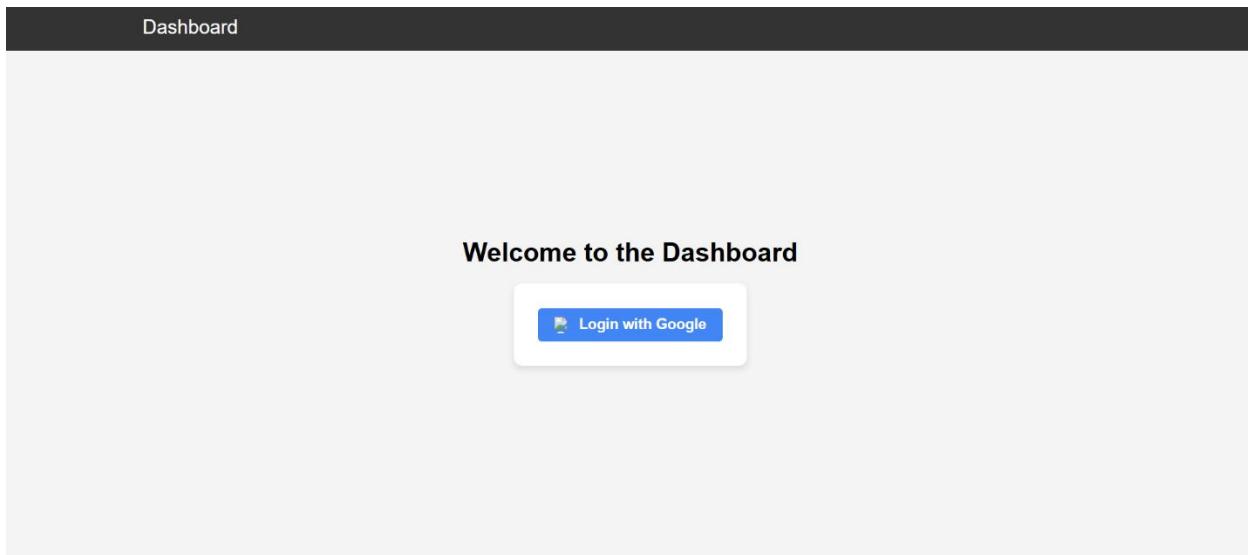
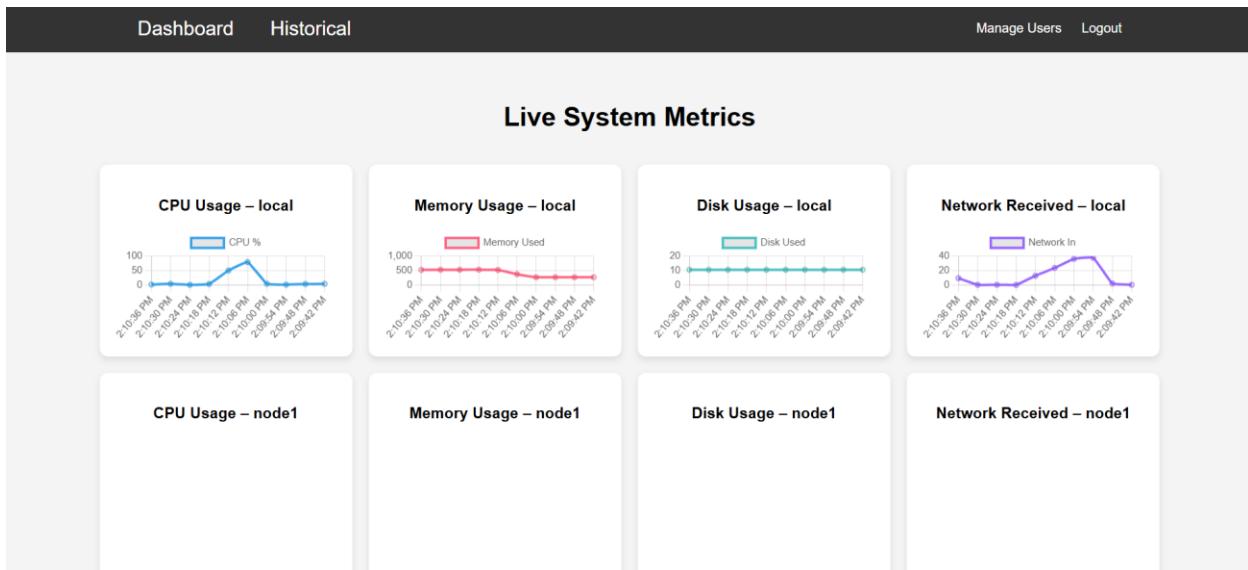


Figure 1 — Google OAuth Login Page



Initial authentication screen prompting users to sign in with Google OAuth before accessing the system dashboard.

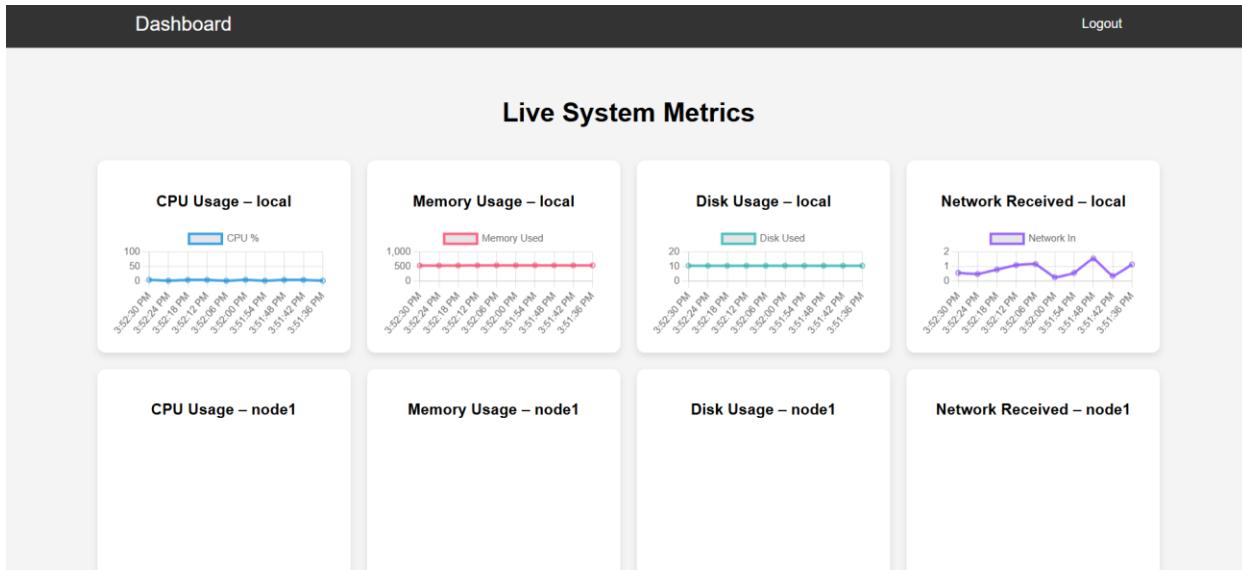
Figure 2 — Live System Metrics Dashboard (Admin View)



Real-time visualization of system metrics (CPU, memory, disk, and network usage) collected from the local machine and cluster nodes. This view is available to Admin users and updates continuously using data retrieved from Netdata APIs.

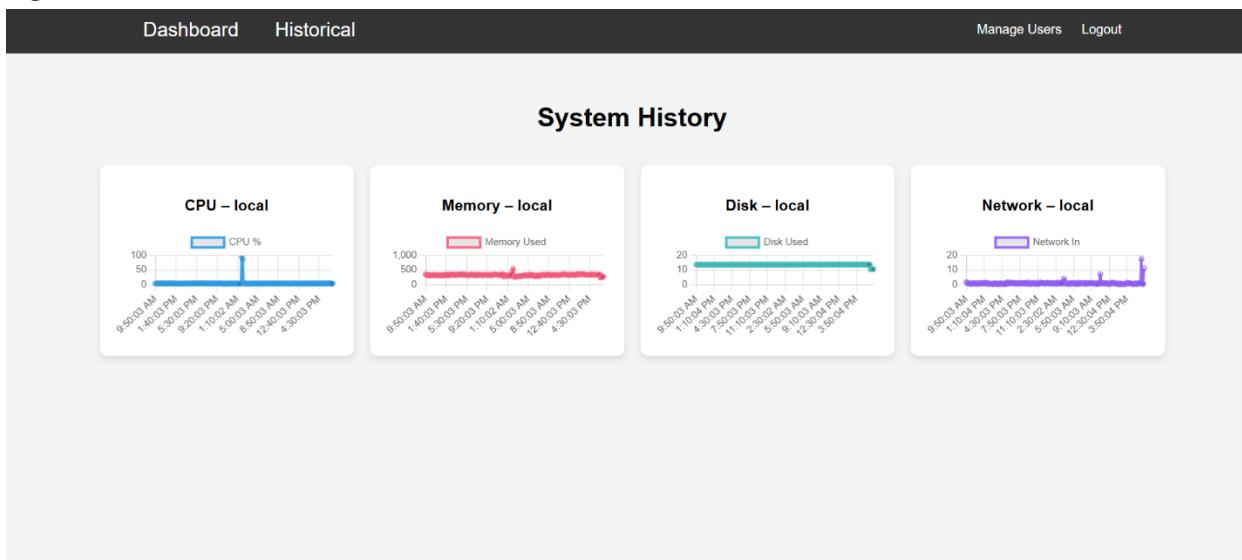
At the time this image was captured, the additional nodes were offline; however, the dashboard illustrates how the system detects and handles unavailable nodes.

Figure 3—Live System Metrics Dashboard (Guest View)



Real-time system metrics dashboard available to standard users. Historical data and administrative controls are restricted, demonstrating enforced role-based access control.

Figure 4 — Historical Metrics Dashboard



Historical system metrics aggregated and stored at fixed intervals, displayed as time-series graphs. This view allows Admin users to analyze long-term performance trends across CPU, memory, disk, and network usage.

Figure 5—User Management Interface (RBAC Administration)

The screenshot shows a user management interface titled "Manage Users". At the top, there is a search bar labeled "Enter user email" with dropdown options "User" and "Update User". Below the search bar is a list of four users:

- [REDACTED]@gmail.com - Admin
Delete
- [REDACTED]@gmail.com - User
Delete
- [REDACTED]@gmail.com - User
Delete
- [REDACTED]@gmail.com - Admin
Delete

At the top right of the interface, there are links for "Manage Users" and "Logout".

Administrative interface for managing user roles within the system. Admin users can promote, demote, or remove users, enforcing role-based access control (RBAC) policies.