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**CGND 314**

**FYP PROPOSAL**

**EduConsult-Interactive Advisor-Advisee Management System**

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# INTRODUCTION

## Introduction

Academic advising is a critical component of student success in higher education. Advisors guide students through course selection, academic progress tracking, and career planning. However, the traditional methods of academic advising often involve time-consuming processes such as manual scheduling, inefficient communication, and lack of centralized records for advisor-advisee interactions.

The **EduConsult** system is a web-based **Interactive Advisor-Advisee Management System** designed to streamline and automate academic consultation. It aims to improve the efficiency of interactions between academic advisors and students, making it easier to schedule consultations, track student progress, and maintain records of advisory sessions. This system will enhance the overall academic experience by promoting better communication and providing real-time support for students.

## Problem Statement

In many educational institutions, the academic advising process is often inefficient and disorganized due to reliance on manual methods such as emails, text messages, and in-person meetings. These traditional methods present several challenges for both students (advisees) and advisors:

1. **Inefficient Scheduling**: Students and advisors struggle to coordinate meeting times due to lack of a centralized scheduling system. This leads to delayed or missed appointments, making it difficult for students to receive timely academic guidance.
2. **Fragmented Communication**: Without a unified platform, communication between advisors and students is scattered across different channels (emails, phone calls, etc.), leading to missed or forgotten messages and poor follow-up on action items discussed during advising sessions.
3. **Lack of Documentation**: There is often no structured way to document and track advising sessions, resulting in advisors and students not having a clear record of previous discussions, recommendations, and agreed-upon actions. This limits both follow-up and accountability.
4. **Limited Progress Tracking**: Advisors lack a systematic way to monitor students' academic performance, course selection, and progress toward graduation. This makes it difficult for advisors to provide data-driven, personalized advice.
5. **Overburdened Advisors**: Advisors are often overburdened with manual administrative tasks, such as keeping track of meeting notes, managing student progress, and coordinating multiple advisees, which detracts from the quality of guidance they can provide.

The absence of an integrated, efficient system to manage academic consultations results in miscommunication, lack of follow-up, and reduced effectiveness of the advising process. This creates challenges for students in staying on track with their academic goals and affects their ability to receive the timely support they need.

**EduConsult**, the proposed **Interactive Advisor-Advisee Management System**, aims to solve these problems by offering a streamlined, web-based solution to automate scheduling, centralize communication, and provide tools for tracking academic progress and consultation history.

## Project Objective

 **Streamline Advisor-Advisee Interactions**: Provide an intuitive platform that simplifies communication and consultation scheduling between advisors and students.

**Enhance Academic Guidance**: Help advisors track students' academic performance, course selections, and progress toward graduation, ensuring better academic outcomes.

**Reduce Administrative Burden**: Automate meeting schedules, reminders, and documentation, reducing manual workload for both advisors and students.

**Maintain Consultation Records**: Keep comprehensive, easily accessible records of all meetings, advice given, and actions taken for future reference.

## Foster ****Student Accountability****: Encourage students to take responsibility for their academic progress by offering self-assessment tools and structured academic planning features.Project Scope

## Project scope

The scope of the **Interactive Advisor-Advisee Management System (EduConsult)** encompasses the design, development, implementation, and deployment of a web-based platform that facilitates streamlined academic consultations between advisors and students. The system aims to improve efficiency, communication, and documentation in academic advising by automating key processes and offering features that address the existing challenges in traditional advising systems.

## 1.5 Target User

1. **Academic Advisors**: Faculty members who are responsible for guiding and mentoring students in course selections, academic planning, and career advice.
2. **Students/Advisees**: Students enrolled in academic programs who need regular consultations with their assigned advisors for academic guidance.
3. **Institutional Administrators**: Staff members who manage academic records, policies, and advisor-advisee assignments.

## 1.6 Project Timeline

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **Weeks** | | | | | | | | | | | | | |
| **FYP** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** |
| 1. Project Planning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Requirement Gathering |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. System Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Database Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Development Phase |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Testing Phase |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. User Feedback and Revisions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Final Deployment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. Project Documentation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Presentation Preparation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 1.6

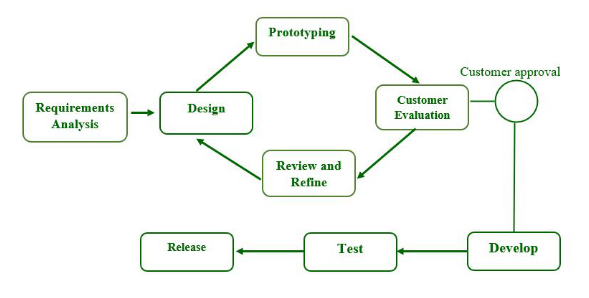
# METHODOLOGY

## Methodology

**Prototype Methodology** is a software development approach that involves building an early version, or prototype, of the system to gather feedback and refine the final product. It focuses on creating a working model early in the development process to help stakeholders understand the system's functionality, interface, and design before the final version is fully developed. This methodology is especially useful when the project requirements are unclear, incomplete, or evolving, allowing developers and users to explore ideas and refine requirements through an iterative process.

The **Prototype Methodology** is an effective approach for developing systems where user interaction, feedback, and refinement are essential. It emphasizes flexibility, user involvement, and iterative development to ensure that the final product meets user needs and expectations. While it comes with some challenges, such as potential for scope creep or higher initial costs, its benefits in improving communication, detecting issues early, and enhancing user satisfaction make it a valuable methodology, especially for complex or user-driven projects.

## Project Development Methodology

**Figure 2.2 Prototype Methodology**

**Step-1: Requirements gathering and analysis:**

Requirement analysis is the first step in developing a prototyping model. During this phase, the system’s desires are precisely defined. During the method, system users are interviewed to determine what they expect from the system.

**Step-2: Quick design:**

The second phase could consist of a preliminary design or a quick design. During this stage, the system’s basic design is formed. However, it is not a complete design. It provides the user with a quick overview of the system. The rapid design aids in the development of the prototype.

**Step-3: Build a Prototype:**

During this stage, an actual prototype is intended to support the knowledge gained from quick design. It is a small low-level working model of the desired system.

**Step-4: Initial user evaluation:**

The proposed system is presented to the client for preliminary testing at this stage. It is beneficial to investigate the performance model’s strengths and weaknesses. Customer feedback and suggestions are gathered and forwarded to the developer.

**Step-5: Refining prototype:**

If the user is dissatisfied with the current model, you may want to improve the type that responds to user feedback and suggestions. When the user is satisfied with the upgraded model, a final system based on the approved final type is created.

**Step-6: Implement Product and Maintain:**

The final system was fully tested and distributed to production after it was developed to support the original version. To reduce downtime and prevent major failures, the programmer is run on a regular basis.

## Requirement Gathering Techniques

## Questionnaire

## A questionnaire was distributed to gather detailed responses from potential users about their needs and preferences for this system. This method allowed for collecting structured data from a larger audience.

## Survey

## Surveys were used to quickly gather feedback from a students and lecturers. This helped in identifying the most desired features for the system.

## Tools and Technology

The development of the **EduConsult** utilized a variety of tools and technologies to ensure a smooth and efficient process. Below is an overview of the key tools and technologies used.

### Programming Language

Programming language is a computer language programmer use to develop system. Below section will discussed on the programming language used in developing this project.

#### PHP

PHP (Hypertext Preprocessor) is a programming language used mainly for building websites. It runs on the server, which means it can create web pages that change based on user input or data from a database. PHP is easy to use and works well with databases like MySQL, making it popular for developing dynamic websites and web applications.

#### Database

A database is an organized collection of data that can be easily accessed and managed. It stores information in tables with rows and columns, allowing users to retrieve and manipulate data using a query language like SQL. Databases are commonly used in applications and websites to store information like user accounts and product details.

#### HTML/CSS

HTML (Hypertext Markup Language) is the standard language used to create and design web pages. It uses tags to structure content, such as headings, paragraphs, links, images, and lists. HTML tells the web browser how to display the content on a webpage. It’s the foundation of any website, providing the basic layout and structure that can be styled with CSS and made interactive with JavaScript.

### Javascript

JavaScript is a programming language commonly used to make websites interactive and dynamic. It runs in the web browser, allowing developers to create features like animations, form validation, and interactive maps. With JavaScript, you can respond to user actions, update content on the page without reloading, and communicate with servers to fetch data. It works alongside HTML and CSS to enhance the user experience on websites.

#### MySQL

MySQL is a popular open-source relational database management system (RDBMS) that uses SQL (Structured Query Language) to manage and manipulate data. It allows users to create, read, update, and delete data in structured tables. MySQL is widely used for web applications due to its speed, reliability, and ease of use. It supports large databases and multiple users, making it a common choice for websites, applications, and data-driven projects.

### Web Development Tools

Web development tools are software applications that help developers create and maintain websites. In the development of the "Interactive Incident Reporting System," several tools were utilized to enhance productivity and streamline the development process.

### 2.4.3.1 Visual Studio Code

Visual Studio Code (VS Code) is a lightweight, open-source code editor developed by Microsoft. It supports multiple programming languages and offers features like syntax highlighting, intelligent code completion (IntelliSense), debugging tools, and an integrated terminal. With a wide range of extensions, users can customize their development environment, making it a popular choice among developers for web and software development.

#### Xampp

XAMPP is a free and open-source cross-platform web server solution that includes Apache, MySQL, and PHP. It was used to create a local server environment for developing and testing the application. XAMPP made it easy to set up the necessary components for running the incident reporting system on a personal computer.

REFERENCES

https://www.geeksforgeeks.org/software-prototyping-model-and-phases/