

Online Help Desk (Ohd) For the Facilities in the Campus

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Abstract of the project

This project is aimed at developing an Online Help Desk (OHD) for the facilities in the campus. This is an Intranet based application that can be accessed throughout the campus. This system can be used to automate the workflow of service requests for the various facilities in the campus. This is one integrated system that covers different kinds of facilities like class-rooms, labs, hostels, mess, canteen, gymnasium, computer center, faculty club etc. Registered users (students, faculty, lab-assistants and others) will be able to log in a request for service for any of the supported facilities. These requests will be sent to the concerned people, who are also valid users of the system, to get them resolved. There are features like email notifications/reminders, addition of a new facility to the system, report generators etc in this system.

Keywords

Generic Technology keywords

Databases, Network and middleware, Programming

Specific Technology keywords

MS-SQL server, HTML, Active Server Pages

Project type keywords

Analysis, Design, Implementation, Testing, User Interface

Functional components of the project

Following is a list of functionalities of the system. More functionalities that you find appropriate can be added to this list. More facilities that are appropriate to your college can be included in the system. And, in places where the description of a functionality is not adequate, you can make appropriate assumptions and proceed.

There are registered people in the system (students, faculty, lab-assistants and others). Some of them are responsible for maintaining the facilities (like, the lab-assistant is responsible for keeping the lab ready with all the equipment in proper condition,

the students council is responsible for taking forward students' complaints/requests to the faculty/administration etc).

There are three kinds of users for this system:

1. those who use the system to create a request (end-users)
2. those who look at the created requests and assign them to the concerned people (facility-heads)
3. those who work on the assigned requests and update the status of the same on the system (assignees)

There is also an 'Administrator' for doing the Admin-level functions such as creating user accounts, adding new facilities to the system etc.

1. A person should be able to

- login to the system through the first page of the application
- change the password after logging into the system
- see the status of the requests created by him/her (the status could be one of unassigned/assigned/work in progress/closed/rejected)
- see the list of requests (both open and closed) created by him/her over the past
- create a new request by specifying the facility, the severity of the request (there may be several levels of severity defined) and a brief description of the request
- close a request created by him/her by giving an appropriate reason
- see the requests that are assigned to him/her by the facility-heads and update the status of requests (after working on them)

- view the incoming requests (if he/she is a facility-head) and assign them to registered users of the system
 - get help about the OHD system on how to use the different features of the system
2. As soon as a request is created, an automatic email should be sent to the person who created the request and the concerned facility-head. The mail should contain the request details.
 3. Similarly, when any status-change occurs for a request (such as the request getting completed etc), an automatic email should be sent to the person who created the request and the concerned facility-head.
 4. A summary report on the requests that came in and requests that were serviced should be sent to every facility-head periodically (say, once in a month)

SQL server. Some links to these technologies are given in the ‘Guidelines and References’ section of this document

2. Decide on the list of facilities that would be supported and define it formally
3. Make a database of different kinds of users (End-users, Facility-heads, Assignees)
4. Assign a system-admin who will create mail-ids for the people in the intranet of your lab or in the internet. These mail-ids will be used for sending automatic notifications and reports. The system-admin will also take care of assigning the logins to the users of the OHD system
5. Create the front-page of the OHD system giving a brief description about the system and a login box
6. Create the help-pages of the system in the form of Q&A. This will help you also when implementing the system
7. Create other sub-systems like automatic notification, screens for various functions (like create_new_request,view_open_)

Steps to start-off the project

The following steps will be helpful to start off the project.

1. Study and be comfortable with technologies such as Active Server Pages/HTML and

Requirements

Hardware requirements

Number	Description	Alternatives (If available)
1	PC with 2 GB hard-disk and 256 MB RAM	Not-Applicable
2		

Software requirements

Number	Description	Alternatives (If available)
1	Windows 95/98/XP with MS-office	Not Applicable
2	MS-SQL server	MS-Access
3		

Manpower requirements

2 to 3 students can complete this in 4 – 6 months if they work fulltime on it.

Milestones and Timelines

Number	Milestone Name	Milestone Description	Timeline Week no. from the start of the project	Remarks
1	Requirements Specification	Complete specification of the system (with appropriate assumptions) including the facilities that would be supported, the services in each facility that would be supported, selection of facility-heads, assignees and administrator constitutes this milestone. A document detailing the same should be written and a presentation on that be made.	1-2	Attempt should be made to add some more relevant functionalities other than those that are listed in this document. Attempt should be made to clearly formulate the work-flow of each of the services (for example, who will take care of replacing a faulty bulb in the lab, who will take care of ordering a new book/magazine for the college library etc)
2	Technology familiarization	Understanding of the technology needed to implement the project.	3-4	The presentation should be from the point of view of being able to apply it to the project, rather than from a theoretical perspective.
3	High-level and Detailed Design	Listing down all possible scenarios (like request creation, request assignment, status updation on a request etc) and then coming up with flow-charts or pseudocode to handle the scenario.	5-7	The scenarios should map to the requirement specification (ie, for each requirement that is specified, a corresponding scenario should be there).
4	Implementation of the front-end of the system	Implementation of the main screen giving the login, screen that follows the login giving various options, screens for facility-heads, screens for the administrator functions etc.	7-9	During this milestone period, it would be a good idea for the team (or one person from the team) to start working on a test-plan for the entire system. This test-plan can be updated as and when new scenarios come to mind.
5	Integrating the front-end with the database	The front-end developed in the earlier milestone will now be able to update the facilities database. Other features like mail notification etc should be functional at this stage. In short, the system should be ready for integration testing.	10-12	
6	Integration Testing	The system should be thoroughly tested by running all the testcases written for the system (from milestone 5).	13-14	Another 2 weeks should be there to handle any issues found during testing of the system. After that, the final demo can be arranged.
7	Final Review	Issues found during the	15-16	During the final review of the

		previous milestone are fixed and the system is ready for the final review.		project, it should be checked that all the requirements specified during milestone number 1 are fulfilled (or appropriate reasons given for not fulfilling the same)
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Guidelines and References

<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnasp/html/asptutorial.asp> (ASP tutorial)

<http://www.functionx.com/sqlserver/> (SQL-server tutorial)