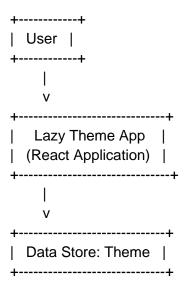
Data Flow Diagram (DFD) for Lazy Theme App:

A Data Flow Diagram (DFD) for a developer typically represents the flow of data within a system, illustrating how data moves between different processes, data stores, and external entities.

Level 0 (Context Diagram)

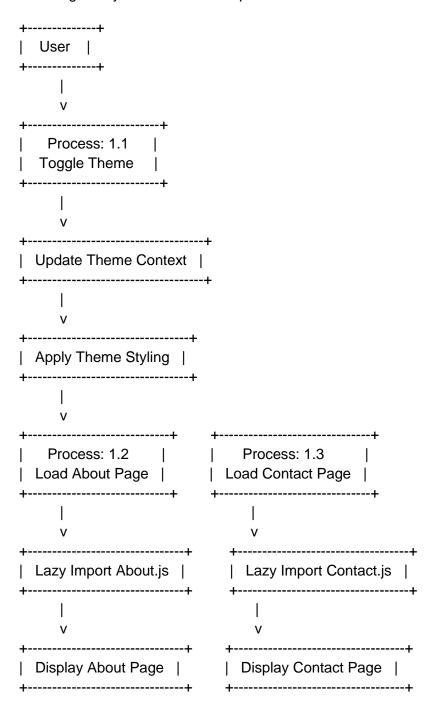
At the highest level, the user interacts with the **Lazy Theme App**, which manages themes and dynamically loads components.



- The User interacts with the Lazy Theme App by toggling themes and loading different pages.
- The Lazy Theme App processes user actions.
- The Theme Data Store stores and update's theme settings.

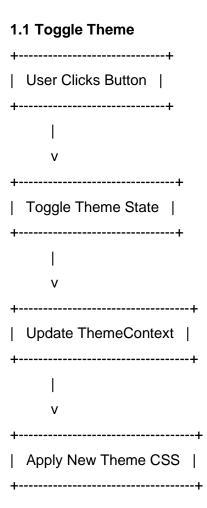
Level 1 DFD (Decomposition of Process)

Breaking the system into detailed processes:



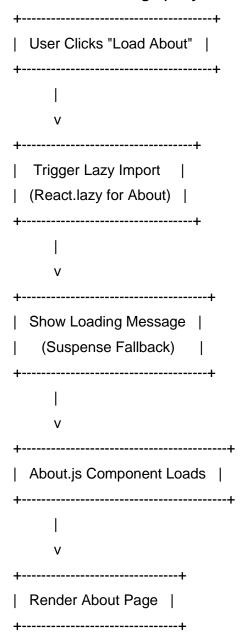
Level 2

Each process from Level 1 is broken down further.



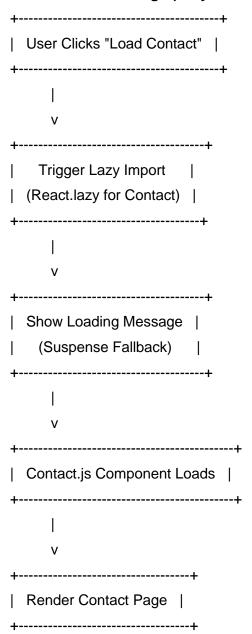
- When the user clicks the toggle button, the app switches between dark/light themes.
- ThemeContext updates the state.
- The CSS styling is applied accordingly.

1.2 Load About Page (Lazy Loading)



- The user clicks "Load About".
- React.lazy() dynamically imports the About.js file.
- While loading, Suspense shows a loading message.
- Once loaded, the About Page is displayed.

1.3 Load Contact Page (Lazy Loading)



- The user clicks "Load Contact".
- React.lazy() dynamically imports the Contact.js file.
- Suspense handles the loading state.
- Once loaded, the Contact Page is displayed.

Data Flow

Entities:

- 1. **User** Interacts with the UI.
- 2. Lazy Theme App Handles theme switching and lazy loading.
- 3. **ThemeContext** Stores and updates the theme state.

Processes:

- 1. **Toggle Theme** Updates the UI theme based on user selection.
- 2. Lazy Load About Page Dynamically imports and renders About.js.
- 3. Lazy Load Contact Page Dynamically imports and renders Contact.js.

Data Stores:

- 1. **Theme Data Store** Stores theme state (light or dark).
- 2. **React Lazy Components** Manages About.js and Contact.js.