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Assignment 12.a

#include <iostream>

#include <string>

using namespace std;

class Employee {

private:

string name;

string employee\_id;

int age;

double salary;

string department;

long long phone\_number;

public:

// Constructor

Employee() {

name = "";

employee\_id = "";

age = 0;

salary = 0.0;

department = "";

phone\_number = 0;

}

// Member function to get data from user

void getdata() {

cout << "Enter name: ";

getline(cin, name);

cout << "Enter employee id: ";

cin >> employee\_id;

cin.ignore(); // Consume newline character

cout << "Enter age: ";

cin >> age;

cout << "Enter salary: ";

cin >> salary;

cout << "Enter department: ";

cin.ignore(); // Consume newline character

getline(cin, department);

cout << "Enter phone number: ";

cin >> phone\_number;

// Check if phone number has correct number of digits

if (phone\_number < 1000000000 || phone\_number > 9999999999) {

throw "Invalid phone number. Number of digits must be 10.";

}

// Check if age is less than 18

if (age < 18) {

throw "Age must be greater than or equal to 18.";

}

}

// Member function to print employee information

void putdata() {

// Calculate salary (assuming 10% of basic salary)

double hra = 0.2 \* salary;

double da = 0.5 \* salary;

double totalSalary = salary + hra + da;

cout << "Employee information:" << endl;

cout << "Name: " << name << endl;

cout << "Employee id: " << employee\_id << endl;

cout << "Age: " << age << endl;

cout << "Salary: " << totalSalary << endl;

cout << "Department: " << department << endl;

cout << "Phone number: " << phone\_number << endl;

}

};

int main() {

Employee e;

int choice;

while (true) {

cout << "1. Enter employee information" << endl;

cout << "2. Print employee information" << endl;

cout << "3. Exit" << endl;

cout << "Enter your choice: ";

cin >> choice;

switch (choice) {

case 1:

try {

e.getdata();

} catch (const char \*msg) {

cout << msg << endl;

}

break;

case 2:

e.putdata();

break;

case 3:

exit(0);

default:

cout << "Invalid choice. Please try again." << endl;

}

}

return 0;

}

OUTPUT1. Enter employee information

2. Print employee information

3. Exit

Enter your choice: 1

Enter name: Enter employee id: 1234567

Enter age: 19

Enter salary: 10000

Enter department: CS

Enter phone number: 9146682006

1. Enter employee information

2. Print employee information

3. Exit

Enter your choice: 2

Employee information:

Name:

Employee id: 1234567

Age: 19

Salary: 17000

Department: CS

Phone number: 9146682006

1. Enter employee information

2. Print employee information

3. Exit

Enter your choice: 3