

Automated Grievance Handling System

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Abstract

In the institution, majorly grievances are handled and conveyed verbally, through applications, or through registers which is inconsistent, time-consuming and require a lot of effort in creating and maintaining the applications. The 'Complaint Desk' project will be designed with an objective to overcome all the limitations of the manual systems, and to allow the handling of Complaints and files with minimum effort and in less time. By computerizing the system, the students or employees can file their complaints and get their problems solved without the need of going to the Admin Office every time. The idea is to provide ease of working to the employees/students by providing online services to them. The students and employees can simply log in to the system with their Login Id and Password and convey their grievances. The sender can afterwards check the status of their posted complaint and close the complaint only after being fully satisfied. The concerned person can check his/her mailbox to review the grievances and perform necessary actions.

Keywords: *Complaints, Effortless, Automated, SQL server, Solution.*

I. INTRODUCTION

The need and benefit of having a project like this which handles grievances of a person is that it encourages employees to

raise concerns without fear of reprisal, it provides a fair and speedy means of dealing with complaints, and it saves person's time and money as solutions are found for

workplace problems. It helps to build an organizational climate based on openness and trust. Software is there which basically handles and manages the complaints of students and faculties. Why this project is necessary? What is the proposed work? All this is discussed further.

II. LITERATURE SURVEY

Earlier, there was no way for students to file their complaints. Only faculties could file their complaints for themselves and for students. Faculty used to write their complaint in a register that was maintained by the admin, then the register was passed onto the admin, then admin used to pass the register to the supervisor of respective department. The supervisor, then sort the complaint accordingly and call the technicians to get the complaint solved.

This procedure is very time taking and also, maintaining the registers is a difficult task. Therefore, to overcome the drawbacks of the manual system, the project is developed which allows students and faculties to file their complaint from their computer systems via internet.

III. RESEARCH OBJECTIVE AND MOTIVATION

The register, in which all complaints are filed, is first passed from faculty to admin, then from admin to supervisor and then back to admin. Registers are difficult to maintain and also, students cannot write their complaints in that. Therefore, a system should be there to reduce human effort, paperwork and to give a fair chance to all the members of the institution to file their complaints. The research objective is to provide software to solve the problems mentioned above. Software that is made is a website with the name of 'Complaint Desk'.

The government organization, DRDO (Defence Research and Development Organisation) have a computerized grievance handling software namely "Grievances Redressal System" to solve the complaints or grievances of the employee in less time and effort. Also, there is a project for public grievances. In our country where everyone is allowed to file their complaints in less time and effort, then there must be software in Inderprastha Engineering College that reduces all the register work and human labor. So, considering all these points mentioned above, a website is there in Inderprastha Engineering college with a

name of ‘Complaint Desk’ that automates compliant handling procedure.

IV. METHODOLOGY USED

Complaint desk is based on agile methodology. Agile development methodology provides opportunities to assess the direction of a project throughout the development lifecycle. This is achieved through regular cadences of work, known as sprints or iterations, at the end of which teams must present a potentially shippable product increment. By focusing on the repetition of abbreviated work cycles as well as the functional product they yield, agile methodology is described as iterative and incremental. Features of this methodology are that changes are welcomed even late in development, working software is delivered fast, good Cooperation between business people and developers and customer satisfaction.

For making websites, agile methodology is the most common methodology used. It is very effective when it comes to follow it practically. The Agile movement seeks alternatives to traditional project management. Agile approaches help teams respond to unpredictability through incremental, iterative work cadences and empirical feedback. Agilists propose alternatives to waterfall, or traditional sequential development.

V. PROPOSED WORK

A. Participants

The participants or the users of the website are students, faculties, admin and supervisor. All the personal information of all of them is saved in database which cannot be changed by the user. Faculties here include professors, wardens and HODs. Supervisors are of two different departments i.e. civil and electrical.

B. Procedure

The procedure of complaint filing in case of students is that firstly, student log in to its account and fills the complaint registration form. The complaint goes to the HOD or the warden (for hostel complaints) who decides to whether reject the complaint or to forward the complaint further. If the



Fig. 1 Agile Methodology

complaint is not rejected then it will be forwarded to the admin and the supervisor. The complaint is then solved by the supervisor.

The procedure of complaint filing and solving in case of faculty is that it fills the complaint registration form first and submits it. The complaint is sent to the admin and the supervisor. The supervisor solves the complaint accordingly. If the faculty is not satisfied with the solved complaint then it can reopen the complaint and supervisor solves it again.

The procedure for complaint handling in case of supervisor is that it can see all the complaints from faculties and students separately. Complaints of the students are checked by HODs of their respective departments and forwarded to supervisor. Supervisor then assigns the tasks to technicians and accordingly, technicians do the task and solve the complaints. Supervisor then changes the status of the complaint accordingly.

The admin receives all the complaints from both students and faculties. When HODs forward students' complaints then it is broadcasted to both supervisor and admin

and in the same way when a faculty sends a complaint then it is sent to both supervisor and admin. Admin keeps track of all the complaints that which complaints are solved, in-process not solved or closed.

C. Technology Used

Technologies used in the project are:

1) Classic ASP: Active Server Pages (ASP), later known as Classic ASP or ASP Classic, is Microsoft's first server-side script engine for dynamically generated web pages. ASP is a server-side scripting to generate contents that would be sent to the visitor's web browser. The ASP interpreter reads and executes all script code between <% and %> tags, the result of which is content generation. These scripts are written using VBScript.

2) HTML, JavaScript and CSS: these are the front end languages used for providing a skeleton, interactivity and consistent view to the website.

3) Webmatrix by Microsoft: It is a free, cloud-connected website builder and HTML editor for Windows, geared towards web development. WebMatrix enables developers to build websites using built-in

templates or popular open-source applications, with full support for ASP.NET, PHP, Node.js and HTML5.

4) SQL server compact: SQL Server Compact shares a common API with the other Microsoft SQL Server editions. It also includes ADO.NET providers for data access using ADO.NET APIs, and built-in synchronization capabilities, as well as support for LINQ and Entity Framework. Future releases will unify the synchronization capabilities with Microsoft Synchronization Services. Unlike other editions of Microsoft SQL Server, SQL CE runs in-process with the application which is hosting it. It has a disk footprint of less than 2 MB and a memory footprint of approximately 5 MB. SQL CE is optimized for an architecture where all applications share the same memory pool. Windows Store apps for Windows 8 cannot use SQL Server Compact edition, or any other edition of SQL Server.

CONCLUSION

According to the requirements gathered and the technologies used, a system is created to ensure the best possible utilization of the resources to achieve the required functionality. Earlier, majorly all the work

was done manually, which was more time-consuming and required a lot of effort in creating and maintaining the files. The 'Complaint Desk' has been designed with an objective to overcome all the limitations of the manual systems, and to allow the handling of Complaints and various details, files with minimum effort and in less time. By computerizing the system, the employees can file their complaints and get their problems solved without the need of going to the Head Office every time. The idea is to provide ease of working to the employees by providing online services to them.

The user can simply log in to the system with their Login Id and Password, submit a new complaint in the system which will be forwarded accordingly to the concerned person. The user can afterwards check the status of their posted complaint. The system is fairly dynamic, i.e. it automatically provides all the personal information and in case of faculty, if it is not satisfied with the solved complaint, it can reopen it. The system is dynamic and easy to use, satisfies all the requirements.

Also, this project is made using agile methodology i.e. firstly, the project was

evaluated as in all the requirements were gathered and then limitations of manual system were known, then, planning of all the work was done, Designing and implementation of the project was done after that. This methodology is iterative which makes it successful to implement and better from all the other methodologies.

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ACKNOWLEDGEMENT

We are extremely grateful to our faculty members and our project supervisors. At this juncture we feel deeply honored in expressing my sincere thanks to Dr. Pooja Tripathi, Ms. Preeti Sharma, Mr. Krishan Kumar and Ms. Archana Bhalla for guiding us and providing valuable insights leading to the successful completion of the paper.

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