Augmentation of Programmed Student Result Supervision Scheme (SRSS)


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Abstract – This study is motivated on the Intensification of a Programmed Student Result Supervision Scheme (SRSS) developed by using ASP.NET, HTML, CSS, BOOTSTRAP, ANGULAR JS and was locally hosted in windows server (IIS). This web-application is helpful for students and institutes for acquiring the results in an easy method. The manual system of students’ educational result processing and calculating Cumulative Grade Point Average (CGPA) was found to be monotonous, mainly when carried out for a huge number of students, this setup the entire procedure time-hungry, wrong prone and systematic overall. This web-application will construct the teacher’s job shorter tough by cutting down the time and effort consuming on result construction, etc., thereby, authorizing the teacher extra time for teaching and other instructional topics. The entire result scheme will be under the dominance of the administrator and the administrator is the superior user who enjoys all advantages such as read, write and process the results. All the teacher requires to construct an account and get accepted by the admin. The benefits that are providing to apprentices are to read and accomplish their effect by providing user identifications for protected login and in the event of fresh student the recording is offered. The student can download or print his/her result. And the guest user has the privilege only to read.

Keywords: Programmed, Cumulative Grade Point Average (CGPA), result processing, admin/administration, registration, Data flow diagram (DFD)

1. INTRODUCTION

Student Result Supervision Scheme is a Network-Based application. It is produced for university understudies to simple way and rapidly gets an outcome. Every student is capable to see the individual result separately. The imprint investigation process in an educational organization has been intended to bring to pass by the Student Result Supervision Scheme (Centola, 2010). It guarantees that all exercises are automated by programming at a specific time with no extent of human-initiated mistakes. (Bahar, 2018). A computer or any device that can be attached to a network and prepared to use or be applied by other computers or any other devices are online available (Abdullah-Al-Shafi, 2019b; Abdullah-Al-Shafi, 2017; Abdullah-Al-Shafi, 2019c; Abdullah-Al-Shafi, 2018f; Abdullah-Al-Shafi, 2019d). The computer used to access for information processing system is to simplify directly access to the students’ personal and course information, instant student any information Editing and monitoring of failed courses. Our framework can support for keep course subtleties, for example, course codes, course credit, course depictions and CGPA for unconstrained calculation of the GPA are required. The framework stays up with the latest records of the thorough understudy body in the Department and produces the graduating understudy's list. A likewise, details techniques, such as enlistment, Supply from gathered, information transfer queries to the framework graphical UIs were created for the convenience (James, 2014). The manual system handles mistakes and omissions in CGPA calculations, the student’s information can't the right time, late readiness of students’ conclusive outcome for convocation and absence
of a refreshed database of students’ data comment about intention (Centola, 2010).

2. EXISTING SYSTEM

These activities aim to design an automated student result processing system that will promote throughput and diminish the response time involved in processing results immediately after they graduate from the institution. Our system will capably register courses and in turn, supply form collects through our website, enable lecturers to upload and students can see every semester result update. The goals of the study incorporate, for example, to point attention to the job of Information Communication Technology in administration conveyance for the organization, to contribute a stage for viable procedure course teaching, easy to understand as an electronic application milder, we can get untouched accessibility (Abdullah-Al-Shafi, 2019a; Abdullah-Al-Shafi, 2018c; Abdullah-Al-Shafi, 2018d; Abdullah-Al-Shafi, 2018e), Easy calculation, Easy Storage of information, More effective. Requires less effort and time (James, 2014).

3. PROPOSED SYSTEM

Student Result Supervision Scheme is an application that refers to the examination system. It is applied by the test or test cell and furthermore understudies to deal with the assessment marks utilizing an automated support of an executive’s framework where he/she can record different sorts of activities, for example, including the course, including understudies, including marks, see the report, and so on. If the Admin plan wants to update or delete the attributes, they will enable them to act. With the computerized system, there will be no loss of data or no delicacy will occur which usually happens when a non-computerized system is used. The Admin can likewise see the reports what are the subjects, courses, which instructor is accommodated course, understudies they have included and they can likewise alter or erase the reports. The administrator can likewise ready to include framework client or include another administrator for information section (Saha, 2017).

4. APPROACH

The application is developed as a web based as well as a desktop-based management tool, using a Relational Database Management System (RDBMS). The choice to apparatus the application as a database was educated by the thought that different sorts of information would should be held, and a database approach would be progressively exact because of the favorable circumstances that the database document framework has over different types of record frameworks. A database the executive’s framework permits associations to effectively produce databases for various applications by database directors (DBAs) and some other authorities. Database Management System approves numerous client applications projects to at the same time get to a similar database that is known as simultaneousness. Here we utilized Visual Studio, an Integrated Development Environment, to make the Graphic User Interface and to compose the codes, Microsoft SQL Server as a Relational Database Management System (RDBMS) to make the database tables and ASP.net structure with MVC, a Scripting language to speak with and control the database besides HTML, CSS, BOOTSTRAP, ANGULAR JS and was privately facilitated utilizing Microsoft windows server (IIS). The essential highlights of the Dot Net are that it is object-Oriented and a cross-stage language. By cross-stage, it implies that the projects can stumble into a few stages, for example, Microsoft Windows, Apple Macintosh, Linux, and Android, etc.

4.1 Data flow Diagram

A Data Flow Diagram (DFD) is a graphical portrayal of the "stream" of a System. An information stream graph can likewise be utilized for the representation of Data Processing. DFD shows the cooperation between the framework and outside elements (Saha, 2017). A DFD shows the progression of information over a framework (Abdullah-Al-Shafi, 2018a; Abdullah-Al-Shafi, 2016a; Abdullah-Al-Shafi, 2018b; Abdullah-Al-Shafi, 2016b). Information stream graphs are mostly utilized during issue investigation. It would seem that a framework as a capacity that changes over the given contribution to a required yield. The change of information through the distinctive transformation in the framework are appeared in the Data Flow Diagram:
4.2 Flow Chart

A flowchart is a kind of graph that speaks to a work process or procedure. A flowchart can likewise be characterized as a diagrammatic portrayal of a calculation, a bit by bit way to deal with tackling an errand (Stuppy, 2000).

4.3 Use case Diagram

4.3.1 Admin

The Admin is responsible for introducing the new student, endorse the student from one class to another, from one semester to another and from one year to another. Managing the student accounts like any changes regarding the name, address, etc. (Stuppy, 2000; Hasan, 2019). The Admin also handles the complex task like inputting a new faculty, assigning the faculty to the selected subjects. All the updates like student updates, faculty updates, exam updates are checked by the admin. The administrator has the top level of power in our system.

4.3.2 Teacher

The Teacher can update the task concerning the student’s attendance, inner marks of the students and any data concerning the subjects they manage. They can also get the student details info for better understanding the student achievement and upgrade the capability of the student. The Teacher also gets the updates from the administrator regarding any events to take place in the organization. They can also publish any notice regarding his/her class and communicate with students.

4.3.3 Student

Our system is developed targeted to the student’s results in management so the student is the main ingredient of our system. The students can get their result without the hassle and he can also view his previous year/semester result. He can get instant notification regarding the class schedule and result publication. If a student wants to communicate with the teachers, then he can do this with our system real-time chat facility.
5. RESULT

5.1 Login

The system starts with a login page where the registered user can enter a user name and password to be able to access the system. Only the admin can define the username and password of the students and the teacher. If any user forgets their login credentials, they must be contact with the admin.

5.2 Admin Panel

Admin has the superpower of this system. He can handle the students and the teachers. Adding students, teachers and updating their profile. Admin can assign the course to the respective teacher and manage the course schedule. He can also issue the result of the students. If any teacher misses their class, then admin instantly sends a notification to the respective teacher about his class schedule so that he can remind about his schedule.

5.3 Student Panel

Students can get their total course info, all kinds of marks and the result sheet from this system. If any notice is published from the teachers/admin then they can easily show this notice. Students can view their academic profile if any change needed then they can contract to admin and admin update those students’ profiles. There is an extra feature that our system provides and that is real-time chat with teachers. Any kinds of study related conversion can be done between teachers and students and this is highly monitored by the admin.

5.4 Teacher Panel

Teachers can take attendance of the students. They can view the course that is offered to them by the authority. Teachers easily distribute all types of marks to the students. If teachers need to publish any notice, then they can easily publish a notice regarding their offered course. Teachers can take a student’s attendance digitally through this system and the attendance is saved automatically in the
database according to individual’s students profile and a percentage of the attendance marks is generated automatically. Once an attendance is saved in the database it won’t be modified by the teachers if need then contacts to the admin.

5.5 Final Grade Sheet

Here is the final result Sheet produced by our result management system. Students can get their full result through this system. Students can also download their result sheet in excel format. If students want to get their previous result, they can get it easily.

Fig 9: Teacher Panel

Table 1: Final Result Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
<th>Physics</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>GPA</td>
</tr>
<tr>
<td>Rabi</td>
<td>1</td>
<td>37</td>
<td>3.5</td>
</tr>
<tr>
<td>Nabi</td>
<td>2</td>
<td>38</td>
<td>3.5</td>
</tr>
</tbody>
</table>

6. CONCLUSION

Right now, of the SRSS is introduced which is created by utilizing C# programming language, utilizing ASP.NET, HTML, CSS, BOOTSTRAP, and ANGULAR JS and was privately facilitated utilizing Microsoft windows server (IIS). Result Supervision Scheme makes the whole procedure online where there will be simplicity of work, World Wide production, simplicity of putting away information, Result can be gotten to from anyplace around the globe, Better proficiency of information stream the framework additionally tried on a neighborhood server to affirm its adequacy. There is security in the system as there is monitoring from the administrator since only registered users can use the special functionalities and no user will have access to more than his/her account. There is a future scope of this facility that many more features can be added such as online tuition fees payment system, add multiple payment gateways, get update information via SMS thus making it more interactive, more user-friendly which fulfills each user need in the best way possible.

7. REFERENCE


