



Microsoft Teams Application
Development Accelerator

Week 6: Class Message Extensions

October 29, 2025



Agenda

- **Overview of Message Extensions**
- **Link Unfurling**
- **Action Commands**
- **Search Commands**

Message Extensions & Unfurling in Microsoft Teams

Mostly present in conversations

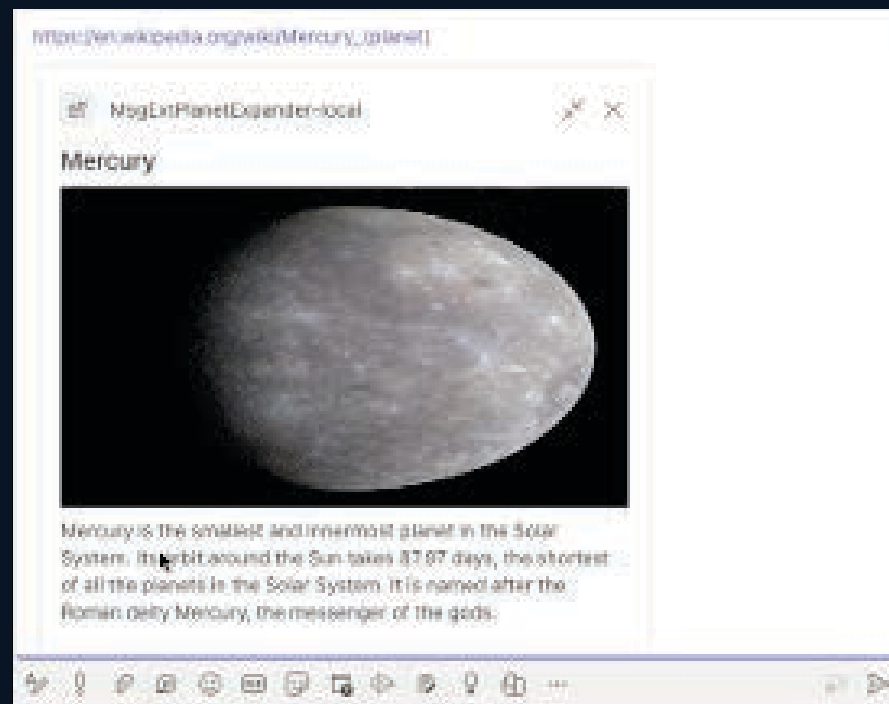
Draft & create new messages with assistance of your web services

Search & augment messages based on existing messages

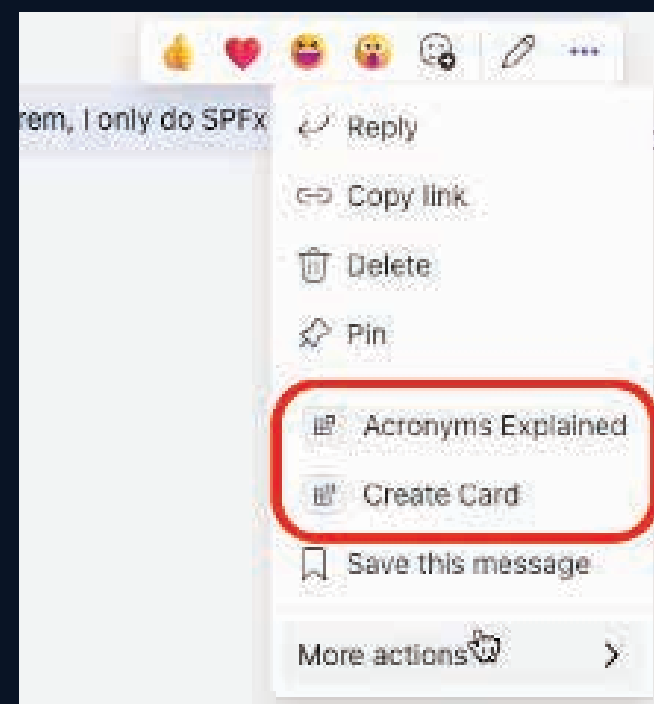
Three Ways to Augment Messages



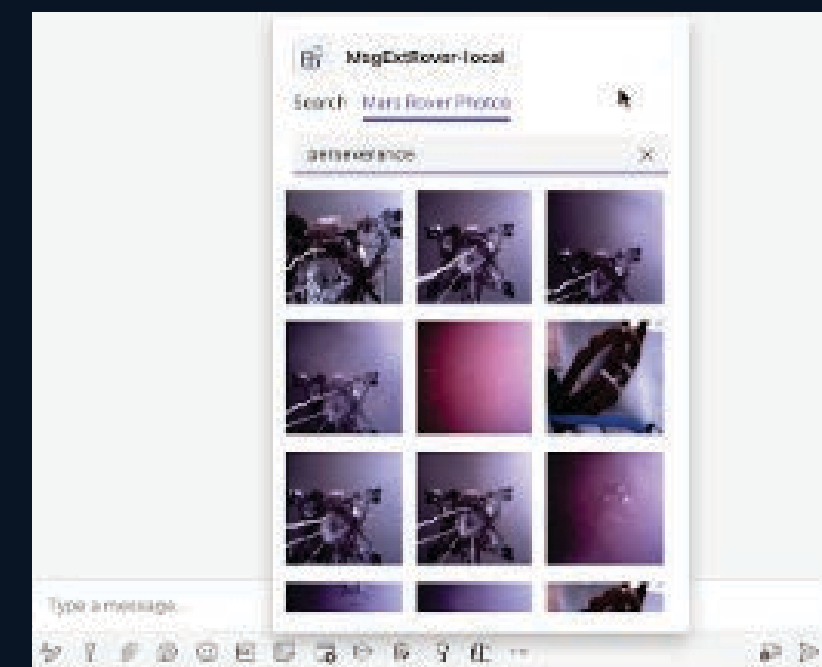
Link Unfurling



Action Command



Search Command

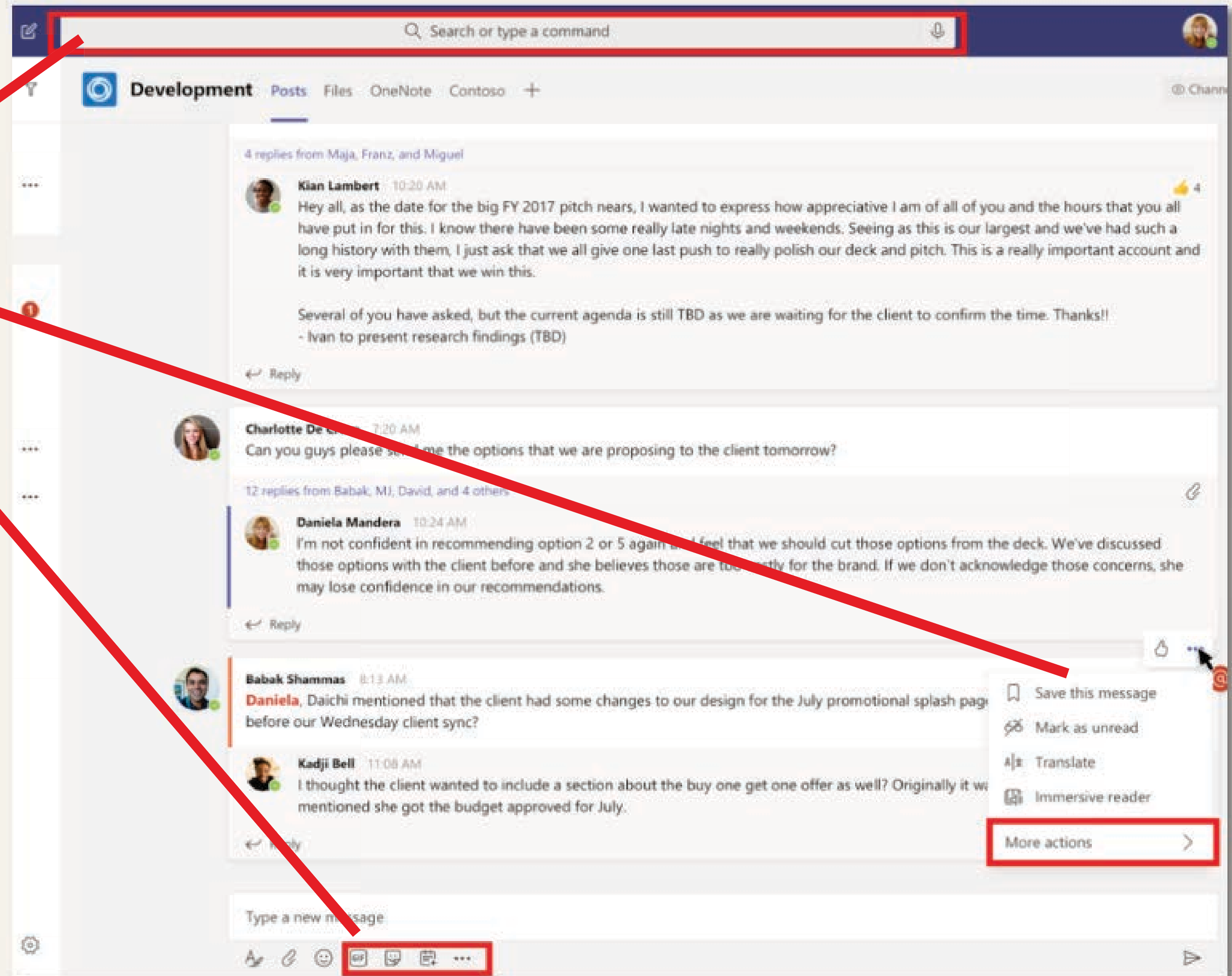


Command Bar

Message

Compose

Three Places to Leverage Message Extensions





Link Unfurling



Link Unfurling

- **Monitor links pasted in compose message box**
- **Automatically augment message with Adaptive Card**
- **Show a preview-like feature**
- **Cached for 30m by default**
- **Supports install & zero-install**

Link Unfurling Card Options



Adaptive Card

Publish Adaptive Card schema



Matt Hiding

Created Mon, Feb 13, 2017

Now that we have defined the main rules and features of the format, we need to produce a schema and publish it to GitHub. The schema will be the starting point of our reference documentation.

Board: Adaptive Card

List: Backlog

Assigned to: Matt Hiding

Due date: Not set

Set due date ▾

Comment ▾



Thumbnail Card

TaskBot 5/9 10:34 AM



Task created: reminder to finish sales projections
Assigned to: Claude Grady
Sent incident voluptates facilis

[View task](#) [Assign to me](#)



Hero Card

App Studio 4/11 PM

Seattle Center Monorail
Seattle Center Monorail



The Seattle Center Monorail is an elevated train line between Seattle Center (near the Space Needle) and downtown Seattle. It was built for the 1962 World's Fair; its original two trains, completed in 1961, are still in service.

[Official website](#) [Wikipedia page](#)

Install & Zero-Install Usage Options

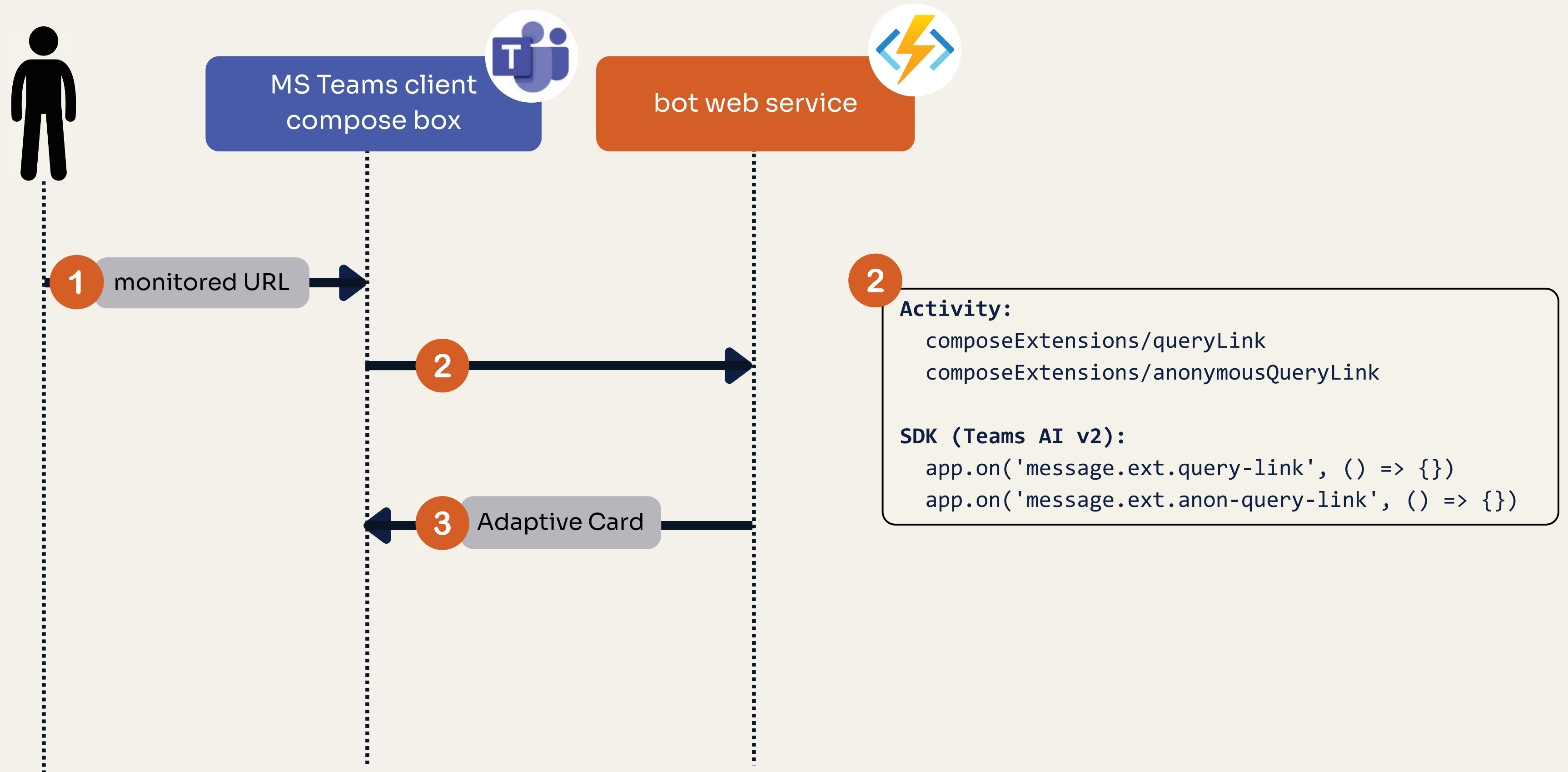
- **Install**

- Typical experience with Microsoft Teams
- Defined in app manifest

- **Zero-install:** `supportsAnonymizedPayloads=true`

- If app is deployed to org, but not installed, will be available
- Links are unfurled automatically with an invoke request
- Good way to show users a preview of your app
- **Limitation:** Can only respond with a list, not grid

How Link Unfurling Works



Message Extensions



Message Extensions

- **Enable users to interact with web services through buttons & forms**
- **Search/initiate actions in Microsoft Teams**
- **Gather information**
 - Send text from message  bot
 - Prompt users with dialog (task module)
- **Respond & act**
 - Send results back as text, rich card(s)
 - Results presented as options to choose from
 - Displayed as dialog, add to message compose box, or added directly to convo
- **Powered by bots that handle specific types of messages**

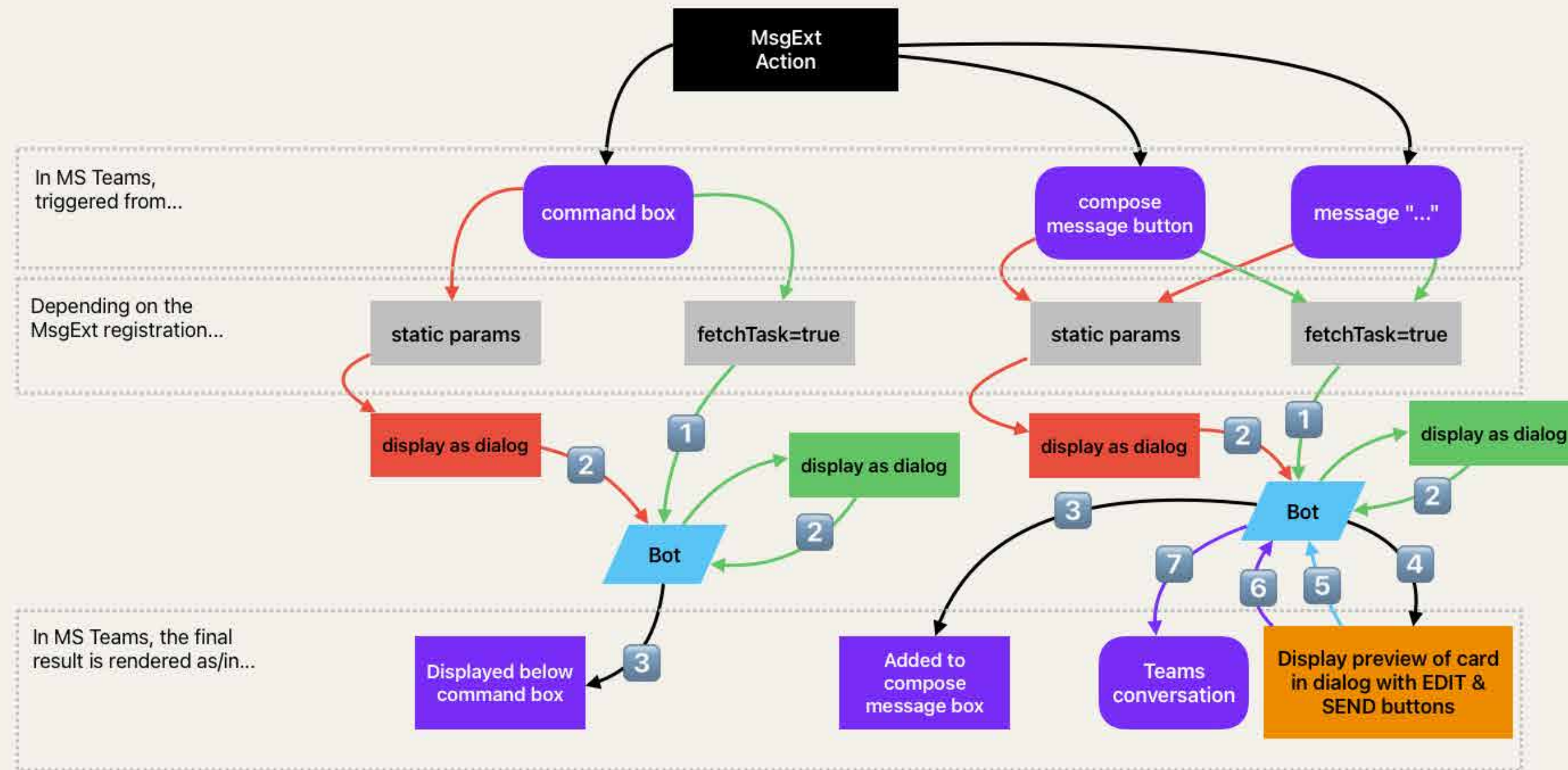
Action Commands



Action Commands

- **Present user with modal dialog**
- **Supported in all three Teams surface areas**
 - Command box: triggered by @mention
 - Compose message box: triggered by selecting button below input box
 - Message: triggered from [...] on message
- **Decide how to populate dialog**
 - Static list of parameters
 - Embedded web view
 - Adaptive Card

How Action Commands Work



- 1 `Activity = composeExtension/fetchTask`
`TeamsActivityHandler.handleTeamsMessagingExtensionFetchTask()`
- 2 `Activity = composeExtension/submitAction`
`TeamsActivityHandler.handleTeamsMessagingExtensionSubmitAction()`
- 3 `composeExtension.type = result`

- 4 `composeExtension.type = botMessagePreview`
Bot also repeats this when on 4 path

- 5 `Activity`
`type = composeExtension/submitAction`
`value.botMessagePreviewAction = edit`
`TeamsActivityHandler`
`.handleTeamsMessagingExtensionBotMessagePreviewEdit()`

- 6 `Activity`
`type = composeExtension/submitAction`
`value.botMessagePreviewAction = send`
`TeamsActivityHandler`
`.handleTeamsMessagingExtensionBotMessagePreviewSend()`

- 7 **Bot posts card directly to conversation on 6 path**

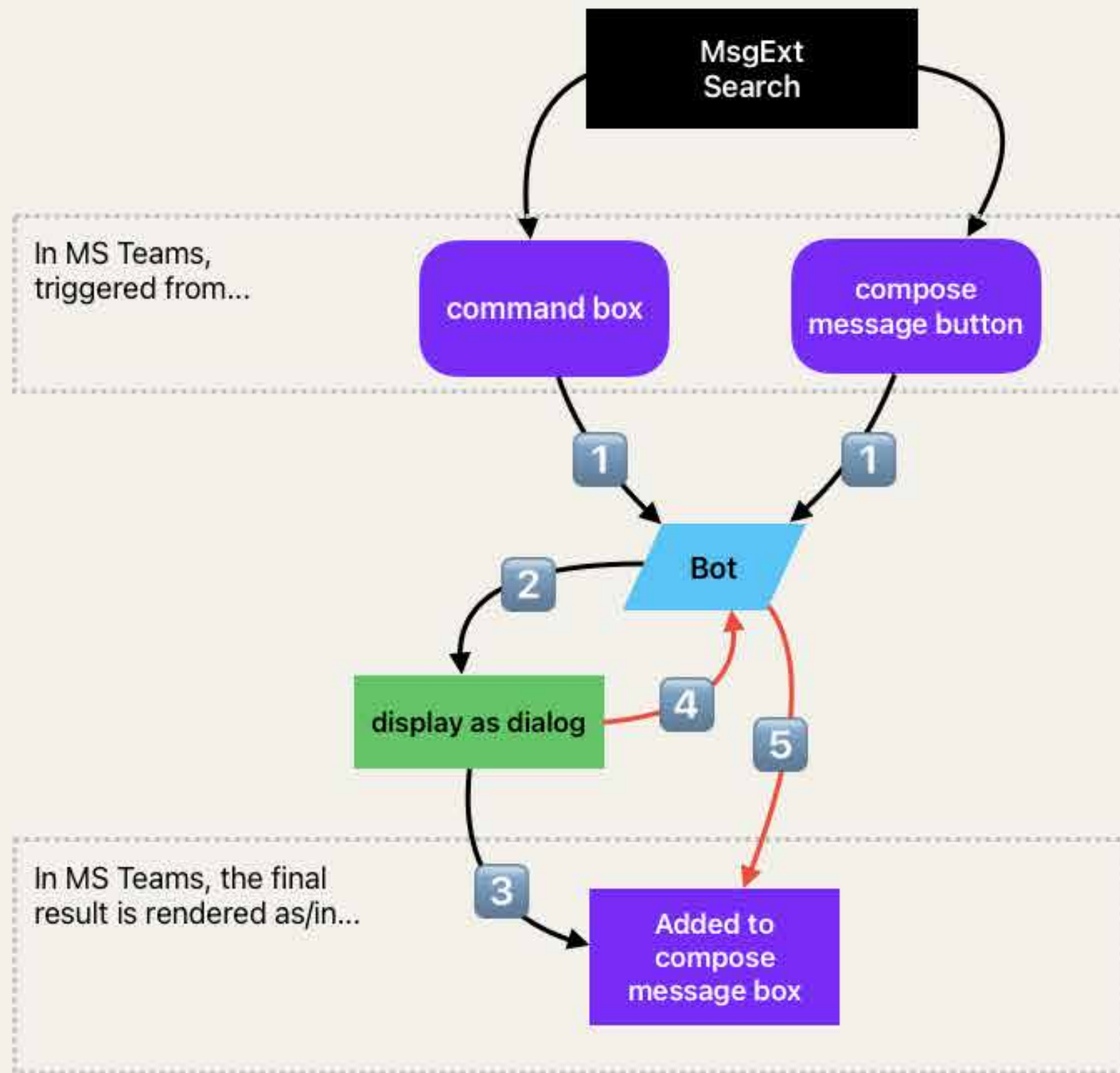
Search Commands



Search Commands

- **Allow user to search external system**
- **Supported in:**
 - Command box
 - Compose message box
- **`initialRun`: Teams submits search before user enters keyword**
- **Response includes collection of cards**
 - Preview shown in a `list` / `grid`
 - When selected, full card added to message

How Search Commands Work



- 1 Activity = composeExtension/query
TeamsActivityHandler.handleTeamsMessagingExtensionQuery()
- 2 composeExtension.type = result
- 3 Add card to compose box
- 4 Activity = composeExtension/selectItem
TeamsActivityHandler.handleTeamsMessagingExtensionSelectItem()
- 5 composeExtension.type = result

Week 6 Homework



Week 6

Assignments

- **Create link unfurling extension**
- **Create action command**
 - with static parameters
 - with forms (dialog/task module)
- **Create search command**