

A Synopsis on

Web Based Student Helpdesk

Submitted in partial fulfillment of the requirements
of the degree of

Bachelor of Engineering

in

Information Technology

by

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UNIVERSITY OF MUMBAI

2019-2020

Approval Sheet

The project report entitled ***Web Based Student Helpdesk*** Submitted by ***Nilesh Yadav (16104035) Amol Beldar (16104070) Viraj Ghag (16104024)*** for the partial fulfillment of the requirement for award of a degree ***Bachelor of Engineering in Information Technology*** to the University of Mumbai, is a bonafide work carried out during academic year 2019-2020

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Place: A.P. Shah Institute of Technology, Thane

Date:

CERTIFICATE

This is to certify that the project Synopsis entitled ***Web Based Student Helpdesk*** Submitted by ***Nilesh Yadav (16104035) Amol Beldar (16104070) Viraj Ghag (16104024)*** for the partial fulfillment of the requirement for award of a degree ***Bachelor of Engineering in Information Technology*** to the University of Mumbai, is a bonafide work carried out during academic year 2019-2020

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Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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(Amol Beldar 16104070)

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Date:

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Chapter 1

Introduction

As we see in our day to day college life we may notice students facing some kinds of problems which they may not directly convey it to the teachers due to many reasons. Hence to overcome this problems a 'Web Based Student Helpdesk' is a great solution for this problem. In this system we are trying to make a web application in which student and staff can interact with high authority using this service. The system will be sea kind of a web application which will be used by the college individuals to address there problems, complaints, suggestions or request etc to the college administration. A web application is any computer-like device deployed in a public venue to give people self service access to products and services. Using this idea of web application technology we can similarly deploy such web application systems in college corridors to get an easy access to the system and enable the individuals to write down their problems ,complaints, suggestions or request etc to the college authorities with complete confidentiality.

1.1 Abstract

The purpose of this project is to provide the colleges with an interactive machine for different activities going on in the colleges. The students will be able to know, ask complaint etc about what all activities colleges is doing for the students. Also we can provide students to give there suggestions or requests for particular activities that the students may require on college/departmental or personal basis as well. We will be making a website for an online complaint management system where the issues of the student can be registered online and will be resolved by the college authorities. This web application can reduce the gap between the student and the college staff as all the requests, complaints suggestions etc will be confidential and only the authorised person or the person who is intended to the requests can be able to view it.

1.2 Objectives

The main objective behind building this project is to reduce the communication gap between the students and the college authorities and also help in creating a techno friendly environment and save time. With the use of the web application students can be able to convey there problems without hesitating to the college officials. Students will also be able to apply/request for some important college applications/credentials as well (eg. Bonafide certificate, Concession forms etc).

Chapter 2

Literature Review

[1] Kaur, Harpreet, and Sonali Malhotra. "Use of "Kiosks" as a Self Service Tools in Libraries." 2018 5th International Symposium on Emerging Trends and Technologies in Libraries and Information Services (ETTLIS). IEEE, 2018 The

above paper says that The use of latest technologies in libraries is a must for every library to enhance the efficient services of that particular library. The help of this latest technology helps in thinking of library use in different manner. Not only does the kiosk is used for libraries in countries like USA, UK, Canada, New Zealand etc for various purposes. However in India they are still under development. In this library management system using kiosk libraries can perform in more efficient manner than before. Today all the libraries of the world are using technologies for the ease of its users. To make its services more effective the libraries has now switched over to the self service technologies. The use of these self service technologies like kiosks highly reduces the staff workload and also save the previous time and energy of the library users. This library kiosks are being largely installed in US and UK. But along with it certain things should also be considered while designing and implementing the kiosk in the library like it's design which should be attractive the place where you would keep it the user interface etc. There are a number of advantages of using kiosks in libraries that is the reason the kiosks are becoming very popular in library community and libraries all over the world are using it to make their service more efficient and effective. Like it reduces the extra load and burden on the staff, reduces the queue and the waiting time at the reception desk. It remotely manages the library devices from one location etc.

Advantages :-

1. User friendly interface.
2. No need any external device.

Disadvantage :-

1. Service only available on machine.
2. Continues electricity supply needed.
3. Infrastructure is very expensive.

[2] Si, Nong, Ke-Bin Jia, and Chang Xu. "A Networked Multimedia Distributed Kiosk System for Commercial and Home Appliances." 2016 Third International Conference on Computing Measurement Control and Sensor Network (CM-CSN). IEEE, 2016. To make sure the system under a maximum data security frame,

we implemented the kiosk system under several password levels and secure USB memory stick protection. The database security is mainly related to the client and server system, which allows store and authorized staff to retrieve the data from those system after passing the relative password checker. In that case, the data tables have to be designed to satisfy EAKS security requirement. The structure of the data secure table involves password table, searching condition table, category table, order form table, brand table, screen protection table, condition detail table and description table. To protect the customers sensitive information, we presented a periodical password changing USB memory stick to the highest level staff. The password is stored in the memory with Rijndael Algorithm to prevent from deciphering. Under the rapid development of information technology in today's society, kiosk system has become an indispensable part in many fields. Especially in retail business, retailers use the kiosk system to meet customer demanding and promote overturn. These systems have been widely used in department stores, book stores, entertainment and recreation services and supermarkets, which have highly improved the service productivity. networked system; ASP.NET; authorware platform.

Advantages :-

1. User friendly interface.
2. Multimedia network capacity.

Disadvantage :-

1. Need more devices and sensors.
2. Infrastructure very expensive.

[3] Kansuwan, T., Chomsiri, T. (2019). Authentication Model using the Bundled CAPTCHA OTP Instead of Traditional Password. 2019 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering

In this paper they have presented an idea of verifying the user by using “BUNDLED CAPTCHA OTP” for user verification instead of using old traditional passwords. It includes the use of CAPTCHA and one time password for reducing further processing steps and also user will not have to remember his password. It is a unique random parameter which will be used instead of traditional password method.

Advantages :-

1. Authentication of user.
2. Every time different OTP will be sent to user while registration process.

Disadvantage :-

1. This technique will not work if there is no internet connectivity.

Chapter 3

Infrastructure

3.1 Previous Infrastructure

In the previous system, if the students need to complain or request about anything they need to go to the college official personally. Also if the students need to request for any special courses, certificates or for any other needs they need to go to the authorities or exam section or any other department physically in order to convey it to the person. Sometimes it may happen that the person students intend to meet may not be present at that moment or may not be in the college premises resulting the student to go to check about the person's availability multiple times thus resulting in waste of time and also wastage of manpower with no guarantee their visit will be successful.

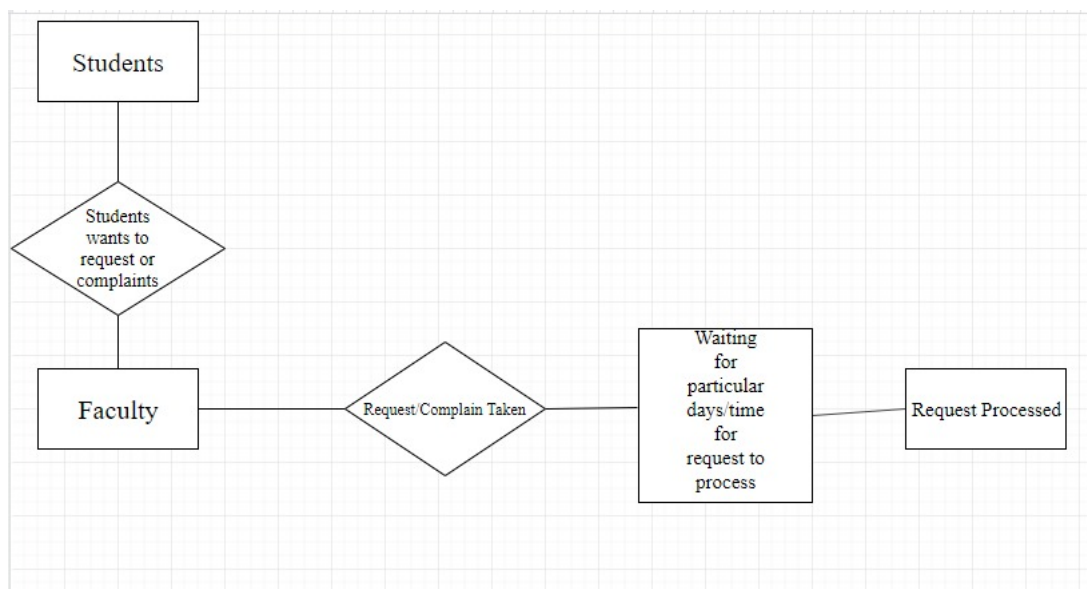


Figure 3.1: Previous System

3.2 Final Infrastructure

In the final system, the students will be able to convey there problems ,feedback,requests to the college using the web application which will be implemented in the college.The students will need to login into the system through their unique login credentials provided to them by the admin.Once the student logs into the system he can convey his/her problems or even request his needs to the authorities in a secure and confidential way.Thus saving time and manpower.

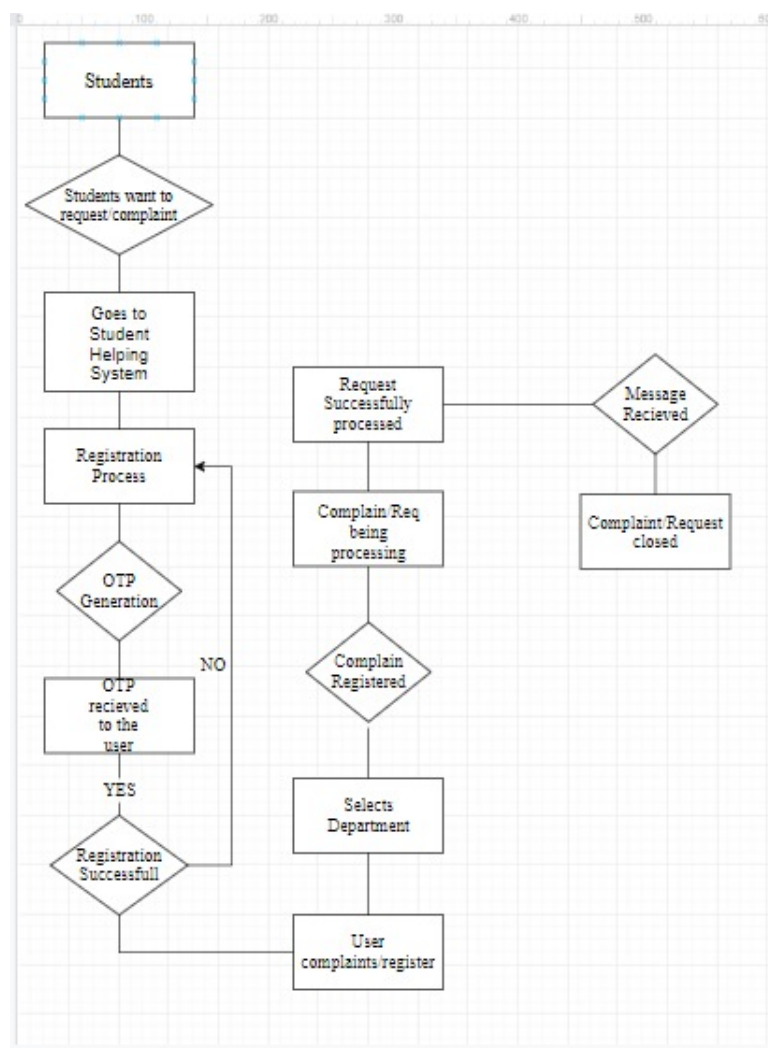
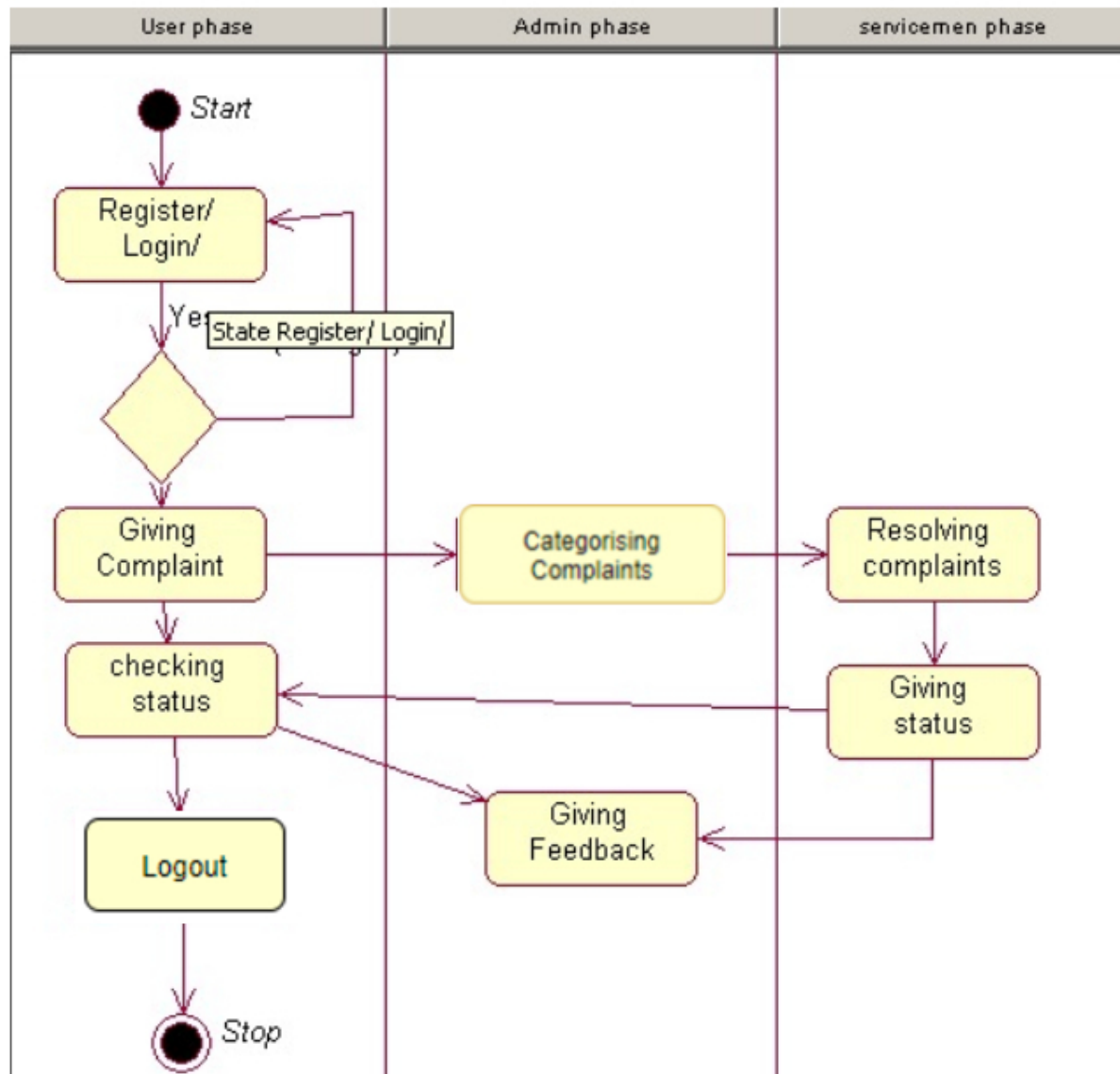


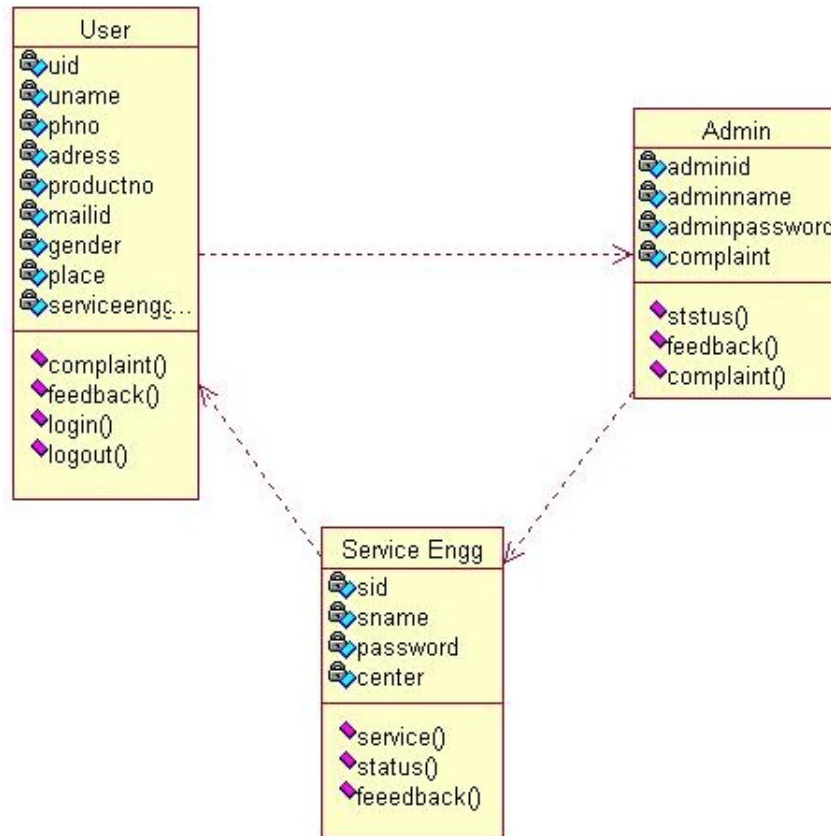
Figure 3.2: Final System

3.3 Activity Diagram



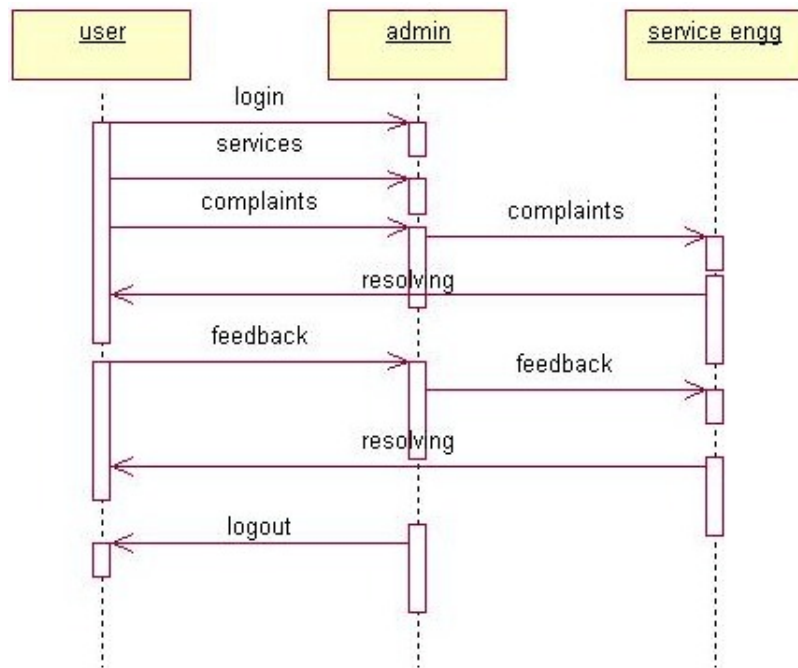
In this activity diagram we can easily understand the complete process of working. User need to first register if already registered then user can directly go for login. After this user can lodge their complaint/suggestion/feedback. User can also check the status of the their complaint/suggestion/feedback after successful resgistering query.

3.4 Use Case Diagram



We can see here features provided to user and admin for updating their information and data. User can update their profile after registering or login like gender, mobile number, address, student belong from which department, roll no., moodle id etc. Admin can see the dashboard of complaints/feedback/suggestions register from students. Admin can see the details of registered users and can manage users. Admin can also check the activity of the of users on their dashboard.

3.5 Class Diagram

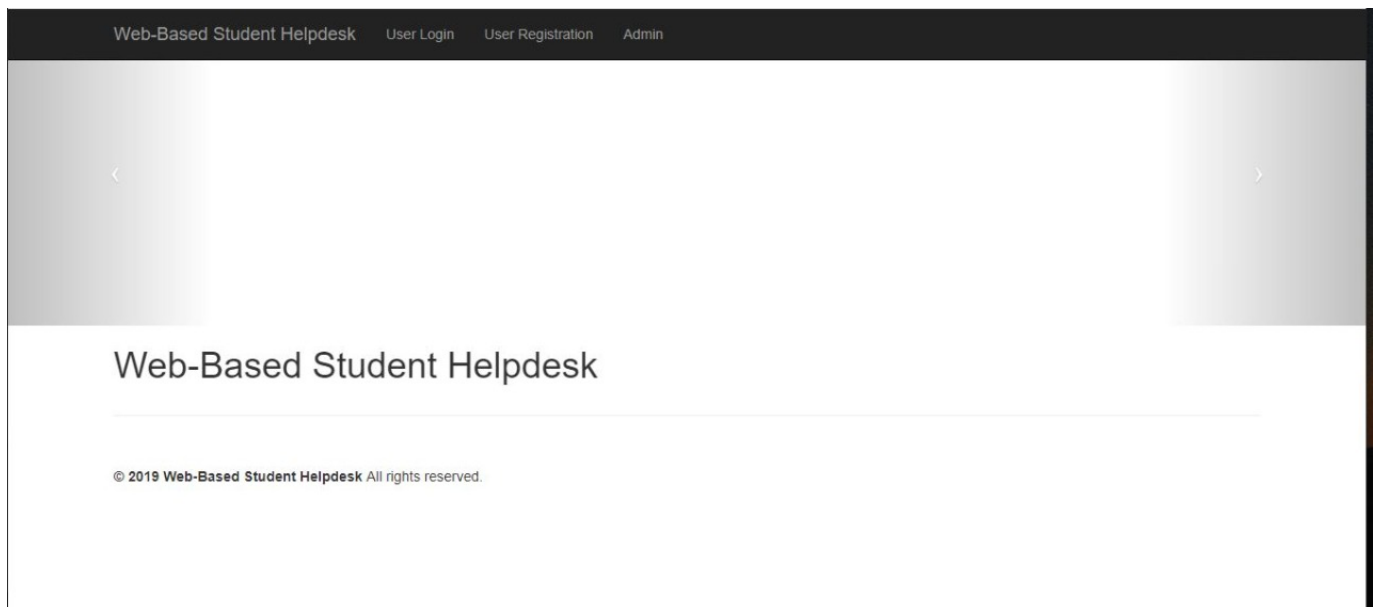


The main part of the webbased student helpdesk system is here. After the registering query from student admin can see the query on their dashboard immediately. Admin have to take action student query and status/update will be reverted to respective student.

Chapter 4

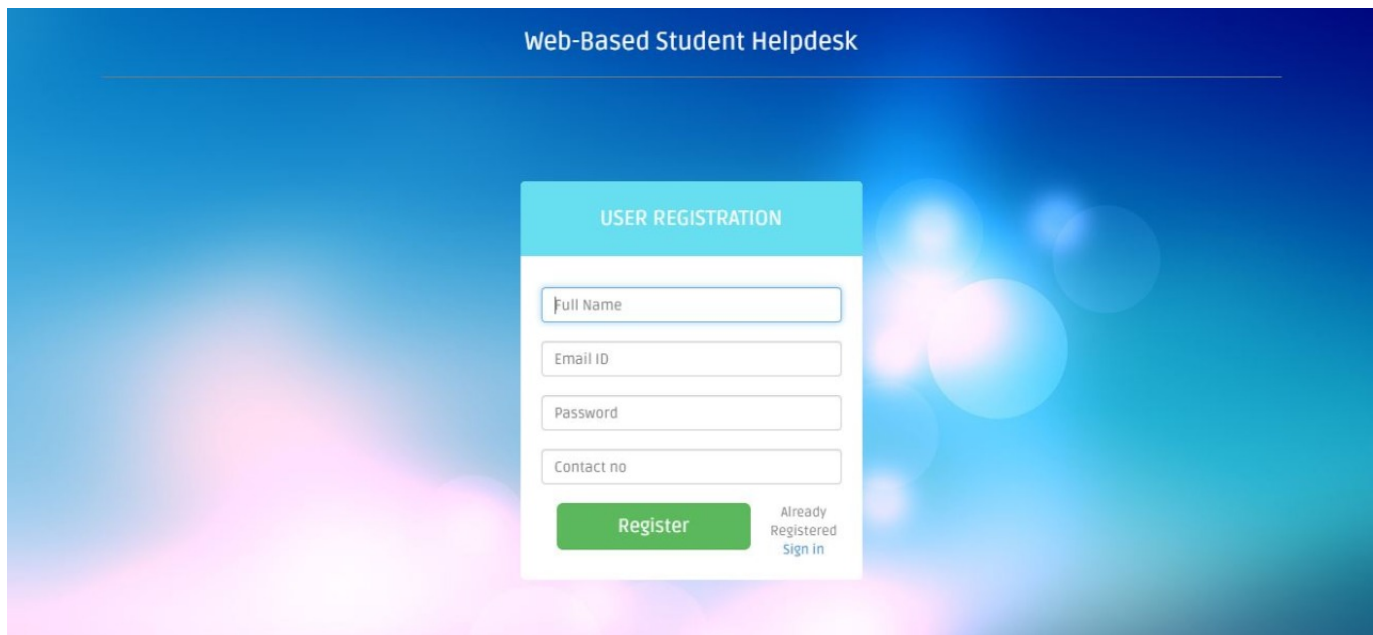
Design and Implementation

4.1 Homepage



This image showing the homepage of helpdesk system. There are total 3 options 1) User Registration for new user registration process. 2) User Login for already registered user. 3) Admin for admin login.

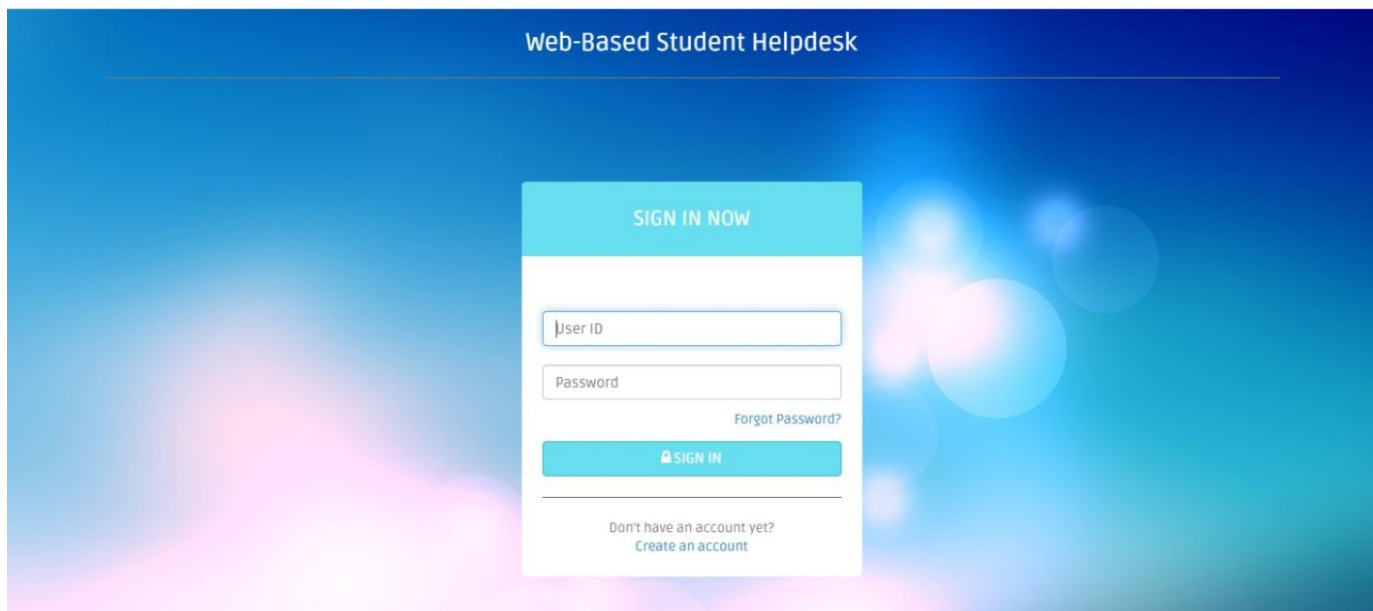
4.2 Registration



The image shows a web-based student helpdesk interface with a registration form. The header is "Web-Based Student Helpdesk". The form is titled "USER REGISTRATION" and contains four input fields: "Full Name", "Email ID", "Password", and "Contact no". Below the fields is a green "Register" button. To the right of the button, there is a link that says "Already Registered Sign In".

Registration form for new user. Here new user need to register by providing their email id, mobile number and password. All the registered user data will be stored in database for validating the user data.

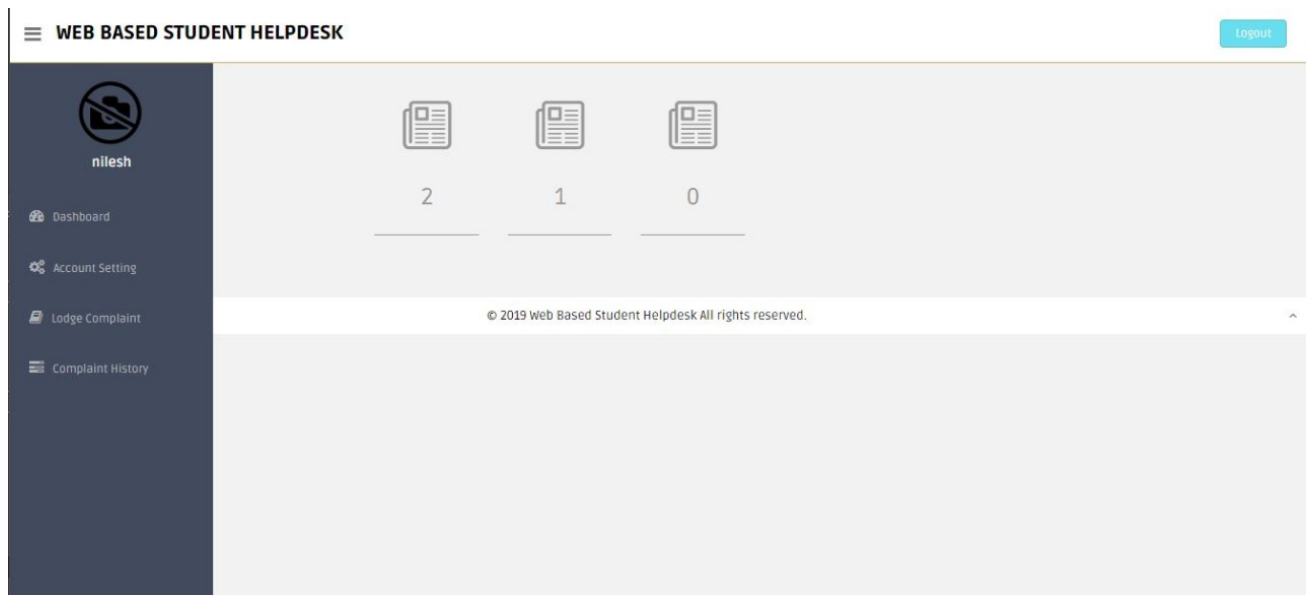
4.3 User Login



The image shows a web-based student helpdesk interface with a sign-in form. The header is "Web-Based Student Helpdesk". The form is titled "SIGN IN NOW" and contains two input fields: "User ID" and "Password". Below the password field is a link that says "Forgot Password?". Below the fields is a blue "SIGN IN" button. At the bottom of the form, there is a link that says "Don't have an account yet? Create an account".

Login page for registered user. For login and accessing the system user need to provide registered email id and password.

4.4 User Side



Homepage of user side. User can see the status of their lodged queries on dashboard. In this user can update their profile as per their requirement. Can lodge new query. User can also able to see their complaint history.

4.5 User Profile

The screenshot shows the 'nilesh's Profile' page. The header and sidebar are identical to the dashboard. The profile section includes a 'Last Updated at' timestamp and several input fields: 'Full Name' (nilesh), 'User Email' (nileshya98@gmail.com), 'Contact' (9029232103), 'Academic Year' (empty), 'Select Department' (dropdown), 'Moodle ID' (empty), 'Roll No.' (empty), and 'Reg Date' (2020-04-12 11:44:13). At the bottom, there is a 'User Photo' section with a placeholder image and a 'Change' link.

Here user can update their profile. User can update contact number, department, academic year, moodle id if wrong entered, roll no. and upload profile photo.

4.6 User Complaint Page

WEB BASED STUDENT HELPDESK

Logout

nilesh

Dashboard

Account Setting

Lodge Complaint

Complaint History

> Register Complaint

Category: Select Category

Sub Category: Select Subcategory

Complaint Type: Complaint

Department: Select Year

Nature of Complaint

Complaint Details (max 2000 words)

Complaint Related Doc/Img: Choose File | No file chosen

Complaint form for user. In this user can select the category of their query with sub category related to their category. For example if I selected examination category then user can select sub category as results, exam form fees, revaluation form status etc. User can lodge their query briefly with limit of 2000 words along with the attachment of any file in jpg, jpeg, png the format.

4.7 Admin

Complaint Management System | Admin

Back to Portal

Sign In

Username

Password

Login

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Admin login page.

4.8 Admin Departments

Create

Manage Departments

Show 10 entries

Search:

#	Department	Description	Creation date	Last Updated	Action
1	First Year		2019-10-09 22:32:10		✎ ✕
2	Computer Engineering		2019-10-09 22:32:27		✎ ✕
3	Information Technology		2019-10-09 22:32:38		✎ ✕
4	Civil Engineering		2019-10-09 22:32:47		✎ ✕
5	Mechanical Engineering		2019-10-09 22:33:11		✎ ✕
6	EXTC		2019-10-09 22:33:18		✎ ✕

Showing 1 to 6 of 6 entries

Admin access for their departments.

4.9 Admin Portal Complaints

Complaint Management System | Admin

Admin

Manage Complaint

Not Process Yet Complaint 0

Pending Complaint 0

Closed Complaints 3

Manage users

Add Category

Add Sub-Category

Add Department

User Login Log

Logout

Manage Users

Show 10 entries

Search:

#	Name	Email	Contact no	Reg. Date	Action
1	Nilesh Yadav	nileshyadav@gmail.com	7070808099	2019-10-09 21:17:37	View Details Delete
2	Amol Beldar	bhau@gmail.com	7788776655	2019-10-09 21:30:12	View Details Delete
3	nilesh	nilesh150@gmail.com	9029232103	2019-10-10 11:46:01	View Details Delete

Showing 1 to 3 of 3 entries

Complaint dashboard of admin. Admin can see the query, complaint, feedback and suggestion generated by students and can take action on it by providing remark. Here admin can update departments, category and sub category of queries. Admin can check the user activity and manage users.

Chapter 5

Summary

Complaints and feedbacks are the backbone of any institutions to improve their functionality and help them develop in the correct and efficient manner. But if the institutions don't get the proper feedbacks or get to know about the difficulties students are facing it will be difficult for the institutions to progress in the way they want. Thus with the help of the Web Based Student Helpdesk this problem can be solved as the students can put up their requests, complaints or feedback about the things or facilities they need or the difficulties they are facing directly to the college authorities without any other person being knowing about it thus having a secure connection and helping the institute to know the problems, work accordingly to solve them and thus helping the institute to progress and develop at a faster pace.

Chapter 6

Conclusions and Future Scope

The principle behind constructing a Helpdesk System is to effectively retrieve and implement any complaint, suggestions and feedback from student and staff. College students and staff can give their suggestions and feedback to higher authority. All the information related to a query of students and staff can be seen by the admin dashboard. We can implement this type of system in corporate and government sector for getting immediate response from respective authority.

Bibliography

- [1] Kaur, Harpreet, and Sonali Malhotra. "Use of Kiosk" as a Self Service Tools in Libraries." 2018 5th International Symposium on Emerging Trends and Technologies in Libraries and Information Services (ETTLLIS). IEEE, 2018
- [2] Kansuwan, T., Chomsiri, T. (2019). Authentication Model using the Bundled CAPTCHA OTP Instead of Traditional Password. 2019 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering
- [3] Si, Nong, Ke-Bin Jia, and Chang Xu. "A Networked Multimedia Distributed Kiosk System for Commercial and Home Appliances." 2016 Third International Conference on Computing Measurement Control and Sensor Network (CMCSN). IEEE, 2016.
- [4] Erdem, E., Sandikkaya, M. T. (2018). OTPaaS —One Time Password as a Service. IEEE Transactions on Information Forensics and Security,
- [5] Kassim, R. A., Johari, J., Rahim, M. I., Buniyamin, N. (2017). Lecturers' perspective of student online feedback system: A case study. 2017 IEEE 9th International Conference on Engineering Education (ICEED).
- [6] Srivastava, S., Sivasankar, M. (2016). On the generation of alphanumeric one time passwords. 2016 International Conference on Inventive Computation Technologies (ICICT)

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