HOSTEL MANAGEMENT SYSTEM USING SERVICE NOW

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Abstract— As the name specifies "HOSTEL MANAGEMENT SYSTEM" is a project which is developed for the management of several activities that happens in every hostel. These days there are various educational institutions increasing for every day and these are followed by the requirement of accommodation for students who wanted to study in these institutions. So there is a lot of work to be done for a student to be joined in this hostel and in these contexts generally there are no applications or any software developed. So our project is much helpful in these contexts. This project is developed based on problems faced by the hostel management and avoids many problems which are caused by man work which causes problems like incorrect data entry and several other problems. By identifying these drawbacks caused by current technique which interrelated for developing an automated and digitalized system known to be the hostel management system which gives much more comfortable and compatible with the existing system and this is the system which is more user friendly. The proposed system has superior efficiency, and it surmounts the shortcomings of existing technique of hotel management system. Also, it has few advantages while the system is generating such as providing high security, avoiding data redundancy, data consistency, easy handling, stored record, data updating, less laborious work and less human error.

1. Introduction

In traditional way in order to book a room or request for staying at hostel and providing feedback lots of work should be done for every activity. Firstly, to book a room at hostel we need to come early in the morning to hostel for the better selection of rooms. And then when the process starts each floor is allocated to a minimum of 2-3 hostel officials and then these people will be giving a token number to each student and it takes a minimum of 2-3 hours to complete this process for all the students. And a day is allocated to first year and the next to their seniors out of whole this process takes minimum 4 to 5 days. And after completion of giving tokens to all the students each student is called according to their token number and then each floor in-charge will check each student payment proof and then by referring to the advanced booking list he/she will be allocated with the room and again if her payment proofs should be considered or not like management do not consider the payments which are paid using local banks if anyone has paid their amount using those banks again their raises an issue and then due to this the other student candidates must wait until the completion. But using this project many numbers of students can complete their procedure simultaneously which is easy both for the management as well as the student. And for a non hosteller to stay at hostel that student first need to get a letter signed from parents and then submit that to transport department and this letter should again be forwarded to the higher officials of hostels and they might not be present all the day at their cabins so this takes a minimum of 2-3 days. But using this project the student who wanted to stay at hostel can send their request which is directed to the official of hostel via

email. Whenever they accept the request the candidate will get a notification regarding the acceptance which is much better than the manual signatures and all.

2.   METHODLOGY

A. CURRENT SYSTEM

Using existing languages in programming like C, Java, Python, etc. the application will be easily produced. It has the involvement in the creation of several modules that helps in establishing a user end interface. Nevertheless, these languages are very time-consuming. Instead we go for an automated implement which enhances productivity and results best outcomes when compared to project developed using regular programming languages. Overall user interface is well designed purposely to develop collaboration among user and association in order to query and search. The current technique utilizes the understanding of HTML and Java script as a programming language for the request structure. On contrary, this requires large simulation time, and it is having laborious work.

B. PROPOSED SYSTEM

A hostel management portal allows a student to register with hostel and book a room and for staying at hostel for a period of time and for any new announcements regarding events or any other important things can be known to students through this portal. Student can provide feedback through online using this portal. Numerous numbers of institutions, Industries and firms, hotels, paying guest rooms etc. will accept such type of applications and it seems to be more reliable, effective, time saving and less economic.

3.   MODULE EXPLANATION

A. LOGIN/SIGNUP:

The user must sign up first if he is willing to make utilisation of such application as per the requirement of this module. Here a plugin should be installed which is called user registration request. By using this plugin when the user has signed up that particular user will be sent a user name and password and when the user logged in for the first time using the password sent via email the portal asks to reset password and then confirm the password. And the validation of password is done automatically like there should be a special symbol and so on. All this process is done by this plugin. All this can be done only when the administrator accepts the user's request. If administrator does not accept the request then the user is not be able to access the application which is done by the plugin installed.

B. HOME PAGE

After successful authentication, user is directed to the homepage. Homepage includes several items like booking room which is created using a widget called icon link and the link of the table created is given as the link under the room booking widget. And using several types of containers a icon link called contact details and announcements are created. When the user clicks on the widget the respective information is shown. The user will be able to view his profile, change password and several other actions.

C. APPLICATION FORM FOR ROOM BOOKING

When user clicks on this widget, he will be directed to a form which takes the information of the user like the room type he wants and the which year is the user studying. For the first year there will be certain hostels followed by other year students. By using several artifacts like client scripts, UI policies the form is

designed. First year students must be able to book rooms only in certain hostels and there are specified rooms for each year. And a student cannot book a room for others so name is populated automatically on loading the form using client script. According to the type of room chosen room numbers will be changed. And based on the type of room the fee details are automatically populated. First year students need to pay caution deposit and this will be only visible to them and for the remaining it is be hidden using UI policy actions. This is how the form is created and the details of each user is stored in the form of table.

D. CONFIRMATION OF REQUESTS

After submitting the form user will get an email notification containing the room information like the room number and the fee details of room and at what time it is submitted. All this process is done by the workflow. In order to help companies for gaining precise outcomes in business, then there must be a process as multiple steps for automation with hybridisation of system and people. Make the processes that drive your business more effective and efficient with end-to-end automation that removes the bottlenecks. Workflow has 2 predefined activities namely begin and end. And there are several activities connected to any other by transaction line. When the administrator accepts the user request the email is sent from the administrator this should be done by enabling the email notifications. And the user receives an email notification regarding the room details.

1)   ARTIFACTS USED

Artifacts are nothing but the applications files used in service now for various purposes to satisfy several requirements. Like tables, scripts, workflows and these are some of the examples of the artifacts.
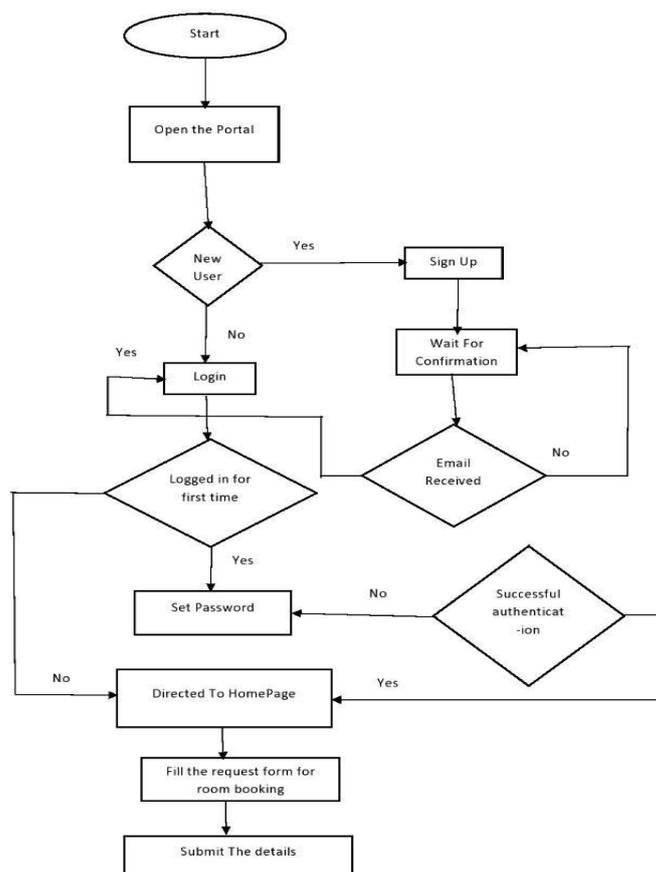
A. TABLE

Collection of date or record will be constructed in a table structure in which every content is recorded in a database. Corresponding to the row ad column of the table, we manage the arrangement of processing the data. Applications such as CMDB, Problem and Incident helps in regulating such data. It has the extension into one or two tables, constructing the parent and child created table structure. A form is used to represent the table much effectively. A form is a content page displaying fields and values for a single record from a database table. Forms have a 1-column layout, a 2-column layout, or a mix of both. Forms are opened from Modules in the Application Navigator or by clicking a record's number in a List.

B. CLIENT SCRIPTS

It permits to run and execute the JavaScript on client-based browser at the time of such script-oriented events take place. Events that come under this group: at the load point of form, post form submission, field changing value. Trigger the utilisation of client-based script at the time of reach in form fields, configuring form and field values all this come under the instance of user defining the form. The fields does the creation of visible or hidden scripts that makes the file to read or write, mandatory or optional which completely rely on the value that was related to each field. Finally, the field adjust the options based on appropriate selection of list being made based on user's responsibility, display popup messages based on a value in a field.

C. UI POLICY

UI policies dynamically change the behaviour of information on a form and control custom process flows for tasks. For example, you can use UI policies to make the number field on a form read-only, make the short description field mandatory, and hide other fields. Basic UI policies do not require any scripting, however for more advanced actions, use the Run scripts option. You can also use client scripts to perform all of these actions, but for faster load times use UI policies when possible.

D. WORKFLOW

The drag-and-drop interface application for automating multi-step processes across the platform can be done through workflow. It comprises of several sequential activities for instance record generated, users notified, pending approvals or scripts under process. The graphical Workflow Editor represents workflows visually as a type of flowchart. It shows activities as boxes labeled with information about that activity and transitions from one activity to the next as lines connecting the boxes.

E. FLOW CHART
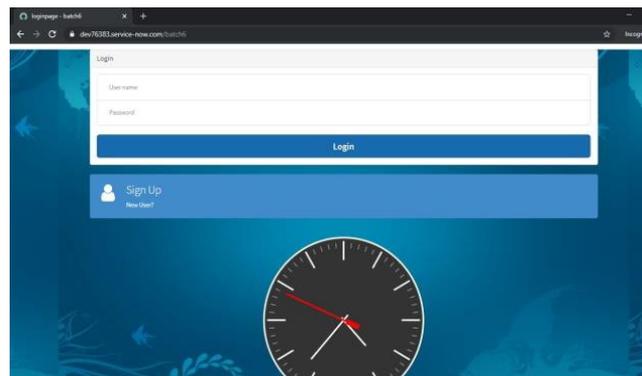
Fig.1 Login Page

4.   RESULTS

C. LOGIN PAGE

It suggests the user to understand the process in which the user make use of the login credentials for accessing the application or form or how to register to access the application.
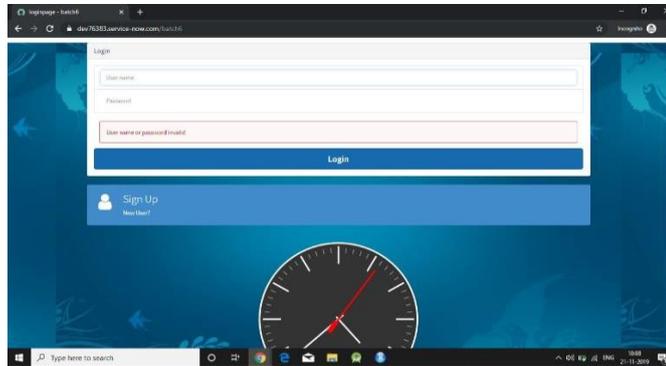
Fig.2 Signup Page

D. SIGNUP PAGE

This page allows a new user to register and to access the application.
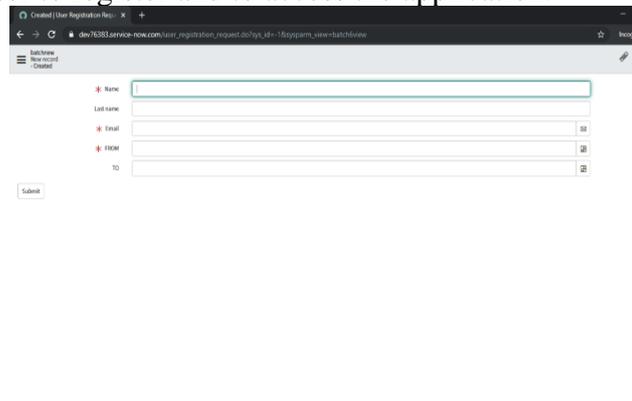

Fig.3 Home Page

E.   HOME PAGE
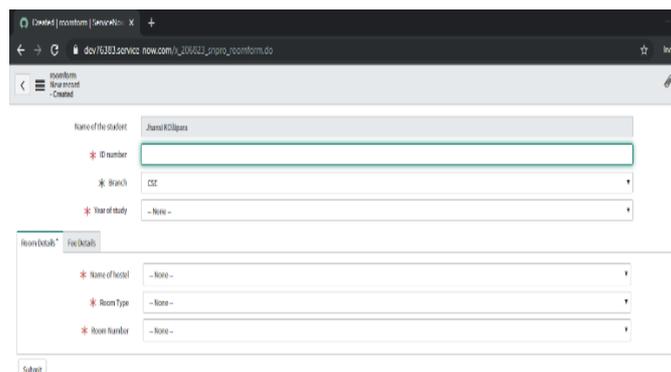
Fig.4 Validation of details

The module of homepage involves three group of domains such as contact details, room booking and announcements. Depending on the ease of interest, the client can have access to any of the domain.
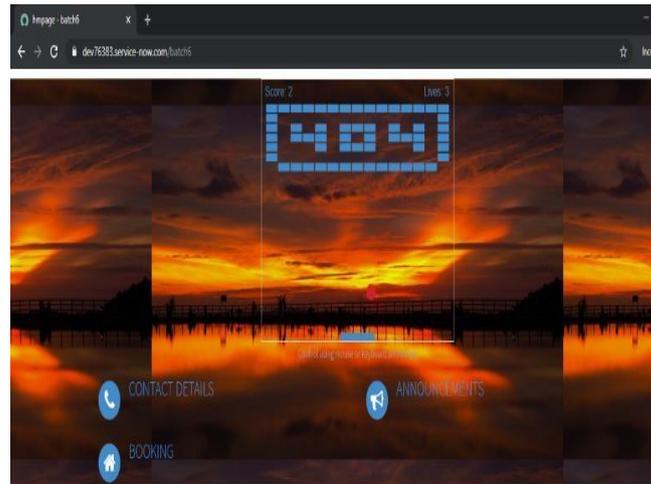
Fig.5 Form for booking room

F. VALIDATION OF DETAILS

By using a plugin user validates the login details and checks for the password from the database table called user registration table.

G.   FORM FOR BOOKING A ROOM

This is the form used for booking the room and there are two sections in the form one is for room details and the other is for fee details. This prevents user from continues scrolling of a web page.

5.   CONCLUSION

The application facilitates the learners to appeal for room booking and to acquire authorization from the superiors. An application should be designed to meet all of the client's defined specifications. There is no rule for the use of programming language. Instead there exists different technology that is being developed and one of them is Service now. Thus, the proposed software thereby attained for an optimal result This software therefore suggests an optimal solution for the need of the students to verify and see the status directly.

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