AeroAspire-SDE Intern Training

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- **Learning Topics:**
  - Frontend connection
  - Error handling for DB
  - Edge cases
- **Task:**
  - Connect React app to DB-backed API
  - Handle blank data, no tasks, DB connection errors
- **Questions:**

1. What happens if the database is down?

- When the database is offline, the app can't fetch or save any data, so everything depending on it just fails.
- Any SQL queries you try to run will break, often causing a runtime error.
- The server usually returns a **500 error**, which basically means something went wrong on the backend.
- I noticed that sometimes the app just crashes when it tries to get data that isn't there, instead of showing anything meaningful to the user.

2. **How to handle empty result sets gracefully on frontend?**

- You can check if the data returned from Flask is empty or null before trying to render it.
- If there's nothing there, show a simple message like "No tasks yet" so the user isn't left staring at a blank screen.
- It also helps to give a quick link or button to add a new task if the list is empty.

3. Describe full flow: user requests data → API queries DB → responseto frontend → frontend renders or shows "no items" message.

- When a user clicks a button in React, it sends a request to the Flask backend.
- Flask looks up the database and gets whatever data is available.
- The backend sends this data back to React.
- React then shows the data on the screen.
- If the database has no records, React just displays a message like "No items available" instead of leaving it blank.