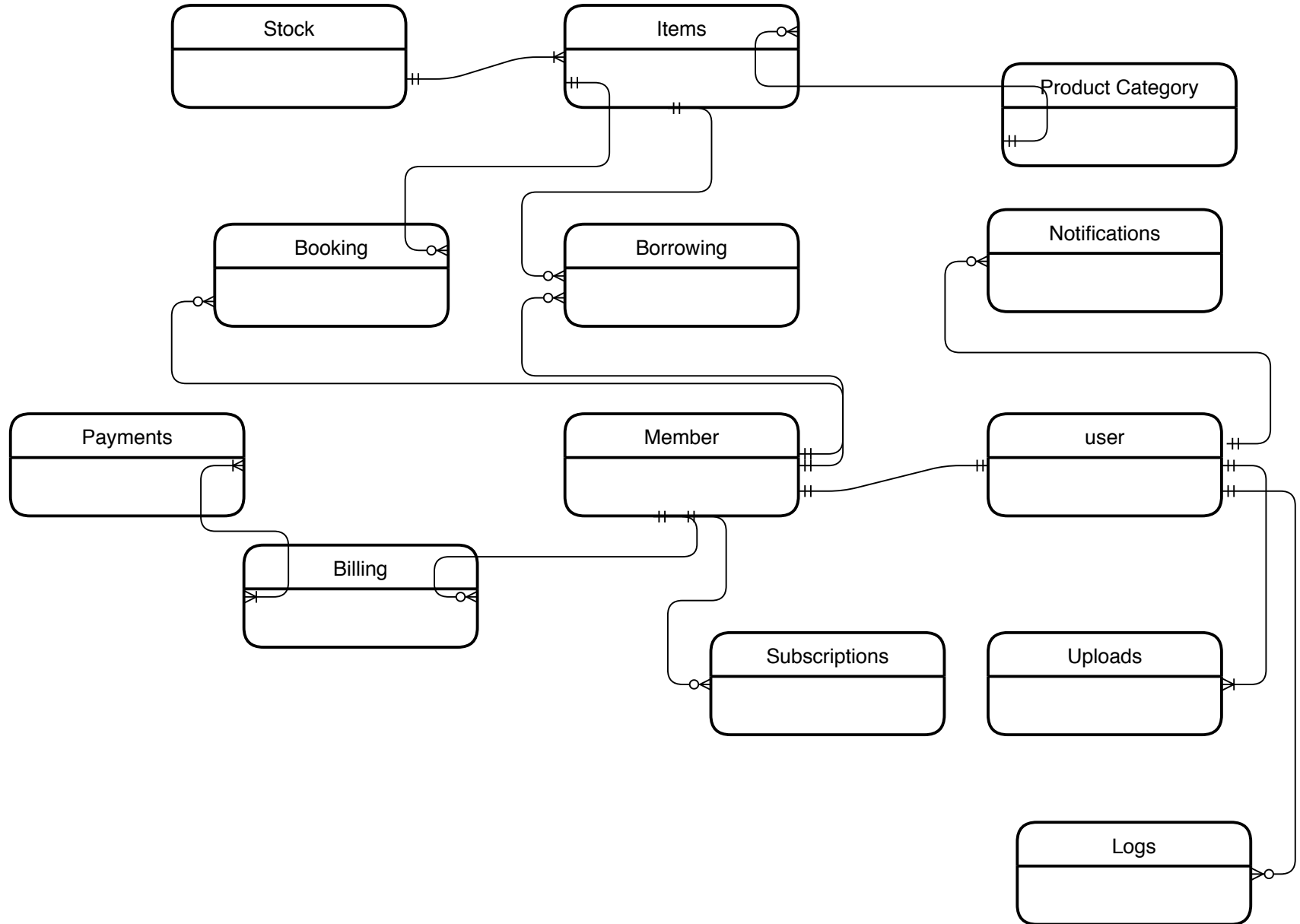
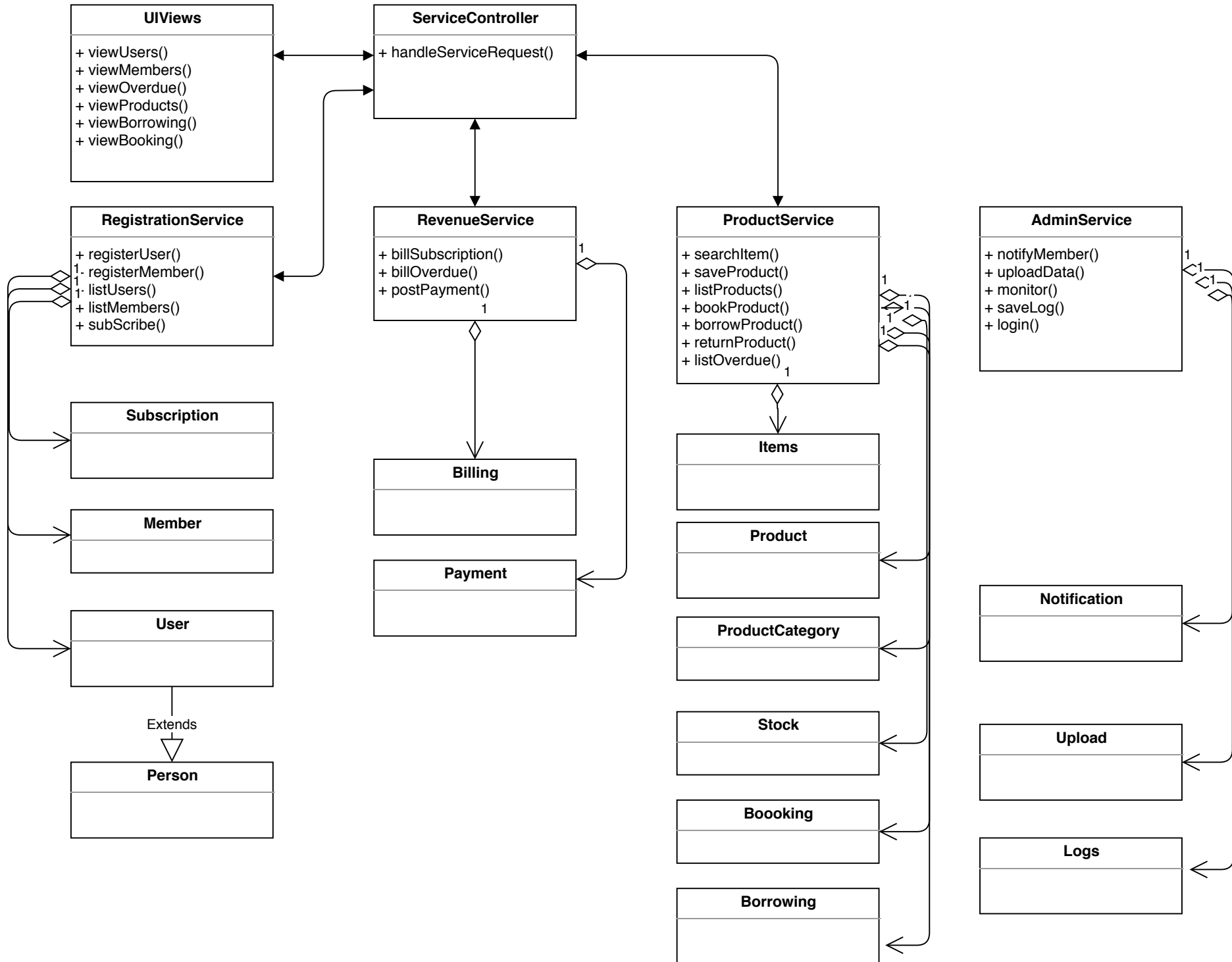


Conceptual Data Model For Library Application



Class Diagram



Entity Classes

Member
+memberId:int +memberName:string +memberStartDate:date +memberEndDate:date +memberStatus:string +userId:int

User
+userId:int +userName:string +userCategoryId:int

UserCategory
+userCategoryId:int +userCategoryName:string

Subscription
+subscriptionId:int +memberId:int +subscriptionDate:date +subscriptionTypeId:int

SubscriptionTypes
+subscriptionTypeId:int +subscriptionTypeName:string

Item
+ itemId:int + itemName:string + categoryId:int + balance:int

ItemCategory
+categoryId:int +categoryName:string

Stock
+stockId:int +itemId:int +quantity:int

Boooking
+bookingId:int +memberId:int +bookingdate:date +collectiondate:date

Borrowing
+memberId:int +borrowingdate:date +returndate:date

Billing
+billing:int +memberId:int +transactionType:string +transactionId:int +transactionDate:date +amount:decimal

Payment
+paymentId:int +billingId:int +amount:decimal +paymentDate:date +paymentMode:string

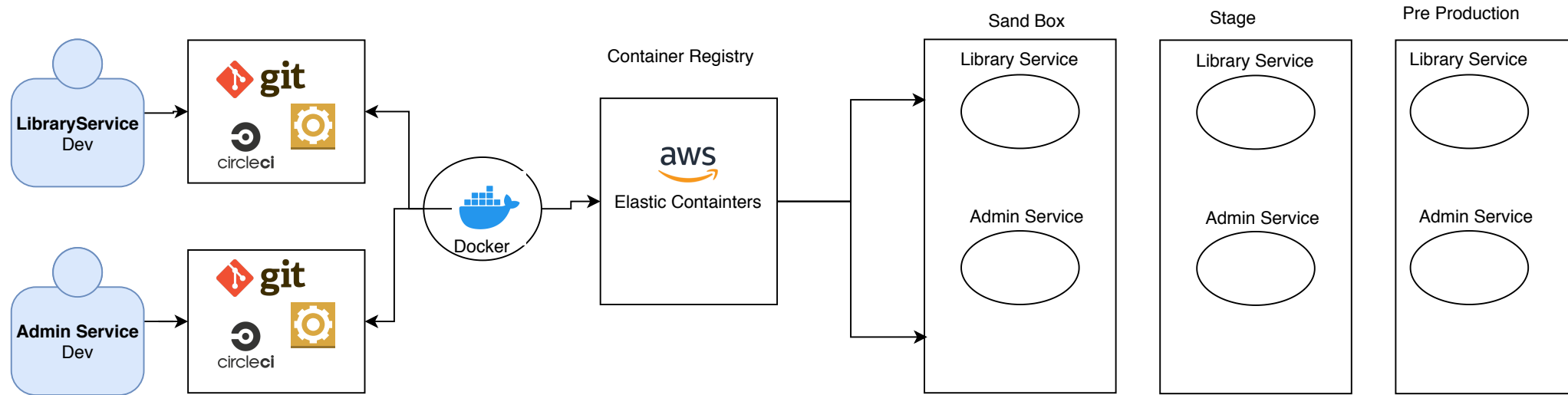
Notification
+notificationId:int +notificationDate:date +notificationTime:datetime +memberId:int +priority:int +content:string

Upload
+uploadId:int +uploadDate:date +uploadedBy:int +fileName:string

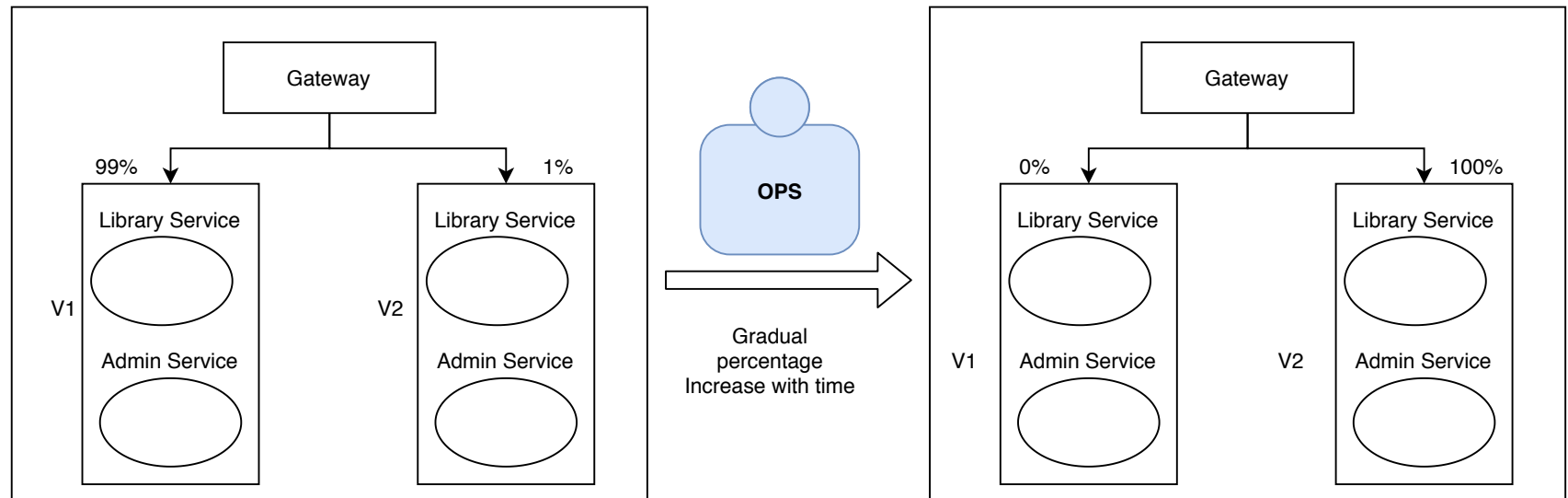
Logs
+logId:int +logTime:datetime +category:string +content:string

CI/CD Pipeline

CI



CD



Infrastructure Setup

Client End

Server End (Containerized)

