**Sequence Diagram:**

**Profile Page Update:**

A screenshot of a computer flowchart

AI-generated content may be incorrect.

**Functional Requirements (FRs)**

**Profile Update Process**

**FR1:** The system shall allow users to click the "Update Profile" button to initiate the update process.

**FR2:** The backend API shall validate the provided data before updating the profile.

**FR3:** The backend API shall return a **success response** if the update is successful.

**FR4:** The backend API shall return an **error response** if validation fails or an issue occurs.

**FR5:** The frontend shall display a **success message** upon a successful profile update.

**Non-Functional Requirements (NFRs)**

**Performance & Reliability**

* **NFR1:** The profile update request should be processed within 2 seconds for a smooth user experience.
* **NFR2:** The system should handle 100+ concurrent profile update requests without performance degradation.

**Usability**

* **NFR3:** The user interface shall provide clear error messages in case of validation failures.
* **NFR4:** The profile update page shall be responsive and work on both desktop and mobile devices.

**Availability**

* **NFR5:** The system shall have **99.9% uptime**, ensuring that profile updates are always accessible.