



Electronic Parts Tracker

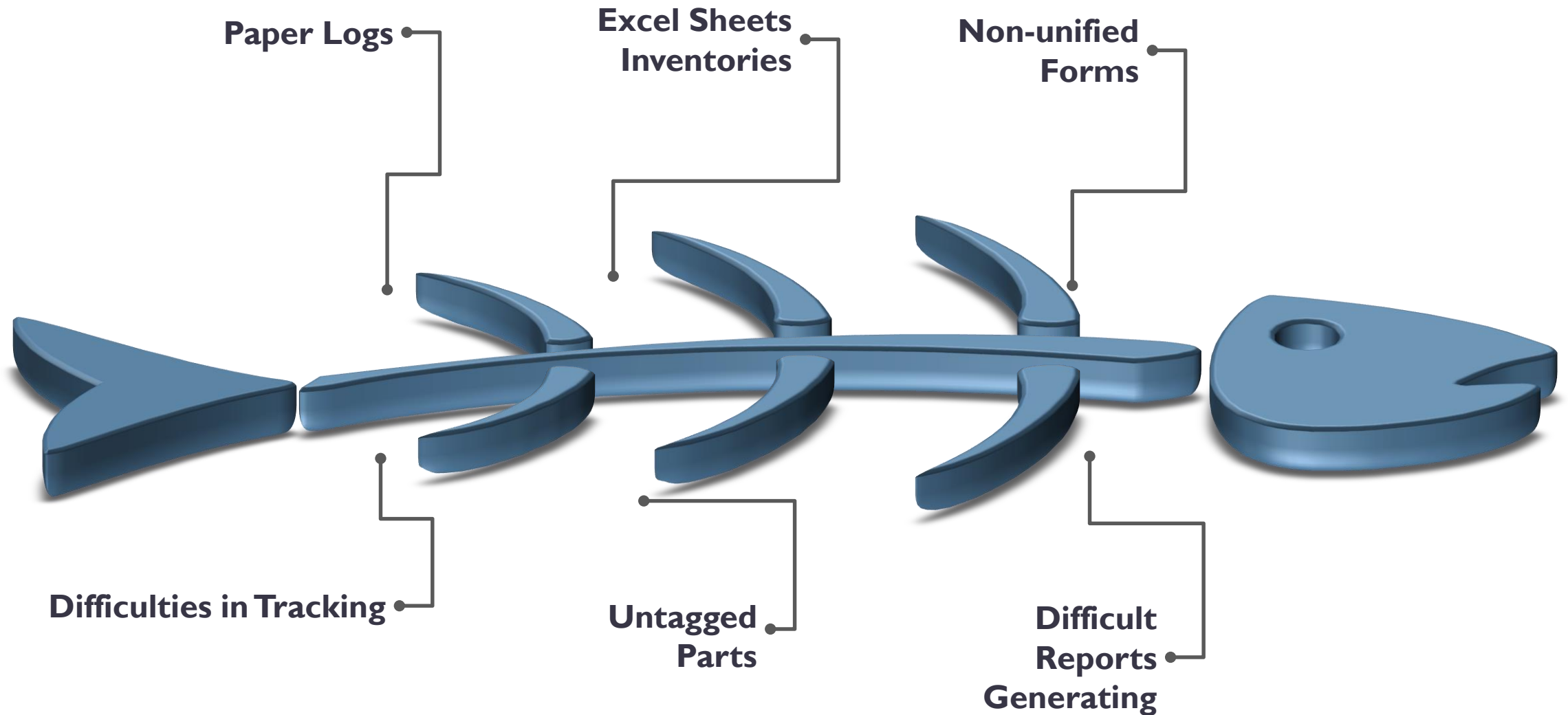
COE 485

Wael Elagi

Abdulrahman AlKhiary

Mahdi Mayouf

PROBLEM OVERVIEW



REQUIREMENTS – SPECIFICATIONS

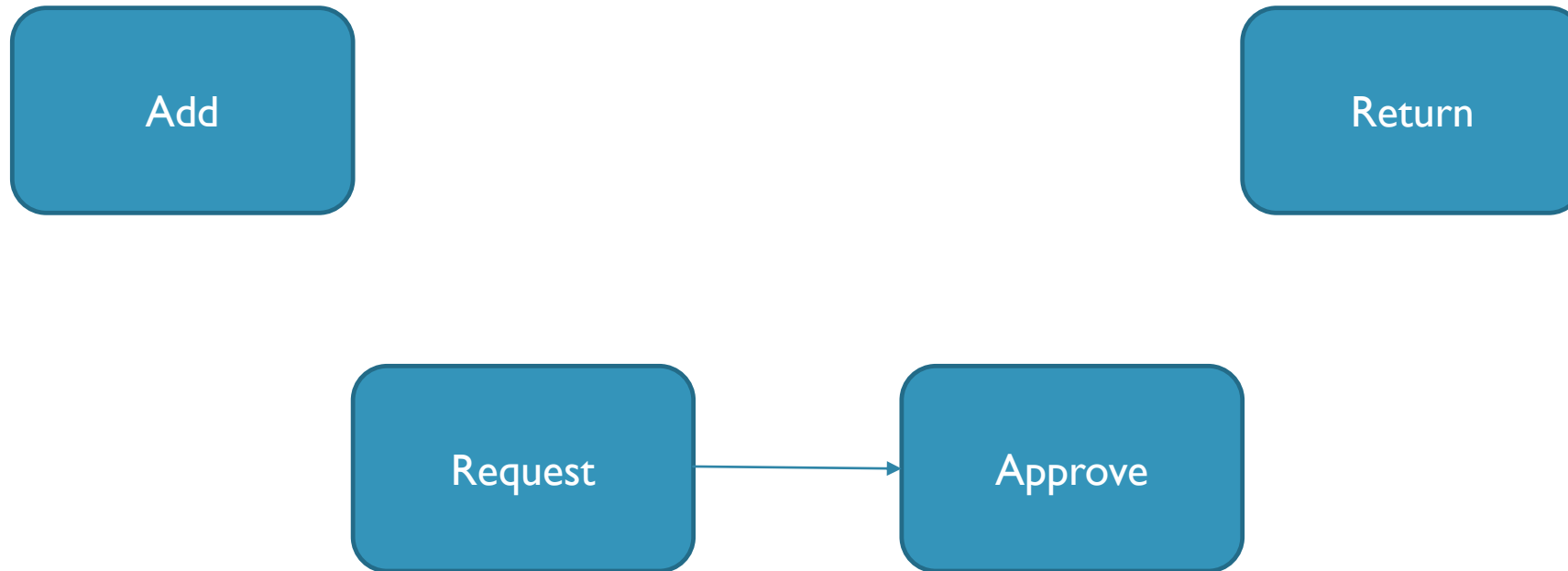
Requirements

- Add new parts and their quantities. Similar but non-identical parts should be distinguishable. Include part photos.
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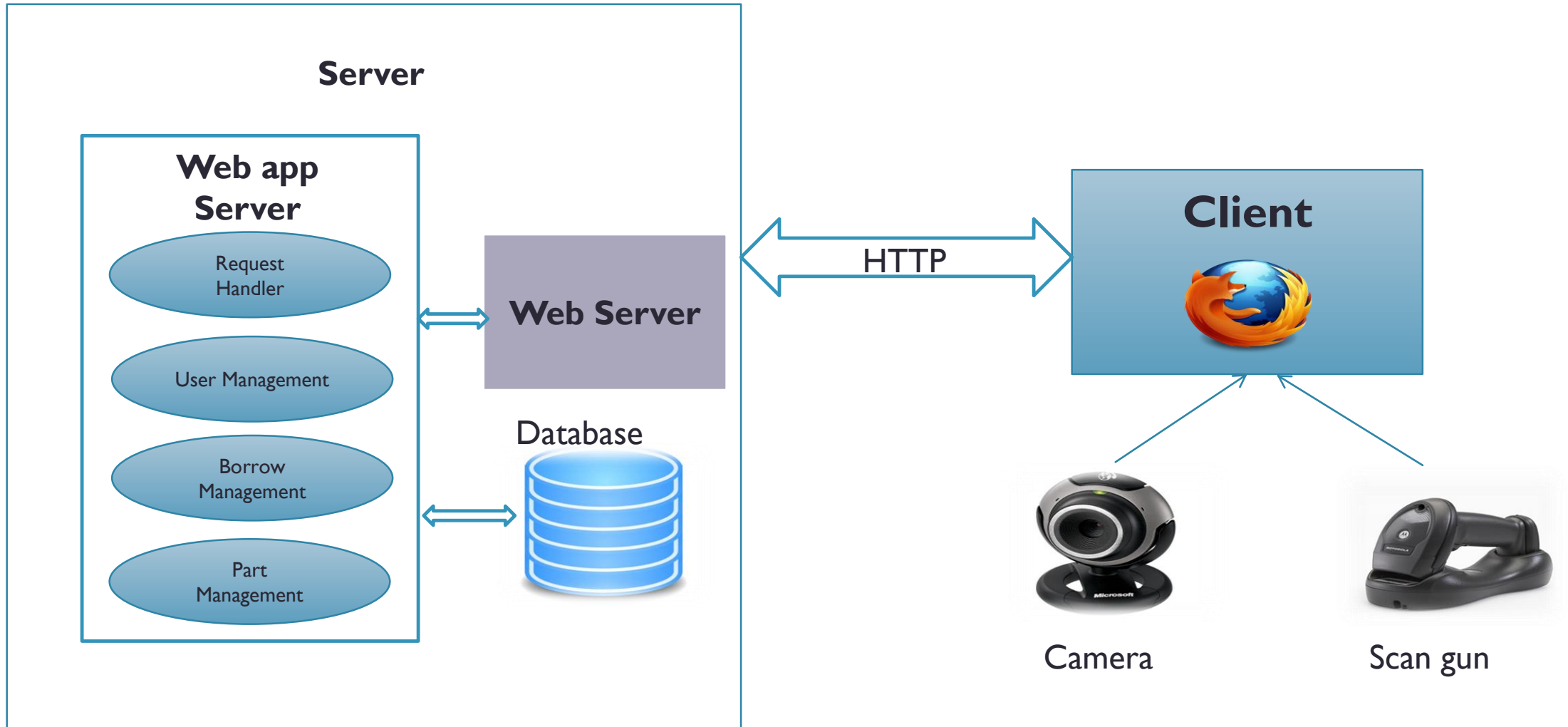
Specifications

- A database that keep records of parts and their quantities, users, requests and approvals
- Generating a unique QR code for each part.
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SYSTEM SUB-FUNCTIONS



SYSTEM ARCHITECTURE



COMPONENTS

Off-Shelf Components

Hardware components

- **Server (workstation)**
- **Scan gun**
- **Cam**

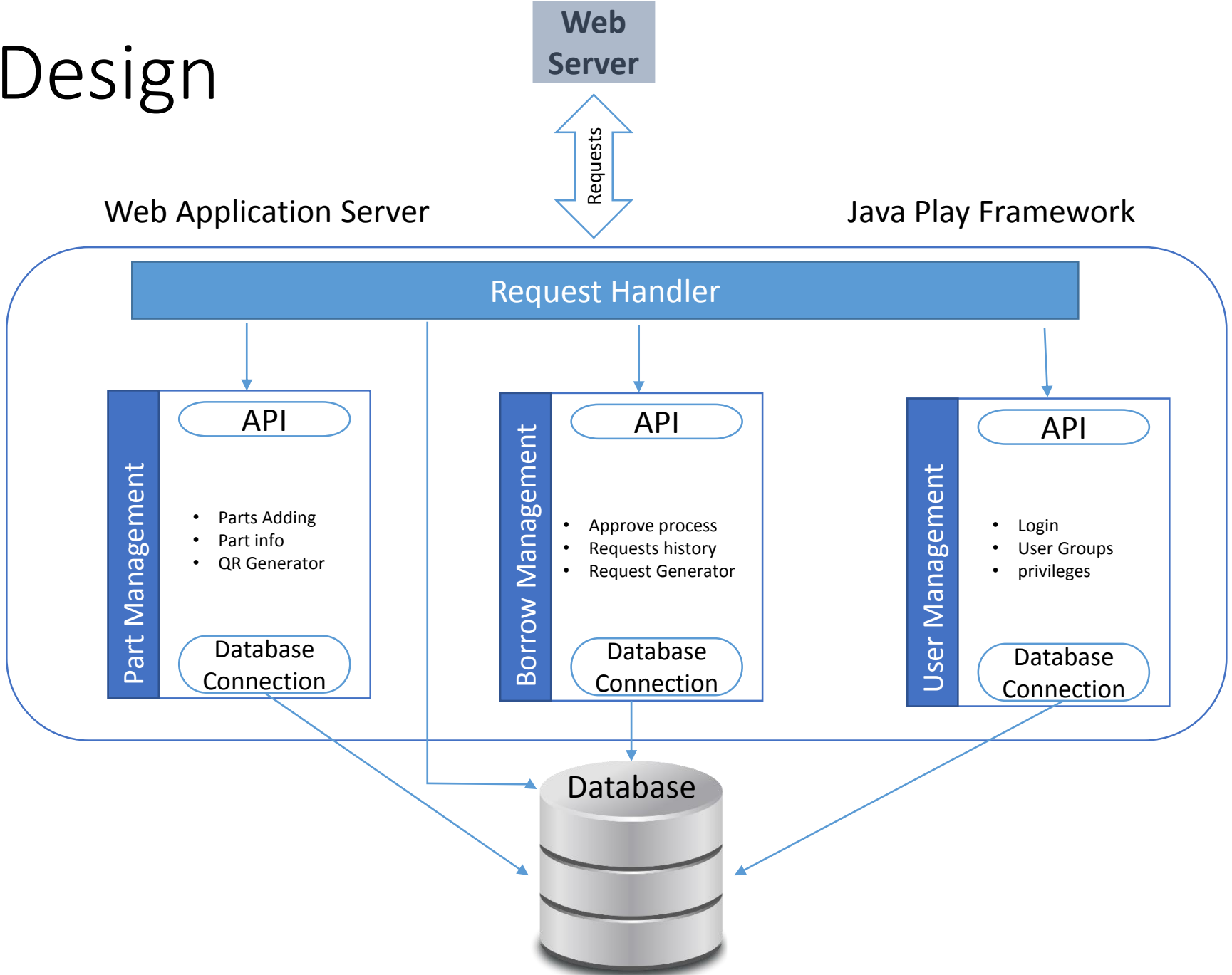
software components

- Web Application server
- Web server
- Database server
- User Management (Through Framework)
- Client (web browser)

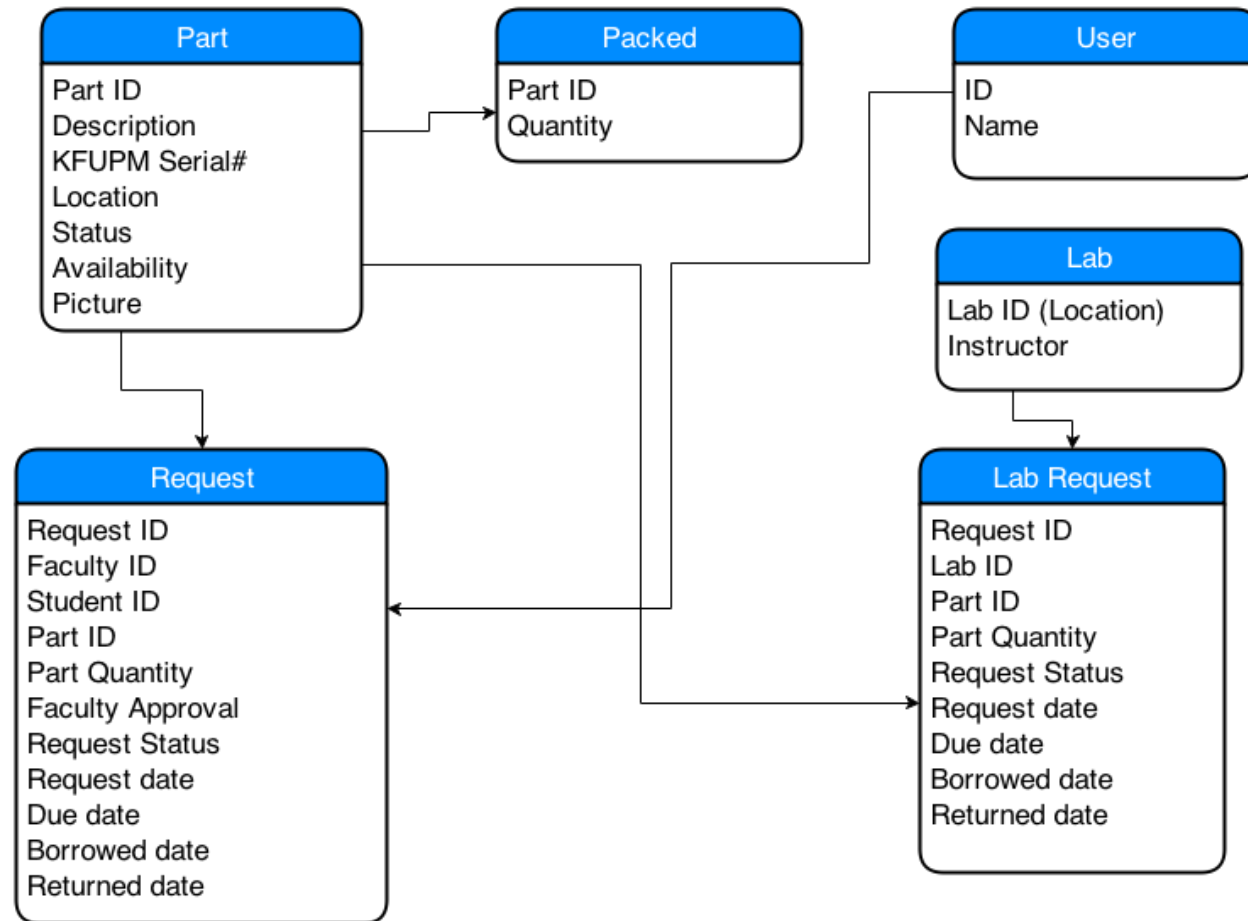
Custom Components



Web App Design



DATABASE DESIGN



DESIGN DECISIONS

Options	web application	Desktop application
Criteria		
Accessibility	Anywhere	Software-Installed Device
Development	One system(multiple views)	multiple system
Installation	One side	Many sides
Component integration	One environment	Many environment
System Update	Server side	All workstations
OS independence	Yes	NO
Server Load	High	Medium

Options	Weight	web application	Desktop application
Criteria			
Accessibility	0.3	10	7
Development	0.2	7	5
Installation	0.15	8	5
Component integration	0.05	7	6
System Update	0.1	8	5
OS independence	0.15	9	1
Server Load	0.05	4	7
Result		8.3	5.15



QUESTIONS

