

STALELINK

TEAM 1

Trương Đức Dương - Hanoi - May 12, 2023

Members:

Trương Đức Dương

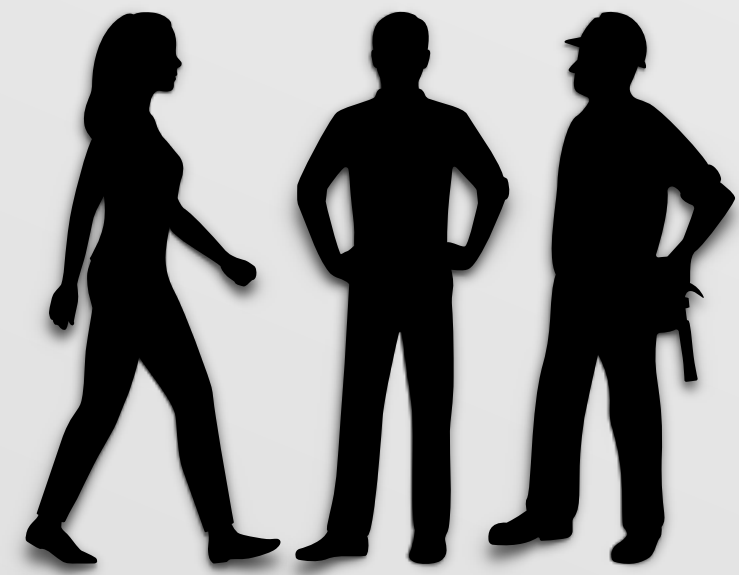
Nguyễn Khánh Duy

Phùng Việt Hưng

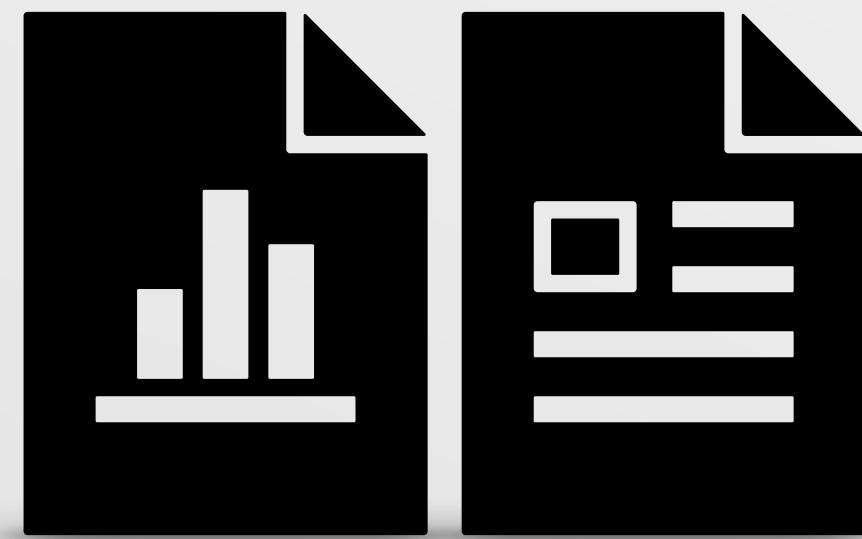
Nguyễn Thành Đông

Mentor:

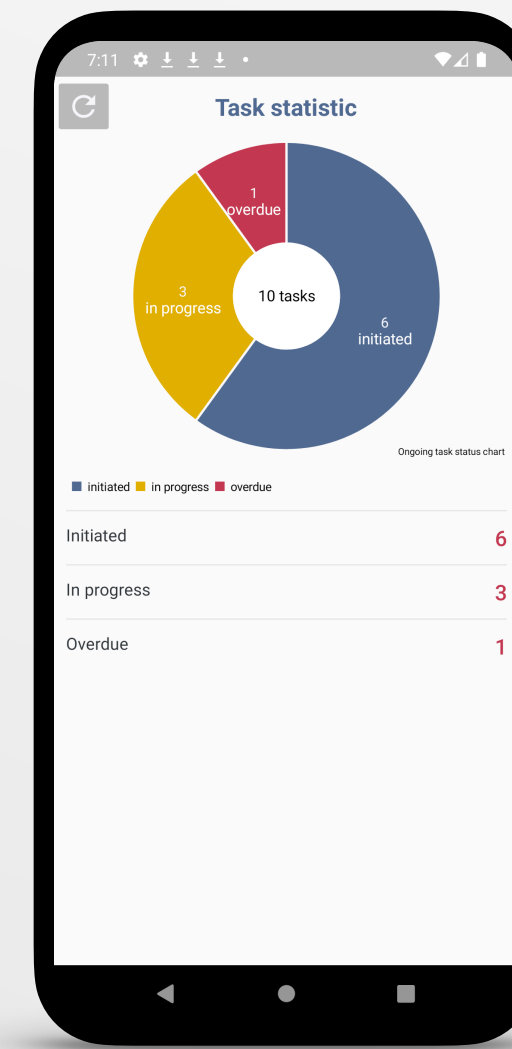
Mr. Bùi Văn Dương



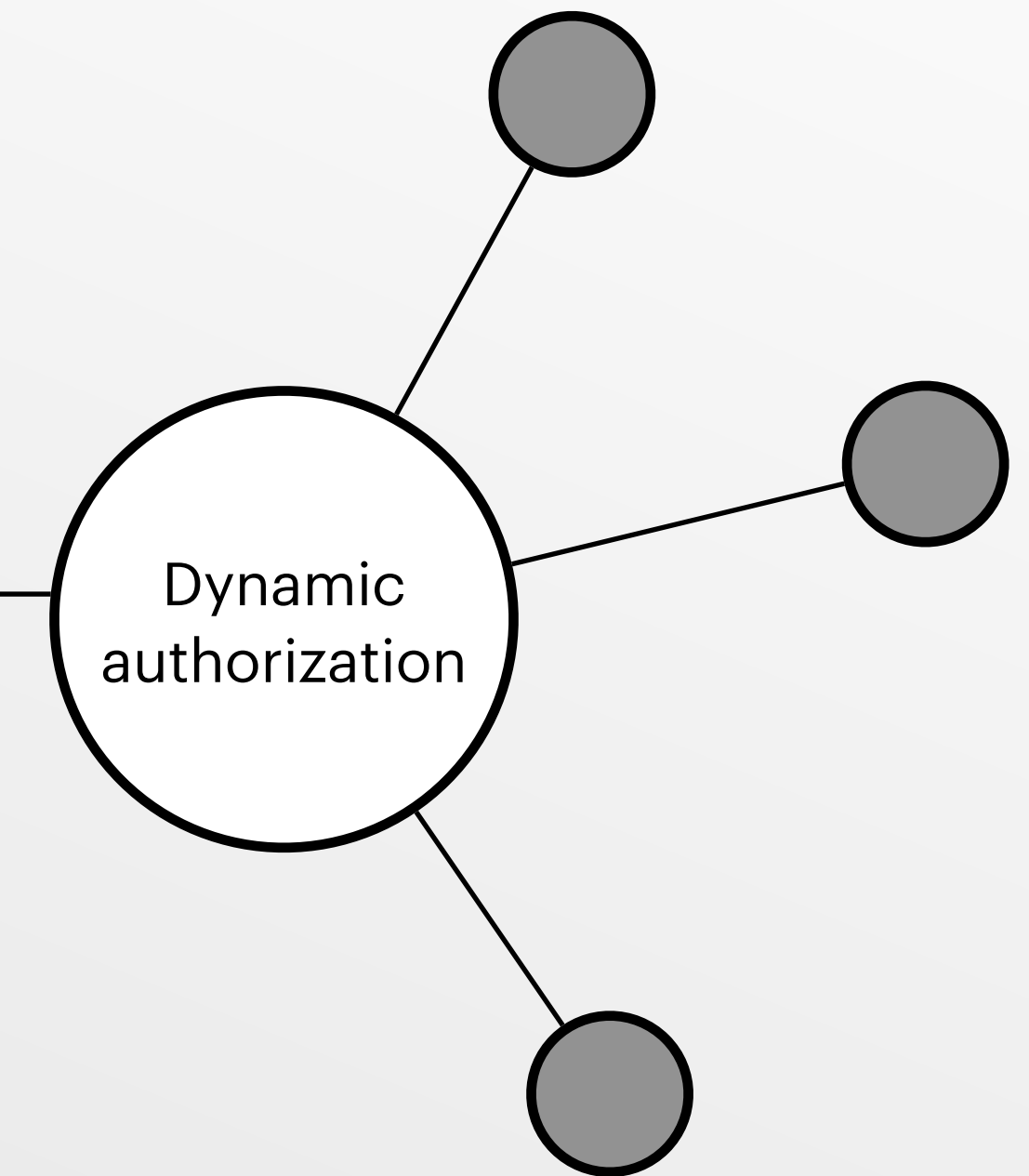
User management



Project and task management



Designed to run on
Android smartphones



Main features

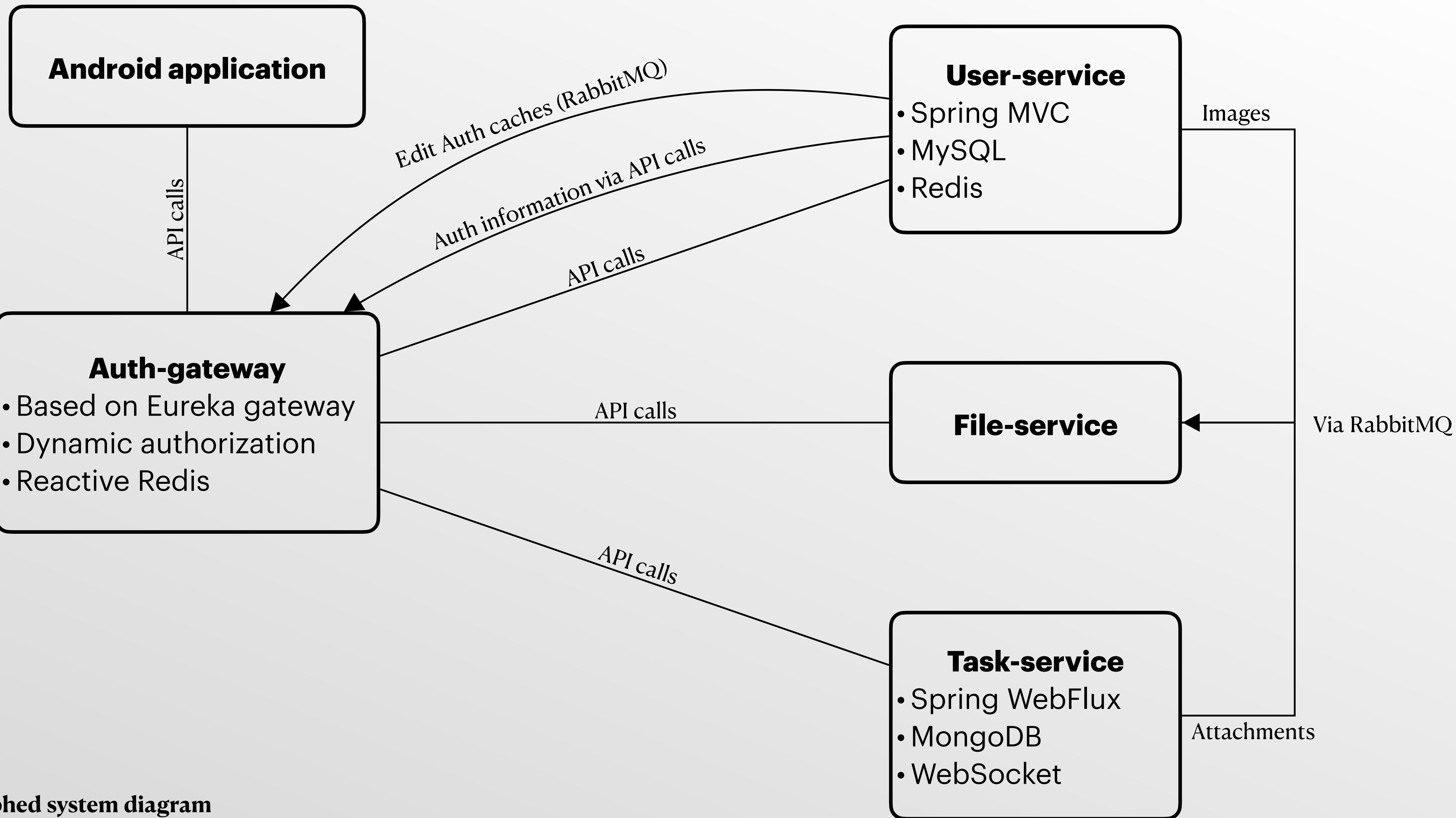
Frontend:

- **Android Studio Electric Eel**

Backend:

- **Spring boot 3**
 - Choreography architecture model (RabbitMQ 3 as message broker)
 - Spring cloud discovery: Eureka server, gateway and clients
 - Spring MVC and Spring WebFlux
- **MySQL 8**
- **MongoDB 6**
- **Redis 6**
- **RabbitMQ 3**
- **WebSocket**

Implemented technologies



Choreographed system diagram

User-service

Users	
PK	<u>Id</u> INT
NOT NULL	username NVARCHAR(100)
NOT NULL	name
	Phone VARCHAR(100)
NOT NULL	Email NVARCHAR(200)
NOT NULL	Password NVARCHAR(500)
	avatar NVARCHAR(500)
DEFAULT 'TRUE'	IsActivated BOOL
NOT NULL	CreatedAt DATETIME
NOT NULL	CreatedBy VARCHAR(100)
	LastModifiedAt DATETIME
	LastModifiedBy VARCHAR(100)

UserRoleMappings		
	FK	RoleId INT
	FK	RoleId INT

Roles	
PK	<u>Id</u> INT
DEFAULT 'TRUE'	name NVARCHAR(100)
NOT NULL	IsActivated BOOL
NOT NULL	CreatedAt DATETIME
	CreatedBy VARCHAR(100)
	LastModifiedAt DATETIME
	LastModifiedBy VARCHAR(100)

RoleFuncMappings		
	FK	RoleId INT
	FK	FuncId INT

Functions	
PK	<u>Id</u> INT
NOT NULL	name NVARCHAR(100)
DEFAULT 0	level TINYINT
	parentId INT
	uri NVARCHAR(500)
DEFAULT 'TRUE'	displayed BOOL
DEFAULT 'TRUE'	IsActivated BOOL
NOT NULL	CreatedAt DATETIME
NOT NULL	CreatedBy VARCHAR(100)
	LastModifiedAt DATETIME
	LastModifiedBy VARCHAR(100)

CheckItems	
PK	<u>Id</u> String
	content String
	position int
	check boolean
	taskId String
FK	CreatedBy int
NOT NULL	CreatedAt Date

Chats	
PK	<u>Id</u> String
	content String
FK	taskId String
NOT NULL	CreatedAt Date
NOT NULL	CreatedBy int

Task-service

Attachments	
PK	<u>Id</u> String
	name String
FK	taskId String
NOT NULL	CreatedAt Date
	CreatedBy int

Tasks	
PK	<u>Id</u> String
	name String
	description String
	status int
	userIds List<Integer>
FK	projectId String
	dueDate Date
NOT NULL	CreatedAt Date
	CreatedBy int
	LastModifiedAt Date
	LastModifiedBy int

Projects	
PK	<u>Id</u> String
	name String
	description String
NOT NULL	CreatedAt Date
	CreatedBy int
	LastModifiedAt Date
	LastModifiedBy int

Database design