#include <stdio.h>

#include <string.h>

#define MAX\_DOCTORS 5

// Functions initialization

void view\_doctors();

void print\_patient\_slip(char name[], int age, char gender[], char phone[], int doctor\_index);

//Doctors Array

char doctor\_names[MAX\_DOCTORS][50] = {

"Dr. Ali", "Dr. Sara", "Dr. Kamran", "Dr. Hina", "Dr. Faisal"

};

char doctor\_specialties[MAX\_DOCTORS][50] = {

"Cardiology", "Neurology", "Pediatrics", "Orthopedics", "General Medicine"

};

int main() {

int choice;

char patient\_name[50];

int patient\_age;

char patient\_gender[10];

char patient\_phone[15];

int doctor\_choice;

// To Show Menu

while (1)

printf("\n===== Hospital Management System =====\n");

printf("1. Add New Patient\n");

printf("2. View Doctor List\n");

printf("3. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

if (choice == 1) {

printf("\nEnter patient name: ");

scanf(" %[^\n]", patient\_name);

printf("Enter patient age: ");

scanf("%d", &patient\_age);

printf("Enter patient gender (Male/Female): ");

scanf(" %[^\n]", patient\_gender);

printf("Enter patient phone number: ");

scanf(" %[^\n]", patient\_phone);

// Function To Show Avaliable Doctors

view\_doctors();

// Select Doctor

printf("Select a doctor (1-%d): ", MAX\_DOCTORS);

scanf("%d", &doctor\_choice);

if (doctor\_choice < 1 || doctor\_choice > MAX\_DOCTORS) {

printf("Invalid doctor selection.\n");

} else {

// Print patient slip

print\_patient\_slip(patient\_name, patient\_age, patient\_gender, patient\_phone, doctor\_choice - 1);

}

} else if (choice == 2) {

view\_doctors();

} else if (choice == 3) {

printf("Exiting the program. Goodbye!\n");

break;

} else {

printf("Invalid choice. Please enter 1, 2, or 3.\n");

}

}

return 0;

}

// Function to show doctor list

void view\_doctors() {

printf("\n===== Doctor List =====\n");

printf("| %-3s | %-20s | %-15s |\n", "No", "Name", "Specialty");

printf("-----------------------------------------------\n");

for (int i = 0; i < MAX\_DOCTORS; i++) {

printf("| %-3d | %-20s | %-15s |\n", i+1, doctor\_names[i], doctor\_specialties[i]);

}

printf("-----------------------------------------------\n");

}

// Function to print patient slip

void print\_patient\_slip(char name[], int age, char gender[], char phone[], int doctor\_index) {

printf("\n===== Patient Slip =====\n");

printf("+---------------------------------------------+\n");

printf("| %-15s: %-25s |\n", "Patient Name", name);

printf("| %-15s: %-25d |\n", "Age", age);

printf("| %-15s: %-25s |\n", "Gender", gender);

printf("| %-15s: %-25s |\n", "Phone", phone);

printf("| %-15s: %-25s |\n", "Doctor", doctor\_names[doctor\_index]);

printf("| %-15s: %-25s |\n", "Specialty", doctor\_specialties[doctor\_index]);

printf("+---------------------------------------------+\n");

}