# Theme & Lazy Loading React Project

### ****Level 0 - Context Diagram****

* **External Entity:** User
* **Process:** Theme & Component Loader
* **Data Store:** Theme State (Light/Dark)

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| External Entity |

| User |

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| Theme & Component |

| Loader |

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| Data Store: Theme |

| Light/Dark |

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+----------------------+

| Data Store: Component |

| Visibility State |

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### ****Level 1 - Detailed Breakdown****

#### **1. Theme Context Management**

* User toggles theme → System updates ThemeContext

#### **2. Lazy Loading Components**

* User visits a section → React.lazy() loads the component dynamically

#### **3. Suspense Handling**

* While loading, a fallback message (Loading...) is displayed

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| External Entity | | External Entity |

| User | | (Lazy Loaded API) |

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| Toggle | | Load |

| Theme Context | | Lazy Components |

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| Data Store: Theme | | Data Store: Component|

| Light/Dark | | Cache (React.lazy) |

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| Apply |

| Theme to Elements |

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| Render |

| Components w/ Suspense |

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| Toggle |

| About/Contact View |

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| Data Store: Component |

| Visibility State |

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**Toggle Theme Context**

* The **user clicks the toggle button** → Theme changes (light ↔ dark).
* **Theme state updates** in the **context provider**.

**Apply Theme to Elements**

* The updated **theme is applied** to the UI

**Render Components with Suspense**

* Suspense **waits** for the components (About, Contact) to load.

**Load Lazy Components**

* When the user **navigates to About or Contact**,
* React.lazy() **loads** the component dynamically

**Toggle About/Contact View**

* The user **clicks Show/Hide About/Contact** → Updates component visibility state.