import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

public class StudentCourseRegistrationSystem {

public static void main(String[] args) {

// Creating a scanner object for taking input

Scanner sc = new Scanner(System.in);

// Student information input

System.out.print("Enter your school name: ");

String schoolName = sc.nextLine();

System.out.print("Enter your session: ");

int session = sc.nextInt();

System.out.print("Enter your roll no: ");

int rollNo = sc.nextInt();

sc.nextLine(); // To consume the newline character

System.out.print("Enter your name: ");

String name = sc.nextLine();

System.out.print("Enter your father's name: ");

String fatherName = sc.nextLine();

System.out.print("Enter your mother's name: ");

String motherName = sc.nextLine();

System.out.print("Enter your class: ");

int standard = sc.nextInt();

sc.nextLine(); // To consume the newline character

// List of available courses

List<String> availableCourses = new ArrayList<>();

availableCourses.add("Physics");

availableCourses.add("Chemistry");

availableCourses.add("Mathematics");

availableCourses.add("English");

availableCourses.add("Hindi");

// List to store registered courses

List<String> registeredCourses = new ArrayList<>();

// Course Registration System

boolean registering = true;

while (registering) {

System.out.println("\n----- Course Registration Menu -----");

System.out.println("1. View Available Courses");

System.out.println("2. Register for a Course");

System.out.println("3. View Registered Courses");

System.out.println("4. Unregister a Course");

System.out.println("5. Exit");

System.out.print("Choose an option: ");

int choice = sc.nextInt();

sc.nextLine(); // To consume the newline character

switch (choice) {

case 1:

System.out.println("\nAvailable Courses: ");

for (int i = 0; i < availableCourses.size(); i++) {

System.out.println((i + 1) + ". " + availableCourses.get(i));

}

break;

case 2:

System.out.println("\nEnter the course number you want to register for:");

for (int i = 0; i < availableCourses.size(); i++) {

System.out.println((i + 1) + ". " + availableCourses.get(i));

}

int courseChoice = sc.nextInt();

sc.nextLine(); // To consume the newline character

// Validate the course selection

if (courseChoice >= 1 && courseChoice <= availableCourses.size()) {

String selectedCourse = availableCourses.get(courseChoice - 1);

if (registeredCourses.contains(selectedCourse)) {

System.out.println("You are already registered for this course.");

} else {

registeredCourses.add(selectedCourse);

System.out.println("Successfully registered for " + selectedCourse + ".");

}

} else {

System.out.println("Invalid course number.");

}

break;

case 3:

System.out.println("\nYour Registered Courses: ");

if (registeredCourses.isEmpty()) {

System.out.println("No courses registered yet.");

} else {

for (String course : registeredCourses) {

System.out.println(course);

}

}

break;

case 4:

System.out.println("\nEnter the course number you want to unregister from:");

for (int i = 0; i < registeredCourses.size(); i++) {

System.out.println((i + 1) + ". " + registeredCourses.get(i));

}

int unregisterChoice = sc.nextInt();

sc.nextLine(); // To consume the newline character

// Validate the course unregistration

if (unregisterChoice >= 1 && unregisterChoice <= registeredCourses.size()) {

String courseToUnregister = registeredCourses.get(unregisterChoice - 1);

registeredCourses.remove(courseToUnregister);

System.out.println("Successfully unregistered from " + courseToUnregister + ".");

} else {

System.out.println("Invalid course number.");

}

break;

case 5:

System.out.println("Exiting the system. Goodbye!");

registering = false;

break;

default:

System.out.println("Invalid option. Please try again.");

break;

}

}

// Closing the scanner object to avoid resource leak

sc.close();

}

}