**Water Quality Monitoring System Documentation**

A blue screen with white text

Description automatically generated**Design Choices**

**Visual Design and Navigation**

* **Cohesive Color Scheme**: We implemented a professional and visually appealing color palette:
  + Primary Dark Blue (#1E2638) - Used for headers and primary containers
  + Secondary Blue (#2F3A4F) - Applied to navigation elements and secondary containers
  + Accent Pink (#F55FF3) - Highlights and interactive elements
  + White (#FFFFFF) - Text and contrast elements
* **Navigation System**:
  + Implemented a sidebar navigation pattern for intuitive access to different sections
  + Consistent styling across all pages with centered text alignment
  + Clear visual feedback for hover and selected states
  + Fixed width of 200px to maintain layout consistency

**Page Layout Structure**

* **Standardized Template**: Each page follows a consistent layout pattern:
  + Clear, centered title at the top
  + Main content area with data visualization
  + Interactive controls (dropdowns, buttons) positioned logically
  + Example: The POP (Persistent Organic Pollutants) page showcases this structure with:
    - Title: "Organic Pollutants Line Chart"
    - Location dropdown for data filtering
    - Large line chart visualization

A graph on a screen

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**Initial Challenges and Solutions**

**Development Environment**

* **Challenge**: Setting up a unified development environment for team collaboration
* **Solution**:
  + Established a shared codespace environment
  + Implemented version control protocols
  + Created standardized development guidelines

**Data Integration**

* **Challenge**: Modifying the starter code to accommodate our specific dataset
* **Solution**:
  + Developed a flexible data model
  + Created adaptable visualization components

**Early-Stage Evaluations**

**Performance**

* Initial testing shows smooth rendering of large datasets
* Navigation transitions are responsive

**User Interface**

* Clean and intuitive navigation system
* Consistent interaction patterns across pages

**Future Improvements**

* Implement additional data filtering options
* Add more interactive features to charts
* Importing data from csv to our pages
* Languages
* A screenshot of a computer

  Description automatically generatedAdd pop-ups for out charts