2.2.3 Performance Requirements

A performance requirement is a method for determining how well a software system performs certain tasks under certain situations.

2.2.3.1 Records Management

Records management is a procedure that may be used to govern the development, maintenance, reception, and disposal of information in any format. In other words, it refers to the management of a company's important information from its creation to its disposal.

The following are the many performance requirements for the smooth and efficient operation of the record management system:

2.2.3.1 Speed

Data Management System

To keep the record management system functioning smoothly, the data management system should be as fast as possible. The data processing time and reaction time should be as short as feasible. In a data or record management system, optimal speed implies that records are processed quickly, efficiently, and smoothly. The record management system should retain speed so that the institution's performance and efficiency do not suffer. The data management system's processing and response times are as follows:

**Processing**: Processing: On the inside, everything should be in order. A request is processed in no more than 5 seconds. The server will timeout in 10 seconds. Consistent reaction time is needed. A mistake can only be accepted for a maximum of three seconds.

**Response time**: The ideal reaction time from pressing any buttons to loading the pages is 4 seconds. A two-second mistake is allowed, and the service will be stopped within ten seconds.

2.2.3.2 Capacity

The capacity of a record management system refers to the amount of workload that the system can handle without being overburdened or damaged.

**System for data management**

The volume of work: This operation has no pressure or load, thus one person should be able to do it.

Data: We need to keep track of a lot of records and data of the staff and students in the university.

2.2.3.3 Reliability

For any record management system to work in the future the most important thing that it requires is the reliability of its data management system. It should be efficient and work at a constant level under pressure.

**System for data management**

Our information is incredibly safe and user-friendly, thus the system is quite trustworthy. In addition, all of the data is backed up in the cloud. Every three months, you will receive an update. The notification for the servicing break has arrived, and it contains information on how long the repair will last.

2.2.3.4 Usability

The record management system must be simple to operate. It should not take a large amount of labor to operate, and the system's operation should not be overly complicated or require extensive training.

**Data management software**

This strategy is not only simple to apply, but it is also simple to comprehend. This tool should be easy to use for anyone who is acquainted with Microsoft Word, Excel, and Access. This form is easier and handier than paper-based forms. It only takes a few hours to learn.

2.2.3.4 Accessibility

The university's record management system is mostly accessible to administrators, managers, and supervisors. Because of the nature of their employment, which requires them to work all day around records, they are given access to the university's record management system, which allows them to store, manage, maintain, and update records.

2.2.3.2 Student Records/Information Portal

The Student Records/Information Portal is a portal on the website where all of the students' information and data is collected, such as their address, the course they are taking, their grades, their course tutors, and so on. This portal assists in the methodical and orderly organization of all student data and allow employees to rapidly discover information about any student.

The following are the numerous performance requirements for the Student Records/Information Portal's seamless and efficient operation:

2.2.3.2.1 Speed

Data Management System

Since the system must sift through the information on thousands of students at the institution, the data management system must be swift and efficient to keep the Information Portal running properly. Data processing and reaction times should be as quick as possible and should not be delayed. Optimal speed in the Student Information Portal means that data about students is handled fast, efficiently, and seamlessly. The institution's effectiveness and efficiency should not be harmed by the information portal's slowness. The following are the processing and response times for the data management system:

**Processing**: Everything should be in order on the inside. A request for a student's data should take no more than 5 seconds to process. In 10 seconds, the server will timeout. A consistent response time is required. For a maximum of three seconds, a mistake can be tolerated.

**Response time**: The recommended response time is 4 seconds from hitting any buttons to loading the pages. A two-second error is acceptable, but the service will be terminated within 10 seconds.

2.2.3.2.2 Capacity

The quantity of data or information that an Information portal can store and process without becoming overwhelmed or destroyed is referred to as its capacity.

**Data management System**

The quantity of work: Because there is no strain or demand on this procedure, one staff member should be able to complete it.

Statistics: Thousands of students (i.e. from 2000 and above) graduate and enter schooling each year, and we need to keep track of their information and data. The students' information is extensive, ranging from race, ethnicity, nation, and age to blood group and classes.

2.2.3.2.3 Reliability

The most critical requirement for any Student information portal to function in the future is its dependability. In terms of student data management, the student portal system should be dependable, secure, and efficient. The student information portal should have a specific level of security so that students' privacy may be protected and sensitive and private information can be kept secure. This necessitates the data management system's dependability. Data handling should be quick, efficient, and consistent even when under duress.

**Data management system**

The data saved should be extremely secure and user-friendly, allowing the system to be demonstrated to be fairly reliable. Furthermore, all data should be backed up to the cloud. The students that are involved receive an update every three months. If there is any difficulty or problem, the servicing break notification should occur, along with information on how long the repair will take.

2.2.3.2.4 Usability

Because the Student Information Portal System will be utilized by both students and staff, it should be simple to use and the user experience should be prioritized. This method should not necessitate the employment of excessive personnel, and the handling process should be simple and require little training to operate.

**Data management System**

In addition to being easy to use, this method is easy to understand as well. Anyone familiar with Microsoft Word, Excel, and Access should have no problem utilizing this program. As opposed to paper-based forms, this one is simpler and more convenient. A few hours is all it takes to learn it.

2.2.3.2.5 Accessibility

The administration and then the course leaders have access to the student portal. Due to the nature of the job, the admin has the greatest access to the student portal. They have the ability to authenticate the student's identification and information, as well as change or delete the information from the system. The course leader may also be granted limited access to the student database in order to verify or obtain information about a specific student.

2.2.3.3 Woodlands University College Corporate Website

Following is a synopsis of the website we were requested to create. The technological requirements for our university's website are shown below. We'll go through all of the website's features and what kind of help we can get in this piece.

|  |  |
| --- | --- |
| **Requirements** | **Description** |
| Home page | This page will include a crucial introduction, details, information, university values, and the website's goal. |
| Contact page | This page will include contact information, allowing employees, students, and other interested parties to communicate with the appropriate persons in the appropriate departments. |
| About us | This page will feature the university's information, descriptions, departments, and history. |
| Gallery page | This page contains images and visual information about the institution so that interested parties, staff, and students may learn more about the university's academic environment. |
| Courses | This page provides a comprehensive summary of all of the university's courses and teachers. |
| Events | This website provides historical photographs and visual information from numerous festive events hosted at the institution, as well as information on forthcoming or ongoing events. |
| News | This website contains up-to-date information on the university, its activities, and its students, as well as local and worldwide information relevant to the students or their academic education. |
| Apply | This page allows interested individuals and future students to apply to the university and register for any of the institution's courses and modules. |
| Login | This is the webpage or entry page to the university website that needs user identification and authentication, which is often supplied by the institution to its students and employees in order to keep them informed and provide private information. |

The following are the many performance requirements for the smooth and efficient operation of theWoodlands University College Corporate Website:

2.2.3.3.1 Speed

The total success of a website is determined by its speed. Slow website performance will always have a negative impact on search engine optimization and Google ranking. The first impression a potential student has of your website is its speed. This website's performance should be speedy and efficient, as it symbolizes the university's brand and academic atmosphere. It should not lag or produce sluggish results. The webpage should take less than two to three seconds to load. It should concentrate more on the user experience in order to get credibility. The corporate website should be of the greatest quality and speed. It should run smoothly and fast to be perceived as professional and trustworthy.

2.2.3.3.2 Capacity

A website is a system, and we should conceive of it in terms of "throughput" rather than "capacity." As a result, rather than a total number of visitors (capacity), you'll require a visitor rate per unit of time (throughput). The website's average intake must equal its average outflow for optimal efficiency.Hundreds of students and staff will use the website every day to look for information, thus it should not be slow and have a large capacity.

2.2.3.3.3 Reliability

Since it is a corporate website, it should have excellent information, be updated on a regular basis, be simple to navigate, and have a high visitor-to-student conversion rate. The website must be trustworthy and safe. The website's information should be secure and user-friendly, allowing the system to be trusted. Furthermore, all data should be backed up to the cloud.

2.2.3.3.4 Usability

The corporate website should be simple to navigate. Because the majority of its users will be ordinary people, it should be simple to use. It should not be very complicated or need a large number of people to run, and it should not require any training. In addition to being simple to use, the material on the website should be simple to comprehend. The system should be user-friendly and show all university information in a straightforward and fascinating manner so that viewers' interaction with the website increases and they learn more about the institution.

2.2.3.3.5 Accessibility

Everyone has access to the Woodlands University College Corporate Website. Anyone interested in continuing their education at this institution can examine the information and galleries on the Woodlands University College corporate website, which is open to the public. The website is an excellent source of advertising for any future potential students who may be interested in the school's courses and amenities. History or the grounds.