Maintaining Conversation State with Dialogs

Matt Kruczek

DIRECTOR OF MOBILE & WEB FOR TALLAN

@MCKRUZ www.tallan.com

Agenda

What are Dialogs and why should I use them?

IDialog Interface

Saving State

What are Dialogs?

Conversational abstractions that encapsulate their own state

Breaks up conversations into smaller pieces

Portable and adhere to SRP

What are Dialogs?

Creating a Dialog Chain

Introduction
Dialog

Context
Dialog

Farewell
Dialog
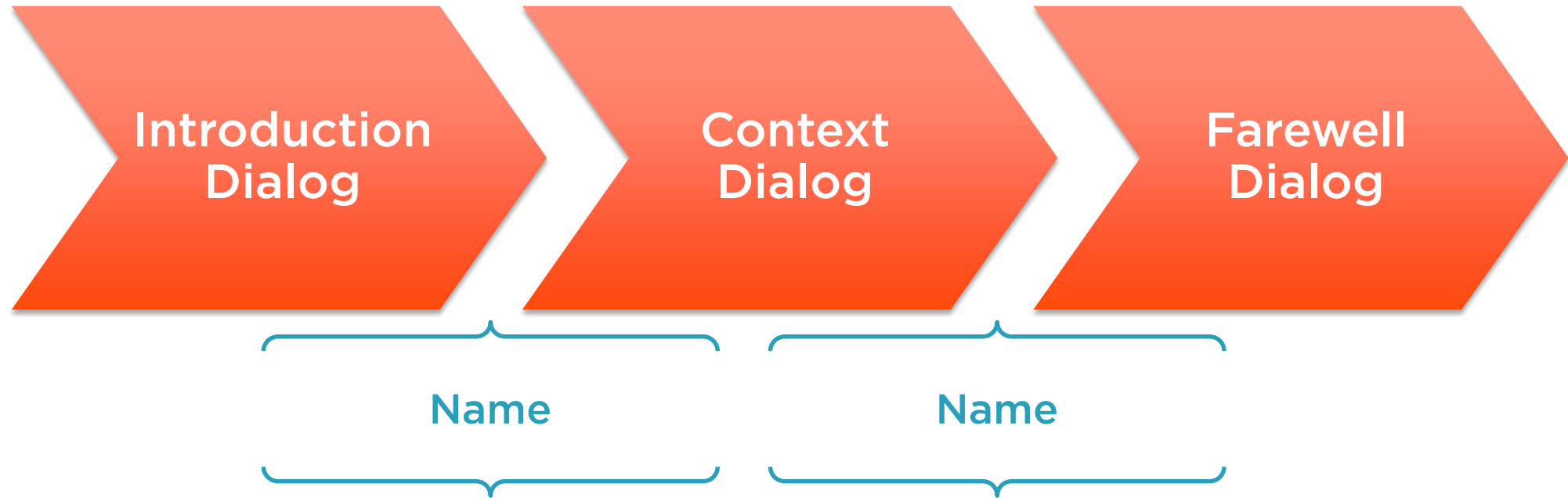
Name

Name

```csharp
Using Microsoft.Bot.Builder.Dialogs;

[Serializable]

public class MyDialog : IDialog<object>

{

    public async Task StartAsync(IDialogContext context)

    {}

}
```

The IDialog Interface

Lives in the Microsoft.Bot.Builder.Dialogs namespace

Must use the Serializeable Attribute

Has one method StartAsync

Utilizes Async and Await

User Created SQL Database

Uniquely Identifiable Properties
- From
- To
- Conversation

Bot State Service

- GetUserData

- GetConversationData

- GetPrivateConversationData

- SetUserData

- SetConversationData

- SetPrivateConversationData

- DeleteStateForUser

Setting and Getting Typed Data

```
StateClient stateClient = activity.GetStateClient();

BotData userData = await
stateClient.BotState.GetUserDataAsync(activity.ChannelId, activity.From.Id);

userData.SetProperty<bool>("isDone", true);

await stateClient.BotState.SetUserDataAsync(activity.ChannelId,
activity.From.Id, userData);
```

Setting and Getting Complex Data

```csharp
// Get Complex Data

StateClient stateClient = activity.GetStateClient();

BotState botState = new BotState(stateClient);

BotData botData = new BotData(eTag: "*");

botData.SetProperty<BotState>("UserData", myUserData);

BotData response = await stateClient.BotState.SetUserDataAsync(activity.ChannelId, activity.From.Id,
botData);

// Set Complex Data

MyUserData addedUserData = new MyUserData();

BotData botData = await botState.GetUserDataAsync(activity.ChannelId, activity.From.Id);

myUserData = botData.GetProperty<MyUserData>("UserData");
```

Summary

What are Dialogs and why should I use them?

IDialog Interface

Saving State