

OOP Term Projects

Muhammad Ali
muhammadallee@gmail.com

Here is a list of OOP term projects ideas. These projects are available on first come first serve basis and a project will be assigned to one and only one group! A group must choose from these projects.

In most cases, it is not recommended to choose a project out of this list. However, in exceptional circumstances (like all the projects have been reserved) you may propose your own idea (which will need an approval from the instructor).

Group Strength

A group may consist of **exactly 4 or exactly 5 members (that means a group of students less than 4 or greater than 5 is NOT allowed)**. Out of which, one will be a **group leader** who'll be responsible for the successful completion of the project and sending weekly progress reports.

All **group members** shall have **clear roles and responsibilities** and shall be **documented** (See the project structure guidelines). Tea serving will not be considered as a role.

Project Ideas

Auction Software

Description

'Weber' is well known for its carpet selling business, and has clients throughout the world. You are required to build software for them that cater their basic needs for customer registration and auction management.

Programming Complexity: Medium

Required Skill Set: OOP, Arrays, STL (vector).

Recommended but Not Compulsory Skills: File Handling & Graphics.

UML Class Diagram Code Generator

Description

UML Class Diagram Code Generator, as its name suggests, helps you to generate code in C++.

Programming Complexity: Medium

Required Skill Set: OOP (Strong), STL (vector), and File Handling.

Recommended but Not Compulsory Skills: Graphics (Very Strong).

Movie World

Description

'Movie World' Shop has a huge collection of movies (in the form of DVDs). You are required to make software that manages the rental operations of movies.

Programming Complexity: Medium

Required Skill Set: OOP, STL (vector), and Arrays.

Recommended but Not Compulsory Skills: File Handling & Graphics.

Paint Plus

Description

Paint Plus provides you the facility to draw using mouse and save the drawn image into a BMP file which can be read by any other software.

Programming Complexity: High

Required Skill Set: OOP, STL (vector), Arrays, Graphics (Strong), File Handling

Recommended but Not Compulsory Skills: Mathematics (Strong).

Chess

Description

Chess software that helps you to play chess game in Human vs. Human mode.

Programming Complexity: Medium.

Required Skill Set: OOP, Arrays.

Recommended but Not Compulsory Skills: Graphics, File Handling.

Question Bank

Description

Question Bank computerizes the MCQ based exams. It takes input from a file having questions and their answers and presents randomly before the exam takers.

Programming Complexity: Medium.

Required Skill Set: OOP, STL (vector), Arrays, and File Handling.

Recommended but Not Compulsory Skills: Graphics.

Gourmet Inventory System

Description

Gourmet Inventory System computerizes the Stock, Sale and Purchase departments of Gourmet Chain.

Programming Complexity: Medium.

Required Skill Set: OOP, STL (Vector), Arrays.

Recommended but Not Compulsory Skills: File Handling, Graphics.

Library System

Description

Library Systems is aimed to computerize the library management operations, e.g. Registering a Student, Issuing a book, Handling Books Return, etc.

Programming Complexity: Easy.

Required Skill Set: OOP, Arrays.

Recommended but Not Compulsory Skills: Graphics, File Handling.

Paranoid Game

Description

This project is the implementation of a paranoid game, where the user controls the ball with the help of a paddle and hits the bricks to complete the level.

Programming Complexity: Medium.

Required Skill Set: OOP, Arrays, Graphics, And Basic Mathematics.

Recommended but Not Compulsory Skills: File Handling.

Text Editor

Description

A basic implementation of a text editing software that helps editing of any text-file on the hard disk drive.

Programming Complexity: Easy.

Required Skill Set: OOP, Arrays, File Handling.

Recommended but Not Compulsory Skills: Graphics.

Any other

Get it approved by the instructor.

Description: N/A

Programming Complexity: N/A.

Required Skill Set: N/A.

Recommended but Not Compulsory Skills: N/A.