**Level 0 (Context Diagram)**

At the highest level, the system consists of a single process that represents the entire application.

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| External Entity |

| (User) |

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| React Router SPA |

| (Process: 1.0) |

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| Data Store: Routes |

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**Explanation:**

* **External Entity (User):** The user interacts with the SPA by navigating between different pages.
* **Process (React Router SPA):** The system processes route changes and renders the appropriate component.
* **Data Store (Routes):** Stores information about different pages and their corresponding components.

**Level 1 DFD (Decomposition of Process 1.0 - React Router SPA)**

Now, let’s break down the **React Router System** process into more detailed steps.

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| External Entity |

| (User) |

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| Process: 1.1 - Navigate to Home |

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| Data Store: Routes |

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| Process: 1.2 - Navigate to About |

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| Data Store: Routes |

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| Process: 1.3 - Navigate to Contact |

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| Data Store: Routes |

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| Process: 1.4 - Navigate to Dynamic Post |

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| Data Store: Routes |

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| Process: 1.5 - Handle 404 Not Found |

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| Data Store: Routes |

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**Explanation:**

1. **Process 1.1 (Navigate to Home):** The user clicks the "Home" link, and the Home component is rendered.
2. **Process 1.2 (Navigate to About):** The user clicks the "About" link, and the About component is rendered.
3. **Process 1.3 (Navigate to Contact):** The user clicks the "Contact" link, and the Contact component is rendered.
4. **Process 1.4 (Navigate to Dynamic Post):** The user clicks on a specific post, and the Post component dynamically renders content based on the post ID.
5. **Process 1.5 (Handle 404 Not Found):** If the user enters an invalid URL, the NotFound component is displayed.

**Data Flow:**

* The user interacts with the application by clicking navigation links.
* The system processes route changes using React Router and renders the appropriate component.
* The updated content is displayed to the user without a full page reload (SPA behavior).

**Additional Notes:**

* This DFD represents a client-side routing system with dynamic content loading.
* If the application interacts with a backend (e.g., fetching post details from an API), additional data stores (APIs, databases, etc.) could be introduced.
* Further enhancements can include authentication handling, lazy loading, or nested routes for modular development.