

Patrol Shift Bid Scheduler v2.0

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Problem

- Scheduling at Pinecrest Police Department needs to be done at least four times a year. Each quarter a supervisor in charge needs to create a new schedule and have all the officers bid on the available shifts/spots.
- This is a tedious process when done by hand as every officer would need to bid in order of seniority. Once the schedule is approved, a daily roster needs to be printed out each day and passed around the department.

Current System

- Scheduling at Pinecrest Police Department is been done manually with pen and paper. The process involves the supervisor in charge creates a schedule with shifts and spots for the officers to bid on each quarter. A sheet with these shifts/spots is posted in the wall where officers bid on a spot in order of seniority.
- After bidding ends, the bids are reviewed by the supervisor in charge and approved. The bids are compiled into a schedule using spreadsheets. When the schedule is in effect, a daily roster sheet is printed out and passed around the department.

Patrol Officers
November 20, 2019 - February 20, 2020
Please PRINT your name-don't sign!

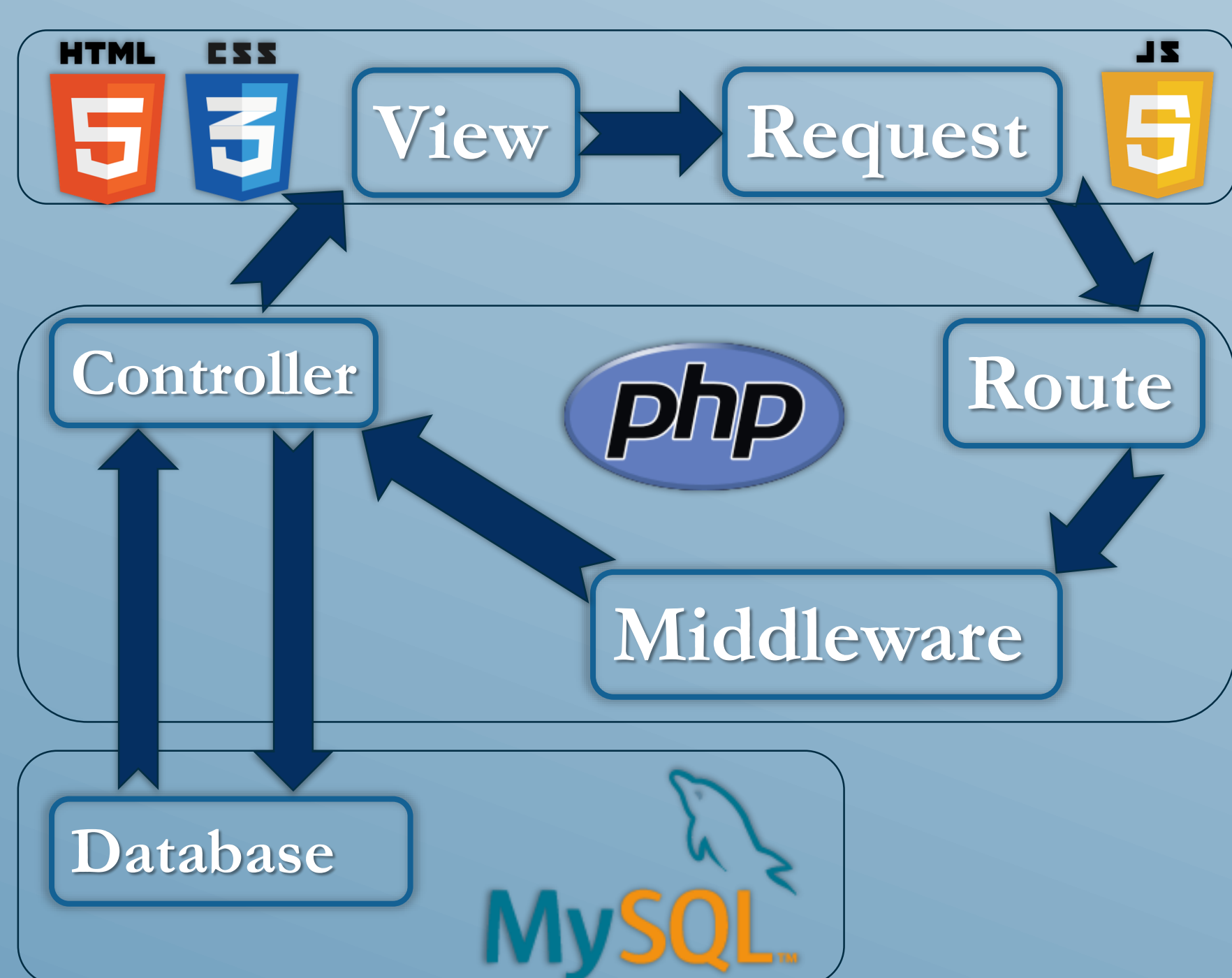
A-shift

0500-1300	0600-1400
Mon/Tue _____	Sun/Mon _____
Wed/Thu _____	Tue/Wed _____
Fri/Sat _____	(Mon-Thu ONLY Sun 0600-1400)

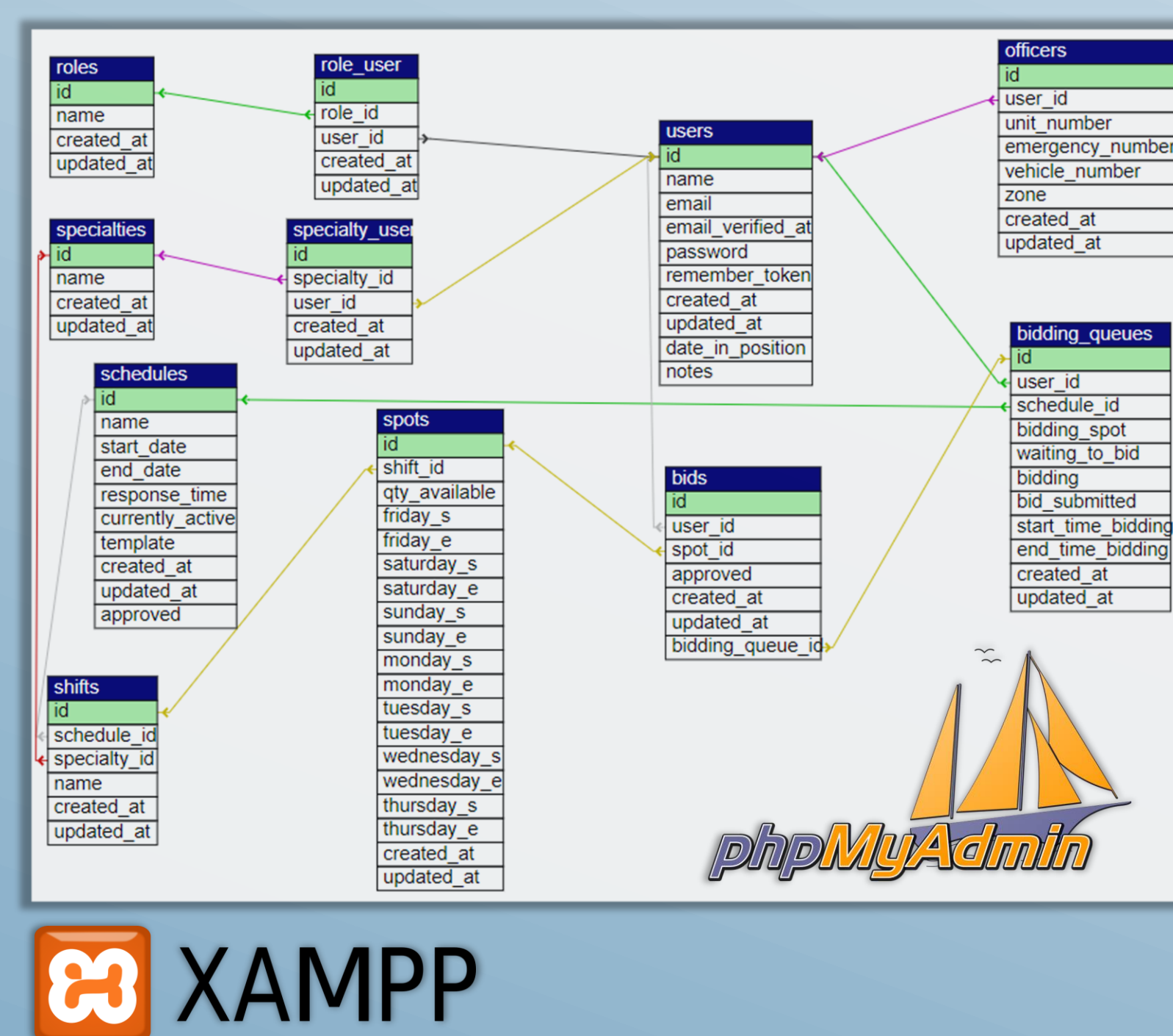
Requirements

- **Features:**
 - User registration by admin, root accounts.
 - Login, profile management by admin/user.
 - Assign user account access level (root, admin, officer, ...)
 - Assign user specialties and notes.
 - Admin level accounts have the ability to create schedules with multiple shifts and multiple spots per shift.
 - Set bidding order per officer during schedule creation.
 - Notify officers by email once it's their turn to bid.
 - Officers can view and bid on an active schedule.
 - A supervisor can bid for an officer.
 - Schedule bids review and approval.
 - Daily roster view, available to every user.

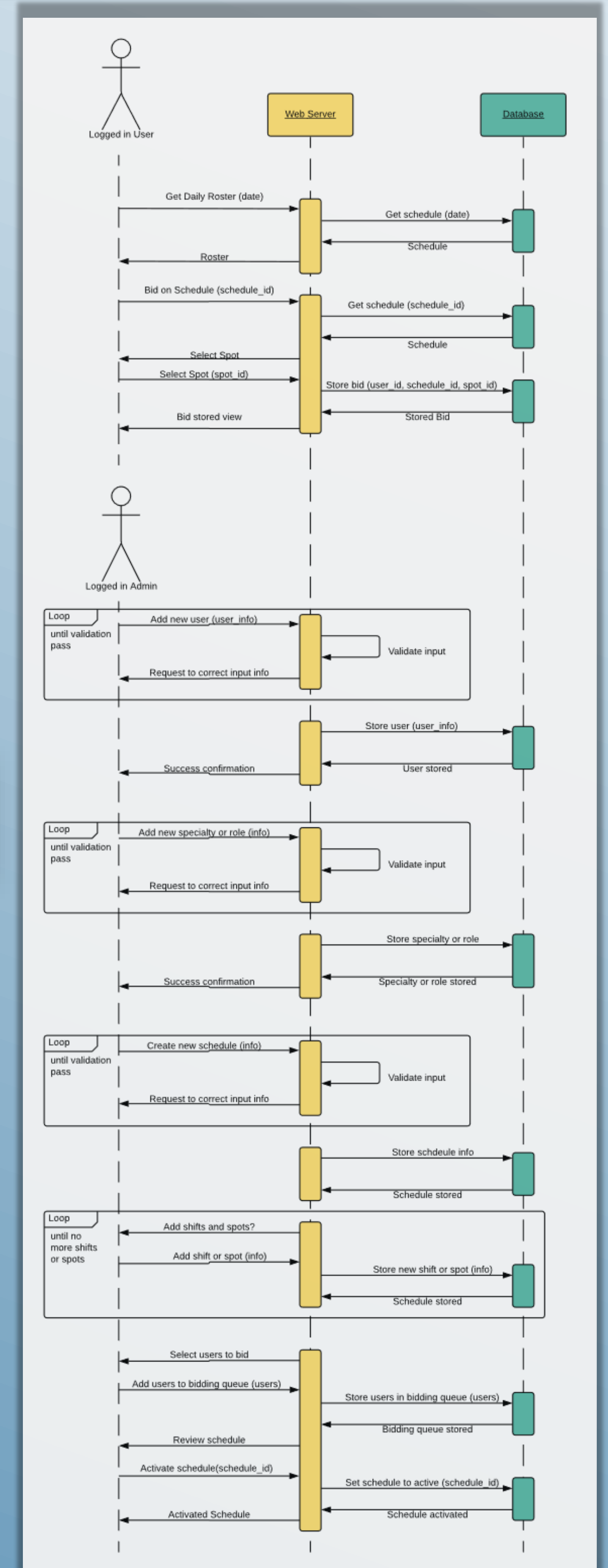
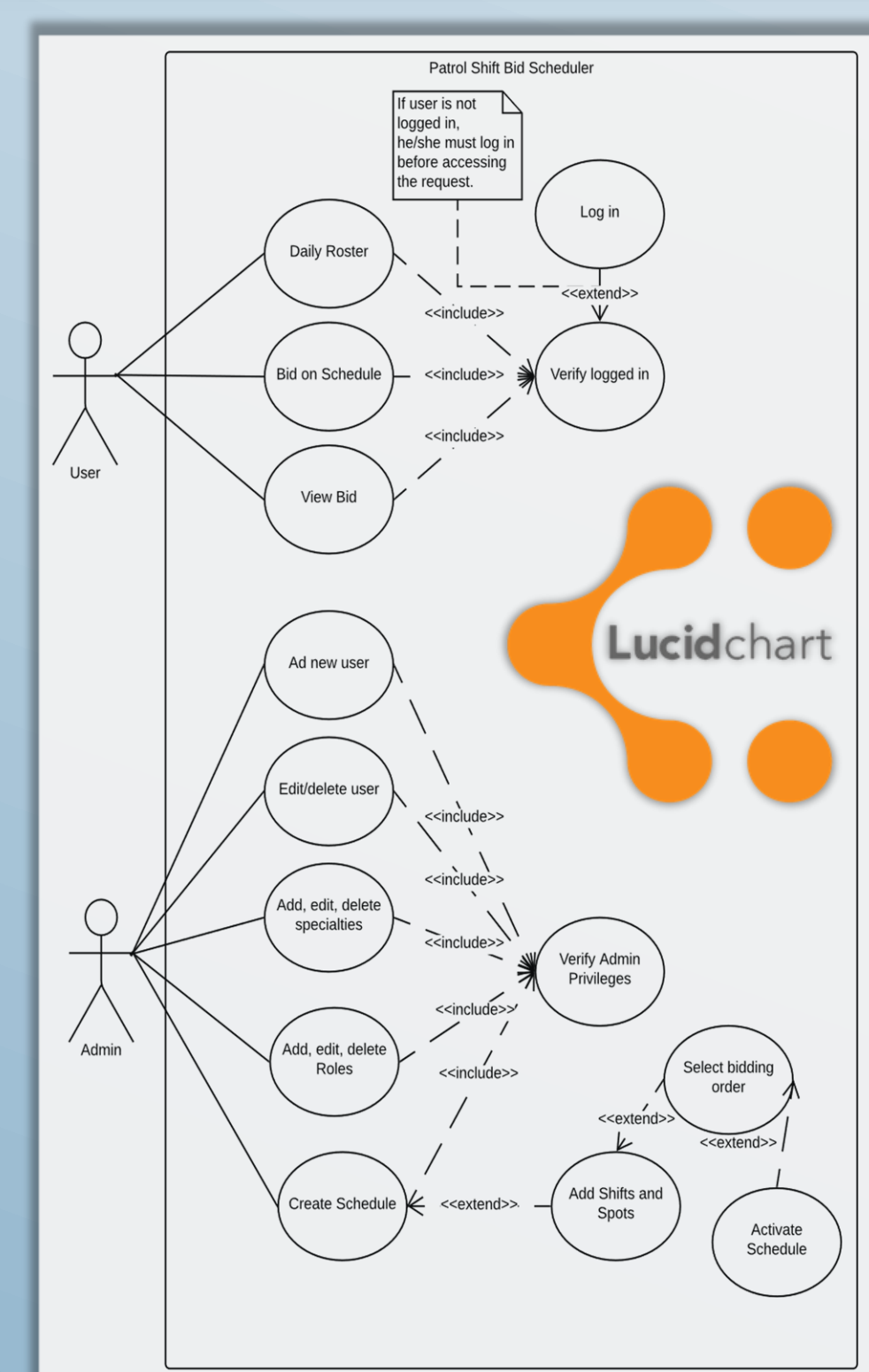
System Design



Database



Use & Sequence Diagram



Implementation

Verification

Summary

- **Completed Features:**
 - User management
 - Login authentication
 - Roles and specialties management
 - Create schedule
 - User/admin bid on schedules
 - Admin review and approve schedules

Future Plans

- The ability for officers to request a day/time off.
- The ability for admins/supervisors to approve the time-off request.
- Daily Roster to reflect the day off modification.

Acknowledgement

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