JNCT

LNCT Group of Colleges

Object oriented programming methodology case study

EMPLOYEE CLASS HIERARCHY

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OOPM CASE STUDY

EMPLOYEE CLASS HIERARCHY

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Need of case study

- Studying case studies is a valuable learning tool that combines theoretical knowledge with practical application. It helps develop critical skills, prepares for real-world challenges, and provides insights that can inform our decision-making in professional settings.
- The motivation behind a case study is driven by the desire to gain deeper insights, contribute to knowledge, inform decision-making, or facilitate learning and understanding in a particular context.
- Case studies can be versatile tools that provide valuable insights and lessons across different levels—national, international, and local. They contribute to informed decision-making, policy development, community development, and professional growth across various contexts.
- The use of software at the national and international levels is diverse and spans across government, defense, healthcare, education, business, research, and various other sectors. The specific applications depend on the needs and objectives of the organizations or individuals involved.
- The use of software varies widely, and it can be employed by both professionals and non-professionals depending on the specific nature and purpose of the software. The accessibility and user-friendliness of software have contributed to its widespread use by individuals with varying levels of technical expertise and professional backgrounds.
- **Professional Use:**
- **Industry-Specific Software:** Professionals in various industries use specialized software tailored to their needs. For example, architects use CAD (Computer-Aided Design) software, engineers use simulation software, and graphic designers use graphic editing software.
- **Business and Management Software:** Professionals in business and management use software for tasks such as project management, customer relationship management (CRM), enterprise resource planning (ERP), and data analysis.
- The domain of employee class hierarchy software is essential for organizations to efficiently manage their workforce, streamline HR processes, and ensure compliance with relevant regulations. The software in this domain helps create a structured and organized framework for handling all aspects of employee management within an organization.

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Objectives of case study

- The objectives of a case study focusing on employee class hierarchy in software development or human resource management can vary depending on the goals of the study and the context in which it is conducted. However, here are some potential objectives that such a case study might aim to achieve:

- **Understanding Organizational Structure:**
  - Analyze how the software models and reflects the organizational structure, including hierarchical relationships, reporting lines, and departmental divisions.

- **Efficiency and Productivity:**
  - Evaluate how the software contributes to the efficiency and productivity of HR and management processes related to employee class hierarchy.

- **Compliance and Data Security:**
  - Evaluate the software's ability to comply with relevant regulations and data security standards, ensuring the protection of sensitive employee information.

- **Employee Empowerment:**
  - Assess whether the software supports employee empowerment through self-service features, allowing individuals to manage their information and perform certain HR-related tasks.

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RELATED STUDY

- Some online platforms specialize in hosting and sharing case studies across different industries. These platforms may offer free or paid access to a variety of case studies. while some case studies are freely available, others may require purchase or access through a subscription.
- Yes,google is a powerful search engine that indexes a vast amount of information available on the internet, including case studies from various sources. The availability of case studies on Google may vary, and some case studies may be accessible directly, while others may require access through specific websites or databases.
- The term "case study" can refer to a variety of materials, and whether a case study is ready to use depends on its source and purpose. However, there are instances where case studies may not be immediately ready to use.
- No, a case study itself is typically not subject to patent protection. A case study is a form of documented research or analysis that presents a detailed examination of a particular situation, event, or phenomenon. It is a descriptive, analytical, and often illustrative account of a real or hypothetical situation.
- Certainly, many research papers involving case studies are available across various academic disciplines. Check websites of professional associations related to human resources or management. They may provide resources or links to case studies.
- Using a recursive CTE to traverse an employee hierarchy by YugabyteDB Docs: This article describes a case study of how to use a recursive Common Table Expression (CTE) to traverse an employee hierarchy and retrieve information about all of the employees in the hierarchy.
- The link to the article "using a recursive CTE to traverse an employee hierarchy" by YugabyteDB Docs is:
- https://docs.yugabyte.com/preview/api/ysql/the-sql-language/with-clause/emps-hierarchy/

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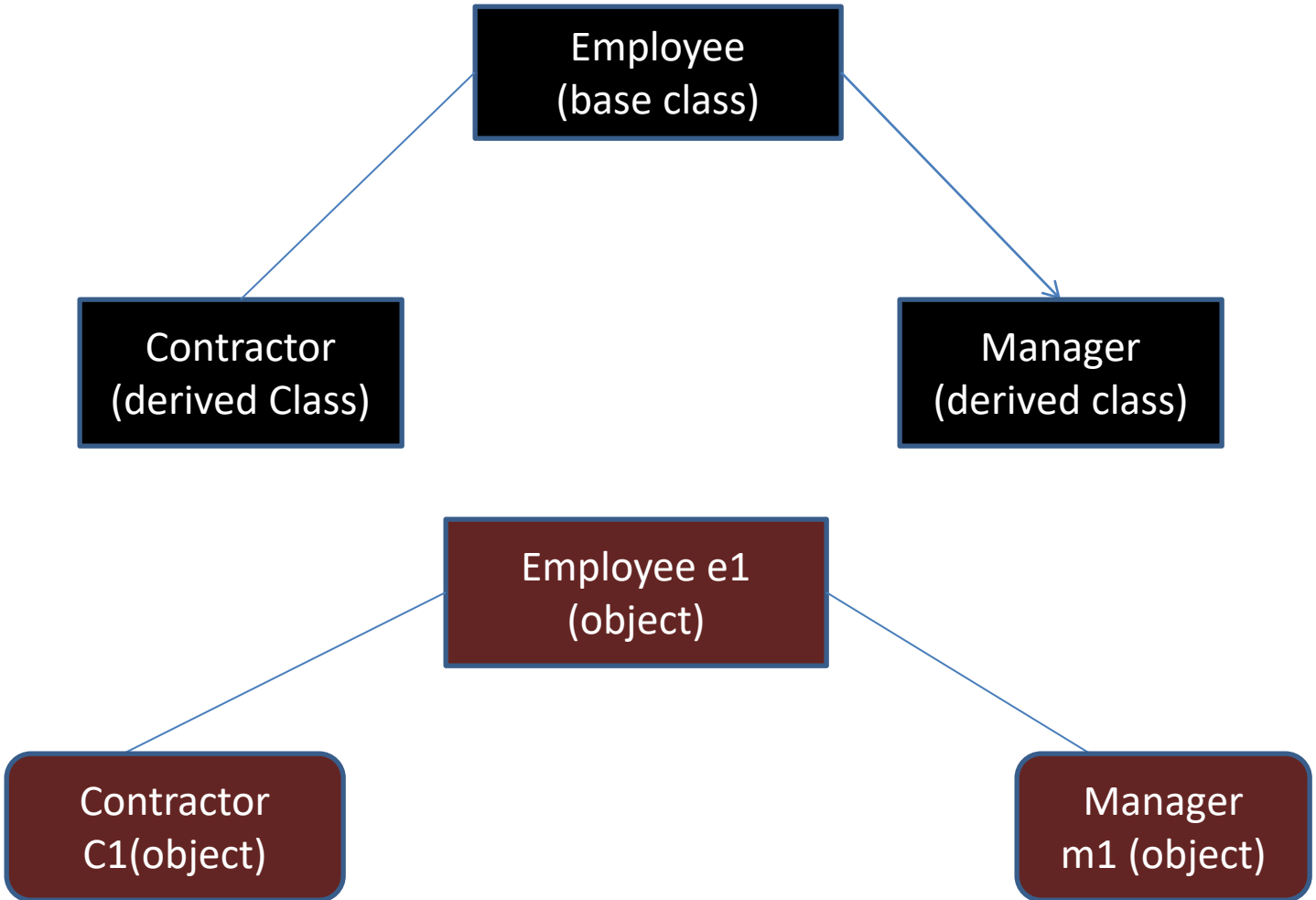
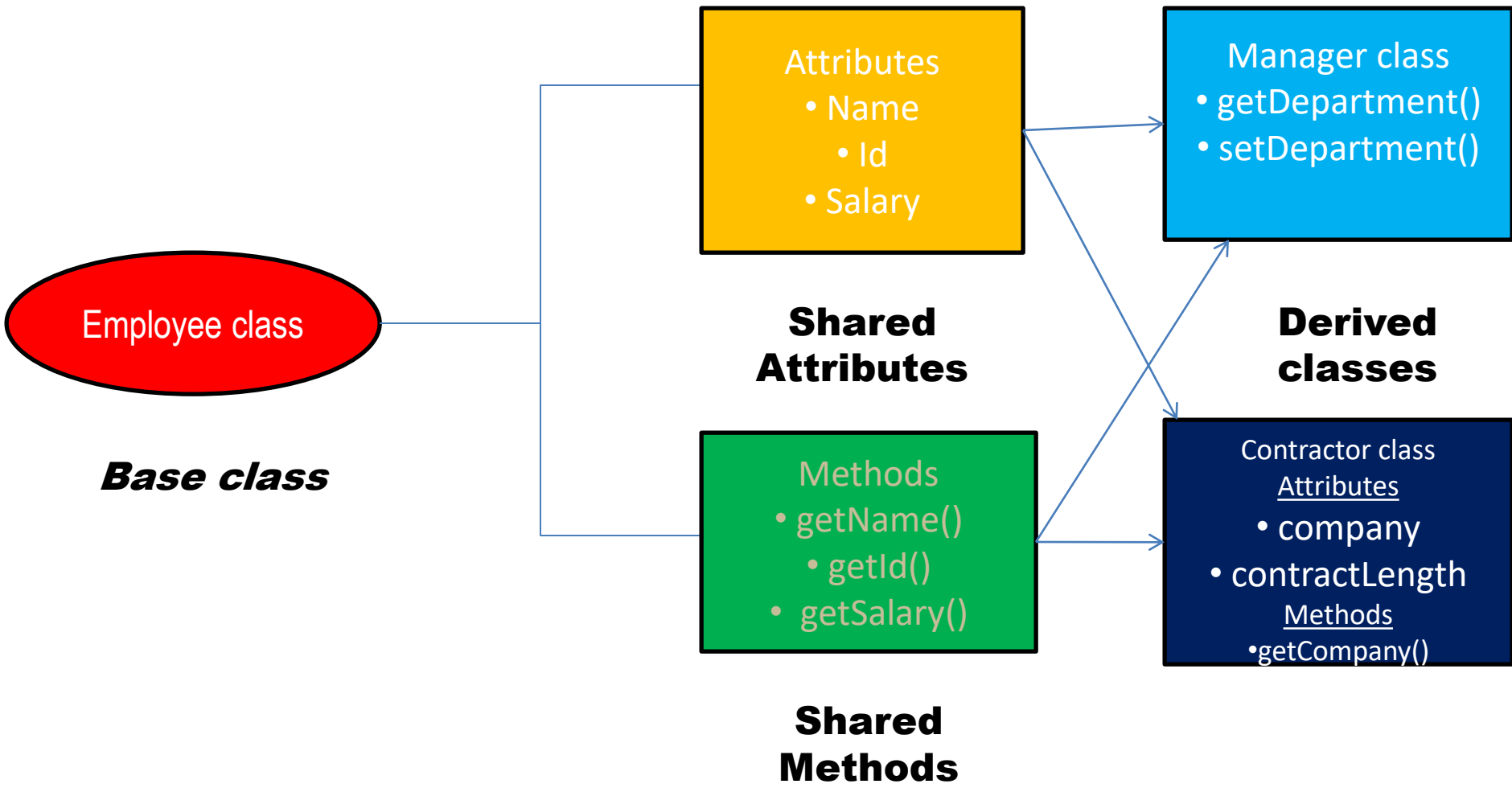
PROPOSAL

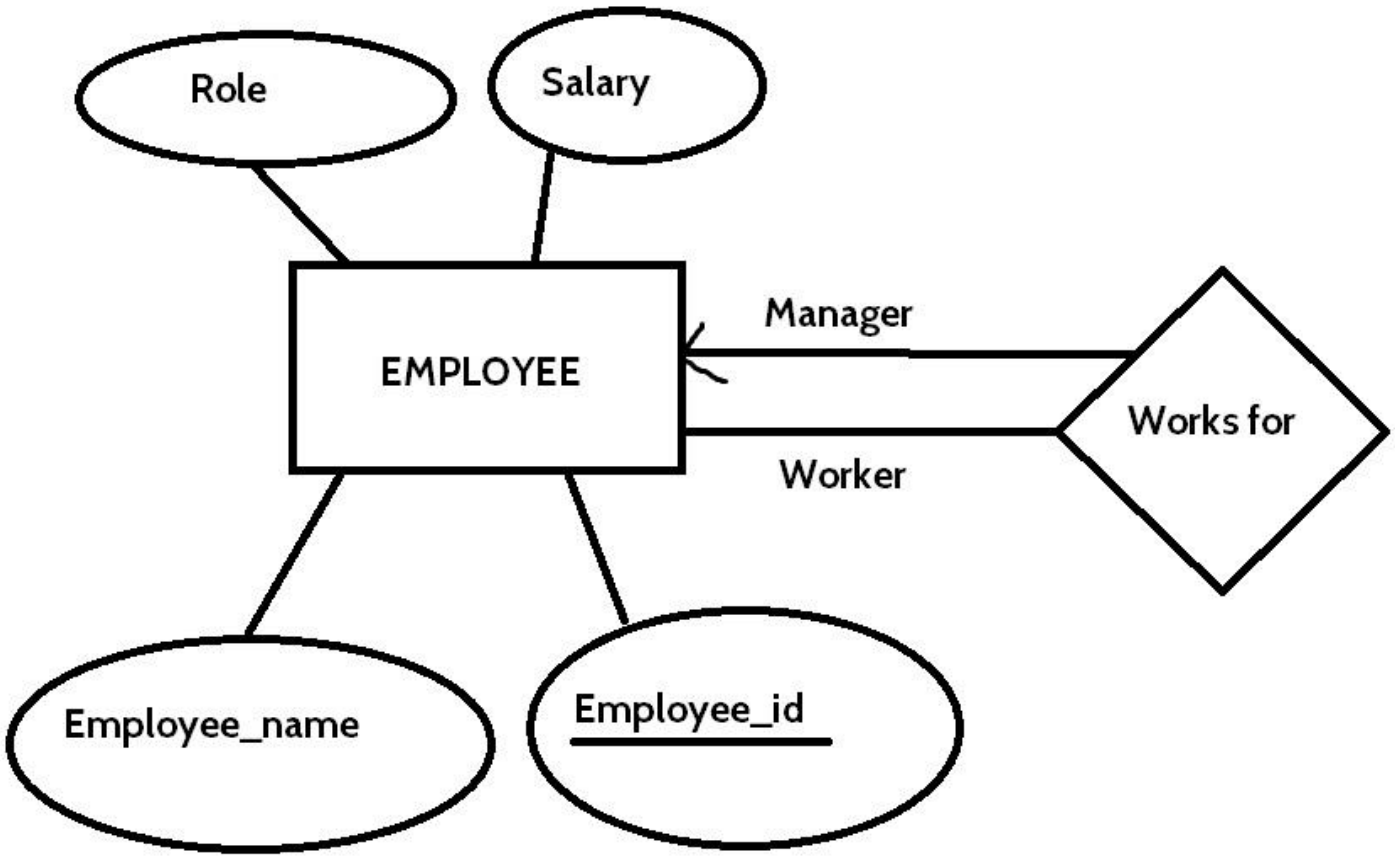
- Class and object Diagram



• Design Flow Diagram



•Design ER Diagram



OOPM CASE STUDY

Input and output

Analysis

sample

Input data

```
#include <iostream>
using namespace std;

class Employee {
public:
  Employee() {}
  Employee(string name, int age, int salary) : name(name), age(age), salary(salary) {}
  virtual void print() {
    cout << "Employee: " << name << ", " << age << ", " << salary << endl;
  }

protected:
  string name;
  int age;
  int salary;
};

class Manager : public Employee {
public:
  Manager() {}
  Manager(string name, int age, int salary, int bonus) : Employee(name, age, salary), bonus(bonus) {}
  void print() {
    cout << "Manager: " << name << ", " << age << ", " << salary << ", " << bonus << endl;
  }

protected:
  int bonus;
};

class Contractor : public Employee {
public:
  Contractor() {}
  Contractor(string name, int age, int hourlyRate, int hoursWorked) : Employee(name, age, hourlyRate),
hoursWorked(hoursWorked) {}
  void print() {
    cout << "Contractor: " << name << ", " << age << ", " << hourlyRate << ", " << hoursWorked << endl;
  }

protected:
  int hourlyRate;
  int hoursWorked;
};

int main() {
  Employee *e1 = new Employee("John Smith", 30, 100000);
  e1->print();

  Manager *m1 = new Manager("Jane Doe", 40, 150000, 50000);
  m1->print();

  Contractor *c1 = new Contractor("Peter Jones", 25, 50, 40);
  c1->print();
```

Output data

- Employee: John Smith, 30, 100000
- Manager: Jane Doe, 40, 150000, 50000
- Contractor: Peter Jones, 25, 1634887535, 40

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Code BuZzers

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