

IT Asset Management System

Students:

Julian Rodriguez, Ryan Bliss, Brandon Asseo, Mohammad Dossani, Kaden Sealey

Instructor:

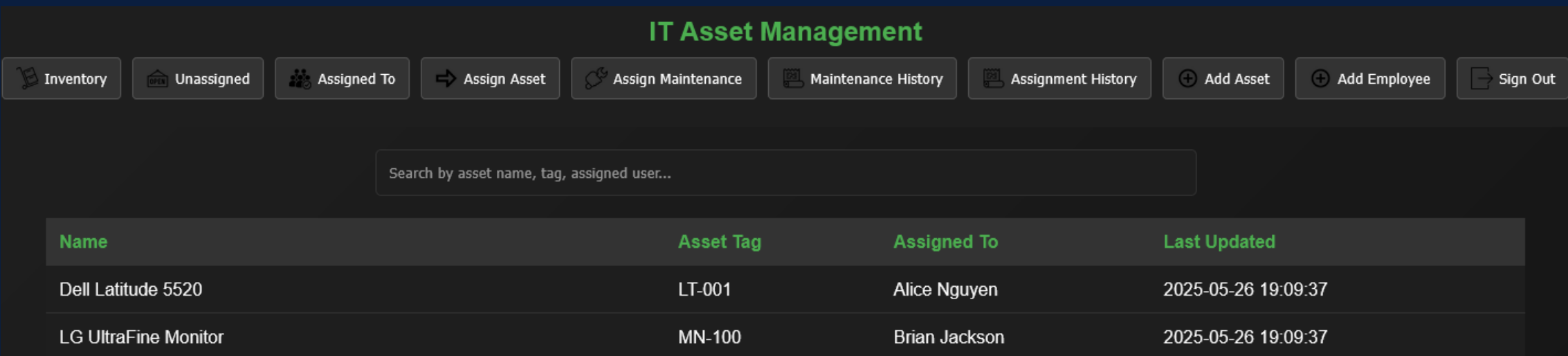
Masoud Sadjadi, Florida International University

PROBLEM

Many small to mid-sized organizations rely on spreadsheets or manual methods to manage IT hardware, which can result in lost or untracked assets, inaccurate reporting, lack of assignment history, and challenges with routine maintenance. This system addresses those issues by offering a centralized, web-based platform that streamlines asset management, reduces manual errors, and enhances overall IT operational control.

CURRENT SYSTEM

This system uses real-time updates, provides maintenance logs, and simplifies data analysis for asset management.

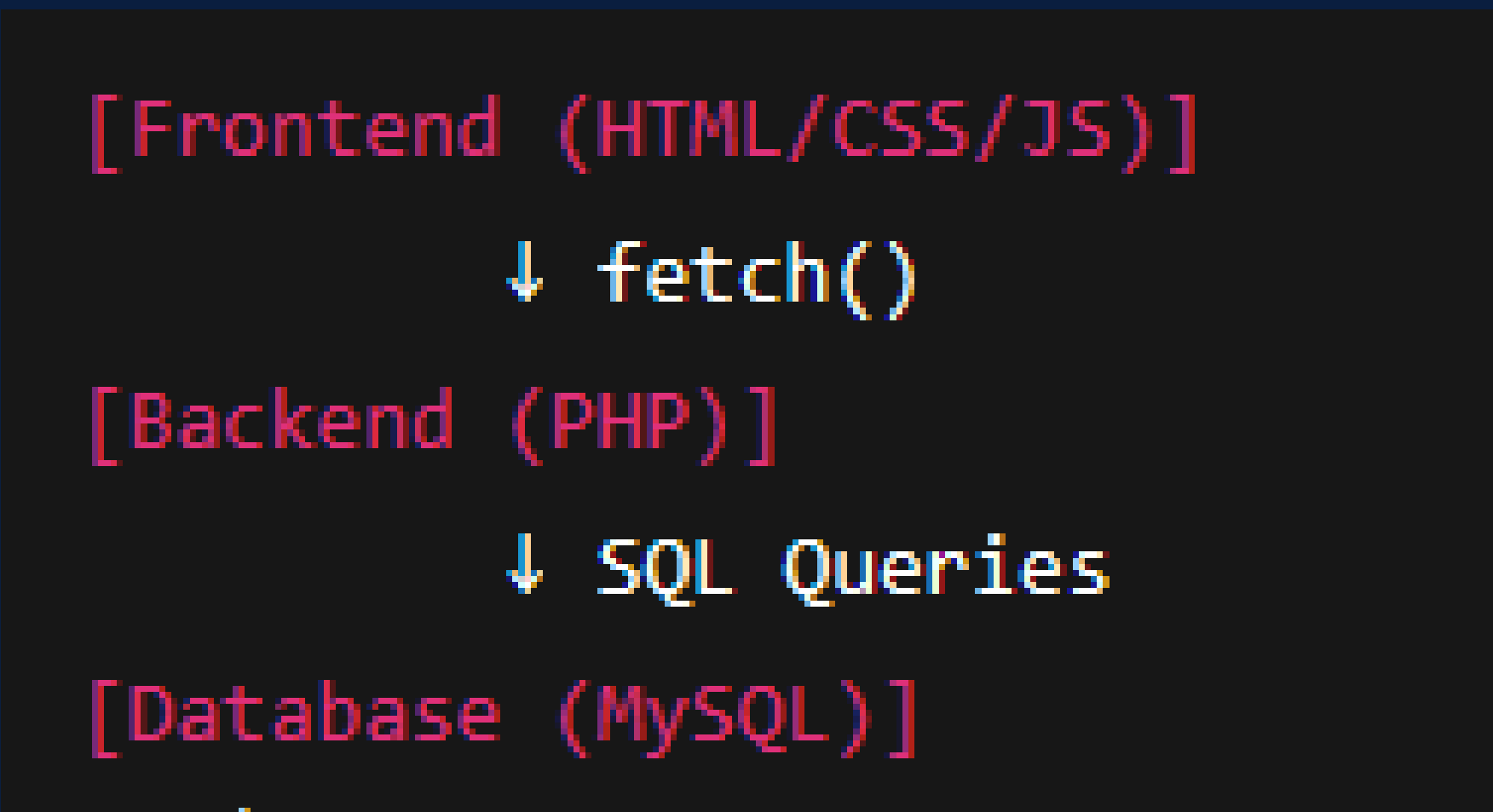


REQUIREMENTS

- XAMPP
- phpMyAdmin
- PHP/JavaScript
- MySQL
- HTML/CSS/JS



SYSTEM DESIGN



OBJECT DESIGN

- Inventory Object
 - fetchData function
- Asset Object
- Add Employee/Asset/Maintenance Forms

```
//fetch data from backend.php
async function fetchData(search = '', mode = 'inventory') {
  currentMode = mode;
  const response = await fetch(`backend.php?search=${encodeURIComponent(search)}&mode=${encodeURIComponent(mode)}`);
  const data = await response.json();
  currentData = data;
  renderTable(data, mode);
}
```

```
function toggleMaintenanceHistory() {
  const form = document.getElementById('maintenance-history-container');
  const isVisible = form.style.display === 'block';
  form.style.display = isVisible ? 'none' : 'block';
  if (!isVisible) {
    form.scrollIntoView({ behavior: 'smooth', block: 'start' });
  }
}
```

IMPLEMENTATION

- PHP handles dynamic data processing; MySQL stores inventory data
- SQL queries manage data retrieval, updates, and logging RMAs.
- JavaScript functions update inventory and maintenance lists in real time.
- Login system for secure access control.
- Responsive web interface that displays assets, employees, and last updated dates.

VERIFICATION

We conducted functional testing to ensure all features, including asset inventory display, adding assets, employees, and maintenance logs, work correctly. Manual test cases simulated real-use scenarios like adding assets, checking maintenance history, and viewing employee assignments. Data integrity checks confirmed the database accurately reflects stock changes and RMAs. User interface testing verified the system remains user-friendly and responsive across all devices.

SUMMARY

Our IT Asset Management System provides small businesses with a streamlined, real-time solution for tracking employee assets. By automating asset monitoring and integrating maintenance logs, businesses can minimize errors, prevent asset loss, and improve operational efficiency. The user-friendly interface and dynamic reporting tools empower users to make informed decisions, saving time and minimizing risk.

REFERENCES

- PHP Documentation. "PHP Manual & Downloads."Available: <https://www.php.net/download-docs.php> [Accessed: 14 - May 2025].
- gaut2172, "InventoryManagementSys," GitHub. [Online]. Available: <https://github.com/gaut2172/InventoryManagementSys>. [Accessed: 14 - May 2025].

ACKNOWLEDGEMENT

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