

國立雲林科技大學考試答案卷

No 0447764

第 1 頁

學 年	學 期	日 期	考 別	<input type="checkbox"/> 平時考	<input type="checkbox"/> 期中考	<input type="checkbox"/> 學期考
科 目			評 分			
系 所	年 級	學 號	姓 名	李學豪		

13. 3NF: parkingInfo table

PK ← FK + 1 foreign key from Space Table

primary key	parkingNum	Lisense	Enter Time	Leave Time	Space Num	paymentNum
	1	ABC123	2018/1/1/7:00	2018/1/1/12:00	3	1
	2	DEF456	2018/1/2/16:00	null	4	null

Space Table

foreign key from payment Table

primary key	spaceNum	Camera Num
	1	A
	2	B
	3	C
	4	D

payment Table

derived value

primary key	paymentNum	paymentType	Fee	TotalFee	hours
	1	Cash	200	1000	5

referential integrity is you can use one data to connect to others, you will find whole data in the end and nothing will miss.

For example,

If I got a parkingNum "1".

In parkingInfo table I can get the information of Lisense, Enter Time, Leave Time, Space Num, paymentNum.

Then I can use foreign key to find others information.

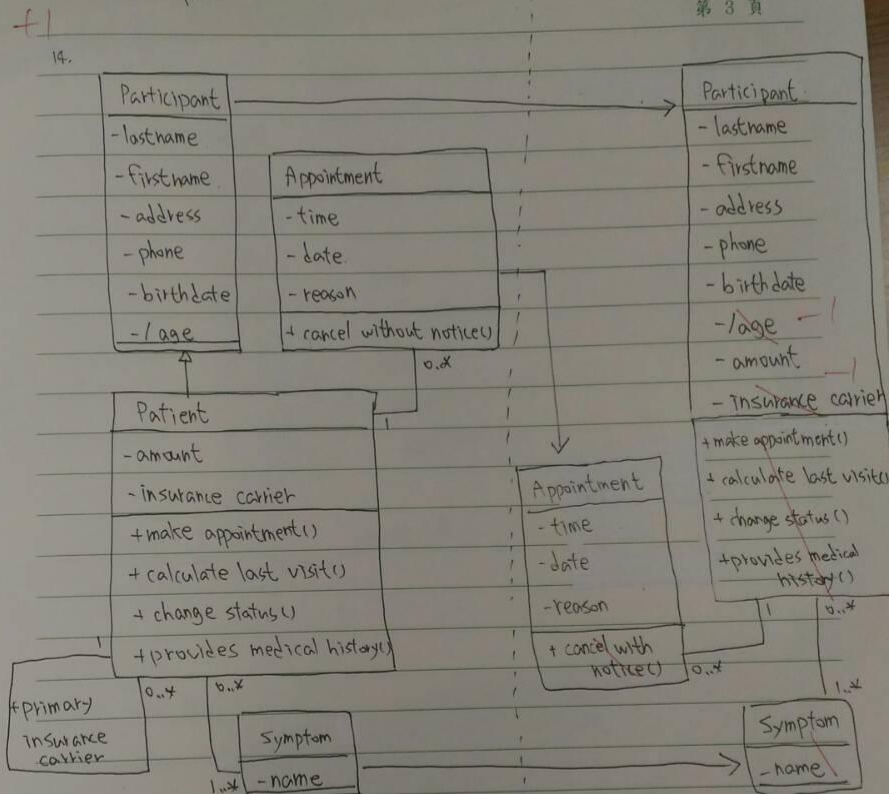
SpaceNum is "3", In space table, I will know it's cameraNum is "C".

PaymentNum is "1", In payment table, I will know it's paymentType is "cash", Fee is "200", TotalFee is "1000", hours is "5".

Teamwork ver.1

problem domain class

RDBMS class
第 3 頁



check employee status

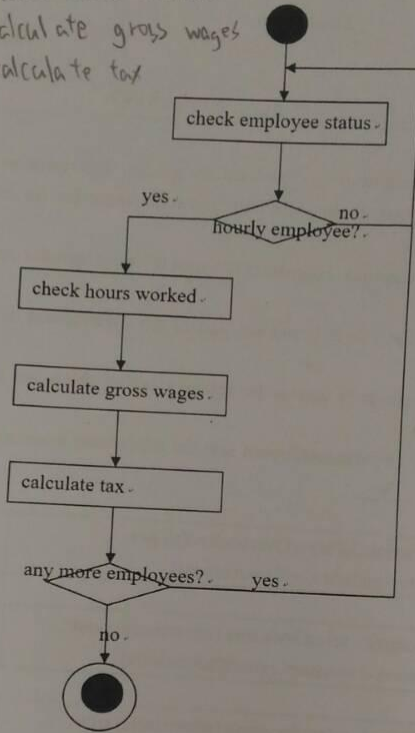
if status = true

check hours worked

calculate gross wages

calculate tax

do
check



public class Employee
private Account

3. The statement of "The system displays a checkout message showing the details." indicate a trivial or nontrivial step of the Checkout use case? Why? 5%

4. An Employee has a one-to-one association with an Account object that tracks all the incomes and charges accrued from transactions in the ABC Company. The Customer can call the operations of the Account object, but the Account never invokes operations of the Customer. Since the reference to the Account object does not change over time, we need to do something to prevent callers from accidentally modifying the Account. Please write the Java code. 5%

5. The direction of an association changes during the development of the system. Assume that we modify the Account class so that the display name of the Account

```

6. public class Employee {
    public Account account;
    public Account addAccount (Account account) {}
    public Account removeAccount (Account account) {}
    public Account setOwner (Account account) {}
    public Employee () {
        account = new Account ();
    }
}

```

```

public class Account {
    public Employee emp;
    public Account (Employee emp) {
        emp = new Employee (this);
    }
}

```

```

4. public class Employee {
    private Account account;
    public Employee () {
        account = new Account ();
    }
}

```

```

    public Account getAccount () {
        return account;
    }
}

```

```

public class Account {
    private Employee emp;
    public Account (Employee emp) {
        emp = new Employee (this);
    }
}

```

```

    public Employee getEmp () {
        return emp;
    }
}

```