AL-KAWTHAR UNIVERSITY | الكوثر

Programming Fundamentals Project Proposal Submission Form

Note: - This form must be TYPED– Handwritten forms will NOT be accepted.

Group ID: ☐
Group ID will assigned by course instructor

(To be filled by the Student(s) ↓)

1. Degree Program: CS: ☑ IT: ☐

2. Number of Students in Group: 2

3. Project Type: Console: ☐ GUI: ☑

4. Categories: ☑ Management Systems ☐ Game ☐ Others: Write Details

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_____

Note: You can only build your project using C.
All the concepts of programming fundamentals should be utilize in project

5. **Project Title:** UniLink

6. **Instructor Name**: Miss. Nida-e-Rub

7. **Project Details:** Write down the functional requirements of your project below. You can support your content by using pictorial representation (use high quality pictures if any)

UniLink — *WHERE EVERY STUDENT IS JUST ONE LINK AWAY*

Project Overview:

UniLink is a **university management and learning assistant** built entirely in C language.
It aims to provide students and administrators with a centralized platform for **managing profiles**, **courses**, **quizzes**, **grades**, and **reminders** — all within an easy-to-use interface.

The system demonstrates key C programming concepts such as **file handling, structures, arrays, loops, conditionals, modular programming**, **data validation**, and optionally **basic graphics programming** for a visual interface.

Basic Functionalities:

No.	Functionality	Description	Implementation Method
1	**Login System**	Separate logins for Admin and Students	File-based credentials (username + password); simple authentication logic
2	**Student Profile Management**	Add, view, edit, delete student details	struct Student, data stored in students.csv or students.dat
3	**Course Management**	Add/view courses, assign credits	struct Course, stored in file courses.csv
4	**Enrollment**	Enroll students in courses	Mapping student roll numbers with course codes
5	**Quiz System**	Admin can create quizzes; students can attempt and view results	Use struct Question and struct Result; save in quiz.dat
6	**GPA Calculator**	Calculate GPA based on marks and credit hours	Apply GPA formula with stored course data
7	**File Handling / Data Storage**	Persistent storage of all data	Text or CSV files (easy to read, update, and display)

GUI Implementation Plan:

A simple graphical interface using **WinBGIm (graphics.h)** in C.
The GUI will include:

- A **login screen** with text boxes
- **Buttons** for menu options (Add Student, Take Quiz, etc.)
- **Graphical charts** for displaying GPA or quiz results

Conclusion:

UniLink will serve as a smart and accessible portal that bridges students and administration through a simple yet powerful interface.
It's designed to not only fulfill the requirements of the Programming Fundamentals course but also showcase creativity, structure, and innovation.

Student(s) Information:

Student ID.	Class ID	Name	E-mail ID	Cell Phone #
BSCS25201075	Section - A	Muhammad Basim Qureshi	muhammadbasim925@gmail.com	0321-2516186
BSCS25201029	Section - A	Ahsan Ilyas	muhammadilyas2149@gmail.com	0336-2215614

8. I hereby state that the above mentioned goals of our project shall be completed within the due dates specified by the instructor. I shall abide by all the rules set by the instructor.

I shall not be using any unfair means to complete my project and I admit that Plagiarism is a professional sin and I shall not use it.

Name: Student ID # Muhammad Basim Qureshi BSCS25201075

Signature/Date:_____

Name: Student ID # Ahsan Ilyas BSCS25201029

Signature/Date:_____