WORKSHEET-2

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**Subject Name: SOFTWARE ENGINEERING Lab**

**Aim**:

Consider software for academic activities of a university. The project will cover activities like managing of students as well as faculty. Design an SRS document for the project.

1. **Introduction**

This segment is composed to give general data regarding our item "College Management System”. The primary goal of our item is to keep up with data about students, representatives and Different exercises like participation, student marks, charge instalment, and pay instalments, and so forth The Data is put away for decision making in the future for a business cycle inside an Association. This is a desktop application.

1. **Purpose**

This report depicts the product necessities particular (SRS) for the College Management System that gives the entrance and management of data of various Modules in a montage like Students, Guardians, Teachers/Faculty, Finance, Examination, HR. Our task depends on a data set, which stores and keeps up with the data of various Modules inside the framework. The benefit of the management framework is to stay away from passages in Printed versions and it saves the weight of printed versions of information. The framework is a Desktop Application and GUI for this framework is created in C#. The Database for this management Framework is made in SQL. There are two clients for this framework 1. Administrator (have full admittance to Peruse and compose of all modules in management framework)

2. Instructor (approach restricted to compose Also manage the understudy's imprints, participation, and so forth) This is form 1.0 of the products Prerequisite’s determination. The reason for this report is to recover and dissect the thoughts that characterize the item and Prerequisites that the client needs. This record depicts the subtleties of our item, its Boundary, and its objectives. This SRS record depicts the objective, crowd, UI of item and Software/Hardware necessities of our item. This record likewise depicts the issue we have looked during the planning and execution of the item and furthermore portrays how we have tackled this issue and make our item more productive. The management framework saves the human power and time cost to play out a similar assignment. The information in the data set can be put something aside for quite a while and can be utilized for various purposes in the future. In management frameworks, there is a minor possibility losing the information. This archive additionally characterizes how clients and clients see our item and comprehend the usefulness of the item. This archive will help the engineers/creators if there should arise an occurrence of upkeep of the programming item.

**Key Focus and Abbreviations**

While composing this SRS for College Management System the accompanying phrasings are Utilized:

* CMS: College Management System.
* C#: Pronounced as C sharp. It is an OOPS programming language in which Reusable parts work for a wide assortment of utilizations.
* GUI: Graphical User Interface.
* DBMS: Database Management System.
* SQL: Structured Query Language, used to make the information base.
* SQL Server: SQL Server is an information base management framework in which data set is Made and manages the data set like "update", "Erase" and addition another record in The information bases

**Problem Statement**

“Manual College systems were paper-based and difficult to maintain, expensive, more manpower required and unable to handle large records, the previous system was not efficient, not effective and there were issues of redundancy and consistency.”

**Proposed System**

In this venture, the framework is proposed by understanding the issues in the current framework. In This management framework the issues are settled that were in the past framework by moving On a mechanized arrangement of the cutting-edge age. The data set is utilized to store the information at the Backend of the framework. The graphical connection point GUI is created in C#. With a particular goal in mind get the information from the client Furthermore, store it into the data set. Reports of put away information are produced through Crystal reports. The framework that is proposed gives predictable and overt repetitiveness free information away and Ought to be more effective. This framework gives the security of information by verification of clients and in this task right of Clients are characterized. In this framework, administrator is the principal client of the situation who has full privileges of All modules inside the proposed framework and the other client which is a representative of college Additionally, can be an educator inside the college has restricted admittance to the framework like students Participation and characteristics of the students are managed by the representative. In this item, unique Reports can be created, pay slips of worker compensation, expense report of charge instalments if students, Student subtleties, participation report, and so forth the fundamental modules which are centred around this undertaking:

 Student management

 Representative management

 Student Fee management

 Representative compensation instalments

 Client enrolment

 Inward Marks of students

 Participation of students

 Reports of all modules (Crystal Reports)

**Project Scope**

As Colleges are developing step by step to an ever-increasing extent, and furthermore expanding the intricacy of Putting away data of students and connected with the college framework, they face many related

**Issues**: participation and expense of students, pay subtleties of representatives, and so forth This undertaking depends on the instructive foundation framework where this application gives Greatest administrations in a solitary programming item that is utilized by instructor and framework Organization. This venture depends on a work area application that is sharing data on Various offices in a college. In this project that incorporates C# and SQL. C# is utilized to plan the GUI for the application by Which the client can communicate with programming applications. The SQL Server is utilized for making the data set in which different data will store. The fundamental focal point of this venture is to Give the best GUI for the clients and give the numerous modules in a solitary item. Administrator can View all of the data that is put away in the data set through application and administrator too Can adjust this data on the grounds that the administrator has full admittance to the framework. The educator can see and alter the data connected with students, instructors have restricted Access. This undertaking can change any extra module whenever

**Target Audience and Reading Suggestions**

This report is to be perused by the improvement group, the task managers, showcasing staff, Analysers, and documentation essayists. The computer programmer/Developer and undertaking managers Need to turn out to be personally acquainted with the SRS. Others included need to survey the Archive.

Analysers need a comprehension of the framework highlights to foster significant experiments and Give valuable input to the designers. The engineers need to know the necessities of the Programming item they need to assemble. this record is for general conversations on the execution choices with respect to the College Management System. The client of the item ought to have the ideas of RDMS, SQL, points of interaction, and classes.

**Operating Environment**

The CMS is relied upon to be sent in a genuine climate to manage the DBMS inside the College. The incorporated database is utilized to store the data. The client just inside the College (individuals from college staff) can utilize this management framework. Clients outside structure the College can't get to the management framework. This application is created for windows Working framework that can be run on Windows XP or more. The database is utilized in various divisions inside a part of the college. The database Used to store the data is the brought together database. The product we have created Will be introduced on various PC frameworks inside a college and programming will be Associated with a concentrated database through LAN inside a college and afterward the client can Associate with the framework and can store the information and different clients can get access the put away Through a brought together database

**User Types and Authorities**

This management framework is constrained by the educators and framework directors. In this Framework, administrator is the fundamental client who has full admittance to the management framework. Administrator can View and adjust all data that is put away in the database. Administrator can see and adjust the student's records like student's profile, participation, charge, Results, and subtleties of educators and different workers in college, their own data and Their participation for their compensations. Educators approach view and alter the student's data like their participation, Characteristics of tests to create the advancement report of students. Whenever the educator "update’s the student’s data then administrator can see this data.

**Design and Implementation Constraints**

During the execution of the item, various difficulties are confronted. Picking the Interface for the management framework was a vital issue. Associating the database with The application was a significant issue. For interfacing the database, we needed to make our record in ORACLE and afterward we needed to Download the driver(software). The association of the database that is made in ORACLE With C# isn't extremely straightforward as like SQL. So, the establishment of ORACLE driver(software) is Important to make an association among ORACLE and C#. Be that as it may, in the wake of introducing the required Driver it makes an issue in introducing and interfacing with a server in the prophet server, so We chose to leave the prophet and afterward we pick the SQL server to make the database. The SQL Server is not difficult to introduce and interface with a server in SQL it is exceptionally simple to Comprehend the execution of the database and furthermore simple to make another database and Interface with the GUI application

**Methodology of Project**

We fostered our item utilizing the product advancement life cycle. In the advancement of Our item, we utilize the Agile model. The Agile model is a model of SDLC which is a Blend of two interaction models steady and iterative. CMS is created on the premise Of steady interaction model of the agile model which permits the client to partition the enormous Project into various parts/modules. In the steady model the variants/portions of the framework are conveyed to the client after a Normal time period, to get input from the client that is it cleared or he/she need any More changes in the given module. In the event that the client needs any kind of progress in the item, it Is conceivable through the gradual model. After the concluded time each new piece of the item is created and conveyed to the client And afterward toward the end when all parts are grown, all modules/parts are joined in an approach to Foster the full item to convey to the client has gotten done/complete application as Client's necessities. Correspondence among client and designer is a significant piece of the coordinated model. The Item will satisfy the client's prerequisite for the situation when there is most extreme correspondence Among engineer and client so the application will be more exact. The completed item Ought to acknowledge the progressions later on.

**Functional Requirements of the College Management System Project**

The CMS contains the following key features:

**• Admin:** Admission /Registration:

This will deal with all new students to register them with their personal information/details.

**Staff**: Admin will add new staff/Teachers/Employees by inserting their personal information and register them. Admin can add a new user for the CMS by assigning them a login/username and password

**Finance:** Admin can view and manage the financial transaction for the college

**Scholarship**: Admin can assign scholarships to the students

. • **Employee:** Personal information: personal details of staff (name, address, contact, etc.) Will be stored.

**Attendance**: store and represent the attendance details of staff.

**Salary**: provides details about the salary of staff

**Student information:** Teachers can view the details of their students and provide access to the teacher to “update” and manage the student’s exam marks.

**• Student:**

**Personal information:** This will provide all the details about a student like his/her name, address, Guardian, etc. Attendance: This feature provides the attendance details of the student.

**Marks:** This will provide the marks of student internal marks in exams.

**Fee:** This will use to keep a record of student fees and in the future by using this feature Admin can view the fee record of any student within the college.

• **Department:** This will provide the details about departments within a college with their name and every department have its department name.

• **Course**: This will provide the details about courses that are offering by the college. Every course has a name and its unique name. Every course has different subjects and every subject has its own unique name.

**Scholarship:**

**Types:** scholarships may have different types like Need-based scholarship, Merit-based scholarship and scholarship provided by any external.

**Scholarship information**: Every scholarship has its own name and also have a unique ID and description about it.

**Details:** Details of the scholarship will be provided like:

• Which student get scholarship

• When a student gets scholarship

• How much a student gets scholarship

• On which based students get scholarship

**Functional Requirements of the College Management System**

The functional requirements of this system are:

• Register new students.

• Record the attendance of students.

• Record the internal marks of students.

• Record the feed details of students.

• Register a new teacher/employee.

• Register a new user for the system.

• Record the salary details of employees.

• Record the course details and subject information

. • Record the scholarship details and information.

• Generate various reports for all transactions in the system.

Non- Functional Requirements of the College Management System In this system, the authentication of the user is an important factor. In this system, user authentication will be done by login by user name and password and classified by user type. Users will get access to the system as permissions are classified for that type of user. The system has a consistent interface so that the system is easy to use and in the interface of our system buttons and forms are used to enter data related to a specific module.

**Hardware Requirements of the College Management System**

**System:** P IV or above.

**RAM:** 4GB or above.

**Hard Disk**: 20GB or above.

**Operating System:** Windows 7 & or above.

**Software platform:**

Visual studio 2010, SQL Server, .Net Framework 3.5.