

CAREER MENTOR ANALYSIS USING PHP AND SQL

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Abstract: *Most students pursuing their X, XII, UG, and PG in Tamil Nadu, have so many confusions and dilemmas about their career, and they don't have a proper idea of what to do after completing their respective courses. The majority of students in both rural and urban regions of Tamil Nadu lack knowledge about entrance exams, based on which students are admitted to colleges and competitive exams, that are conducted for job recruitment. This project helps create a website that gives notification every time the dates for entrance exams have been announced. It gives us a brief description of each course and shows a list of top colleges that can be chosen for the particular course, along with details. Each student will be provided with an individual login and regular updates will be given to them according to their interests and preferences. It can also be used to find the appropriate colleges based on the student's scores. It is like an analyzer App. This project paves the way for the students to choose an apt course for achieving their career-oriented goals. This website is user-friendly and easy to access for students from rural areas. It proves to be extremely helpful in deciding on higher studies and gives a clear idea about prevailing job opportunities.*

KEYWORDS: Career Guidance, College Selection Analyzer, Student Career Counselling, Higher Education Decision Support System, Rural Education, Student Success, Decision Support Systems in Education, Career Counselling for Rural Students.

Introduction:

Career counseling and career guidance are similar to other types of counseling (e.g., marriage or clinical counseling). What unites all kinds of professional counseling is the role of practitioners, who combine advising on their topic of expertise with counseling techniques that support clients in making complex decisions and facing difficult situations. The focus of career counseling is generally on issues such as career exploration, career change, personal career development, and other career-related issues. There is no agreed definition of career counseling worldwide, mainly due to conceptual, cultural, and linguistic differences. This even affects the most central term counseling, which is often substituted with world guidance, like in career guidance. Due to the widespread reference to both career guidance and career counseling among policy-makers, academics, and practitioners around the world, references to career guidance and counseling are becoming common. Empirical research attests to the effectiveness of career counseling. Professional career counselors can support people with career-related challenges. Through their expertise in career development and labor markets, their clients find suitable placements/jobs, in working out conflicts with their employers or finding the support of other helpful services. It is due to these various benefits of career counseling that policymakers in many countries publicly fund guidance services. For example, the European Union understands career guidance and counseling as an instrument to effectively combat social exclusion and increase citizens' employability. Assessment tools are used in career counseling to help clients make realistic career decisions. These tools generally fall into three categories: interest inventories, personality inventories, and aptitude tests. Interest inventories are usually based on the premise that if you have similar interests to people

in an occupation who like their job, you will probably like that occupation also. Thus, interest inventory may suggest occupations that the client will be happy with. The most common interest inventory is a measure of vocational interests across six domains: Realistic, Investigate, Artistic, Social, Enterprising, and Conventional. People often report a mixture of these domains, usually with one predominant domain. A personality inventory is a self-assessment tool that career counselors and other career development professionals use to help people learn about their personality types. It reveals information about individuals' social traits, motivations, strengths and weaknesses, and attitudes. Aptitude tests can predict with good odds whether a particular person will be able to be successful in a particular occupation. For example, a student who wants to be a physicist is unlikely to succeed if he cannot do the math. An aptitude test will tell him if he is likely to do well in advanced math, which is necessary for physics. There are also aptitude tests that can predict success or failure in many different occupations.

Existing Work:

In analyzing the area of career guidance and guidance and counseling from the general view, we will see that or deduce that its goal is basically to assist students in developing individual growth, of which there are certain procedures that the guidance counselor uses during work. These procedures are:

I. Test: These are being developed to judge interests, abilities, and personality traits. Such tests are:

- a) **Intelligence tests:** These are given to measure intellectual ability. The result of intelligence Quotient (IQ).
- b) **Achievement tests:** which are given to see the level students have reached in verbal and mathematical skills as well as in specific areas such as social studies, science, and foreign languages.
- c) **Aptitude tests:** These are tests designed to predict a student's ability in a particular field.
- d) **Personality tests:** They intend to reveal a student's feelings, problems, attitudes, likes, and dislikes which also determine what is of work a student will enjoy the most.
- e) **Interest inventories:** This helps students think clearly about career preferences, based on the results of these inventories, counselors may suggest a career the student has never considered before.

II. Individual Interview/Counseling: Using personal interviews, the counselor helps the students with many of the typical problems of growing up. It involves an intimate personal relationship between a pupil and the counselor in which both of them discuss having an objective attitude and careful plans for the pupil to help them make decisions.

Limitations of the Existing Manual System:

III. The manual career guidance is limited in the following ways

1. Guidance and counseling are limited to secondary schools in most cases. The rock of education, i.e., the primary schools, has been completely neglected.
2. Though counselors are found in secondary schools, the number of full-time counselors is highly insignificant and cannot cater to the number of students.

3. Some counselors are not committed or diligent and can sometimes be unapproachable.
4. Counselors can only attend to students during working hours of the day.

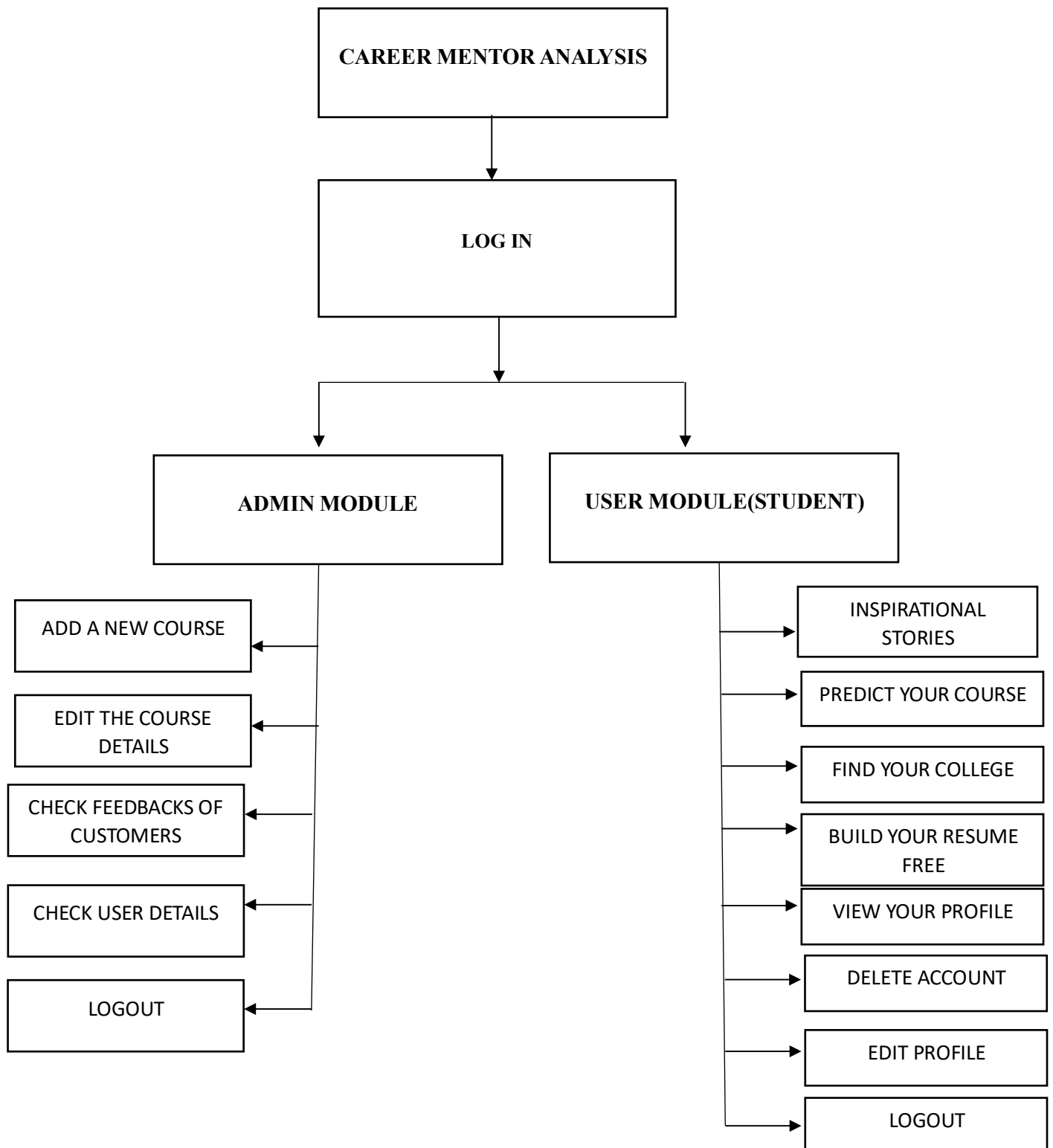
Proposed Work:

The development of career guidance in the counseling system lies on one of the roots of an expert system which is also one of the major roots in expert systems called cognitive science i.e., the area of human information processing. The study of cognition is very important because the human expert has to be available for the knowledge engineer to encode their knowledge into the programs to make the computer emulate the human. In the case of this particular research, the knowledge was acquired from the human experts (career counselors) using interviews with them. The input of this system from the user's point of view is his actions on the pages of the site that make up the system. These pages will be implemented by encoding them with HTML (Hyper Text Markup Language). The user will interact with the system by clicking menus and a hyperlink as well as selecting the answers on the quiz page. The quiz answer will be implemented using radio buttons whereby only one option out of the four (4) can be picked. The proposed system will have a fully dynamic and functional database. The database will be created using WAMP and queried using SQL. The following data about the student will be corrected and stored in the database:

1. first Name (Input type=varchar)
2. Last Name (Input type=varchar)
3. Username (Input type=varchar)
4. Password (Input Type=varchar)
5. Sex (Input Type=varchar)
6. Board (Input Type=varchar)
7. Stream (Input Type=varchar)
8. State (Input Type=varchar)

The quiz questions will also be stored in the database and subsequently retrieved using PHP and SQL commands. The results of the quiz will also be stored in the database and can be retrieved any time the student revisits the site. A student can take the quiz several times and the results of each quiz will be stored for future use or reference. The output of the system is typically the result of the quiz and the accompanying guidance tips that come with the quiz result.

Process flow Diagram:



System implementation:

Implementation is the stage of the project when the theoretical design is turned into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user confidence that the new system will work and be effective. The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover, and evaluation of changeover methods.

System testing

The secure and efficient data was tested along with the following guidelines to prove its validity. It was tested using the following technologies of the software testing. Testing is the process of exercising software with the intent of finding errors. Web app testing is a collection of related activities with a single goal: to uncover errors in web application content, function, usability, navigability, performance, capacity, and security.

Unit Testing

All the modules are tested individually using this test. Developers write unit tests. Developers write unit tests to check their code. Unit testing differs from integration testing, which confirms that an application does what the customer expects it to do. Unit tests are so named because they test a single unit of code. Unit Testing focuses verification effort on the smallest unit of software design. Each of the modules in this project was verified individually for errors.

Integration Testing

Embedding and inverse processes are jointly tested. Integration testing is systematic testing for constructing the program structure while at the same time conducting tests to uncover errors associated with the interface. This Testing was done with sample data. The need for integrated tests is to find the overall system performance.

System Requirements:

Hardware requirements

A good software selection plays a vital part in the development of an application. The first step in contracting equipment is to identify each component and spell out the performance criteria that the processor must meet under normal operating conditions. Identifying the hardware requirements of the system needs a detailed analysis of the system that has to be developed. This decides the type of processor that the system requires for development and other hardware equipment involving the input/output devices.

Software requirements

Front end: PHP, HTML

- PHP Hypertext Preprocessor is a general-purpose programming language originally designed for web development embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks.

Back end: SQL

- SQL, a database management system, must be able to reliably manage a large amount of data in a multi-user environment so that many users can concurrently access the same

data. All this must be accomplished while delivering high performance to the users of the database.

Future Enhancements:

The proposed system is Career Mentor Analysis. We can enhance this system by including more facilities like sending notifications to the students' email when an examination update coming, including book and study materials for books, and by including self-motivating and inspiring video sessions. Providing such features enables the users to include more comments in the system. The current system is being developed which runs on the Desktop PC and laptop. In the future, we can develop it into mobile applications like Android, Windows Phone, etc.

Conclusion:

The Career Mentor Analysis is a project that provides a collection of different career opportunities, normally offered by several different educational institutes, schools, and colleges. This project is designed for the reason of easy up-to-date and comfortable use. A Career Guidance System where students can see various career opportunities. The system shows various fields available after the 12th for graduation and also fields available after graduation. It also lists various colleges available where students can search for colleges by their courses. Career Mentor includes two main users, who are administrators and students. The user can predict their course in the toughest situation they face. It gives you the apt colleges for your percentage. It will help you to develop your resume with the help of a form.

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