

Silence Coffee Maker

Team 4.

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- Design Real Use Cases
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- Define Interaction Diagrams
- Define Design Class Diagrams
- Define Database Schema

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Design Real Use Cases

10. Order Coffee

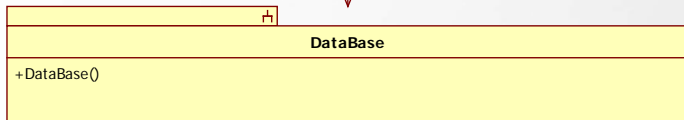
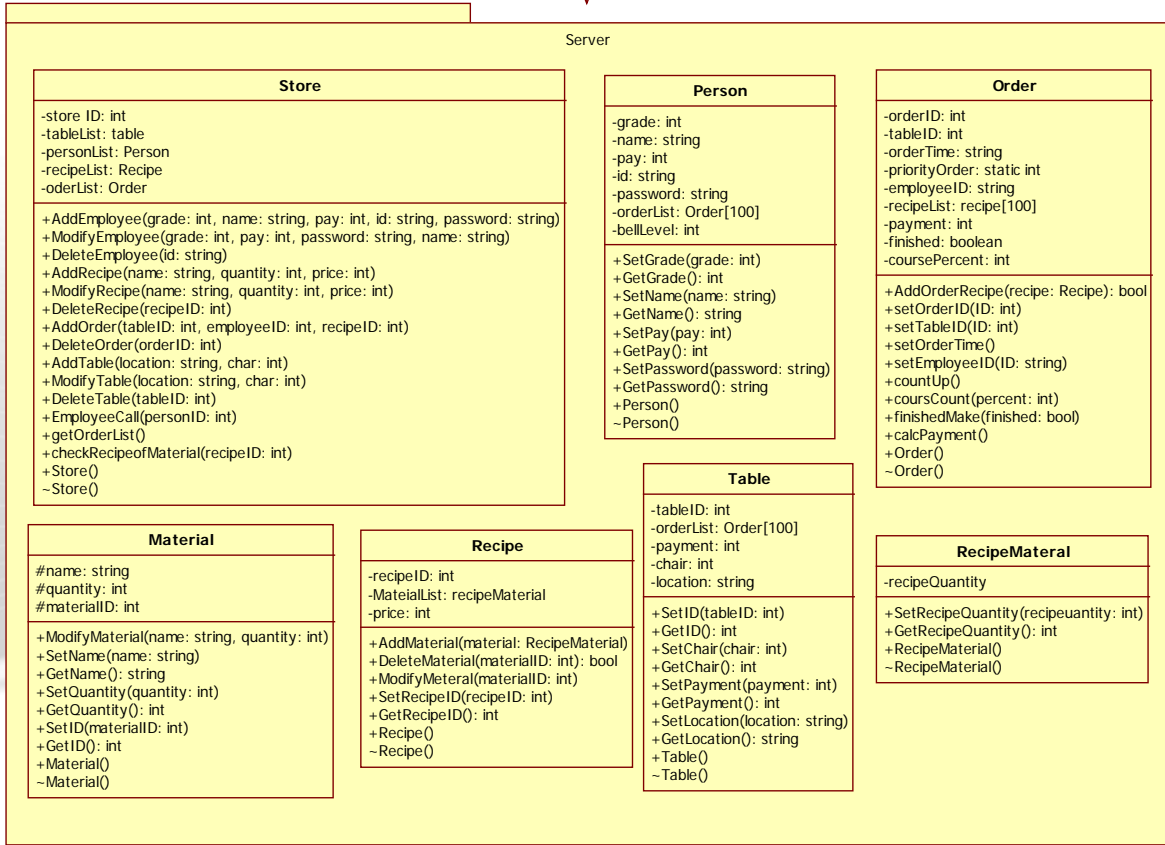
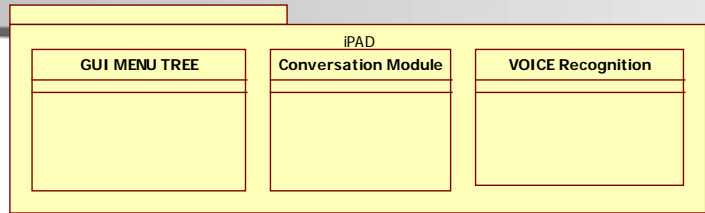
Use Case	10. Order Coffee
Actors	Customer
Purpose	Order Customer's coffee
Overview	
Type	Primary and Essential
Cross Reference	System Function: R2.1
Pre-Requisite	
Typical Courses of Event	(A) : Actor, (S) : System 1. (A) <i>SelectCoffeeMenu</i> on display 2. (S) iPad send to <i>Store</i> class for <i>tableID</i> , <i>employeeID</i> , <i>recipeID</i> 3. (S) <i>Store</i> class is <i>checkrecipe</i> and decide to fault or continue 4. (S) <i>Store</i> class creates to <i>orderList</i> and set order data (<i>orderID</i> , <i>tableID</i> , <i>orderTime</i> , <i>priorityOrder</i> , <i>employeeID</i> , <i>recipeList</i> , <i>payment</i>). 5. (S) <i>Store</i> class save order to database and send to signal to <i>iPAD</i> , and send to order to <i>CoffeeMaker</i> .
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

11. Make Coffee

Use Case	14. Make Coffee
Actor	None
Purpose	Make coffee
Overview	
Type	Primary and Essential
Cross Reference	System Function: R3.1
Pre-Requisite	Order list should be exists in the list.
Typical Courses of Event	(S) : System (C) : Coffee maker 1. (S) <i>Store</i> class send message to <i>CoffeeMaker</i> to make coffee. 2. (S) <i>Store</i> class set <i>order.coursPercent</i> to 30%. 3. (S) If <i>CoffeMaker</i> is jammed by making coffee, <i>Store</i> class send message to <i>iPAD</i> to system error. 4. (C) <i>CoffeeMaker</i> send message that finished job to <i>Store</i> class. 5. (S) If <i>CoffeeMaker</i> is finished job, <i>Store</i> class is setting <i>order.coursPercent</i> to 70%. 6. (S) <i>Store</i> class send message to <i>iPAD</i> to notice finished making coffee.
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

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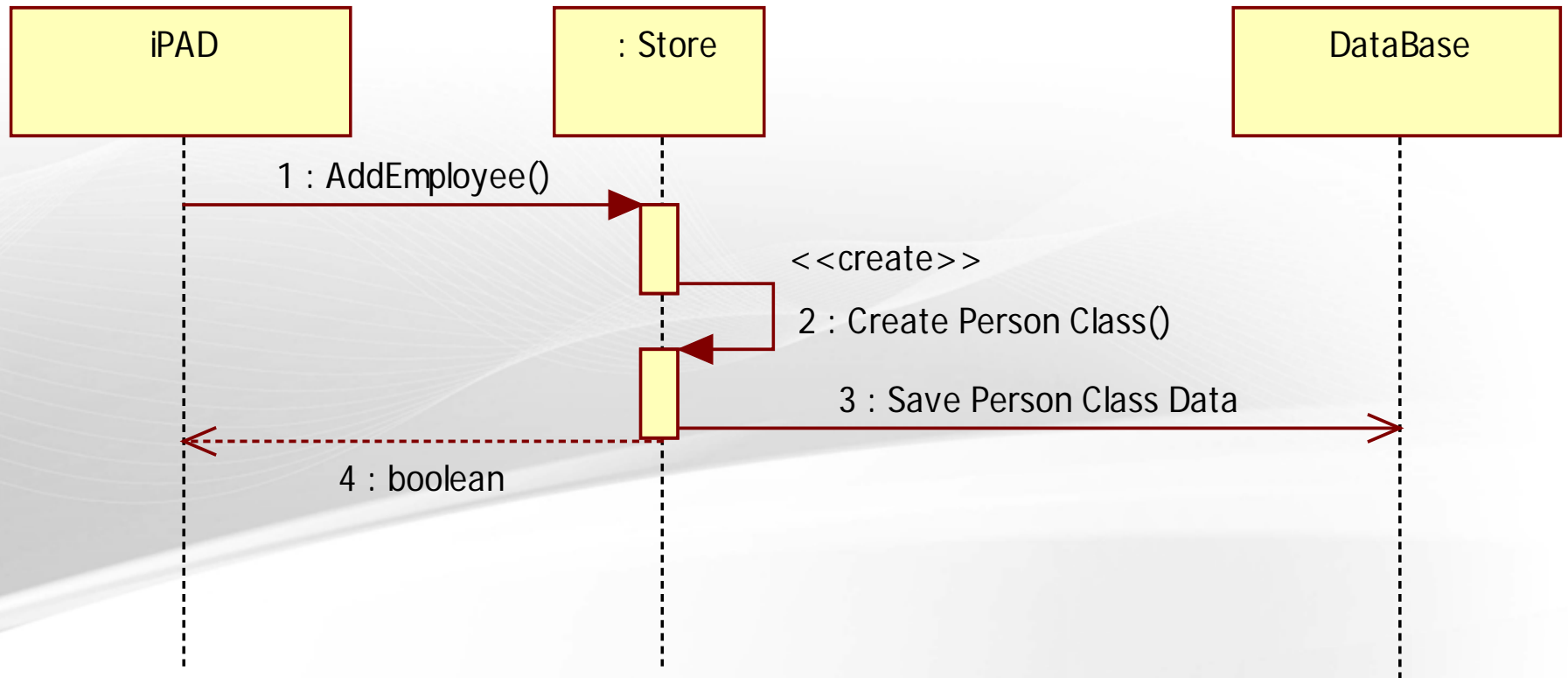
Refine System Architecture



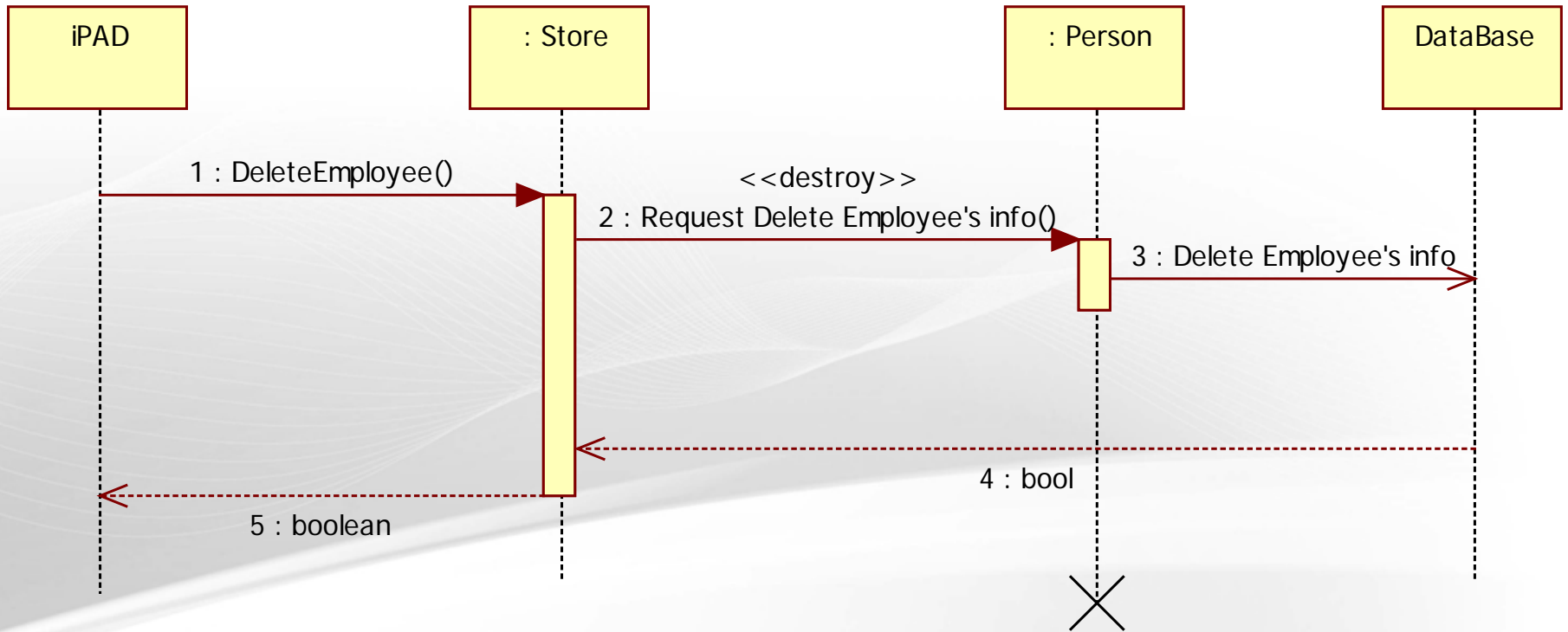
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Define Interaction Diagrams

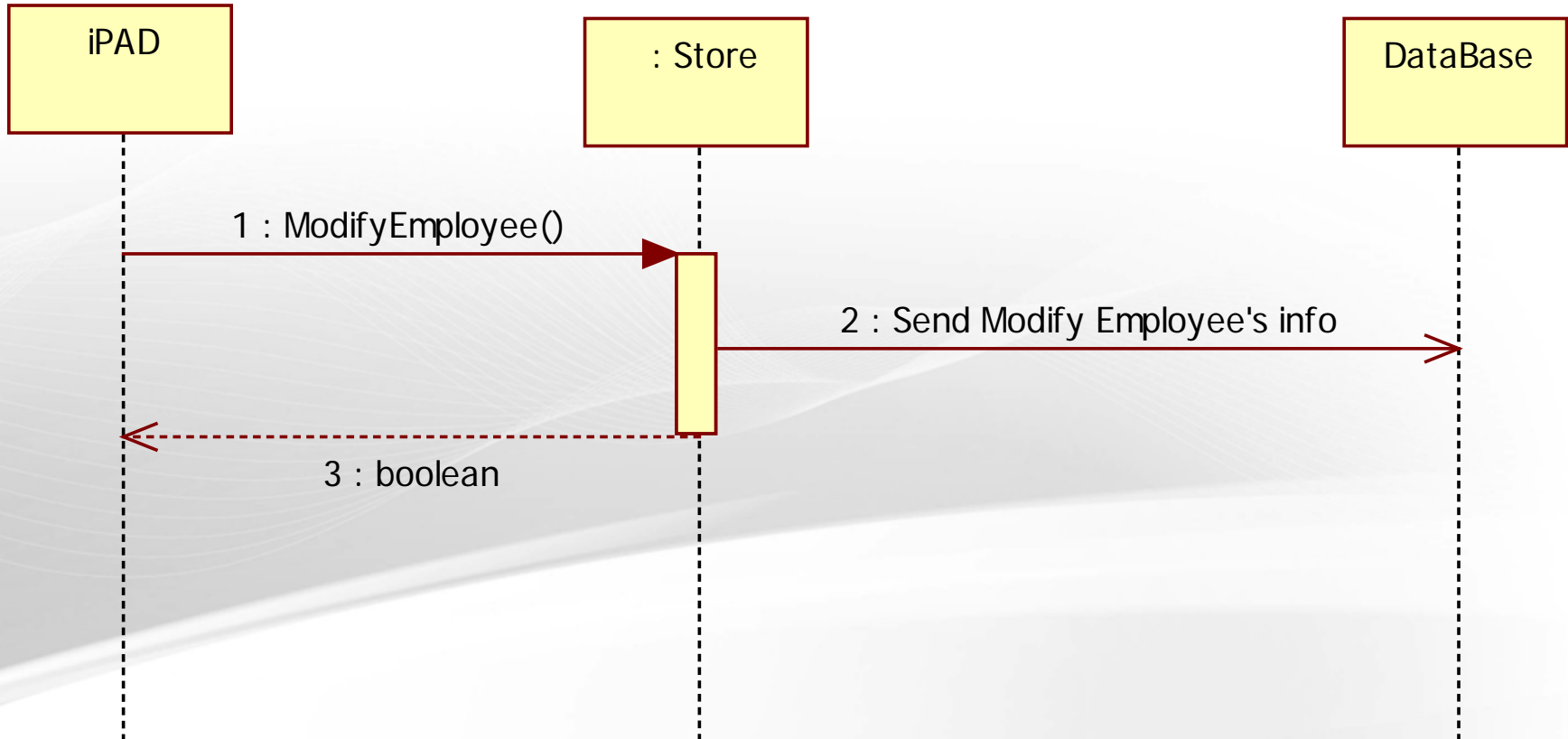
1. Add Employee



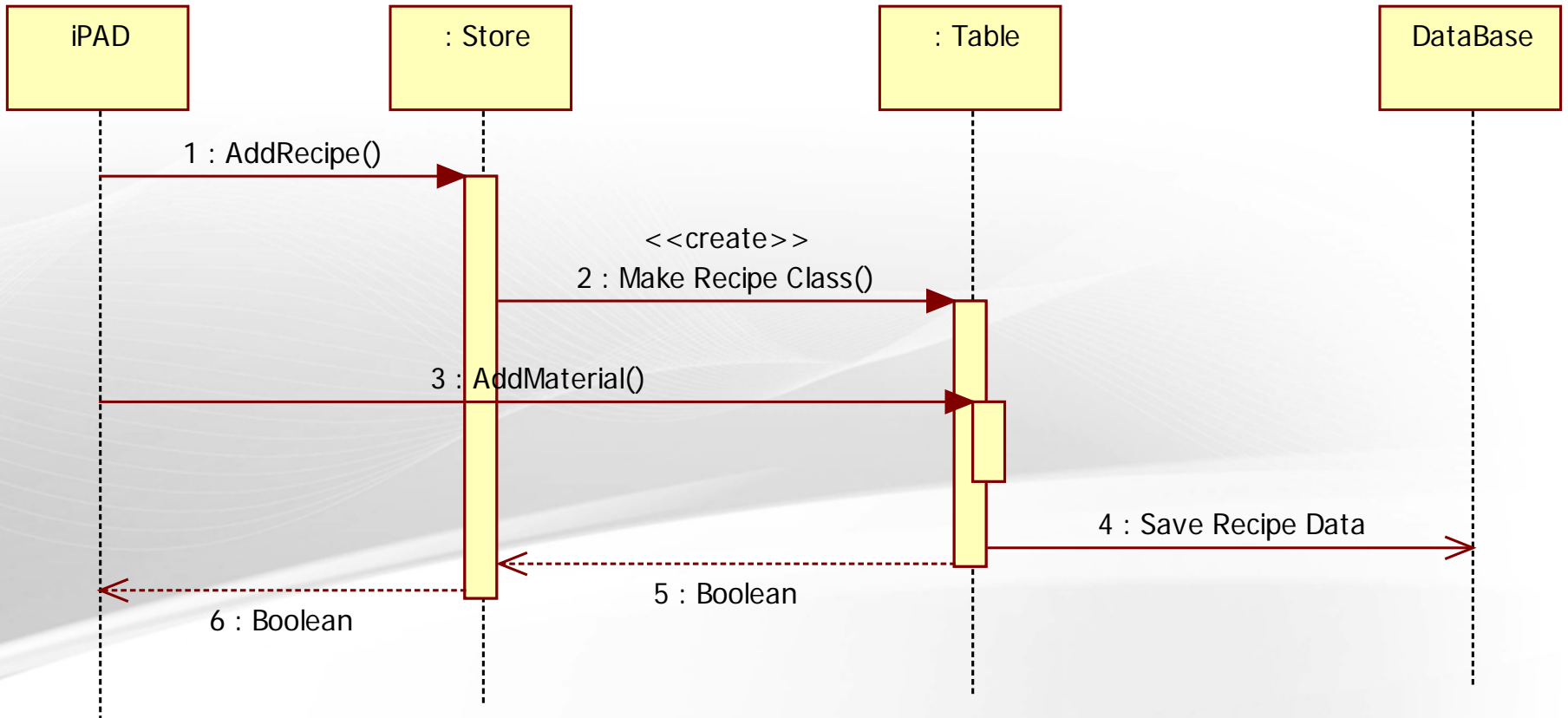
2. Delete Employee



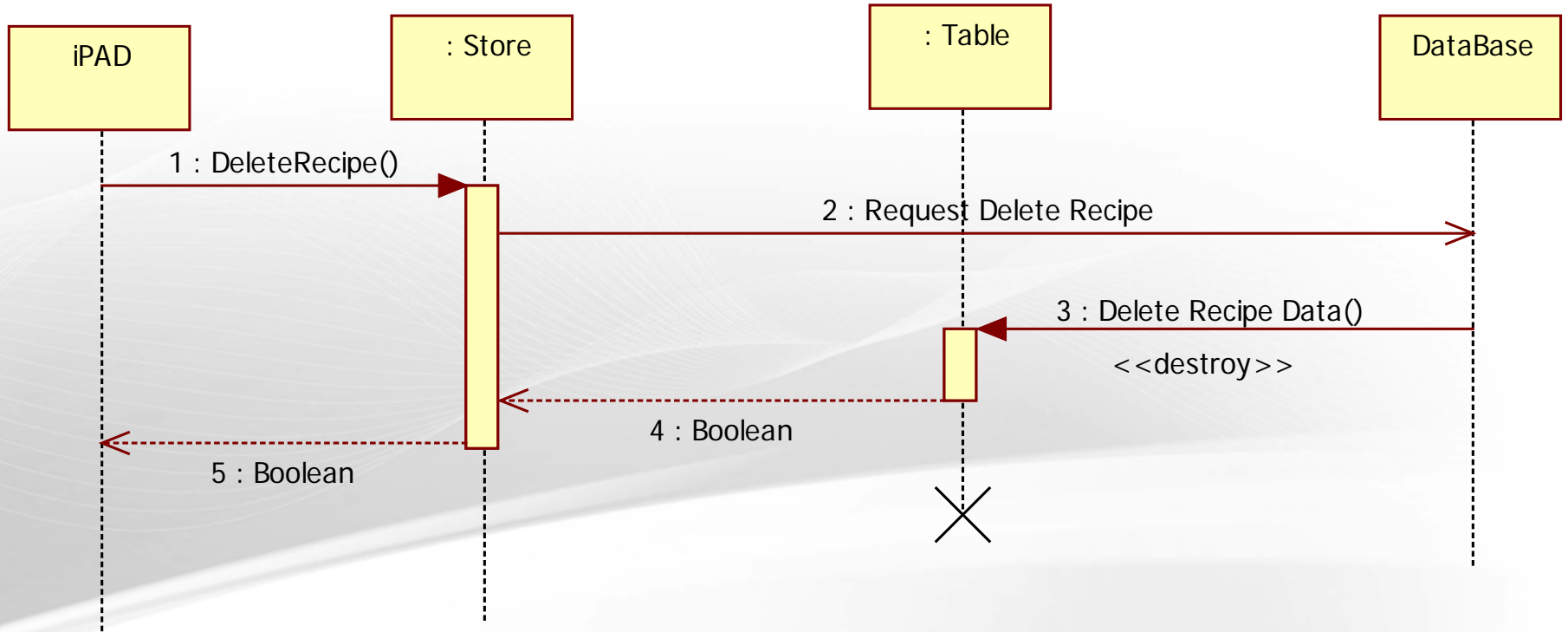
3. Modify Employee



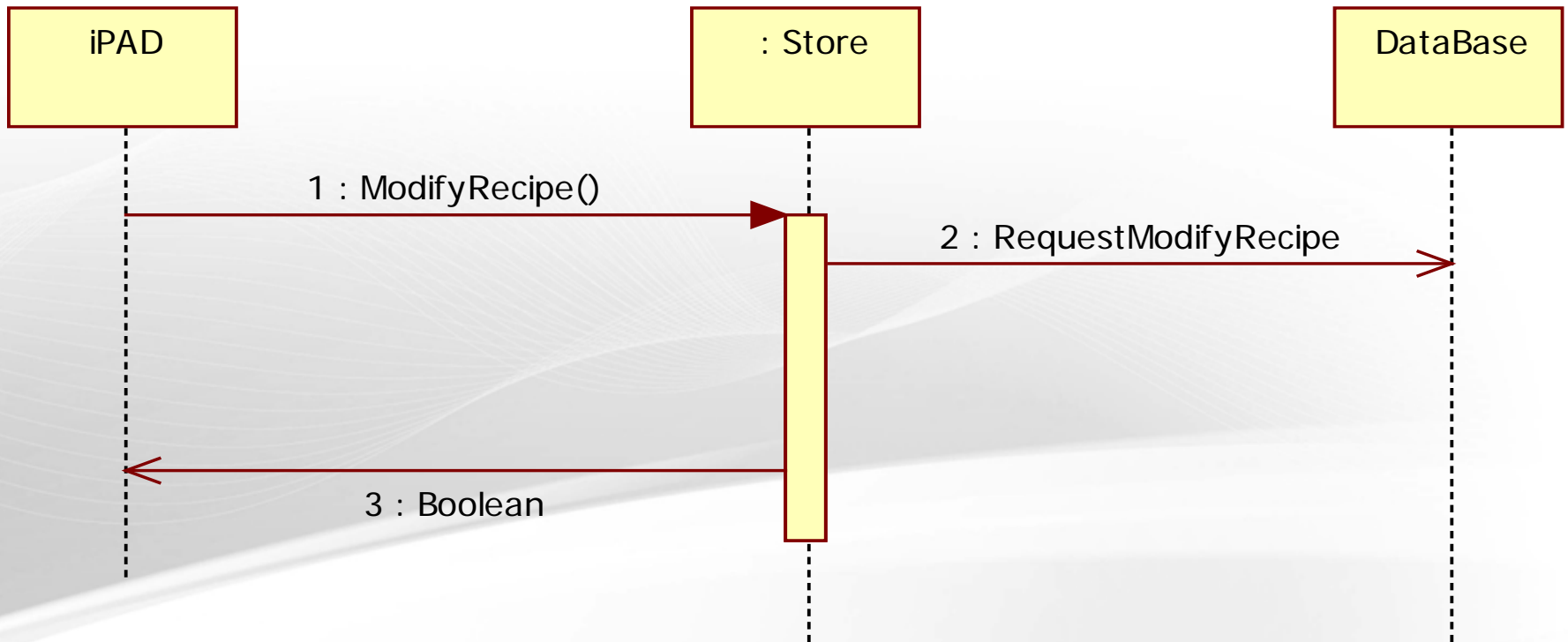
4. Add Recipe



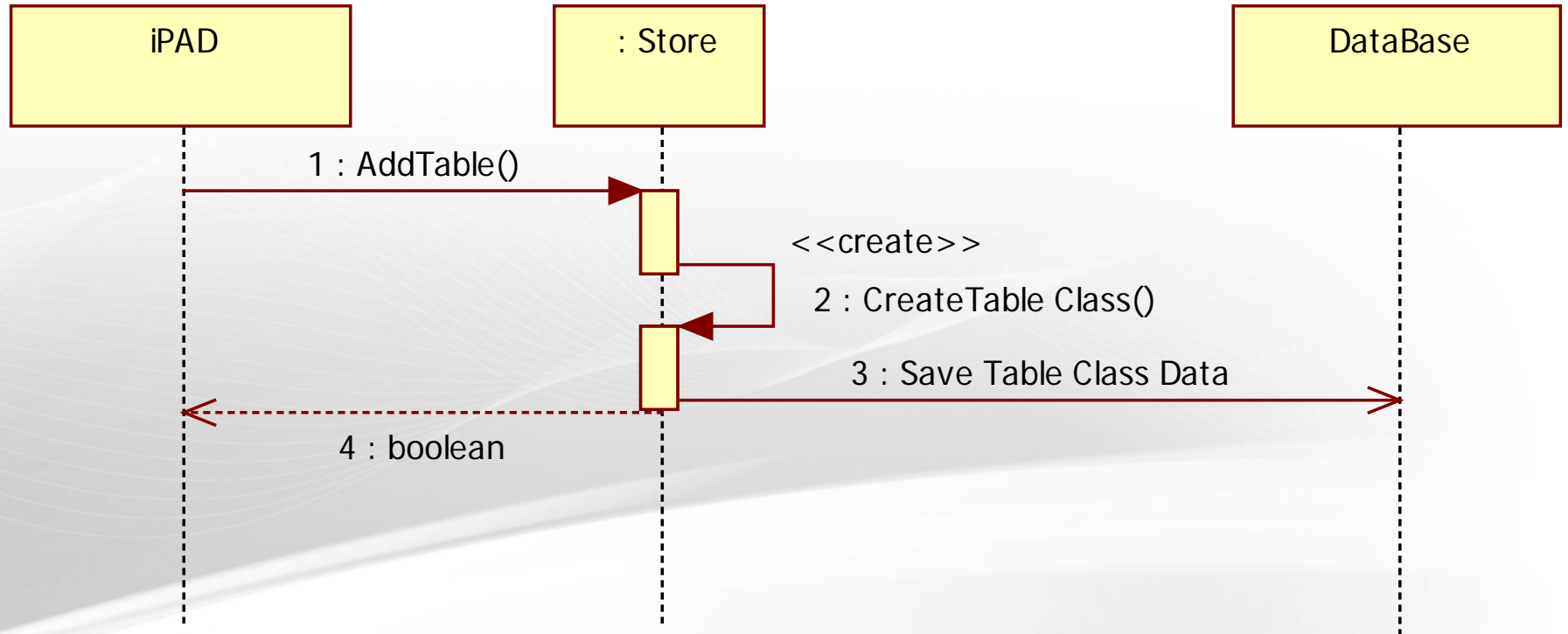
5. Delete Recipe



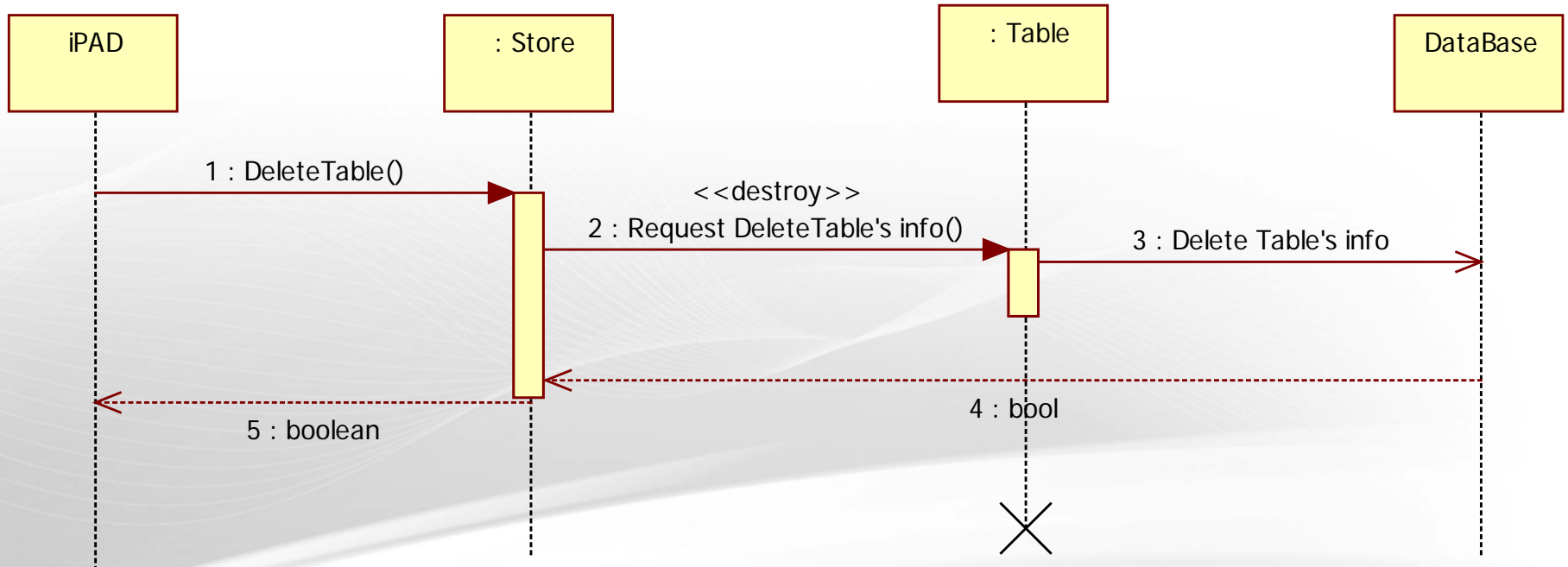
6. Modify Recipe



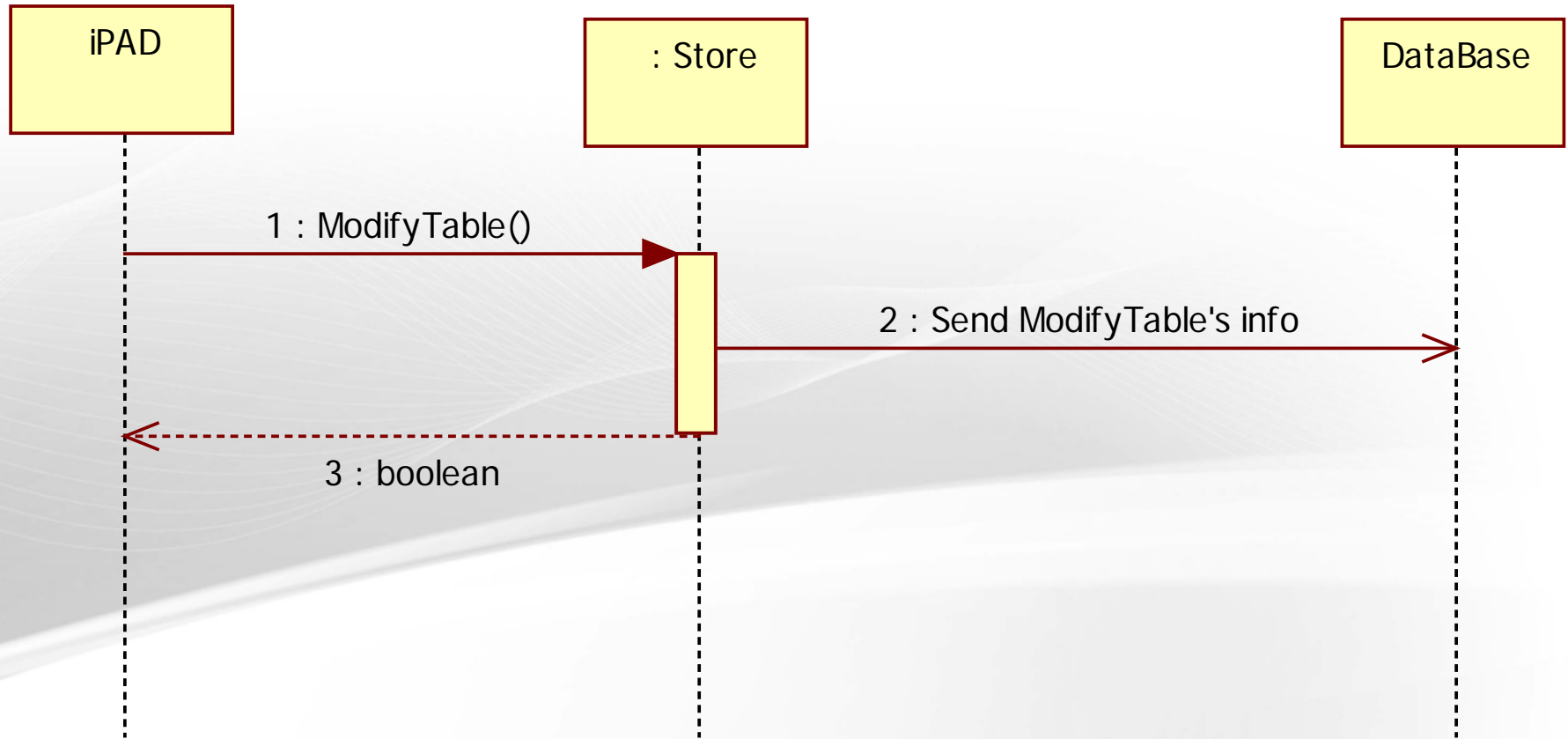
7. Add Table



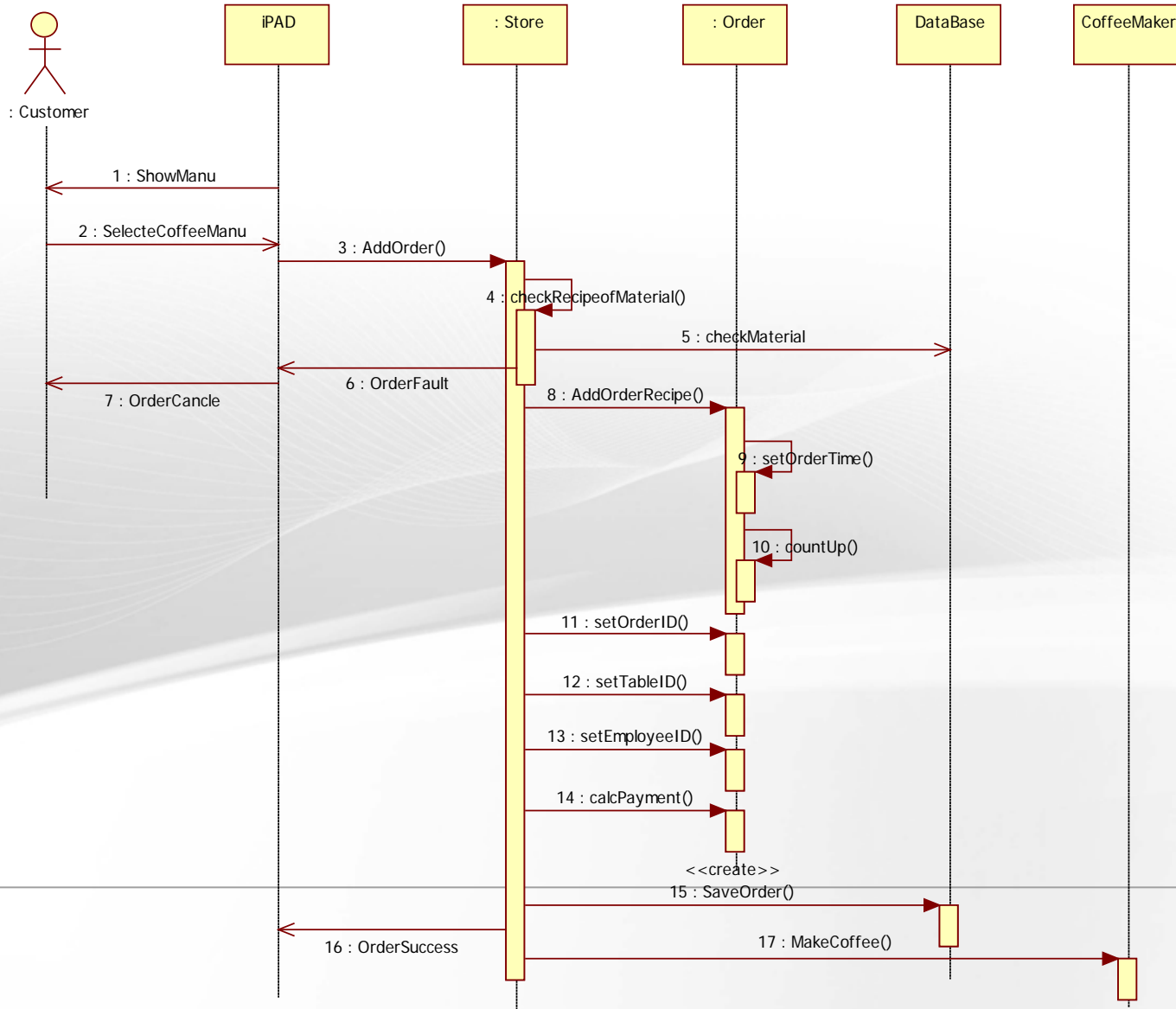
8. Delete Table



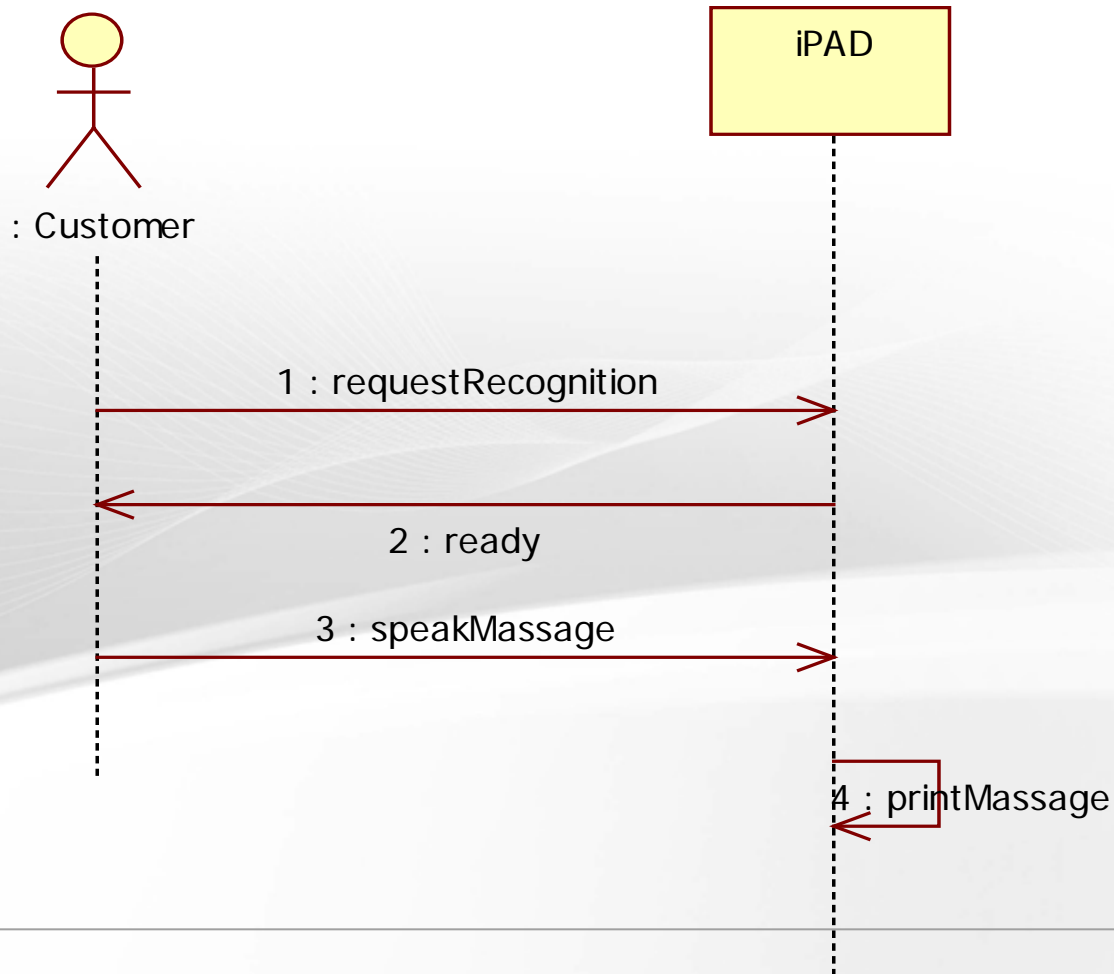
9. Modify Table



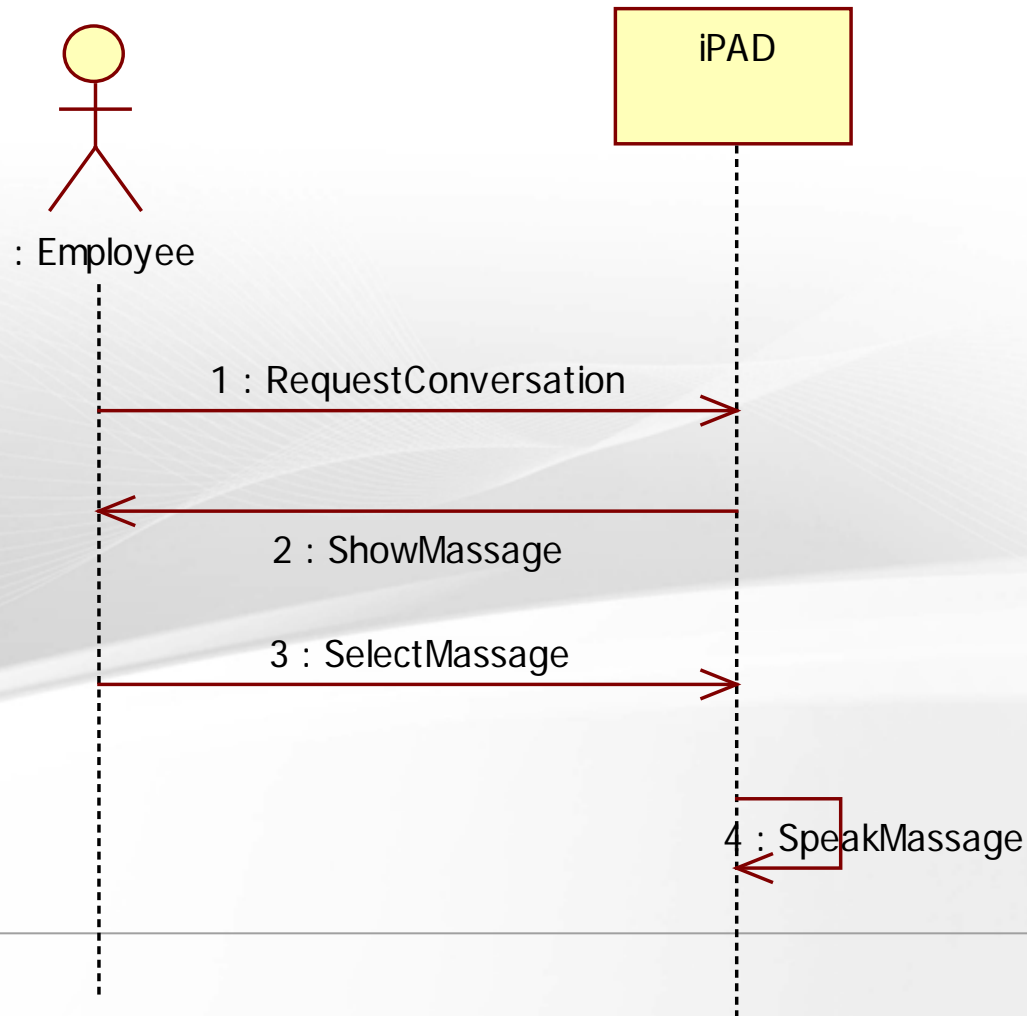
10. Order Coffee & 11. Sequence Order List & 19. Save Order List



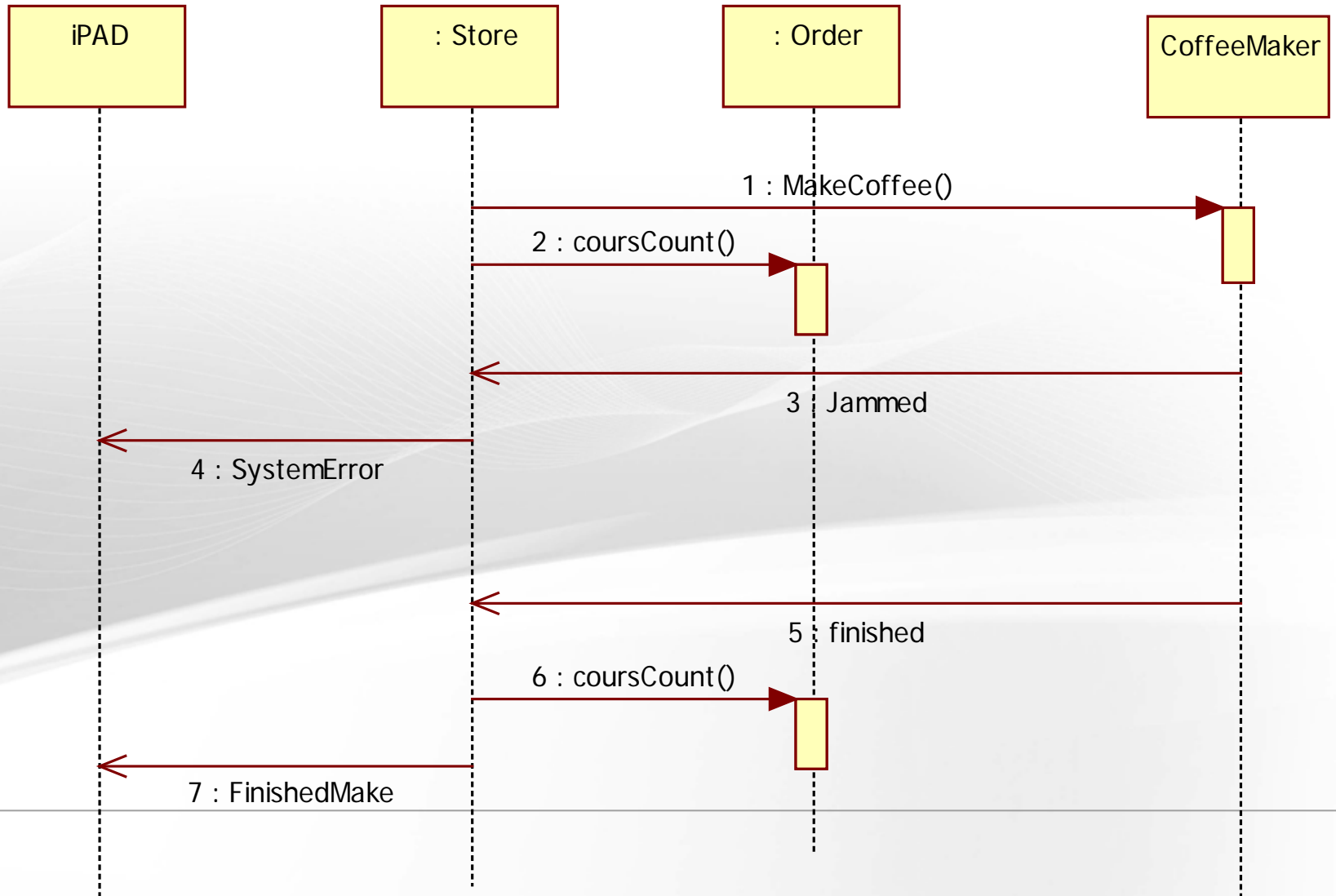
12. Voice Recognition



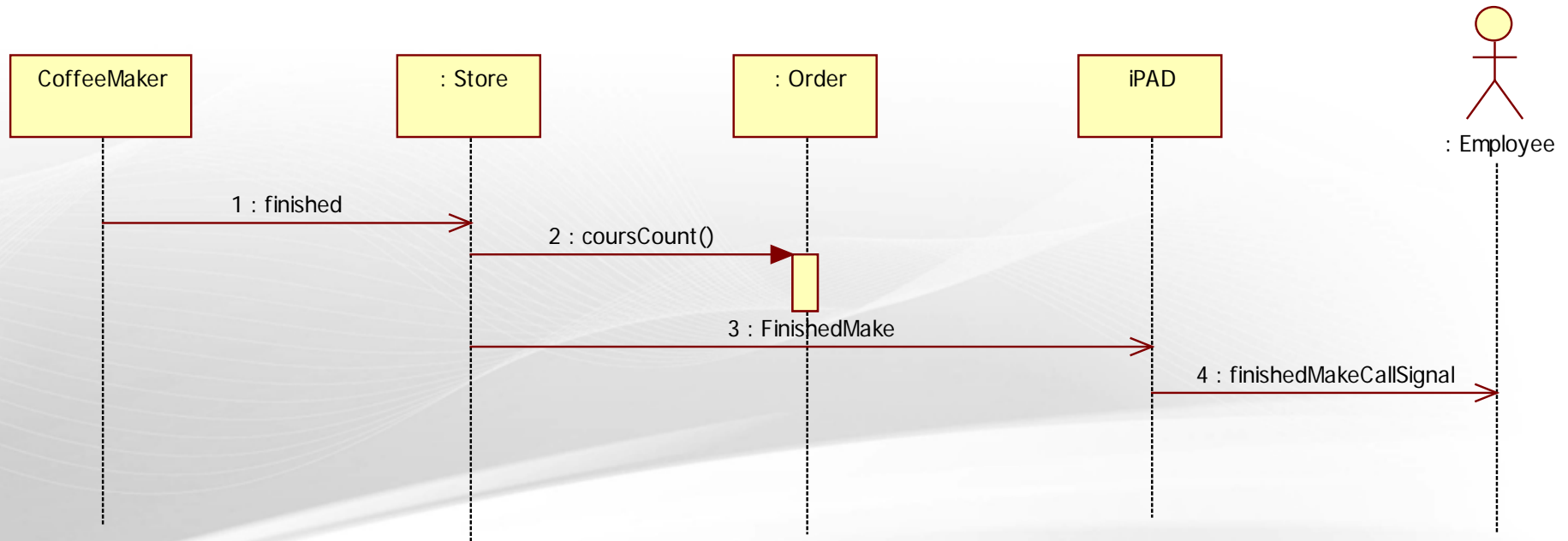
13. Voice Conversation



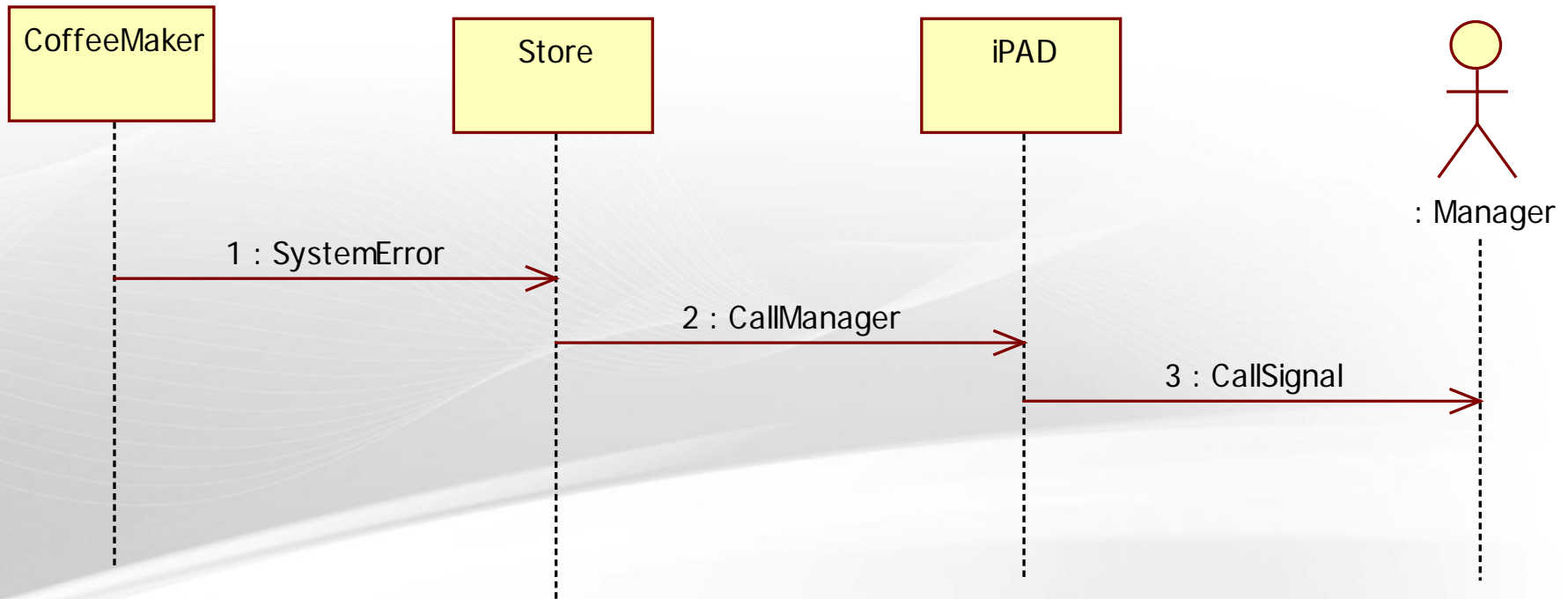
14. Make Coffee



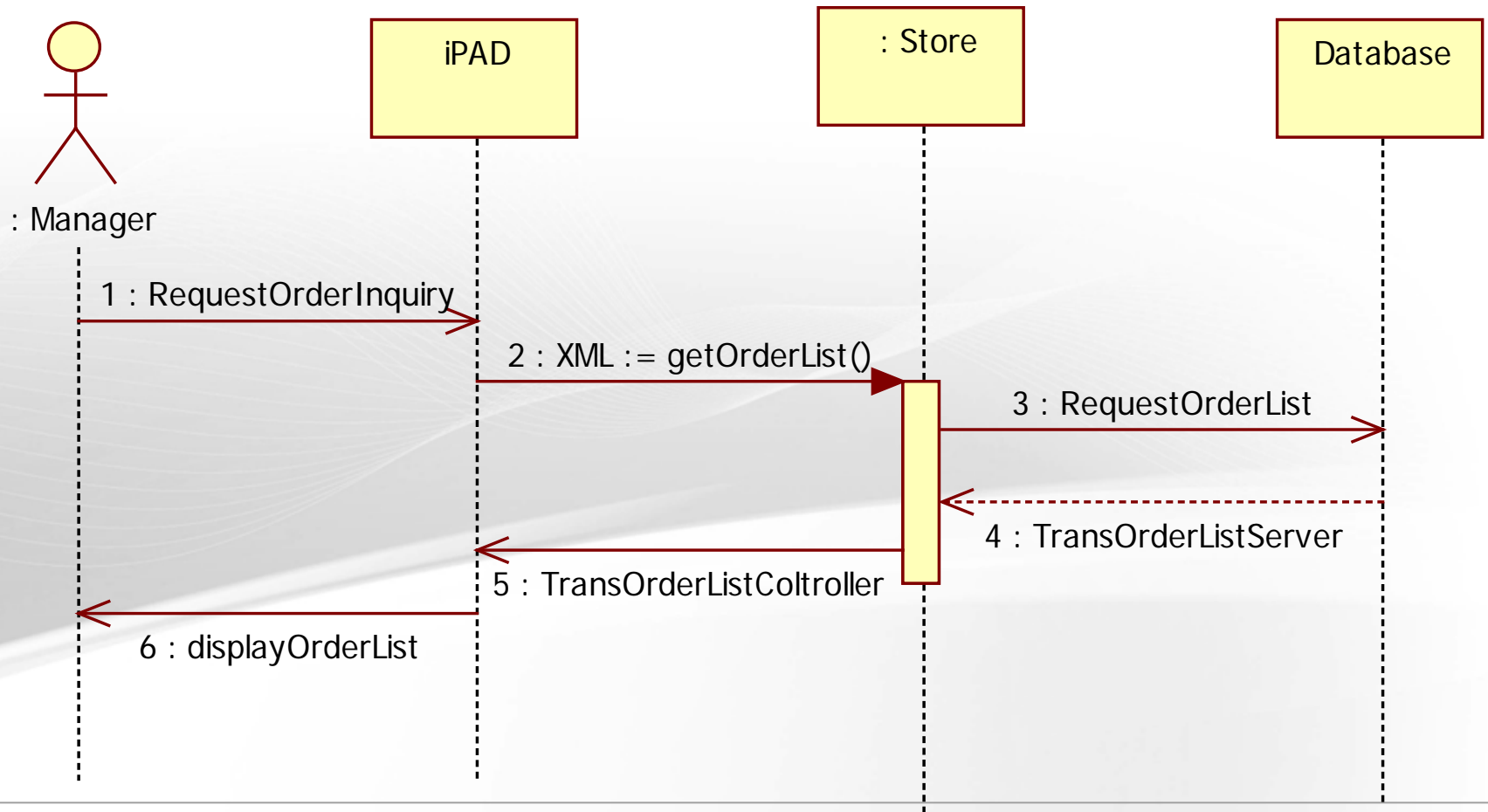
15. Call Employee(of system)



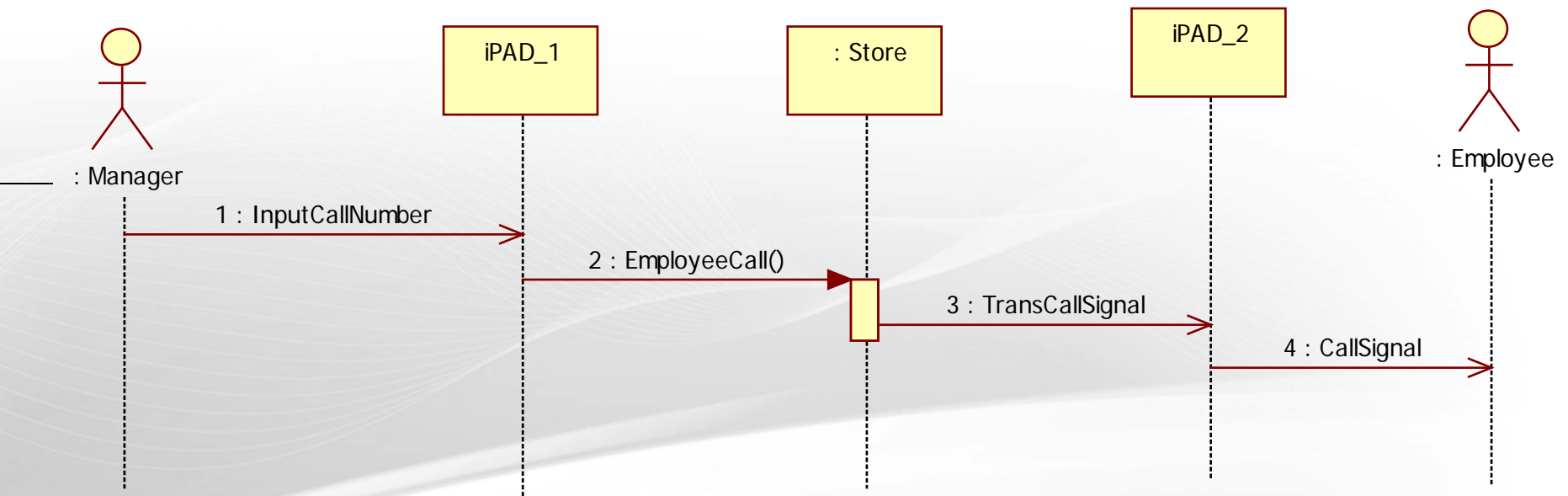
16. Manager Call(of system)



17. Order Inquiry

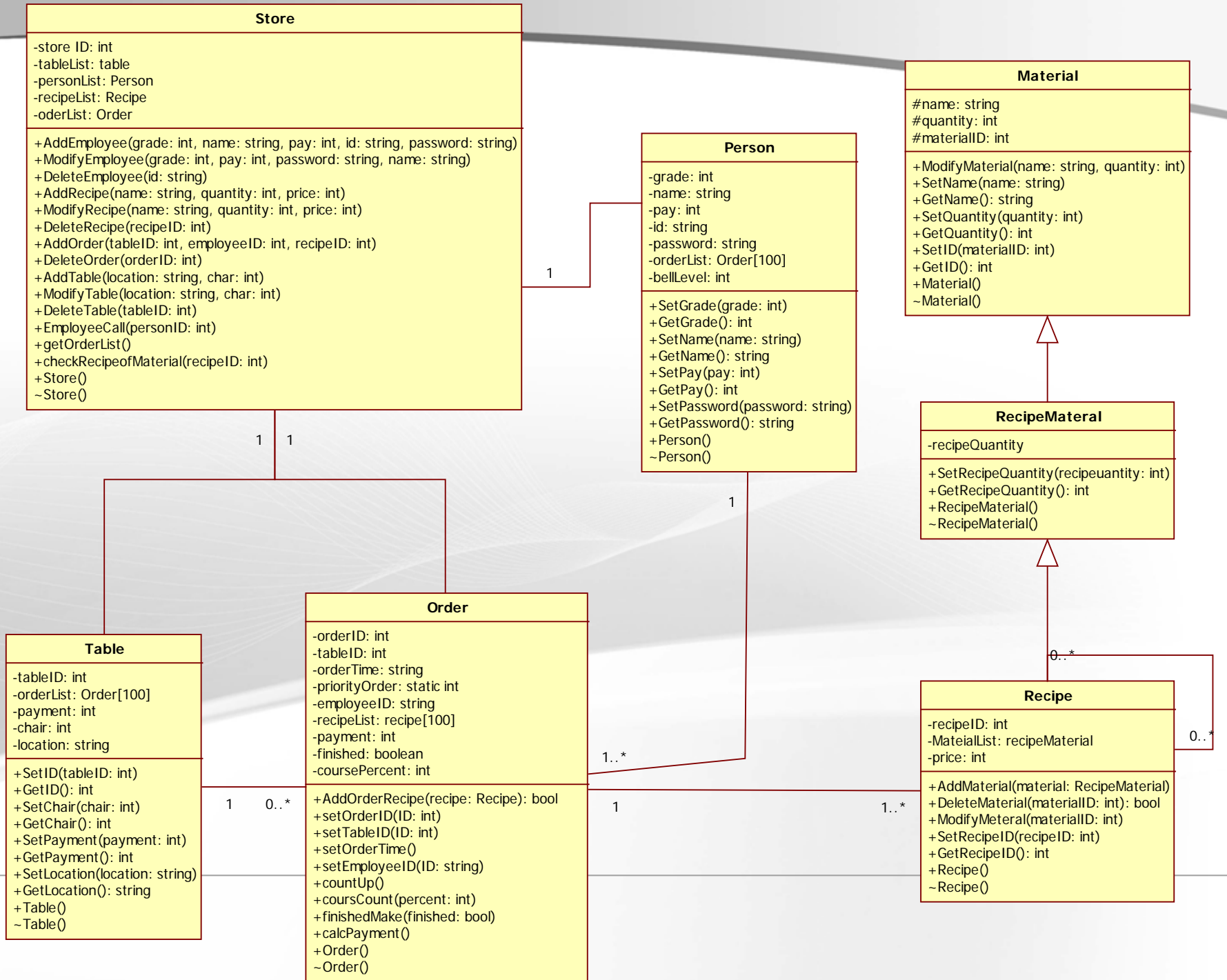


18. Employee Call(of manager)



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Define Design Class Diagrams



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Define Database Schema

Order

orderID	tableID	employeeID	Order Timer	priority Order	payment	finished	Course Percent
PRIMARY KEY	Table(tableID)	Person(personID)					

Person

personID	Name	pay	id
PRIMARY KEY			

RecipeMaterial

materialID	name	quantity	recipeQuantity	price
PRIMARY KEY				

Order_RecipeMaterial

OrderID	RecipeMaterialID	count
Order(OrderID)	RecipeMaterial(materialID)	

Store_Table

tableID	Chair	location
PRIMARY KEY		

Recipe_Compibation_Material

Recipe_Compination_MaterialID	Main_RecipeMaterialID	RecipeMaterialID	recipeQuantity
PRIMARY KEY	RecipeMaterial(materialID)	RecipeMaterial(materialID)	

```

CREATE TABLE person (
  personID int NOT NULL auto_increment,
  name varchar(60) NOT NULL,
  pay int NOT NULL default '40',
  id varchar(60) NOT NULL,
  PRIMARY KEY (personID),
)
CREATE TABLE Order (
  orderID int NOT NULL auto_increment,
  tableID int NOT NULL,
  employeeID int NOT NULL,
  orderTimer timestamp CURRENT_TIMESTAMP,
  priorityOrder int NOT NULL DEFAULT '10',
  payment int NOT NULL, DEFAULT '0',
  finished bool NOT NULL DEFAULT 'FALSE',
  coursePercent int NOT NULL DEFAULT '0',
  PRIMARY KEY (orderID),
)
CREATE TABLE RecipeMaterial (
  materialID int NOT NULL auto_increment,
  name varchar(60) NOT NULL,
  quantity int NOT NULL DEFAULT '0',
  recipeQuantity int NOT NULL DEFAULT '0',
  price int NOT NULL DEFAULT '0',
  recipeType varchar(60) NOT NULL DEFAULT 'material',
  PRIMARY KEY (materialID),
)
CREATE TABLE Order_RecipeMaterial{
  OrderID int NOT NULL,
  RecipeMaterialID int NOT NULL,
  count int NOT NULL DEFAULT ' ',
}
CREATE TABLE Store_Table{
  tableID int NOT NULL auto_increment,
  chair int NOT NULL DEFAULT '1',
  location varchar(60) NOT NULL,
  PRIMARY KEY (tableID),
}
CREATE TABLE Recipe_Compibation_Material{
  Recipe_Compination_MaterialID int NOT NULL auto_increment,
  Main_RecipeMaterialID int NOT NULL,
  RecipeMaterialID int NOT NULL,
  recipeQuantity int NOT NULL DEFAULT '0',
  * PRIMARY KEY (Recipe_Compination_MaterialID),
}

```