Improved Method for Computerized Leave Supervision

CMAK Zeelan Basha, Chandra Sekhar Maganty, G Deva Raju, Y Divya, Y Spoorthy

Abstract: This project is aimed at developing an online leave management system which is important for any organization. Employee (Faculty) Portal is an interface used to associate with the employee in an organization. The application permits the enrolled user to login and a new user is allowed to enroll.[1] This system can be used to automate the flow of work for leave applications and their approvals. The periodic crediting of leave is also automated. There are several features like email notifications, automatic approval of leave, report generators, etc. in this system. Leave Management application will reduce paperwork and maintains a record more efficiently.

Keywords : Employee (faculty), Leave, Adjustment, Approved, Rejected.

I. INTRODUCTION

This is a cloud-based application built with the support of the Servicenow platform. Servicenow is an IT Service Management (ITSM) software platform. This lets you simplify the operation of IT Business Management (ITBM). Based on ITIL guidelines, this cloud-based framework is planned. In earlier days, the staff needs to submit their leaves manually to their respective authorities. [2]This increases the paperwork & maintaining the records becomes tedious. Maintaining notices in the form of records also increases the paperwork. The main objective of the proposed system is to decrease the paperwork and help in easier record maintenance in a cloud using tables, where Leaves and adjustments are maintained. Servicenow also provides high security using access controls. The proposed system automates the existing system.

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The proposed system involves applying and approving leaves online. Using credentials to access the application the existing user is asked to log in and a new user may sign up with general information such as faculty name, faculty id, email, etc. The user will be routed to the homepage after signing in. [3][4]The Homepage consists of the leave application module. In that, the name, Id number, email id will populate automatically. The user will select the number of days of leave and the name of the faculty to whom it will be adjusted. And then the user will select his/her particular department. The head of that department will be populated automatically. If the adjusted faculty will approve the user's leave then that leave request will be passed to HOD. If the HOD approved that leave request, then the state will be changed to "approved".

II. EXISTING SYSTEM

An application can be created using any of the current programming languages such as C, Java, Python, etc. [5]The faculty portal is also an application that requires several modules to be built to create a complete user interface. However, the use of these programming languages is a time-consuming process rather than using a software tool to improve efficiency and leads to better results.

A complete interface for interaction between users within an organization is found nowhere for querying and remainders. On the other hand, a manual application process during the leave is done in a manual manner gathering all the user details without using any of the online resources.

III. PROPOSED SYSTEM

The faculty portal allows faculty to apply for leave by filling out the form. The notifications will be sent automatically to the adjusted faculty and the department HOD. This application may be accepted by colleges and organizations. This program is reliable and saves the consumer time and costs.

3.1 MODULE DESCRIPTION

Login/Signup

In this module, every user who wants to access the application must do login. If the user does not exist, then he/she must do sign up and then submit the request to the administrator. If the authorized user receives his credentials in his registered email with a randomly generated password, the user must log in with that hexadecimal password and then reset his password later. If the request is denied by the administrator, the user does not access the application. This is done using a User Registration Request plugin.

Homepage

After login into the portal, it will be re-directed to the homepage. It contains a Leave application module. A user can access their profile where they can edit profile images, email ids, phone numbers, and preferences.

Upon completion of the job, the user can log out of the application. This is done using the stock theme on the service portal page. By using the stock theme, a status bar will appear at the top of the application to allow the user to navigate to the homepage from any page within the application.
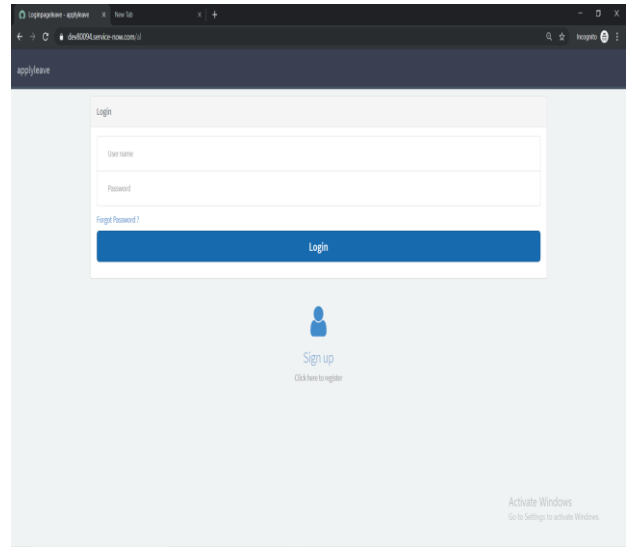
Leave Application

[6][8] In leave application, the Faculty name, Id number, email id will be populated automatically by using business rules and script includes. Initially, the state will be set as "requested". The user will select the number of days for leave, Dates, Time slots and the name of the faculty to whom it will be adjusted. An email notification will be sent to that adjusted faculty.[7] If he approves the leave request, that notification will be forwarded to Head of the Department mail else the state will be changed to "rejected" and the rejection notification will be sent to the user's mail. The HOD Name of that particular department will be populated in the form by selecting the department.[9] If the HOD approved that leave request, then the state will be changed to "approved" and the approval mail will be sent automatically to the user. This whole automation process will be done by using workflow[10].
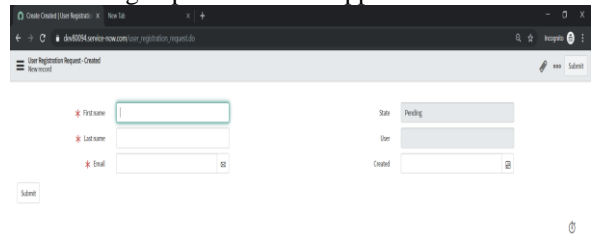
IV. FLOW DIAGRAM
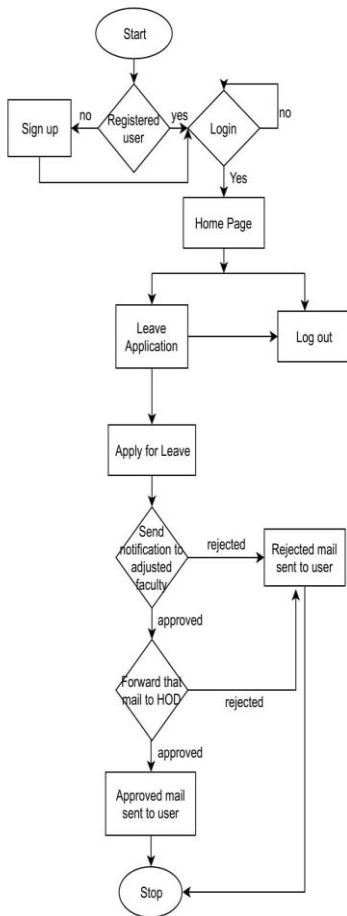
This flow diagram explains all the steps in an application.
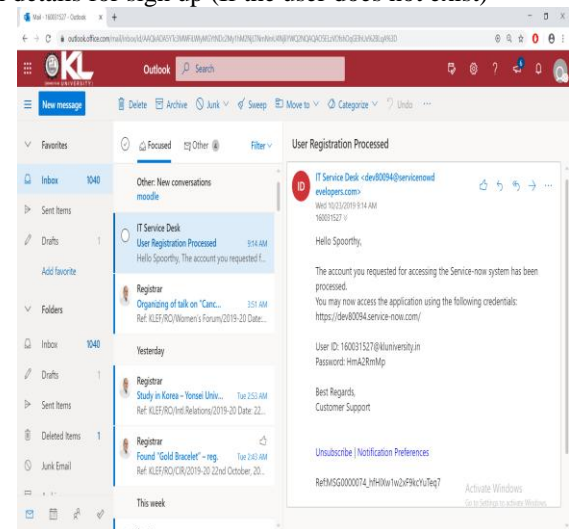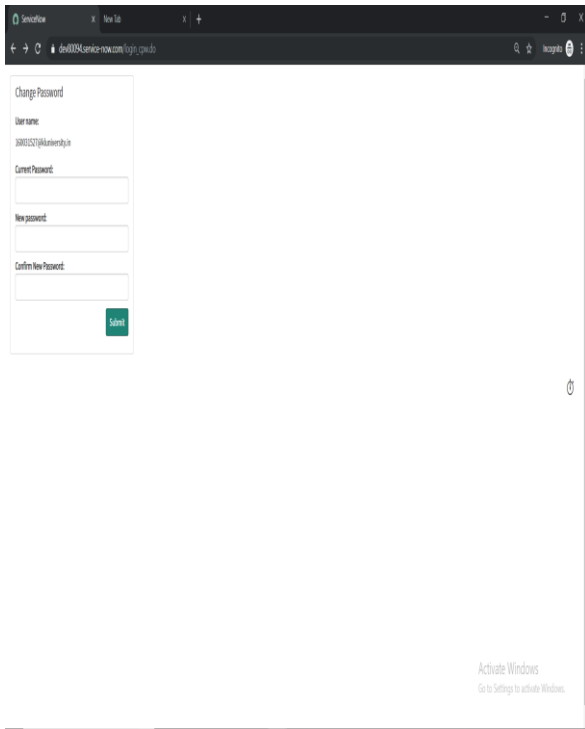
V. RESULTS

Login/Sign up Page

This module used to login into the portal using their credentials to access the application. If there is a new user he/she must sign up to access the application.
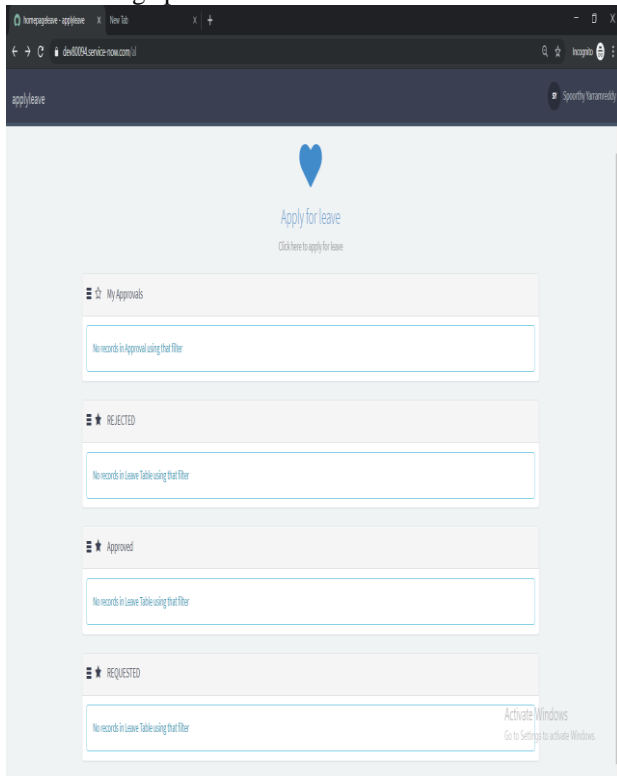

Fill details for sign up (If the user does not exist)

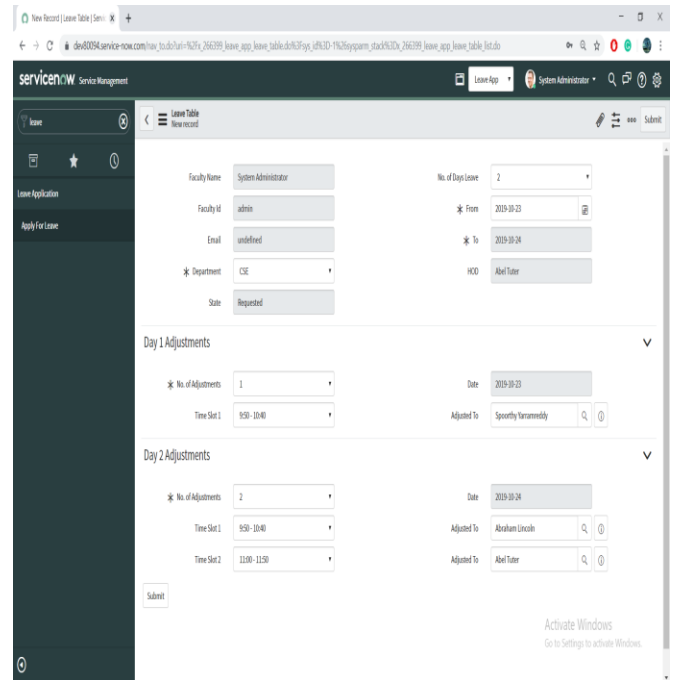Login credentials will be sent to a mail

Change password

Application Form

Home Page
This homepage module consists of "apply for leave" module

VI. CONCLUSION

An application should be built in such a way that it fulfills all the requirements for faculty leave application online. If we built using the programming language, it will consume more time. There are many technologies in existence which take less time to develop applications that are being evolved and Servicenow is one of them. Thus, using this tool the whole leave application process should be done in less time and it contains less human effort. Servicenow is mainly used for storage and high-security purposes. All the entries will be stored in a cloud and the security will be provided by using roles and access controls.

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