



NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES  
(KARACHI CAMPUS)  
FAST School of Computing  
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## **PROGRAMMING FUNDAMENTALS FINAL PROJECT**

Project Title: [Psychological Clinic Management System]

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### **INTRICACIES PERTAINING TO THE PROJECT**

Psychological Clinic Management System is a tool that could be used by small-scaled psychologists to manage their clients' data and appointments. The application also furnishes features to clients who can compute their level of stress and book an appointment with the psychologist

## **LIBRARIES USED**

**\_For basic input/output functions and file handling**

**#include <stdio.h>**

**To use strcpy function in deleteInformation(stptr)**

**#include <string.h>**

**To use exit () function**

**#include <stdlib.h>**

**To use sleep function while recursively calling main**

**#include <windows.h>**

**#include <unistd.h>**

**To counter memory holes/leakage due to usage of structures**

**#pragma pack(1)**

## **FEATURES**

- Login System
- Perceived Stress Scale
- Add/Modify/Delete/View Client's information
- Search relevant Clients using partial information
- Book and View Appointments

## **C LANGUAGE CONCEPTS USED**

### **Control Statements:**

- If/else statements
- Switch-case statements

### **Iterative Control Statements:**

- Counter-controlled loop
- Sentinel loops

### **Arrays:**

- Integer Array
- Character Array

### **Functions:**

- Pass by Value
- Pass by Reference
- Recursive Call

### **Structures:**

- Heterogenous Memory allocation

**Pointers:**

- Pointers with Array
- Pointers with Structures
- Dynamic Memory Allocation
- File Handling

**FLOWCHART**

Enclosed with the document

