**Code Inspection**

**Home.css + Sensor-data.html**

**Description of Landing Page:**

* The landing page is designed to deliver a structured, visually branded, and responsive interface for
* a sensor dashboard. It emphasizes a clean aesthetic through the use of consistent blue tones,
* card-based layout, and organized data visualizations. The layout integrates real-time sensor data.
* visualizations, key statistics, and interactivity via a modern navigation bar, charts, and widgets.
* Interactive behaviour is subtly integrated using hover effects, dropdowns, and custom buttons styled for user-friendliness.

**Layout Description:**

* **Fonts:**
  + General font across the page is Arial, sans-serif, for clean readability.
  + The small-clock-widget uses a monospace "Digital" font to replicate a digital clock appearance.
* **Colours:**
  + --primary-dark-blue: #1B355D
  + --secondary-blue: #005095
  + --deep-navy: #1A2C4E
  + --light-blue: #3B5998
  + --accent-blue: #0c3c84
  + --stat-card-bg: #ffffff (White)
  + --stat-card-border: #e0e0e0 (Light grey)
* These colours are used consistently for the header, navigation, stat cards, backgrounds, and widget UI to provide a coherent brand feel.
* **Text and Text Styling:**
  + .nav-link uses white text, font size 14px, and padded styling for navigation.
  + small-stat-card h4 uses font-size: 13px in primary-dark-blue for metric labels.
  + small-stat-card p uses font-size: 20px, bold, and secondary-blue for metric values.
  + section-title uses 15px bold headers for dashboard sections.
* **Spacing and Layout:**
* Layout relies heavily on Flexbox, e.g., stats-row, .widget-row, .header-content.
* The widget-row and stats-row use gap properties and responsive alignment.
* The top-controls and .stat cards have margin/padding for consistent breathing room.
* Container and Widget Styles:
* The small-stat-card uses a white background, border, padding, subtle shadow, and rounded corners.
* Widget sections like slider-section, bar-chart-container, pie-chart-container, and
* scatter-chart-container use light grey backgrounds (#f8f9fa) with rounded corners and shadows.
* Widgets are vertically sized to a height of 300px for uniformity.
* Widget-Specific Styles:
* The small-clock-widget has a gradient background from secondary to deep navy, text-shadow, border, and neon effect for a modern digital look.
* donut-slider uses a smooth horizontal scroll, hides scrollbars, and includes interactive nav buttons with scale-on-hover.
* The slider-nav buttons are circular, themed, and hover-enabled.

**Responsive Design:**

* The layout automatically adjusts using Bootstrap grid + Flexbox.
* Containers like widget-row and stats-row wrap for smaller screens.
* Min-widths and gap spacing maintain layout integrity across resolutions.

**Images, Logos, and Other Visual Elements:**

* **Images:**
* main-header uses a background image (../images/rakusens\_header.png) which covers the entire top area, centred and non-repeating.
* **Logos:**
* The main logo is centred in logo container using position: absolute with transform: translate(-50%, -50%).
* Styled using logo-svg with a height of 120px.

**Links:**

**Links to Other HTML/CSS/JS Pages:**

- Navigation bar <nav> uses .nav-link elements that would link to pages like:

- dashboard.html

- sensor-data.html

- reports.html

- account.html

- Includes script references:

- sensor-data.js - likely manages chart interactivity and updates

- logged-in.js - handles session or user login logic

**Bootstrap and FontAwesome Links:**

**Bootstrap CSS:**

* <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">
* FontAwesome (Icons):
* <script src="https://kit.fontawesome.com/e2ce4096f8.js" crossorigin="anonymous"></script>
* Bootstrap JS Bundle (for dropdown, navbar collapse):
* <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>

**Extra Details - Interactive Elements:**

**Dropdown Menus:**

* The account-dropdown toggles a user dropdown menu with dropdown-content. Controlled by
* show class for visibility.

**Login Button:**

* Styled with .login-btn - interactive, placed top-right, uses accent-blue with hover transition to light blue.

**Password Toggle Icon:**

* password-toggle allows for interactive show/hide password functionality using positioned icons.

**Clock Widget:**

* small-clock-widget displays live time in a glowing, digital format. Styled for standout visibility.

**Donut Slider + Navigation:**

* donut-slider scrolls horizontally with JS/UX controls (slider-nav) for left/right nav, and hidden scrollbars.

**Charts and Stats Cards:**

* Interactive charts like line, bar, pie, scatter, and area are mounted via ApexCharts with real-time data visualized.

**CSS Explanation and Application:**

**Base Styles:**

* Reset Applied:
* Universal \* selector removes margins/padding and applies box-sizing: border-box.

**Header and Navigation:**

**Main Header:**

* . main-header has a height of 150px, uses background image, centred with background-position: centre.

**Navigation Bar:**

* . main-nav has box-shadow for depth, .nav-link has hover and active styles using theme colours.
* Bootstrap-enhanced navbar classes for responsiveness.

**Widgets and Stat Cards:**

* Stat Cards (small-stat-card):
* White background, padding 7px, small heading and large bold number values for readability.
* Rounded and shadowed.
* Clock Widget (small-clock-widget): Digital-style font, gradient background, glowing text effect, rounded and bordered.

**Donut Slider:**

* Horizontally scrollable section with charts - smooth scroll, hidden scrollbars, nav arrows with hover animation.

**Responsive Adjustments:**

Flex-Wrap and Min-Width:

* stats-row and widget-row wrap at smaller screen sizes. Cards and charts adapt in size.
* Padding + Margins Adjust:
* Uniform spacing across screen widths. Uses Bootstrap's grid system in tandem with Flexbox gap utilities.

**Interactive Elements:**

**Dropdown Menus:**

* Activated via show, positioned absolutely. Styled with background, padding, and border-radius.

**Password Toggle:**

* Positioned top-right in input using password-toggle.

**Login & Nav Buttons:**

* Interactivity via hover transitions, cursor: pointer, and colour animations for feedback.