

# Online Leave Management System

Tulasi Sai Shweta<sup>[1]</sup> · C Saketh Gupta<sup>[2]</sup>

*Student, SRM University, Ramapuram, Chennai, India*

## ABSTRACT

*This project is focused at developing an Online Leave Management Application (LMA) that improves the conventional system of leave management in colleges. The Online Leave Management Application (LMA) is an Android based application which can be used to help the members of faculty in optimizing the time spent in the whole process of availing a leave. This app automates the workflow of leave applications and their approvals by means of mobile phones. In the manual system of leave management, the applicant of leave needs to submit a leave letter to the HOD concerned which in turn has to be submitted to the Principal for further approval. Thus the avail of leave requires approval from various authorities . This involves a lot of paper work, time and effort. The high probability of losing the record is another notable drawback. Also the retrieval of simple information like the total number of leaves taken in a year becomes a cumbersome task as it requires scanning of the entire record. In case of online Leave Management App(LMA), the registered members of the faculty are permitted to generate a leave request providing the required details. The leave request thus generated is sent to the HOD concerned for consideration which can be approved or rejected. In case of approval by the HOD concerned, the leave request is forwarded to the Principal for further evaluation. At any point of time, the applicant is allowed to track the status of his/her application and cancel his/her application. The applicant can also check the number of leaves availed and available . The HOD and the Principal are authorized to view and get the reports of leave details of members of faculty. Thus the Online Leave Management Application proves its effectiveness with respect to time, security of data and flexibility. Thus with the help of Leave Management App, members of faculty can easily manage their leave requests anywhere and anytime.*

**Keywords**—*Leave management, total number of leaves, evaluation by HOD, evaluation by Principal, manages leave requests.*

## 1. INTRODUCTION

In today's era of Internet, the process of leave management can be automated to enhance the efficiency of work in the educational institutions. The Online Leave Management Application (OLMA) is an Android based application which can be used to help the members of faculty in optimizing the time and effort spent in the whole process of availing a leave. This app automates the workflow of leave applications and their approvals by means of mobile phones. To use this app, the members of faculty need to get themselves registered in the app. The registered members of faculty can login into the app for applying leaves by specifying from and to dates, type of leave and reason. After that, the members of faculty are supposed to provide the details regarding their adjusted lecture hours if they are not applying for an emergency leave. The leave request thus generated is sent to the HOD concerned.

Then the HOD is supposed to accept or reject the leave request of members of faculty by considering the details specified in the leave application. If the leave request is accepted, it is forwarded to the Principal for further approval. The Principal too follows the same procedure to take the further action. The members of faculty can track the status and cancel their leave application at any time during this process. Moreover, the members of faculty are allowed to check their leave balance. HOD can also avail the benefits of this app for applying leave. The leave request thus generated by HOD is sent to the Principal which can be accepted or rejected. The HOD and the Principal have privileges to view the leave reports

## 2. LITERATURE SURVEY

In today's era of Internet, the process of leave management can be automated to enhance the efficiency of work in the educational institutions. The Online Leave Management Application (OLMA) is an Android based application which can be used to help the members of faculty in optimizing the time and effort spent in the whole process of availing a leave. This app automates the workflow of leave applications and their approvals by means of mobile phones. The main aim of our project "Online Leave Management Application" is to automate the leave management process in educational institutions. It results in the effortless processing of leave applications.

The scope of the “Online Leave Management Application” is to help the members of faculty, HOD and Principal of an educational institution in the whole process of requesting and granting leaves. The scope of HOD and Principal is confined to accepting or rejecting the leave applications and generating reports. The scope of the applicant (members of faculty or HOD) is confined to applying leave, tracking and cancelling leave application.

### 3. EXISTING SYSTEM

In the existing manual system of leave management in educational institutions, if the members of faculty need to apply for a leave, they are supposed to submit a leave application to the HOD concerned. After receiving consent from the HOD concerned, the applicant needs to submit the leave application to the Principal for further approval. If the HOD or the Principal is not available, then the members of faculty cannot get consent for their leave application. Also the retrieval of information like the number of leaves available becomes a cumbersome task as it requires scanning of the entire record.

#### Limitations of the Existing System:

- ❖ It requires a lot of effort.
- ❖ It consumes more time.
- ❖ It requires lots of paper work.
- ❖ No security for data.
- ❖ Unavailability of required authorities.
- ❖ Report generation is complicated.

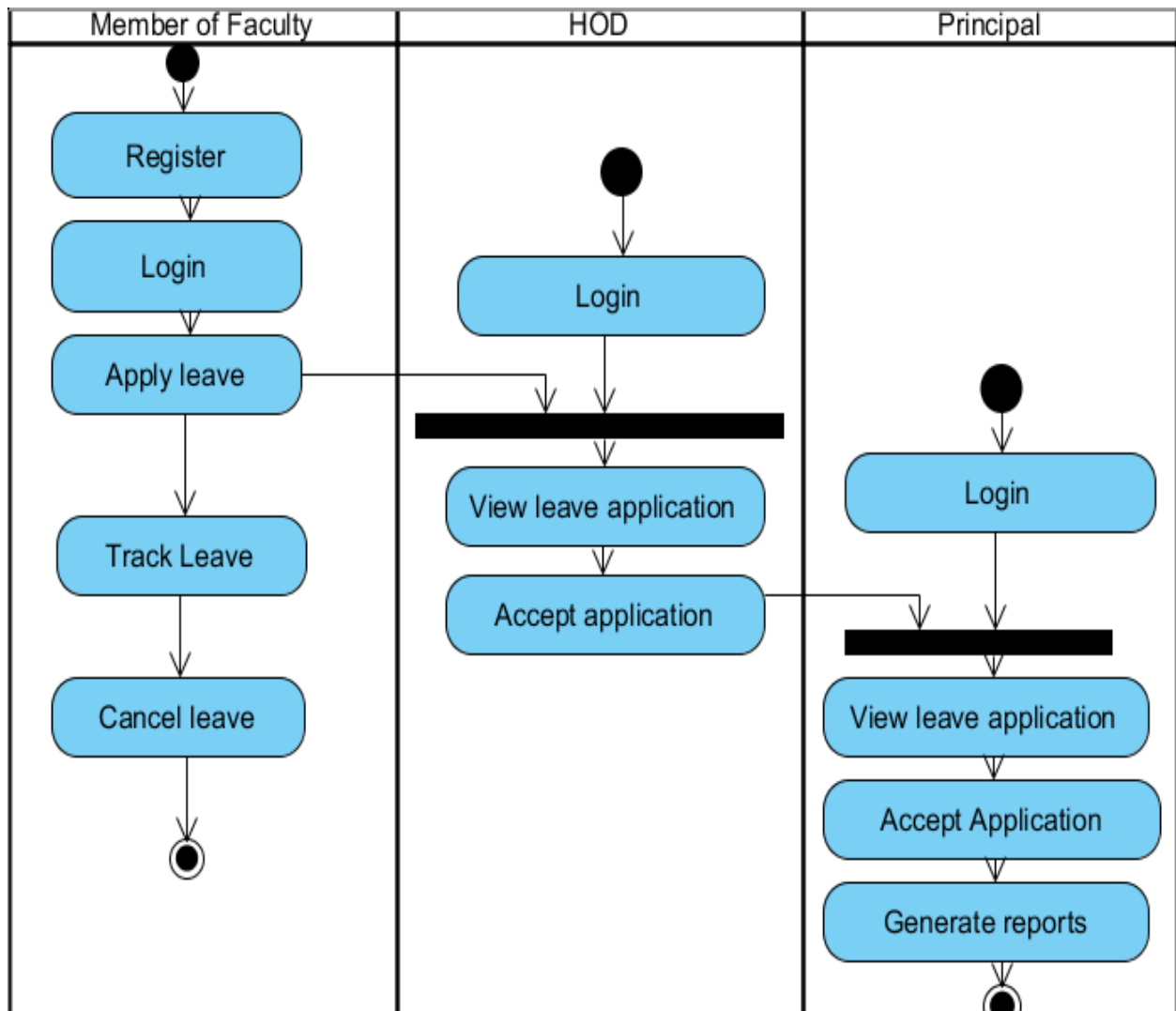
### 4. PROPOSED SYSTEM

By considering the pros and cons of the existing system, this application has been developed to cover all the features and overcomes the cons of the existing system. In the proposed system of Online Leave Management App, the registered members of faculty can simply generate a leave request anywhere and anytime providing the required details. The leave request thus generated is sent to the HOD concerned for consideration which can be approved or rejected. In case of approval by the HOD concerned, the leave request is automatically forwarded to the Principal for further evaluation. This saves a lot of time and effort. The HOD and the Principal can access the leave applications delivered to them anywhere and anytime. Also the members of faculty can view their leave account without going through the entire record. By availing the benefits of this app, members of faculty and HOD can generate leave requests and get them approved even in the case of absence of required authorities. This app enhances security to the leave records of employees.

#### Advantages of Proposed System:

- ❖ The application procedure is made easy.
- ❖ The members of faculty can check their leave status.
- ❖ Reduces a lot of time and effort.
- ❖ Reduces paper work.
- ❖ Friendly User Interface
- ❖ Enhances security
- Flexible to retrieve the information.

### 5. SYSTEM ARCHITECTURE



### 6. MODULE DESCRIPTION

There are mainly three modules in this application. The modules of this app are as follows:

- ❖ Faculty Module
- ❖ HOD Module
- ❖ Principal Module

**Faculty Module:** The primary users of the Online Leave Management App are members of faculty. The members of faculty first need to get themselves registered into the app. Then the registered members of faculty can utilize the services of this app to specify request for leaves. They are also supposed to specify the details regarding their adjusted lecture hours while applying for leave if it is not an emergency leave. They also have privileges to track the status of their leaves and cancel their leave application.

**HOD Module:** The HOD makes use of this app to scrutinize the leave requests generated by the members of faculty of his/her department. The leave request holds details about leave and adjusted lecture hours. By considering the details specified, he can accept or reject the leave application thereby resulting in the update of leave status. The HOD is also authorized to view reports i.e., the list of members of faculty of his department on leave on a particular day. HOD can also utilize the services of this app to apply, track and cancel a leave application.

**Principal Module:** The Principal makes use of this app to scrutinize the leave requests generated by the members of faculty of all departments which were accepted by the HOD concerned. The same applies to the leave requests of HOD too. The leave request holds details about leave and adjusted lecture hours. By considering the details specified, he can accept or reject the leave application thereby resulting in the update of leave status. The principal is also authorized to view reports i.e., the list of members of faculty of any department on leave on a particular day.

## 7. TEST CASES

1.	<b>Test case ID</b>	<b>Faculty registration</b>
2.	<b>Precondition</b>	<ul style="list-style-type: none"> <li>• Enter name</li> <li>• Enter designation</li> <li>• Enter branch</li> <li>• Enter username</li> <li>• Enter password</li> <li>• Enter mobile number</li> <li>• Click “Register” button</li> </ul>
3.	<b>Description</b>	<b>If the details are entered into the database, the user should be notified with a message</b>
4.	<b>Test Steps</b>	<ul style="list-style-type: none"> <li>• Enter name</li> <li>• Enter designation</li> <li>• Enter branch</li> <li>• Enter username</li> <li>• Enter password</li> <li>• Enter mobile number</li> <li>• Click “Register” button</li> </ul>
5.	<b>Expected Output</b>	<b>A message should be displayed as “Registration successful”</b>
6.	<b>Actual Output</b>	<b>Toast with “Successfully Registered” displayed.</b>
7.	<b>Status</b>	<b>Pass</b>
8.	<b>Remarks</b>	

1.	Test case ID	Login
2.	Precondition	<ul style="list-style-type: none"> <li>• Enter username</li> <li>• Enter password</li> <li>• Click “Login” button</li> </ul>
3.	Description	If username and password match, the users (donor or recipient) respective pages have to be displayed
4.	Test Steps	<ul style="list-style-type: none"> <li>• Enter username</li> <li>• Enter password</li> <li>• Click “Login” button</li> </ul>
5.	Expected Output	Displays a welcome message. Apply page for faculty and HOD,HOD applications page for Principal have to be displayed
6.	Actual Output	Displayed a welcome message .Apply page for faculty and HOD,HOD applications page for Princal are displayed.
7.	Status	Pass
8.	Remarks	

1.	Test case ID	Applying the leave
2.	Precondition	<ul style="list-style-type: none"> <li>• Leave dates ,type, reason should be specified.</li> <li>• Sufficient number of leaves are available.</li> </ul>
3.	Description	If the number of leaves are sufficient, The leave details should be entered into the database
4.	Test Steps	<ul style="list-style-type: none"> <li>• Enter the login details</li> <li>• Enter leave details</li> </ul>
5.	Expected Output	After entering the leave details into the database, a message should be displayed as “Applied successfully”
6.	Actual Output	Displayed a message as “Applied successfully”
7.	Status	Pass
8.	Remarks	

## 8. CONCLUSION

The Online Leave Management App is developed to facilitate easy processing of leaves in educational institutions. Manually, this consumes a lot of time, effort and paper work. And also if the concerned authority is not available, the task of availing a leave becomes complicated .So, this app overcomes all these limitations and offers a great deal of help at each and every stage in the whole process of availing a leave.

## 9. FUTURE SCOPE

This project Online Leave Management Application has been developed in such a manner, that the future requirements of the user are met. The project is flexible to adapt the changes efficiently without affecting the present system. In future, there can be a provision to adjust the lecture hours on leave dates to other members of faculty through the app. We are also planning to implement the app on various other mobile platforms like Windows and iOS. This is the future scope of our project.

## 10. REFERENCES

1] Professional Android 4 Application Development, Reto Meier

Head First Android Development by Dawn Griffiths

2] MySQL CookBook, Paul

PHP and MySQL development by Luke Welling

3] Android Application Development Cookbook: 100 Recipes for Building Winning Apps by Lee, Wei-Meng

PHP Reference: Beginner to Intermediate PHP5 by Mario Lurig

