



Smart College Web Portal

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Abstract: SCWP is going to provide a reliable and efficient interface for the students, using which they can complete their most of the official and academic work with ease. This portal provides services to keep the students updated in case of their academics. This will provide the most needful services to the students with less paper work and efforts.

Keywords: Data Flow diagram, DBMS, Availability, Reliability

I. Introduction

As per the current situation in our college the student faces various hardships such as

- Manual Submission of admission form during class hours as it overlaps with Office timing.
- Need to roam in full college campus to take signature on dues form even if students have or may not have dues.
- Students being unaware of important notices and deadlines due to busy work schedule and also during vacations.
- Very less amount of interaction between teachers and students due to time constraints.

For this reason lot of student time is wasted and class schedule is disturbed. So to overcome such problems we're going to implement "SMART COLLEGE WEB-PORTAL".

II. Literature Survey

Problem Faced by:

• Students

Getting and filling up the challans manually.

Filling up and submitting the admission forms manually.

Writing applications for expenditure, bonafied certificates.

Checking for dues, paying dues, and taking signatures of the concerned authorities of various departments.

To view the assignment questions, IA marks, attendance, important notices of the concerned faculty.

Visiting the notice board to check out the various events, seminars, competitions etc. taking place in the college.

Not being aware of important notices and deadlines due to personnel problems.

Due to the above problems a lot of valuable time of student is lost in moving around the campus, unavailability of the concerned faculty, long queues and rush thus affecting the academics.

• Faculty

Announcing IA marks during class hours.

Every time the student approaches the faculty for IA marks and attendance, he/she has to show them the marks and attendance individually as they come, throughout the day.

Repeated announcement of important notices and assignment questions.

Due to these problems class time will be lost and increase the workload resulting in disturbing the schedule of the faculty, in turn affecting the academics.

• Office staff due to manual work

Providing challans and also specifying the amount for every individual.

Sorting the admission forms as per the student category.

Maintain large amount of files of student information.

Searching for any single student information from a large number of files.

Above problems will lead to increased workload and time consumption of the office staff. Using our web portal valuable time and manual efforts of the students, faculty and office staff will be saved. Student will be able to fill admission forms, request for certificates, check for dues, IA marks, attendance and other notices online from anywhere using an Internet connection. Faculty will be able to update IA marks, assignments and other important notices via the admin. Burden on the office staff in issuing challans and

maintaining and sorting student information will be reduced as admission forms will be filled by students and the student database will be maintained by the admin.

Requirement Specification

Functional Requirement:

Process:	Temporary admissions
Functional Requirement	• Provided only for the students willing to take the admission. • A temporary admission form containing the fields (Full name, User name, Address, Mobile number, Email Address, Type of admission (management/govt.), Student category). • Full name will be allowed in first name, last name, and middle name with only alphabets. • User name should be accepted only with alphabets and digits, must start with alphabet. • Address should be entered with any character (except *, ', ?, "). • Email address should be entered with proper format which will be required to receive login details. • Type of admission and student category will be selections in which user must select the proper type. • After filling all these details store all above details and concerned challan as per predefined format will be generated for printing.

Process:	User creation by superuser who is created by the vendor.
Functional Requirement	• Super user(s) is created by the vendor and has all the access permission. • This super user will be able to assign the role to new employee by selecting name and role.

Process:	Creation of student user for login and login details sent through mail by clerk.
Functional Requirement	• New account activation of the student account will be done after the confirmation of physical challan. • On activation the user name and the default password will be sent automatically to the corresponding Email address of the student.

Process:	Admission form
Functional Requirement	• Authorized students fill the admission form after logging in. • For the each year student must have to update his/her form before the last date. • Temporary details should be fetched and modifiability should be provided. • This form will have fields like Student name, Father name, Mother name, USN, Branch, fees, Semester, Mobile number, Email address, Sex, Permanent address, Temporary address, Birth date, Type of admission, SSC (SSLC), HSSC (PUC), Nationality, Religion, Caste, Student category etc. • Student name, father name, mother name should accept only alphabets and should have three fields (First name, Middle name, Last name). • Branch should accept selected from the list of branch. • Semester, Annual fees, Mobile number, SSC (SSLC), HSSC (PUC) should accept only numbers. • USN should accept alphabets in Upper case and number without space. • Email address, Student category and type of admission will be fetched from temporary form filled before. • Permanent and temporary address should accept any character (except *,',?',") and if both addresses are similar then permanent add. Will be fetched in to temporary address. • Nationality, religion, caste and sex should be a selections in which some common types will be listed and an "other" option should be provided only for caste and religion. After selecting other a text box should be displayed in which student have to fill the type. • This details should be stored in database and fetched whenever needed.

Process:	Admission
Functional Requirement	- At the end of each year, students account will be automatically disabled by the clerk. - After login if the account is disabled, allow him to get the print of challan.
Process:	Certificate Generation
Functional Requirement	- After the authorized student logs in, a complete admission form is checked whether form is filled or not. - If not filled he/she will be notified with an alert message and redirected to the admission form otherwise he/she will be able to use the certificate generation facility. - The list of forms names like Expenditure, Bonafied will be displayed to the user. - User may select any number of them as per his/her requirement. - The respective certificate(s) will be generated automatically along with a single challan with appropriate amount and student details. - Student will have to download and print the generated certificate and challan.
Process:	No Dues Generation
Functional Requirement	- After the authorized student logs in, a complete admission form is filled or not will be checked. - If not filled he/she will be notified with an alert message and redirected to the admission form otherwise he/she will be able to check dues. - Student checks for his/her dues. - If he has dues pending then dues will be displayed and no dues certificate will be generated and he must download it and print it and continue the work manually. - If he has no dues then he will be alerted that he has no dues.

Process:	Student Feedback for Teachers
Functional Requirement	- After the authorized student logs in, a complete admission form is filled or not will be checked. - If not filled he/she will be notified with an alert message and redirected to the admission form otherwise he/she will be able to use the feedback facility. - Student has to click on the feedback link. - A form will be displayed which contains: - On selection of subject, name of the faculty will be displayed.. - Questions should be displayed and verification of complete form should be done before storing the details.

Process:	Updates by Admins and clerk
Functional Requirement	- The Admins will be able to update academic information such as IA marks, assignments, attendance and important department notices as per request considering the manual process. - Allow Admins to select the faculty name and corresponding subject for current semester. - The clerks will be able to update official information such as pending dues for students, college news, events, seminars etc.

Process:	Link for university Result
Functional Requirement	Link for the university result will be provided on Home page.

Process:	User feedback for Site
Functional Requirement	- User can give feedback with his name. - May specify any add-ons to be provided, even any bugs or problem handling the site can be notified. - He/she may also rate the site on a scale 1-5.

Non Functional Requirement:**Scalability:**

As SCWP is a web based, any number of users connected to network or Internet can use it easily. So it is going to support maximum number of users depending upon space available with it and one can increase its user support by increasing space capacity.

The features provided with this portal can be increased as per the user need without affecting its current state. So it is scalable in terms of user support as well as extending its configuration and many more.

Security:

This portal is going to provide a secured interface for the users, each user is provided with username and password and hence it will be only accessed by the authorized users. The account will be enabled only by the authorized admin by some physical verifications and disabled by the same on some genuine reasons. And hence there is no question of unauthorized access.

Maintainability:

Smart College Web Portal is easier to maintain because it is totally software based and hence no more hardware is required. So stakeholder can easily port it anywhere with him and he can add more features to it easily, i.e. with less cost. Accessing this portal just needs an Internet connection and hence it can be accessed from anywhere.

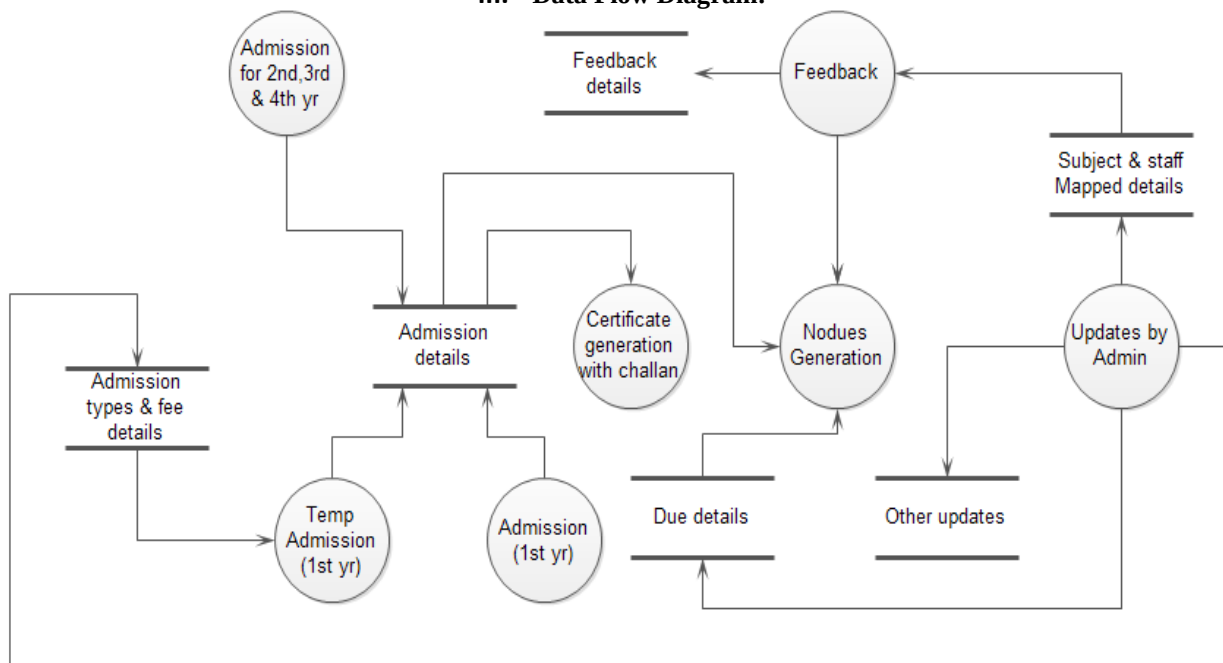
Usability:

The main aim of SCWP is to reduce the unnecessary working burden of the students, office authorities and staff members. The usage of this portal is necessary to keep aside the unnecessary efforts of the students.

This Portal provide a proper Graphical User Interface to the users and hence any inexperienced user with some knowledge about internet can also use it very easily.

Availability:

SCWP will be available at any time-anywhere as it is web based. It is available for any authorized user with an Internet connection within no time.

III. Data Flow Diagram:

As seen in the above DFD,

- During temporary admission, the type of admission and fee details will be fetched from the pre defined database admission type and fee details. The details entered by the students will be stored in admission details.
- When the student will fill the admission form, the details will be again stored into the admission detail database.
- At the end of the year account will be disabled by clerk.

- When a student seeks admission for 2nd year, 3rd or 4th year the details entered by the student in the admission form will be again updated in to the admission detail database.
- When the student needs to generate the certificates the details of the students are fetched from admission detail database on to the predefined certificate format & the certificate along with challan will be generated.
- When the student checks for dues, the information from the due mapped database will be enquired to get confirmation whether student having dues or not.
- If he has dues the details are fetched for admission details database and dues mapped database to generate no dues Form.
- The updates made by admin such as staff and subject mapping are stored in staff and subject mapped database.
- And other updates are stored in other update data base and fetched when required.
- When a student gives feedback the lecturer details are fetched from subject and staff mapped database and the corresponding feedback is saved in to feedback detail database.

IV. Conclusion & Future Work:

By developing this portal we promises to reduce the paperwork on areas like admissions, dues, feedbacks etc. It reduces time wastage done in roaming the college area for due payments, admission procedures, feedback given during lectures etc. It also provides large data storage, making most of the staff works easy by providing features like notice updates, subject-teacher mapping, managing the accounts, verifying documents etc. It also makes it easier for the Principal (Superuser) to view the teachers' feedback given by students, also, he can allot roles to staff as the list is readily available on-line. He too can upload notices. All the features to particular person are available anytime, anywhere with an internet connection. Overall, it makes college life easier.

- Mobile Updates can be provided in future if required.
- One can add more features to it such as Student_resume, On-line payments, etc.
- We can use the below references to find the tools to build the system.

VI. References:

1. <http://www.html5rocks.com/en/resources>
2. <http://api.jquery.com/category/ajax/helper-functions/>
3. https://blogs.oracle.com/MySQL/entry/mysql_at_drupalcamp_goteborg_sweden
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