Async-architecture

Steps

1. Gather requirements
2. Define actions
    - Structure
        - Actor
        - Command
        - Data
        - Event
3. Define data model
    a. List all of the data models
    b. Draw it and relationships between them
4. Define domains
    - Use actor-context approach that focuses on the business transactions and accepts models duplication

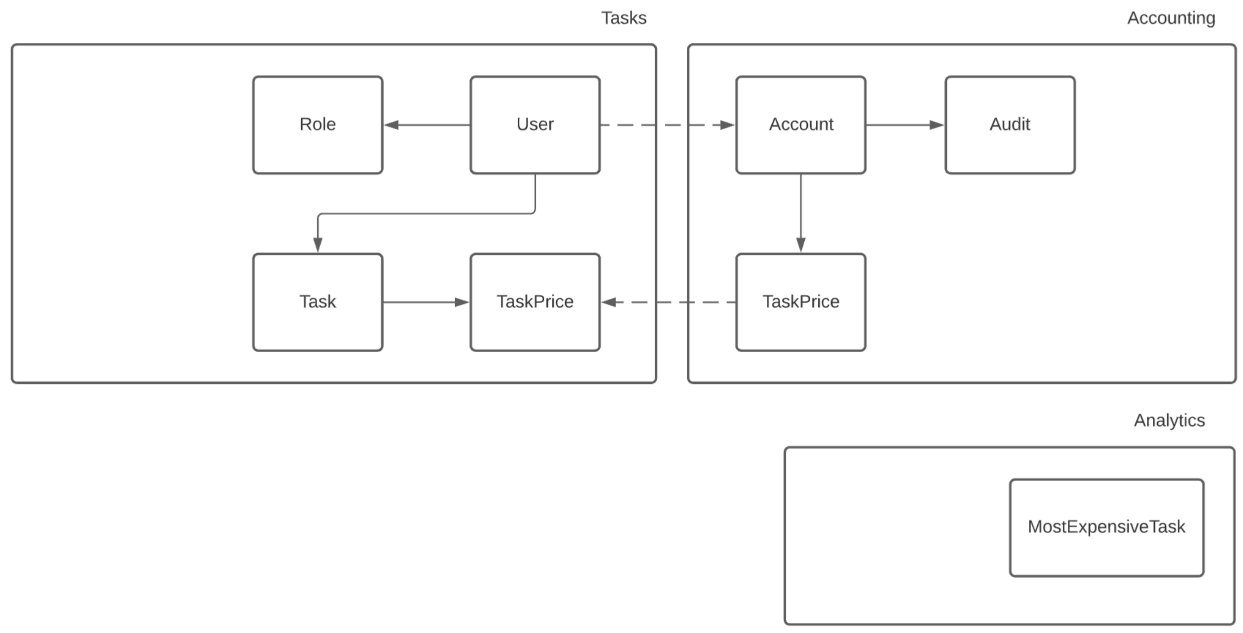
Implementation

Actions

Actor	Command	Data	Event
User	Create Task	Title, description, Status	TaskCreated
User	Login	Photo	Logined
Manager, Admin	AssignTasks		TasksAssigned
User	CompleteTask	TaskId, UserId	TaskCompleted
TaskCreated	AssignPrice	TaskId	PriceAssigned

Actor	Command	Data	Event
TaskAssigned	WithdrawAssignedUser	UserId	UserWithdrawn
TaskCompleted	IncreaseUserBalance	UserId	UserBalanceIncreased
[CRON]	PayUser	UserId	UserPaid
UserWithdrawed	CreateAuditRecord	amount, UserId, type = Withdraw	AuditRecordCreated
UserPayed	CreateAuditRecord	amount, UserId, type = Deposit	AuditRecordCreated

Data model, separated by domains



Services

- API Gateway
- TasksService
- AccountingService
- AnalyticsService

Events

Domain Events

- TaskAssigned
- TaskCompleted
- PriceAssigned
- UserWithdrawn
- UserBalanceIncreased
- UserPaid

CUD Events

- TaskCreated
- TaskUpdated
- TaskDeleted
- AuditRecordCreated
- UserUpdated
- UserDeleted
- UserCreated
- TaskPriceCreated