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Consumer - Aware Warehouse Management

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CLIENT BACKGROUND

Crafty LLC helps companies enhance their employees life at work by providing offices with food, beverage, and event management

CHALLENGE

Optimizing inventory management

SOLUTION

A forecasting algorithm to automate reordering of warehouse stock

\$600,000 Annually
Missed Revenue for
20,000 Missed Items

\$100,630 Annually
Lost Value for
15,356 Expired Items

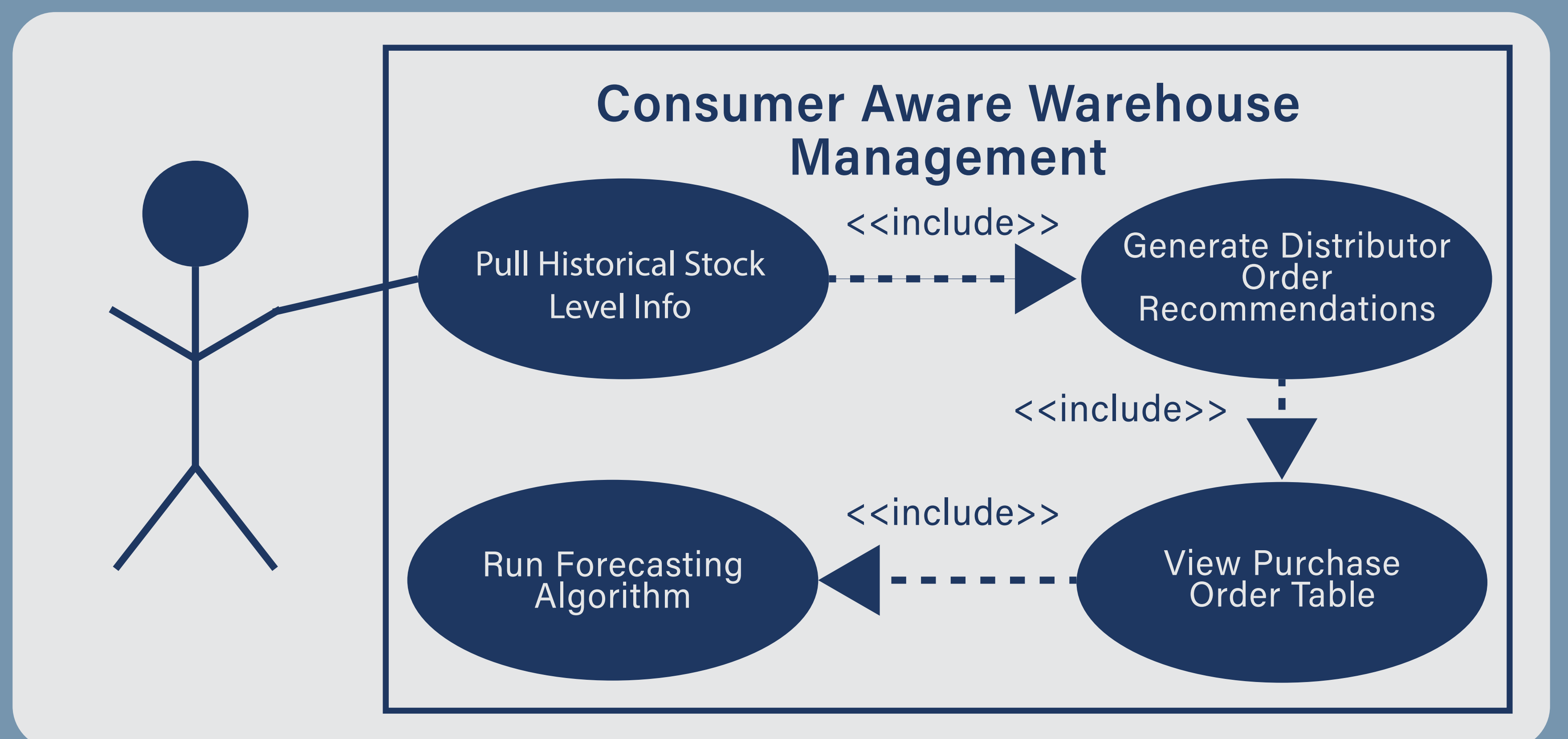
3 Full-Time Employees
Dedicating
50% of Time to Ordering

FUNCTIONAL REQUIREMENTS

- Predict optimal product orders
- Input: Crafty database
- UI and Visualization

NON-FUNCTIONAL REQUIREMENTS

- Timely reports (< 2 min 90% of the time)
- Handle 15000+ distributor order stock keeping units

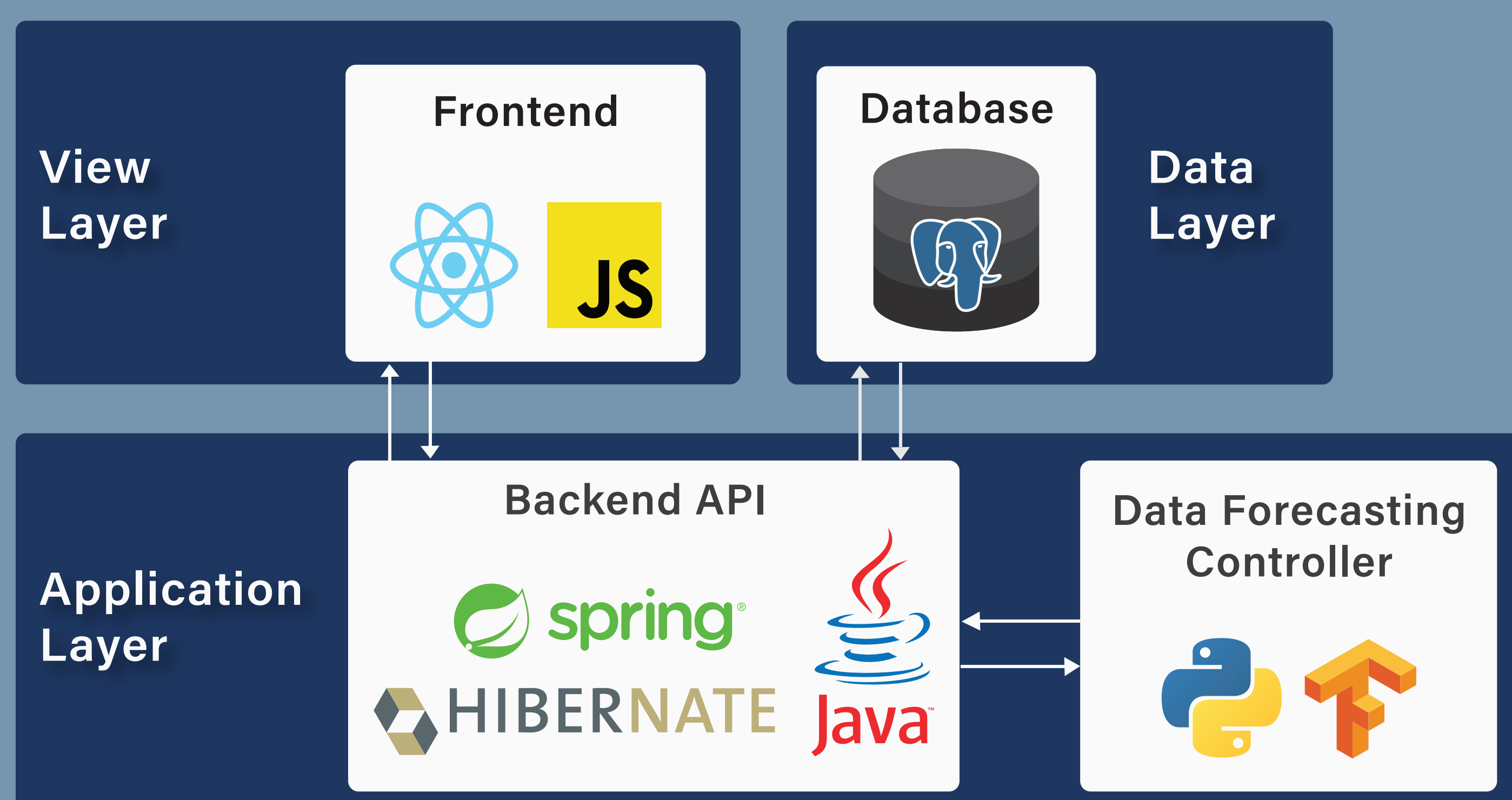


TESTING

- CI/CD - GitLab
- Acceptance Testing - Client Demonstration
- Manual Tests - Frontend
- Testing Predictions - Split Data:
 - Training (67%)
 - Evaluation (33%)

ENGINEERING STANDARDS

- Code Review
- Model View Controller Design Pattern
- Xtreme Programming



Stock Level Over Time For One SKU

