HLD Output 6 | Phi 4 Mini Reasoning

MS Teams Form

High-Level Design (HLD) Document

1. Executive Summary

The application is designed to guide users through a multi-step process of requesting and creating new Teams groups within Microsoft Power Apps. It leverages dynamic content, conditional navigation, and data integration with SharePoint to provide a seamless user experience across four steps:

- **Step 1:** General team setup.

- **Step 2:** Member selection via Office365Users dataset.

- **Step 3:** Channel configuration and welcome message input.

- **Step 4:** Final submission of all collected details.

Key Features:

- Step-based progression with visual feedback using timeline images/icons.

- Form inputs validated in real-time (e.g., character limits for names).

- Claims-based navigation ensures secure transitions between steps.

- Integration with SharePoint lists and Office365Users dataset for data management.

2. Application Architecture Overview

Modules & Screens:

- **Teams Component:** Manages team-specific interactions, disabled by default to enforce controlled workflows.

- **Timeline Collection:** Dynamically populated at startup using `ClearCollect` to drive UI progression across steps.

- **Form Containers (Steps 1–4):** Hierarchical layout groups organize inputs and navigation controls for each step.

Component Interactions:

- **Navigation Buttons:** Use `Switch` statements tied to the active screen name to transition between steps.

- **Combo Box:** Binds to Office365Users data source, enabling team member selection in Step 2–4.

- **Image Components:** Display progression via timeline images selected by current step and screen state.

3. Data Model

Entities & Collections:

- **Teams Groups:** Represented as SharePoint list items (e.g., _submission).

- **Timeline Steps:** Stored in a collection (`Timeline`) with predefined steps/images.

- **Office365Users Dataset:** Provides team member profiles for selection in Step 2–4.

Relationships:

- Users progress through timeline steps, accumulating inputs into the `_submission` collection.

- Claims (e.g., `User().Email`, `User().FullName`) are used to personalize navigation and data submission.

4. Navigation and User Flow

1. **Step 1:** Introduces general setup; users input team details.

2. **Step 2–3:** Users select members, configure channels, and provide welcome messages.

3. **Step 4:** Final review of inputs before submission or cancellation.

4. **Thank You Screen:** Confirms successful request creation (via `Navigate('Thank you Screen')`) or exits the app.

User Journeys:

- Sequential progression through steps with conditional visibility based on input completion and screen state.

- Resetting form data when navigating back to prior steps ensures no loss of progress.

5. Custom Logic and Key Interactions

- **Switch Statements:** Dynamically select timeline images/icons (e.g., `"Step 1 active"` vs. `"Thank you Screen"`) based on `App.ActiveScreen.Name` and step number.
- **Len() Functions:** Validate text inputs by calculating remaining character counts.
- **Patch Function:** Submits form data to SharePoint lists upon confirmation.

6. Integration Points

- **SharePoint:** Data submission via the Patch function; timeline steps stored in a list (`_submission`).
- **Office365Users Dataset:** Multi-select team member lookup and display.
- **Claims-Based Authentication:** Ensures secure navigation between screens during request creation.

7. Special Features/Business Rules

- **Step Progression Visualization:** Timeline images change based on user progress to enhance clarity.
- **Responsive Layouts:** UI adapts dynamically using parent container dimensions (e.g., conditional positioning of elements).
- **Claims-Based Navigation:** Guarantees secure transitions and data submission in compliance with Teams authoring model.

8. Component Summary Table

Component Name	Responsibilities
Teams Component	Manages team-specific interactions, disabled by default to enforce workflow control.
Timeline Collection	Initializes step-based content on startup; drives UI progression through steps.
Form Containers (Steps 1–4)	Organizes form elements and inputs for each request step.

Navigation Buttons	Control movement between steps using Switch logic in OnSelect events.
Combo Box (Team Members)	Allows selection of team members from Office365Users dataset.
Profile Image Component	Displays user avatar with customizable settings.
Header Labels	Provides contextual information like title and sub-header.

Conclusion: This HLD integrates the functionality described in each file, providing a structured overview for developers to build upon while ensuring consistency across navigation, data handling, and UI design within Microsoft Power Apps.