



Silence Coffee Maker

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Phase 2130 Analyze



**2131. DEFINE
ESSENTIAL 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-Requirement	
Typical Courses of Event	(A) : Actor, (S) : System 1. (A) select menu on display 2. (S) save customer's order in system
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

11. Sequence Order List

Use Case	11. Sequence Order List
Actors	System
Purpose	Sequence an order list
Overview	
Type	Primary and Essential
Cross Reference	System Function: R2.2
Pre-Requisite	Already should save an order list
Typical Courses of Event	(A) : Actor, (S) : System 1. (S) sequence an order list 2. (S) make coffee in chronological order
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

12. Voice Recognition

Use Case	12. Voice Recognition
Actors	Customer
Purpose	Perform voice recognition function
Overview	
Type	Primary and Essential
Cross Reference	System Function: R2.3
Pre-Requisite	N/A
Typical Courses of Event	(A) : Actor, (S) : System 1. (A) request voice recognition 2. (S) execute voice recognition. 3. (S) inform employee about recognized voice
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

14. 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) : Server (C) : Coffee maker (W) :Employee 1. (C) received (S)'s message. 2. (C) start makes coffee. 3. if (C) finished making coffee, call employee 4. (W) received coffee and press receive coffee button in iPad.
Alternative Courses of Event	N/A
Exceptional Courses of Event	N/A

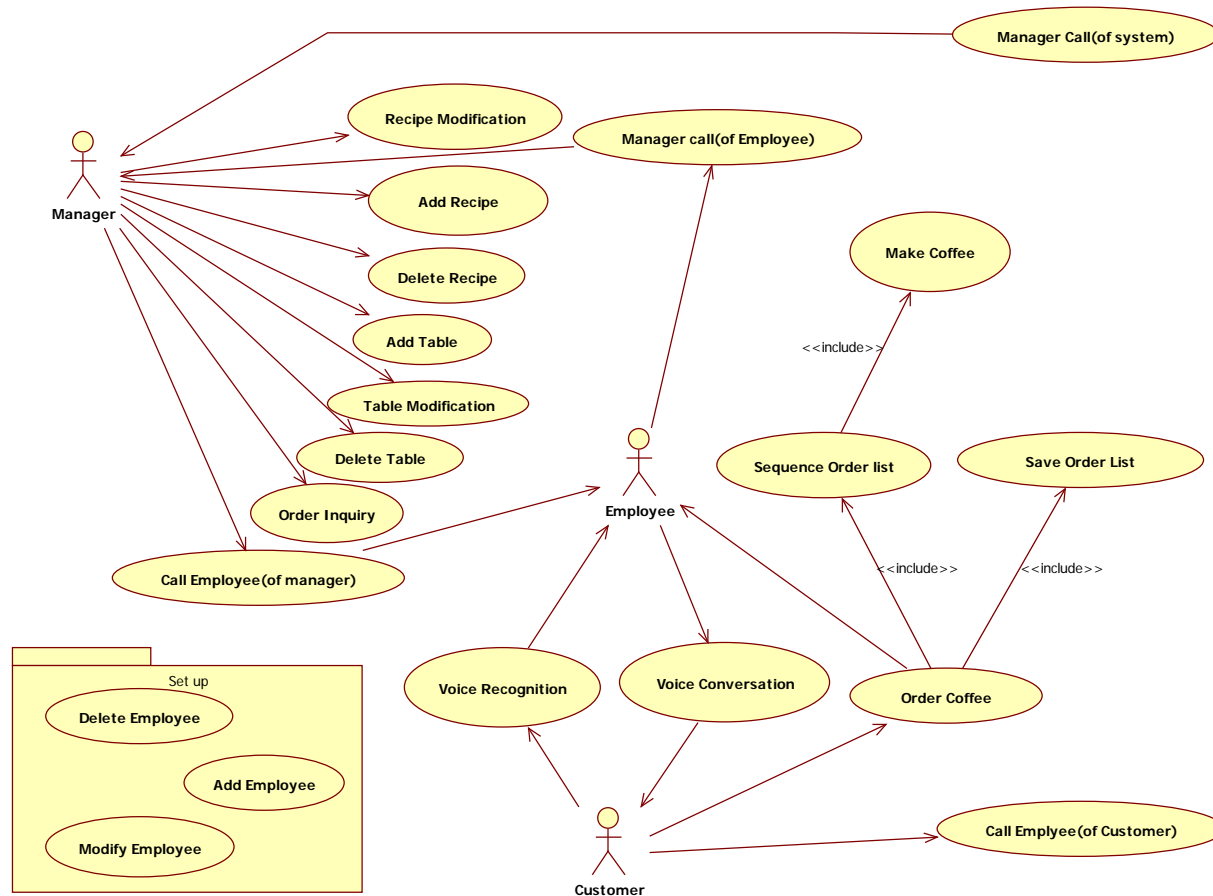
17. Order Inquiry(조회)

Use Case	17. Order Inquiry
Actor	Manager
Purpose	Inquire the whole order list each employee.
Overview	Manager should be check employee order state so that order to employee for ordering another work.
Type	Primary and Essential
Cross Reference	System Function : R4.1 Use Case : -
Pre-Requisites	N/A
Typical Courses of Events	(A) : Actor, (S) : System 1. (A) A manager request showing employee's order list. 2. (S) Check employee's order list. 3. (S) Show order list to manager.
Alternative Courses of Events	N/A
Exceptional Courses of Events	N/A

Phase 2130 Analyze



2132. REFINE USE CASE DIAGRAMS



- Change I : Delete Use Case No.19 “Call of lack coffee elements”.
- We decide delete use-case No.18 “Call of lack coffee elements”. Because we think that use-case No.18 “Employee Call” is same operation. So, we delete the use-case.

Phase 2130 Analyze



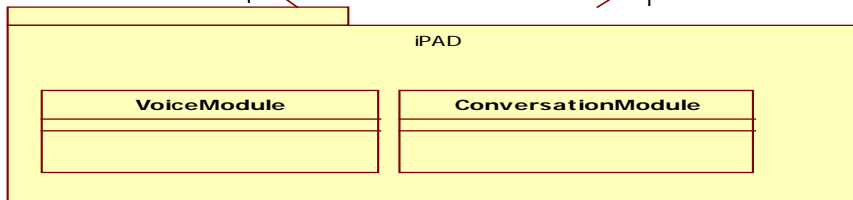
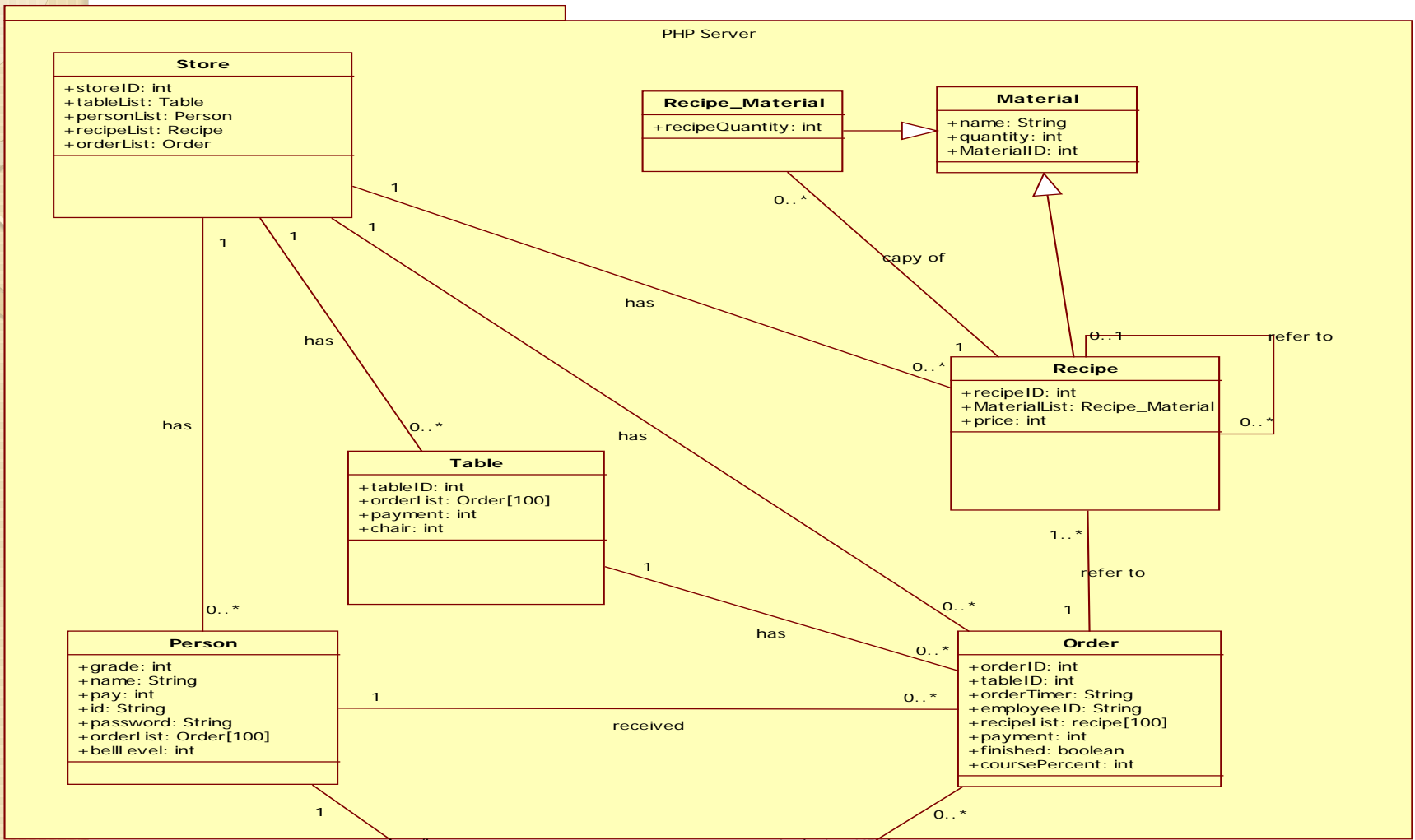
2133. DEFINE DOMAIN MODEL

Step I. List concepts(domain class) from use-cases

Physical or tangible objects	Employee(woker, manager) , table, stor e , recipe,alram
Specifications, designs, or descriptions of thing	Customer, Woker , Manager, coffee
Places	Cafe
Transactions	Make Coffee, resist employee, resist reci pe, resist table, calculation, using voice conversation module , call employee, us ing iPAD conversation.
Roles of people	Employee, Manager, Customer
Containers of other things	Cafe
Things in a container	Employee, table, store, Coffee, recipe
organizations	Cafe

- Step 2. Assign class name into a concep.

Person	Table	Coffee
recipe	Bill	material
Store	Order	Voice Module



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**2134. REFINE
GLOSSARY**

Refine terms

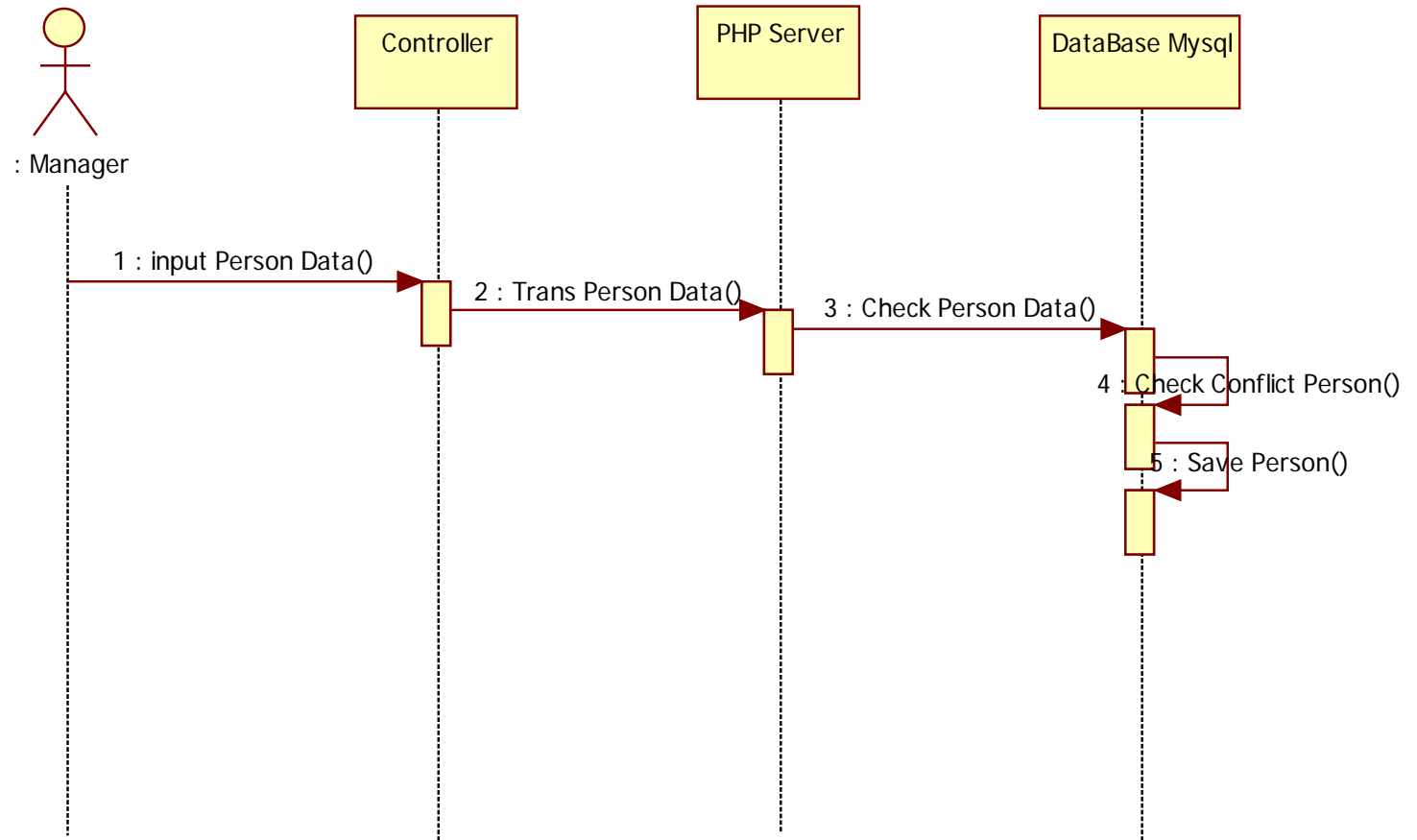
Term	Category	Remarks
Store	Class	Cafe Main Class
Recipe_Material	Class	Material for make Recipe
Material	Class	Material Class
Recipe	Class	Sum of Recipe_Materials
Table	Class	Table Class
Person	Class	Person for employee or manager
Order	Class	Order to recipe
VoiceModule	Class	VoiceModule for employee
ConversationModule	Class	ConversationModule for customer
Store.storeID	Attribute	Unique Store id
Store.tableList	Attribute	Store's table information List
Store.personList	Attribute	Store's person information List
Store.orderList	Attribute	Store's order information List
Recipe_Material.recipeQuantity	Attribute	Quantity for making recipe
Material.name	Attribute	Material's name
Material.quantity	Attribute	Material's quantity
Material.MaterialID	Attribute	Material's unique id
Recipe.recipeID	Attribute	Recipe's unique id
Recipe.MaterialList	Attribute	Material List for Recipe
Recipe.price	Attribute	Recipe's price
Table.tableID	Attribute	Table's unique id
Table.orderList	Attribute	Order List for table
Table.payment	Attribute	Order recipe's all payment
Table.chair	Attribute	Table's chair
Person.grade	Attribute	Person's grade(employee, manager, ceo)
Person.name	Attribute	Person's name
Person.pay	Attribute	Person's pay
Person.id	Attribute	Person's unique id
Person.password	Attribute	Person's password
Person.orderList	Attribute	Person's order List
Person.belLevel	Attribute	Person's bell Level
Order.orderID	Attribute	Order's unique id
Order.tableID	Attribute	Ordered ID of table.
Order.orderTimer	Attribute	Ordered time
Order.employeeID	Attribute	ID of employee to be ordered
Order.recipeList	Attribute	Recipe list to be ordered
Order.payment	Attribute	Total price of ordered list
Order.finished	Attribute	Boolean check of order finished
Order.coursePercent	Attribute	Ordering state.

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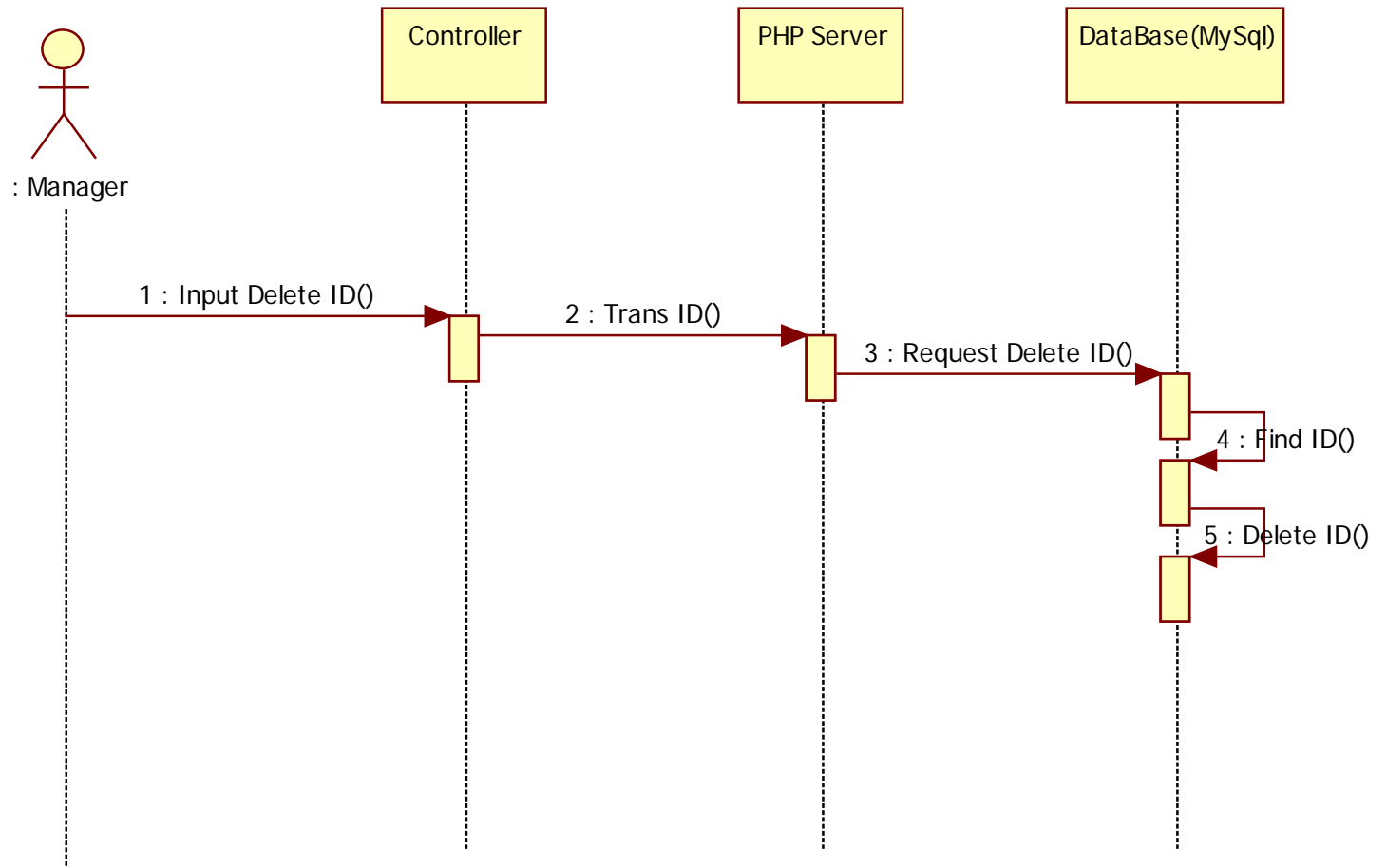


2135. DEFINE SYSTEM SEQUENCE DIAGRAMS

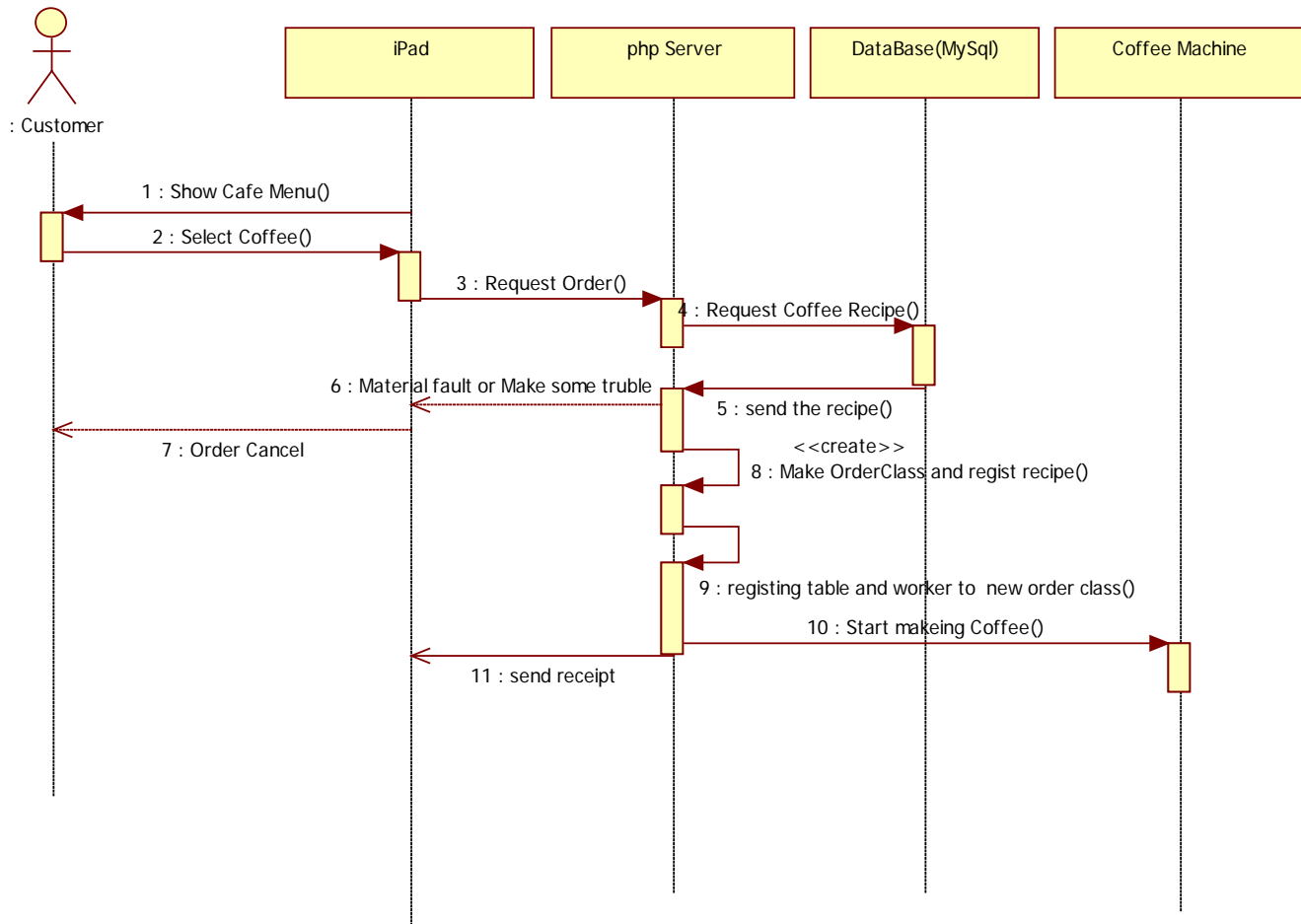
I. Add employee



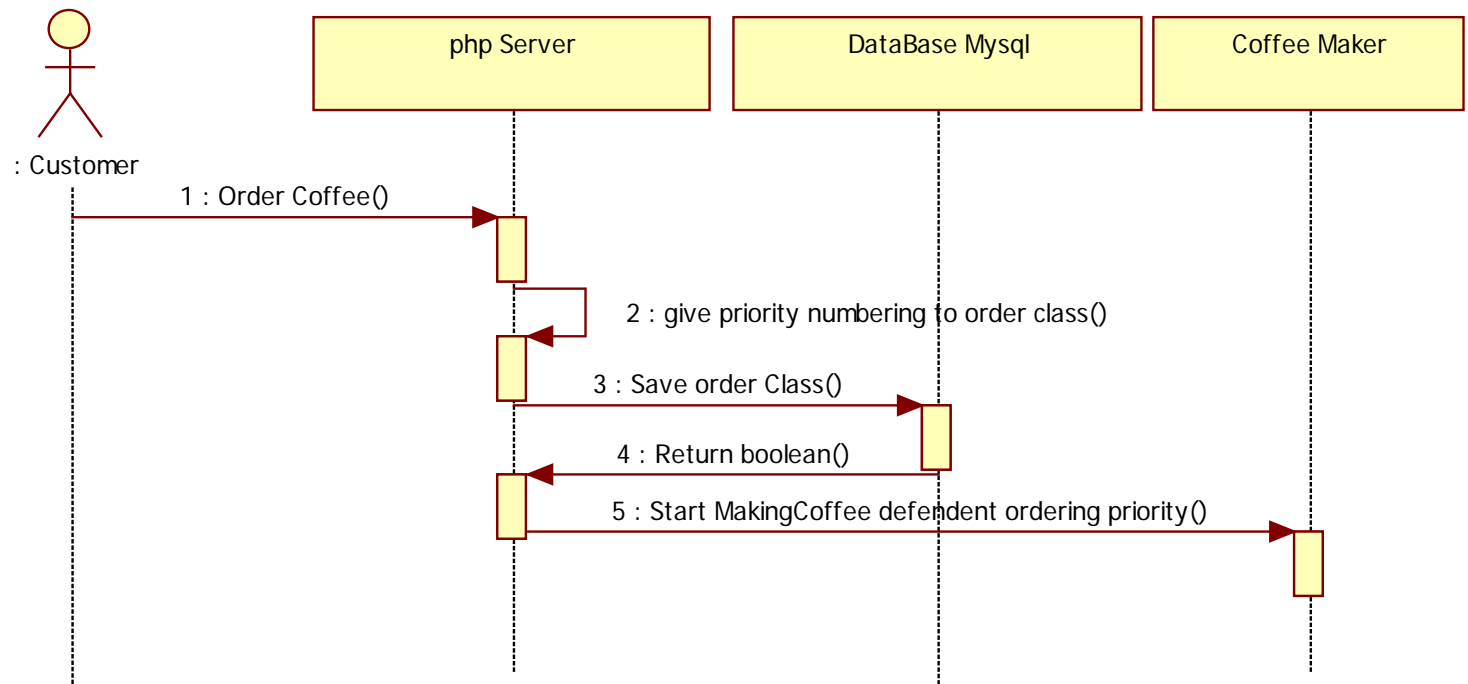
2. Delete Employee



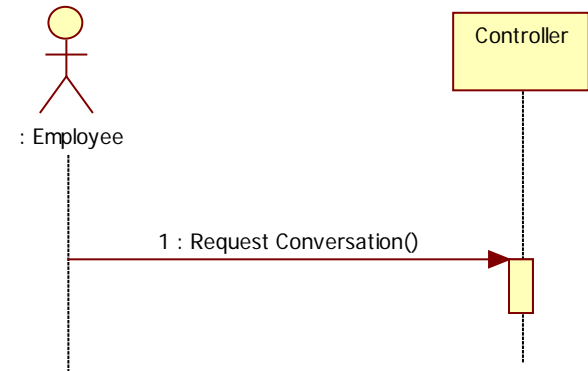
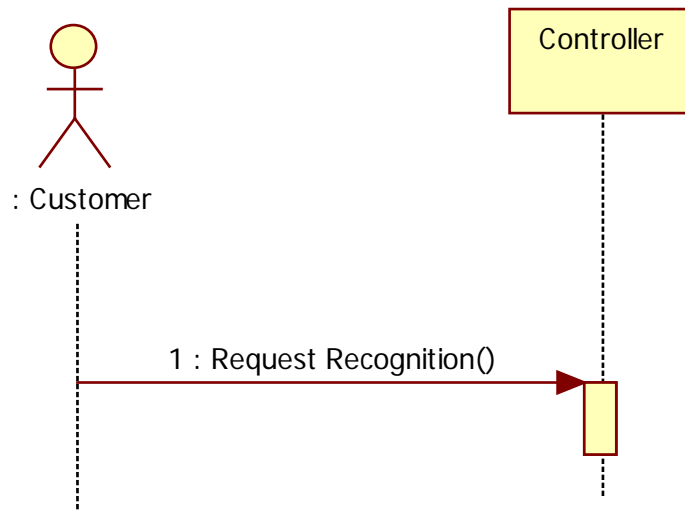
10. Order Coffee



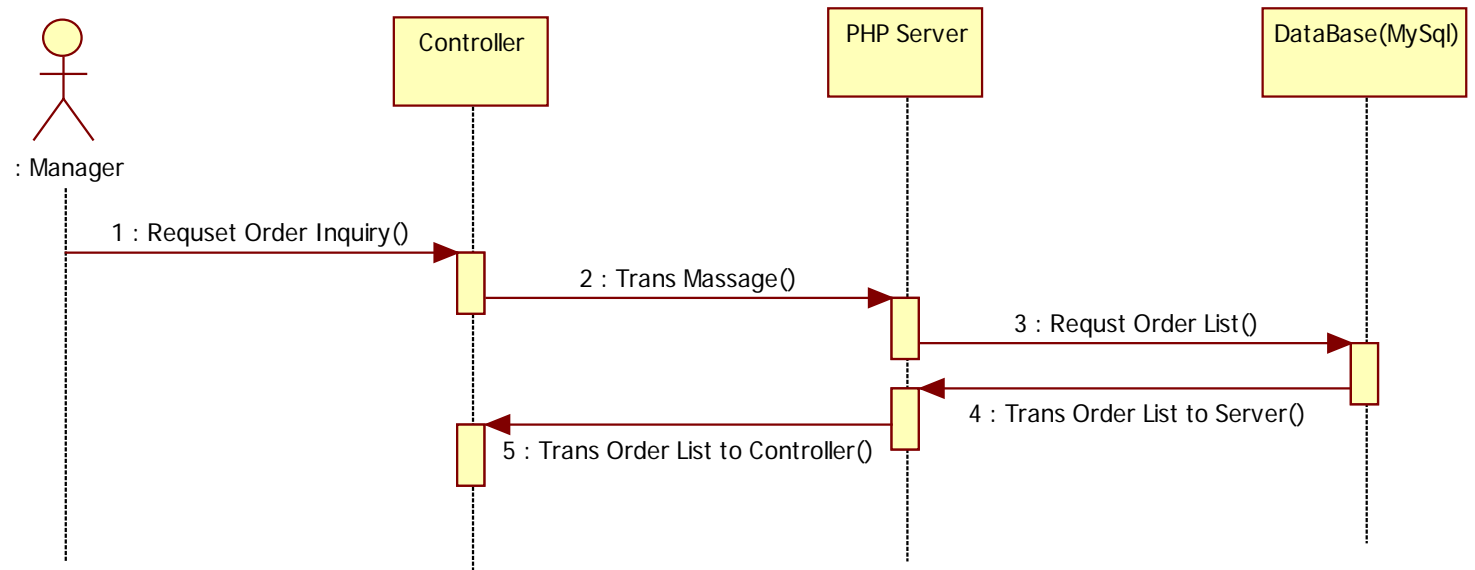
11. Sequence Order List



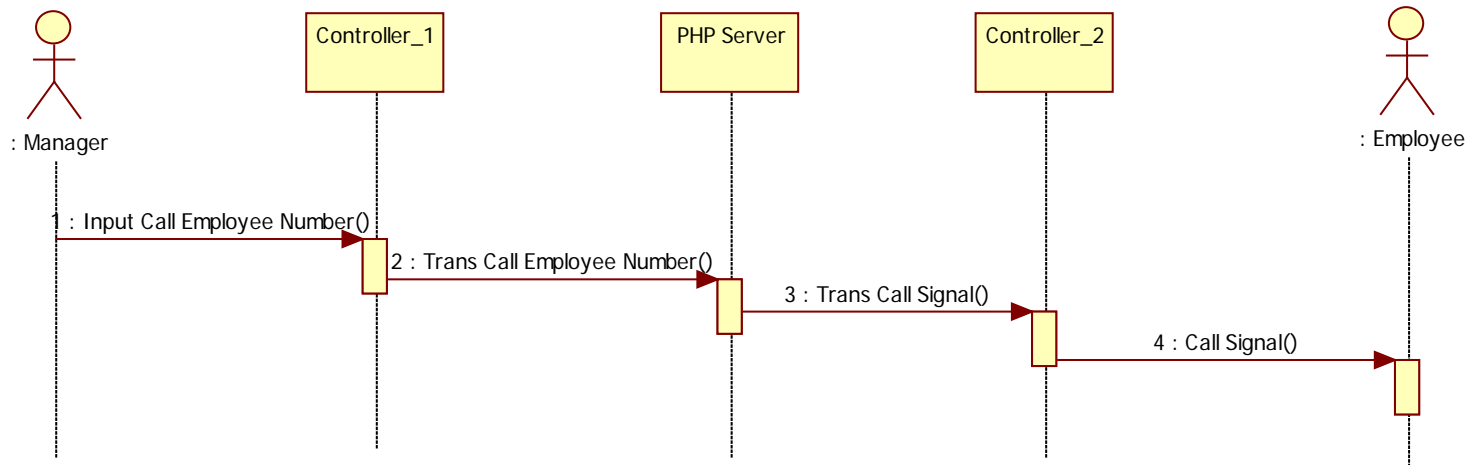
12.Voice Recognition&13.Voice Conversation



17. Order Inquiry



18. Employee Call



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**ACTIVITY 2136. DEFINE
OPERATION
CONTRACTS**

2136. Define Operation Contracts

Use Case	Name of Actor-Activated Event	System Operations
1. Add Employee	1. input Person Data()	1. inputAddEmployee ()
	2. Trans Person Data()	2. transAddEmployee ()
2. Delete Employee	1. Input Delete ID()	3. inputDeleteEmployee ()
	2. Trans ID()	4. transDeleteEmployee ()
3. Modify Employee	1. Input Modify Person Data()	5. inputModifyEmployee ()
	2. Trans Modify Person Data()	6. transModifyEmployee ()
4. Add Recipe	1. input Recipe()	7. inputAddRecipe()
	2. Trans Recipe()	8. transAddRecipe()
5. Delete Recipe	1. Input Delete Recipe()	9. inputDeleteRecipe()
	2. Trans Delete Recipe()	10. transDeleteRecipe()
6. Modify Recipe	1. Input Modify Recipe()	11. inputModifyRecipe()
	2. Trans Modify Recipe()	12. transModifyRecipe()
7. Add Table	1. input Table Data()	13. inputAddTable()
	2. Trans Table Data()	14. trnasAddTable()
8. Delete Table	1. Input Delete Table()	15. inputDeleteTable()
	2. Trans Delete Table()	16. transDeleteTable()
9. Modify table	1. Input Modify Table()	17. inputModifyTable()
	2. Trans Modify Table()	18. transModifyTable()
10. Order Coffee	1. RequestOrder()	19. SaveOrder()
	2. RequestCoffeeRecipe()	20. RequestRecipe()
	3. Make OrderClass and regist recipe()	21. MokeOrderClass()
	4. Order Cancel	22. CancelOrder()
11. Sequence Order List	1. give priority numbering to order class()	23. SetPriority()
	2. Save order class()	24. SaveOrder()
12. Voice Recognition	1. Request Recognition()	25. VoiceRecognition()
13. Voice Conversation	1. Request Conversation()	26. VoiceConversation()
14. Make Coffee	1. Make Coffee()	27. MakeCoffee()
15. Call Employee(of system)	1. Call employee()	28. CallEmployee()
16. Manager Call(of system)	1. Send message()	29. SendMessage()
	2. Call manager()	30. CallManager()
17. Order Inquiry	1. Request Order Inquiry()	31. RequestOrderInquiry()
	2. Trans Massage()	32. TransMassage()
	3. Request Order List()	33. RequestOrderList()
	4. Trans Order List to Server()	34. TransOrderListServer()
	5. Trans Order List to Controller()	35. TransOrderListController()
18. Call Employee(of manager)	1. Input Call Employee Number()	36. InputCallNumber()
	2. Trans Call Employee Number()	37. TransCallNumber()
	3. Trans Call Signal()	38. TransCallSignal()
	4. Call Signal()	39. CallSignal()
19. Save Order List	N/A	N/A

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**2137. DEFINE STATE
DIAGRAMS**

1. State Diagrams for <Table>& 2. State Diagrams for <Coffee Maker>

