Views
Eyelounge Suite using
[HTTPS]

Optometrist
[Person]

A professional who
performs eye tests.

- Logs in (Express.js)
- Views eye tests (SPA)
- Views patient records (MongoDB)
- Generates reports (Node.js)
[]

Send e-mails to
[using SendGrid]

Web Application
[Container: Node.js]

Description: Serves as the user interface for
optometrists.

Includes:
Frontend Components: HTML, CSS (including
Bootstrap), JavaScript.

Features: Eye tests, patient management, reports,
educational resources, settings and calibration, and
account management.

Functionality: Hosts and delivers the web application.

Ensures a dynamic and responsive user experience.

Facilitates user authentication and secure access.

Delivers to the
user's web
browser
[Express.js]

Single-Page Application
[Container: Node.js]

Subset of Web Application

Includes: User authentication, patient
management, report generation, quick test
switching.

Functionality: Seamless, responsive, efficient
navigation.

E-mail System
[Software System]

Sends password to user

Send e-mail using
[SendGrid]

Makes API calls to
[JSON / HTTPS]

Database
[Container: MongoDB]

Test Results: Detailed results from various eye exams.

User Profiles: Information about users.

Patient Records: Personal information and test results.

Configuration Settings.

Reads from and
writes to
[Mongoose]

API Application
[Container: Express.js]

API Application (Express.js)

Includes: Test results, patient
data, authentication, reports.

Functionality: Handles API
requests and backend logic.

Eyelounge Suite
[Software System]

Eyelounge Studio is a comprehensive eye care platform designed for optometrists, targeting professionals who need efficient patient management, test administration, and access to patient records and test results. It integrates various eye tests, patient records, and report generation, secured via HTTPS for data privacy. Built with Node.js, HTML, CSS (Bootstrap), and JavaScript, the web application provides a responsive interface for conducting eye tests and managing records, featuring a Single-Page Application design for quick navigation and streamlined workflow with secure authentication. The backend, using Express.js, handles API requests for cohesive data flow, while MongoDB offers flexible, cost-effective data storage for test results and user profiles. Integrated with SendGrid, it simplifies email notifications. Features include interactive Visual Acuity Charts, Colour Vision tests, and Contrast Sensitivity tests, along with assessments for Astigmatism and Binocular Vision, allowing real-time patient response capture and automatic result recording. Eyelounge Studio enhances eye care efficiency with a user-friendly, secure, and comprehensive system, supporting robust patient management, educational resources, and precise calibration settings for accurate tests.