

Project Synopsis

Title of the Project: - Student Result Management Software

Statement about the Problem

To reduce the work and time of Institute/College by creating a simple and easy to used software.

Why is the particular topic chosen?

The Result Management Software will help to overcome the problem and errors faced by the current method. This software will perform the operations in smooth and effective manner. The Result Management Software will lead to error free, reliable, secure and fast management system.

The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same.

Objective and scope of the Project

The main objective of the Project on Result Management Software is to manage the details of Result, Student, Progress, etc. It manages all the information about Result, Course, etc. The project is totally built at administrative end and only the administrator is guaranteed the access to perform various task like Add, Update, Remove, Manage, Delete Data.

The purpose of the project is to build an program to reduce the manual work for managing the result work. It tracks all the details about the Result, Student, etc. It may help collecting perfect management in details.

It will also be easy to use for students to check their result, marks and performance. It also helps in current all works relative to Result Management. It will be also reduced the time of collecting the management & collection procedure will go on smoothly

Methodology (including a summary of the project)

The Student Result Management Software is consisted of several modules.

This software will collect and store data related to student's name, id, section, roll no.

The admin will have the authority to Add, Update, Delete, Read, the data of students, subjects, courses, marks, percentage, result, etc.

Students will be able to check their results, marks obtained and percentage of their respective exam, semester or year.

The student will be able to get this information only through their roll no.

Each student will get their unique and different roll no and only data related to the roll no will be displayed.

This software will have front-end (UI-User Interface): - this is what the student and admin will use for their particular task. Admin can only login through the username and password

Back-end: - Where all the task will be performed in backend such as taking input giving output etc.

Database will be used to store the data regarding Student name, result, marks, etc.

Hardware & Software to be used

- Python
- Visual Studio Code
- Python Libraries
- Pillow: pip install pillow
- DbBrowser URL (To View Database File)

Testing Technologies to be used

1. Selenium

Selenium is one of the most renowned open-source test automation frameworks.

Selenium allows test automation of web-apps or websites across different browsers & operating systems. Selenium offers compatibility with multiple programming languages such as Java, JavaScript, Python, C# and more, allowing testers to automate their website testing in any programming language that they are comfortable with.

Using Selenium framework, testers are able to deliver test cycles faster by automating repeated test cases. When integrated with CI/CD pipeline, Selenium can also help with a sturdy, bug-free release deployment pipeline.

2. BrowserStack

BrowserStack is the testing platform, to test the websites and mobile applications. We can test a web application in multiple browsers and mobile applications in all the mobile devices without any virtual machines, devices, and emulators.

Using this tool, developers and testers can do the cross-browser testing of various web and mobile applications in different web browsers.

Cross-browser testing is functional testing. We perform this testing to check if the application is working as expected or not in different web browsers for the different operating systems. Here, we can run the test cases manually or by doing automation by specifying the various browsers in the automation scripts.

What contribution would the project make?

The Contribution of The Project is:

- To automate the system that manually maintains and manages the students results.
- To make the system more secure, effective, maintainable, convenient and accessible.
- To reduce the cost and time.
- To simplify the students, access to the results.

References

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- www.tutorialspoint.com
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- www.youtube.com
- www.python.org
- code.visualstudio.com
- www.djangoproject.com
- sqlitebrowser.org

Conclusion

Our project is only a humble venture to satisfy the needs to manage their project work. Several user-friendly coding has also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the College. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.