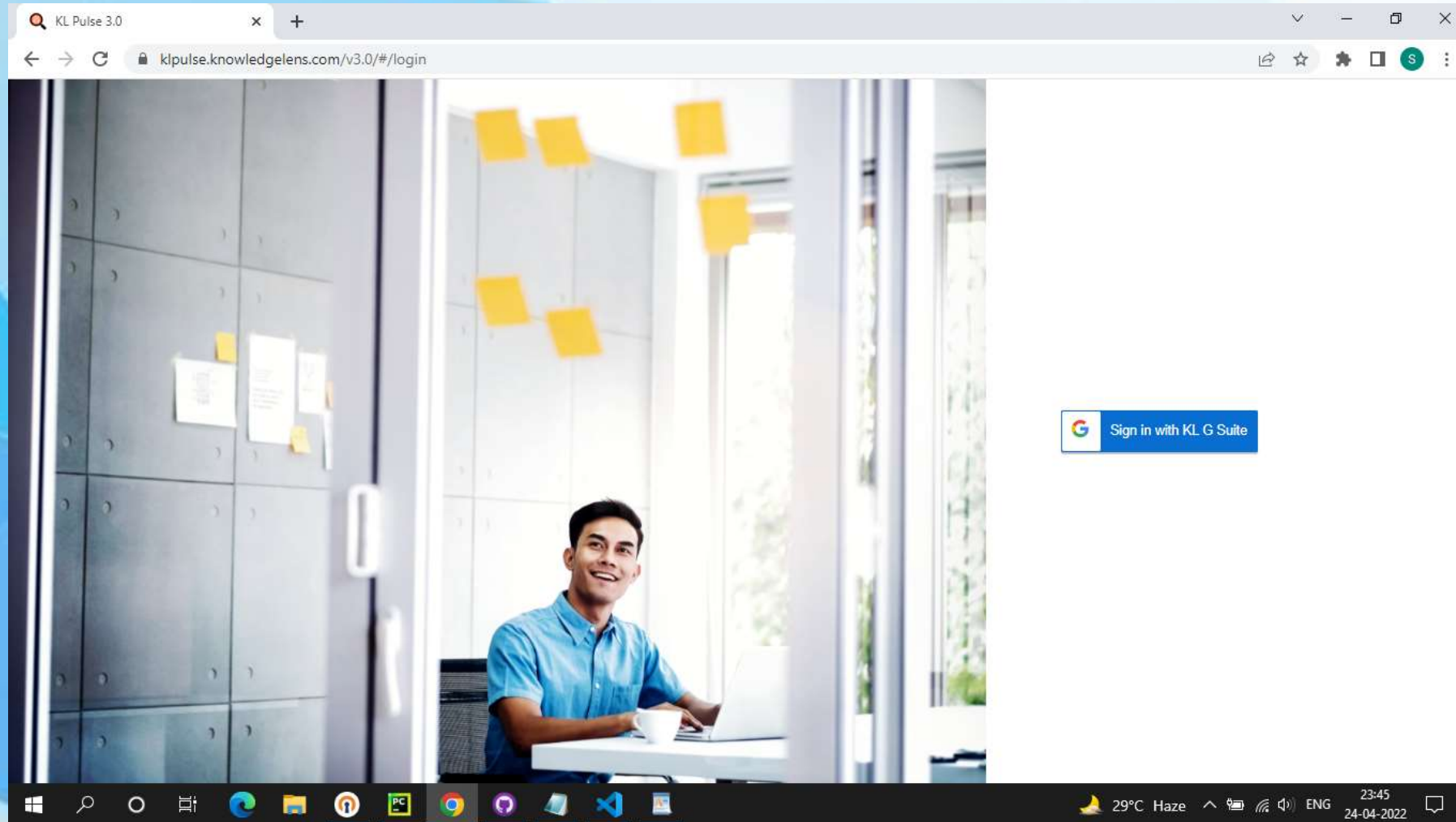
CONCLUSION

- KL Pulse Employee Management System helps the managers to evaluate and monitor their performance.
- It makes the process of employee valuation and report generation for the team leads and managers much easier.
- KL Pulse Leave Management System automates the leave request process, making it hassle-free for both the management and the employees.
- KL Pulse helps in maintaining the records of the employees which will help human resource team to manage work status, leave approval, leave cancellation and report generation.

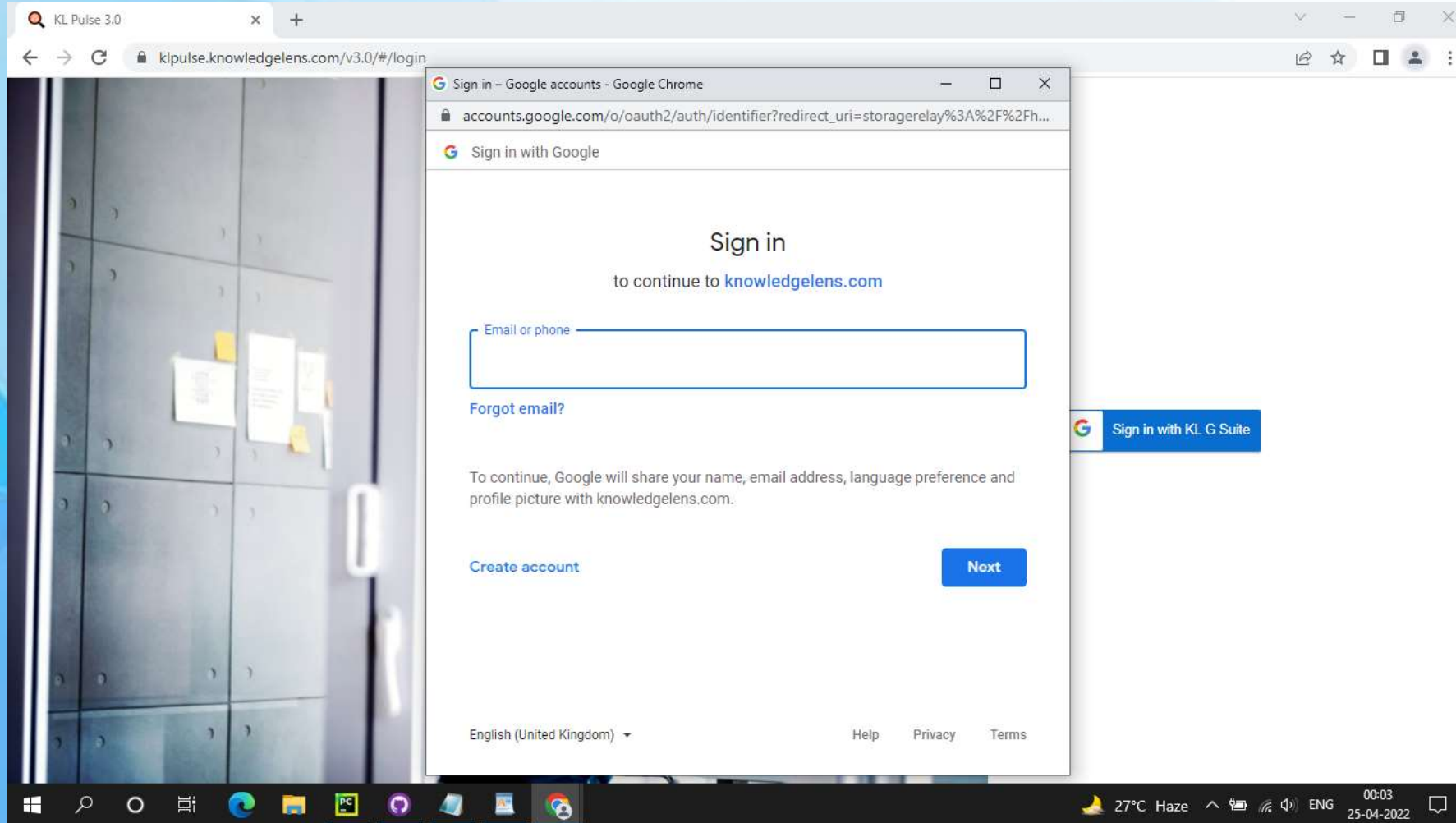
FUTURE ENHANCEMENTS

- KL PULSE provides the provision to integrate multiple supporting applications to the system.
- The IT desk supporting system will be integrated with the KL Pulse which will allow the employees to manage their devices.
- Many other applications are being integrated with KL Pulse like Recruitment Management System, Sale Insights, Execution insights etc.

SCREENSHOTS



SCREENSHOTS



SCREENSHOTS

The screenshot displays the KL Pulse 3.0 dashboard in a web browser. The browser's address bar shows the URL `klpulse.knowledgelens.com/v3.0/#/home/dashboard`. The dashboard header includes the "Knowledge Lens" logo, the "KL Pulse" title, and a user profile for "Sreelekshmi Sunish" with a dropdown arrow. A navigation menu below the header contains links to "Dashboard", "Daily Status", "Leave Management", "Employee Directory", "Apps", "KL Policies", "KL Connect", and "About Me".

The main content area features a personalized welcome message: "Hi Sreelekshmi Sunish! Welcome to KL Pulse", accompanied by a green circular profile icon with the letter 'S' and a blue "Update your status" button. Below this, there are four informational cards:

- Upcoming Holiday:** Displays "May 03 2022" and "Eid-al-Fitr" with a mosque icon.
- Plan your holiday:** Shows "0.5 Available Leaves" and "1.5 Taken Leaves" with a blue arrow button.
- Birthdays and Work Anniversaries:** Celebrates "Happy Birthday HarshadSandeep Bhide" with a cake icon and a menu icon.
- KL Connect:** Announces "KL Utsav !" for the "29th and 30th April" with a red arrow button.

The dashboard also includes three social and news feeds:

- Medium:** A link icon is present, but no content is visible.
- Twitter:** Features a tweet from "Knowledge Lens @KnowledgeLens" dated May 2, 2022. The tweet promotes an employee blog titled "Benefits of Automated Visual Inspection Systems" with a link `bit.ly/3JLcaGS`. It also includes a thank-you message to "Sumanth Srirangam" for sharing insights on this topic.
- News Feeds:** Displays a profile picture of "Sudheesh Narayanan, The CEO" and a caption stating: "Sudheesh Narayanan, CEO at Knowledge Lens, is the backbone".

The Windows taskbar at the bottom shows the system clock as 23:45 on 24-04-2022, with weather information indicating 29°C and Haze.

SCREENSHOTS

The screenshot displays the KL Pulse 3.0 web application interface. The browser address bar shows the URL `klpulse.knowledgelens.com/v3.0/#/home/tasks`. The application header includes the 'Knowledge Lens' logo, 'KL Pulse' text, and a user profile for 'Sreelekshmi Sunish User'. The main navigation menu contains links for 'Dashboard', 'Daily Status' (which is active), 'Leave Management', 'Employee Directory', 'Apps', 'KL Policies', 'KL Connect', and 'About Me'. A left-hand sidebar lists actions: 'Add Status' (highlighted), 'View Status', 'Update Weekly Goals', and 'View Weekly Goals'. The main content area is titled 'Daily Status / Add Status' and features a 'Submit' button in the top right corner. The form includes a 'Date' field with the value '24/04/2022', a 'Goal for this week' text area containing 'No goal set for this week', and a 'What did you accomplish today?' text area containing 'Worked on KL Pulse'. The Windows taskbar at the bottom shows the system date as 24-04-2022, time as 23:50, and weather as 29°C Haze.

KL Pulse 3.0

klpulse.knowledgelens.com/v3.0/#/home/tasks

Knowledge Lens KL Pulse

Sreelekshmi Sunish User

Dashboard **Daily Status** Leave Management Employee Directory Apps KL Policies KL Connect About Me

☰

+ Add Status

☰ View Status

+ Update Weekly Goals

☰ View Weekly Goals

Daily Status / Add Status

Submit

Date *

24/04/2022

Goal for this week

No goal set for this week

What did you accomplish today? *

Worked on KL Pulse

29°C Haze 23:50 24-04-2022

SCREENSHOTS

The screenshot displays the KL Pulse 3.0 web application. The browser address bar shows the URL `klpulse.knowledgelens.com/v3.0/#/home/tasks`. The application header includes the "Knowledge Lens" logo, the "KL Pulse" title, and a user profile for "Sreelekshmi Sunish". The main navigation bar contains links to "Dashboard", "Daily Status" (which is active), "Leave Management", "Employee Directory", "Apps", "KL Policies", "KL Connect", and "About Me".

On the left side, there is a sidebar menu with the following options: "Add Status", "View Status" (highlighted), "Update Weekly Goals", and "View Weekly Goals".

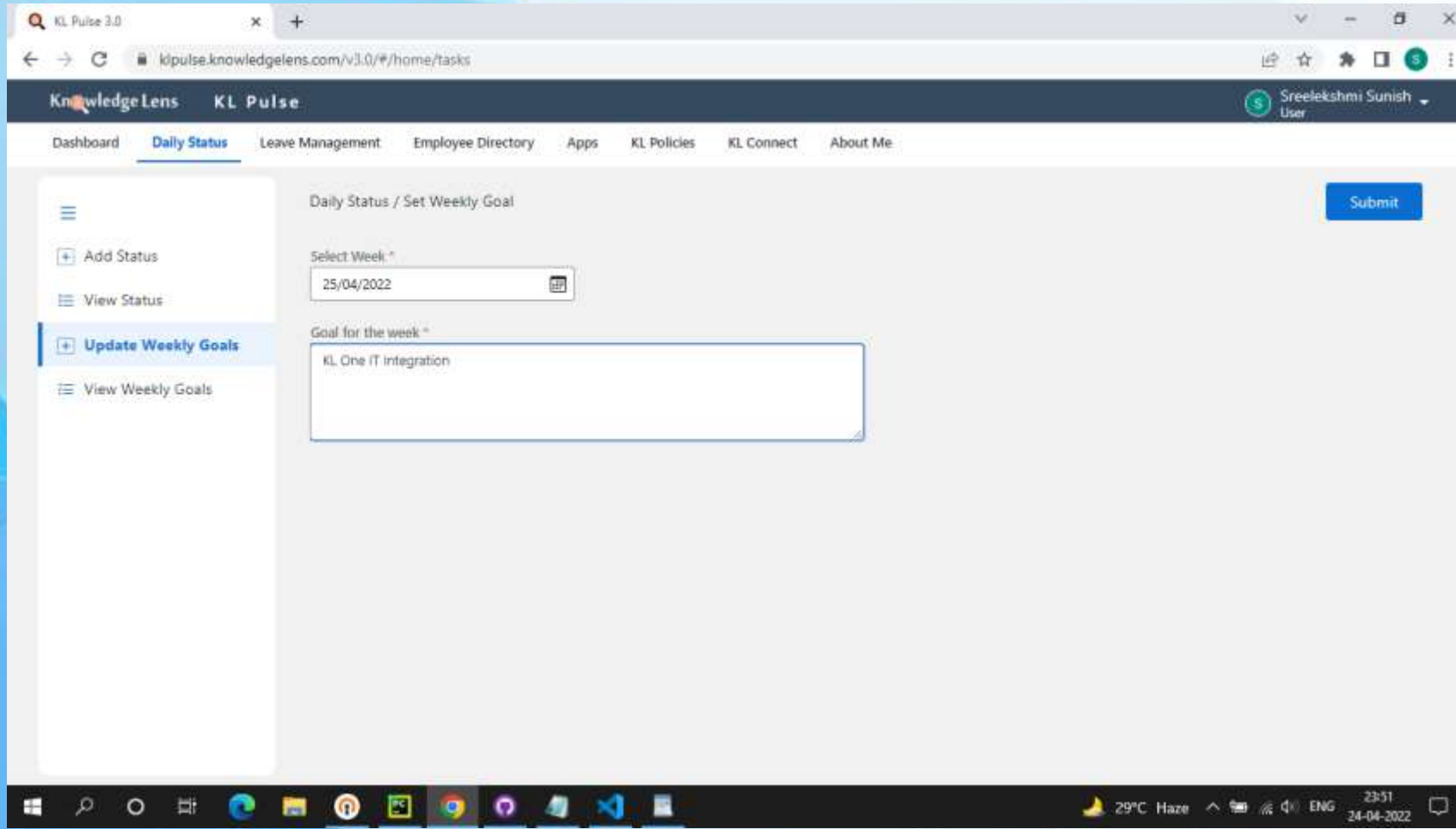
The main content area is titled "Daily Status / View Status". It features a "Select Date Range" dropdown menu set to "18/04/2022 - 24/04/2022". Below this is a legend for status types: Status Present (green), No Status (red), Delayed (orange), Full Day Leave (yellow), Holiday (brown), Weekend (light yellow), First Half Leave (blue), and Second Half Leave (purple).

The status view is organized into a grid of cards for each day of the week:

- 24-04-2022 (Sunday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: No Status. Last updated at.
- 23-04-2022 (Saturday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: No Status. Last updated at.
- 22-04-2022 (Friday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: Today, I worked on integrating KL One It with KL Pulse. I completed integrating the APIs and pushed my code to the dev branch. Last updated at **22-04-2022 06:57 pm**.
- 21-04-2022 (Thursday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: No Status. Last updated at.
- 20-04-2022 (Wednesday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: No Status. Last updated at.
- 19-04-2022 (Tuesday):** Status Present (green dot). Weekly Goals: No goal set for this week. Status: No Status. Last updated at.

The Windows taskbar at the bottom shows the system clock as 23:51 on 24-04-2022, with weather information for 29°C Haze.

SCREENSHOTS



SCREENSHOTS

The screenshot displays the KL Pulse 3.0 web application interface. The browser address bar shows the URL `klpulse.knowledgelens.com/v3.0/#/home/tasks`. The application header includes the 'Knowledge Lens' logo, 'KL Pulse' title, and a user profile for 'Sreelekshmi Sunish'. The main navigation menu contains links for Dashboard, Daily Status (active), Leave Management, Employee Directory, Apps, KL Policies, KL Connect, and About Me.

The 'Daily Status / View Weekly Goal' page features a sidebar with the following options: Add Status, View Status, Update Weekly Goals, and View Weekly Goals (selected). The main content area displays a date range selector set to '28/03/2022 - 25/04/2022' and a grid of weekly goal cards. Each card shows a date range, a 'Weekly Goals' section with the text 'No goal set for this week', and a 'Last updated at' field.

25-Apr to 30-Apr	18-Apr to 23-Apr	11-Apr to 16-Apr
Weekly Goals No goal set for this week	Weekly Goals No goal set for this week	Weekly Goals No goal set for this week
Last updated at	Last updated at	Last updated at

04-Apr to 09-Apr	28-Mar to 02-Apr
Weekly Goals No goal set for this week	Weekly Goals No goal set for this week
Last updated at	Last updated at

The Windows taskbar at the bottom shows the system date as 24-04-2022, time as 23:51, and weather as 29°C Haze.

SCREENSHOTS

KL Pulse 3.0

klpulse.knowledgelens.com/v3.0/#/home/leave-tracker

Knowledge Lens KL Pulse

Sreelekshmi Sunish User

Dashboard Daily Status **Leave Management** Employee Directory Apps KL Policies KL Connect About Me

Leave Tracker / Dashboard

Leave Requests Attendance Requests

Total Leaves
2

Taken Leaves
1.5

Available Leaves
0.5

Work From Home
0

Summary

Apply for leave

Holiday List

Leave Calendar

Search within the current page

Hide/Show Columns
From x To x Days x + 4 selected x v

From	To	Days	Applied On	Type	Reason	Status
25 Apr 2022	28 Apr 2022	4	24 Apr 2022	Full Day Leave	Project review in college	Pending
28 Mar 2022	28 Mar 2022	0.5	28 Mar 2022	Second Half Leave	As I am having severe stomach ache and vomiting, I request you to grant me half day leave.	Taken
17 Mar 2022	17 Mar 2022	1	07 Mar 2022	Full Day Leave	As I have to go to my college for my final project's review, I kindly request you to grant me leave for the above mentioned day.	Taken
22 Feb 2022	22 Feb 2022	1	03 Mar 2022	Deduct	Leave deducted by HR	Taken

29°C Haze 23:52 24-04-2022

SCREENSHOTS

The screenshot displays the 'KL Pulse 3.0' web application interface. The browser address bar shows the URL 'klpulse.knowledgelens.com/v3.0/#/home/leave-tracker'. The application header includes the 'Knowledge Lens KL Pulse' logo and a user profile for 'Sreelekshmi Sunish User'. The main navigation menu contains links for 'Dashboard', 'Daily Status', 'Leave Management' (which is the active section), 'Employee Directory', 'Apps', 'KL Policies', 'KL Connect', and 'About Me'. On the left side, a sidebar menu lists 'Summary', 'Apply for leave' (highlighted), 'Holiday List', and 'Leave Calendar'. The main content area is titled 'Leave Tracker / Apply For Leave' and features a blue 'Apply' button in the top right corner. The form includes a 'Leave Type *' dropdown menu set to 'Full Day Leave', a 'Select Date Range *' field showing '25/04/2022 - 29/04/2022', and a 'Reason *' text area containing the text 'Project presentation in college'. The Windows taskbar at the bottom shows the system date as '24-04-2022' and time as '23:56'.

KL Pulse 3.0

klpulse.knowledgelens.com/v3.0/#/home/leave-tracker

Knowledge Lens KL Pulse

Sreelekshmi Sunish User

Dashboard Daily Status **Leave Management** Employee Directory Apps KL Policies KL Connect About Me

Summary

Apply for leave

Holiday List

Leave Calendar

Leave Tracker / Apply For Leave

Apply

Leave Type *
Full Day Leave

Select Date Range *
25/04/2022 - 29/04/2022

Reason *
Project presentation in college

29°C Haze 23:56 24-04-2022

SCREENSHOTS

The screenshot displays the KL Pulse 3.0 web application interface. The browser address bar shows the URL `ldpulse.knowledgelens.com/v3.0/#/home/leave-tracker`. The application header includes the "Knowledge Lens KL Pulse" logo and a user profile for "Sreelekshmi Sunish". The main navigation menu contains links for Dashboard, Daily Status, Leave Management (active), Employee Directory, Apps, KL Policies, KL Connect, and About Me.

The "Leave Tracker / Holiday List" page features a sidebar with options: Summary, Apply for leave, Holiday List (selected), and Leave Calendar. The main content area includes filters for Year (2022) and Location (Bangalore), along with a search bar. Below these filters is a table listing holidays for 2022 in Bangalore.

Date	Location	Reason	Day
14 Jan 2022	Bangalore	Pongal	Friday
26 Jan 2022	Bangalore	Republic Day	Wednesday
18 Mar 2022	Bangalore	Holi	Friday
15 Apr 2022	Bangalore	Good Friday	Friday
03 May 2022	Bangalore	Eid-al-Fitr	Tuesday
15 Aug 2022	Bangalore	Independence Day	Monday
31 Aug 2022	Bangalore	Ganesh Chaturthi	Wednesday
08 Sep 2022	Bangalore	Onam	Thursday
05 Oct 2022	Bangalore	Vijaya Dashami/Dussehra	Wednesday
24 Oct 2022	Bangalore	Diwali	Monday
01 Nov 2022	Bangalore	Kannada Rajyotsava	Tuesday

The Windows taskbar at the bottom shows the system date and time as 23:56 on 24-04-2022, with a temperature of 29°C and weather condition of Haze.

SCREENSHOTS

The screenshot displays the 'KL Pulse 3.0' web application interface. The browser address bar shows the URL 'klpulse.knowledgelens.com/v3.0/#/home/leave-tracker'. The user is logged in as 'Sreelekshmi Sunish'. The navigation menu includes 'Dashboard', 'Daily Status', 'Leave Management' (active), 'Employee Directory', 'Apps', 'KL Policies', 'KL Connect', and 'About Me'. The left sidebar contains 'Summary', 'Apply for leave', 'Holiday List', and 'Leave Calendar' (active).

The main content area is titled 'Leave Tracker / Leave Calendar'. It features a legend for leave types: Full Day Leave (red), Work From Home (green), First Half Leave (yellow), and Second Half Leave (purple). Below the legend are filters for 'Type' (set to 'Project') and 'Select Project' (set to 'All'), with a 'Fetch' button. The calendar view is for 'April 2022', with tabs for 'Month', '15 days', and 'Week'. The calendar grid shows dates from 27 to 16. Employees' leave status is indicated by colored bars across the dates: 'Arunal Bhargava' (green), 'G Himabindu' (red), 'Vidula Narendran Pillai' (green), 'E. Prithvirajan' (red), 'Manisha Pedhaguntapalli' (red), and 'G Himabindu' (red). Links like '+31 more' are provided for each employee's record.

The Windows taskbar at the bottom shows the system clock as 23:56 on 24-04-2022, with weather information for 29°C Haze.

SCREENSHOTS

The screenshot displays the 'About Me' profile page in the KL Pulse 3.0 application. The browser address bar shows the URL `klpulse.knowledgelens.com/v3.0/#/home/about-me`. The application header includes the 'Knowledge Lens' logo, 'KL Pulse' text, and a user profile for 'Sreelekshmi Sunish'. The main navigation bar contains links to Dashboard, Daily Status, Leave Management, Employee Directory, Apps, KL Policies, KL Connect, and the active 'About Me' page.

On the left, a sidebar menu lists 'Profile' (selected), 'Attendance History', and 'Leave Audit'. The main content area is titled 'About You / Profile / View Employee' and includes an 'Edit' button. It is divided into three sections: 'Basic Information', 'Permanent Address', and 'Current Address'.

Basic Information

Employee Id	First Name	Middle Name	Last Name
INT-615	Sreelekshmi	-	Sunish
Gender	Date of birth	Contact Number	Alternate Number
Female	09 Jun 1998	9645002302	-
Emergency Contact Number	7594935266		

Permanent Address

House Number	Street	City	State
-	-	-	-
Country	Postal Code		
India	-		

Current Address

House Number	Street	City	State
-	-	-	-

The Windows taskbar at the bottom shows the system date and time as 23:57 on 24-04-2022, along with weather information (29°C Haze) and various application icons.

SCREENSHOTS

KL Pulse 3.0

klpulse.knowledgelens.com/v3.0/#/home/about-me

Knowledge Lens KL Pulse

Sreelekshmi Sunish User

Dashboard Daily Status Leave Management Employee Directory Apps KL Policies KL Connect **About Me**

About You / Attendance

Select Date Range *

10/04/2022 - 24/04/2022

Legend: Present (Green), Absent (Red), Leave (Orange), Holiday (Brown), Weekend (Blue), Half Day (Yellow)

Hide/Show Columns: Date, Start Time, End Time, Work Hours

Search within the current page

Date	Start Time	End Time	Work Hours
Sun, 24 Apr 2022			
Sat, 23 Apr 2022			
Fri, 22 Apr 2022	09:34	19:26	09:52 Regularize
Thu, 21 Apr 2022	09:35	19:27	09:52 Regularize
Wed, 20 Apr 2022	09:35	19:33	09:58 Regularize
Tue, 19 Apr 2022	09:28	19:29	10:01 Regularize
Mon, 18 Apr 2022	09:37	19:29	09:52 Regularize

Windows Taskbar: 29°C Haze, 23:57, 24-04-2022

SCREENSHOTS

The screenshot shows the KL Pulse 3.0 web application interface. The browser address bar indicates the URL is `klpulse.knowledgelens.com/v3.0/#/home/about-me`. The user is logged in as Sreelekshmi Sunish.

The navigation menu includes: Dashboard, Daily Status, Leave Management, Employee Directory, Apps, KL Policies, KL Connect, and **About Me**.

The left sidebar contains: Profile, Attendance History, and **Leave Audit**.

The main content area is titled "About You / Leave History". It features a "Leave Type" dropdown menu set to "All Leave". Below this is a table showing the leave history.

Leaves	Type	Date ↑↓	Description
1	Monthly Credit	01 Apr 2022	Auto credited by System
-0.5	Second Half Leave	28 Mar 2022	Second Half Leave from 28 March, 2022 to 28 March, 2022 Auto approved by System
-1	Full Day Leave	09 Mar 2022	Full Day Leave from 17 March, 2022 to 17 March, 2022 Approved by Chaithanya NC
-1	Deduct	03 Mar 2022	Deducted by Jayashree S
1	Monthly Credit	01 Mar 2022	Auto credited by System
1	Monthly Credit	01 Feb 2022	Auto credited by System

The Windows taskbar at the bottom shows the system date and time as 23:58 on 24-04-2022, with a weather forecast of 29°C Haze.

The background is an abstract geometric pattern composed of various-sized triangles. The triangles are primarily in shades of blue, ranging from a deep, vibrant blue to a very light, almost white blue. The triangles are arranged in a way that creates a sense of depth and movement, with some triangles appearing to overlap others. The overall effect is a modern, clean, and visually appealing design.

THANK YOU