

ORACLE

# What to know about components

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# About components in Oracle Digital Assistant

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Render the user interface

- Prompts and messages

Perform operations

- Authentication, set variables, invoke and end flows, branch navigation, integrate human agent support, invoke REST services, notify users and more

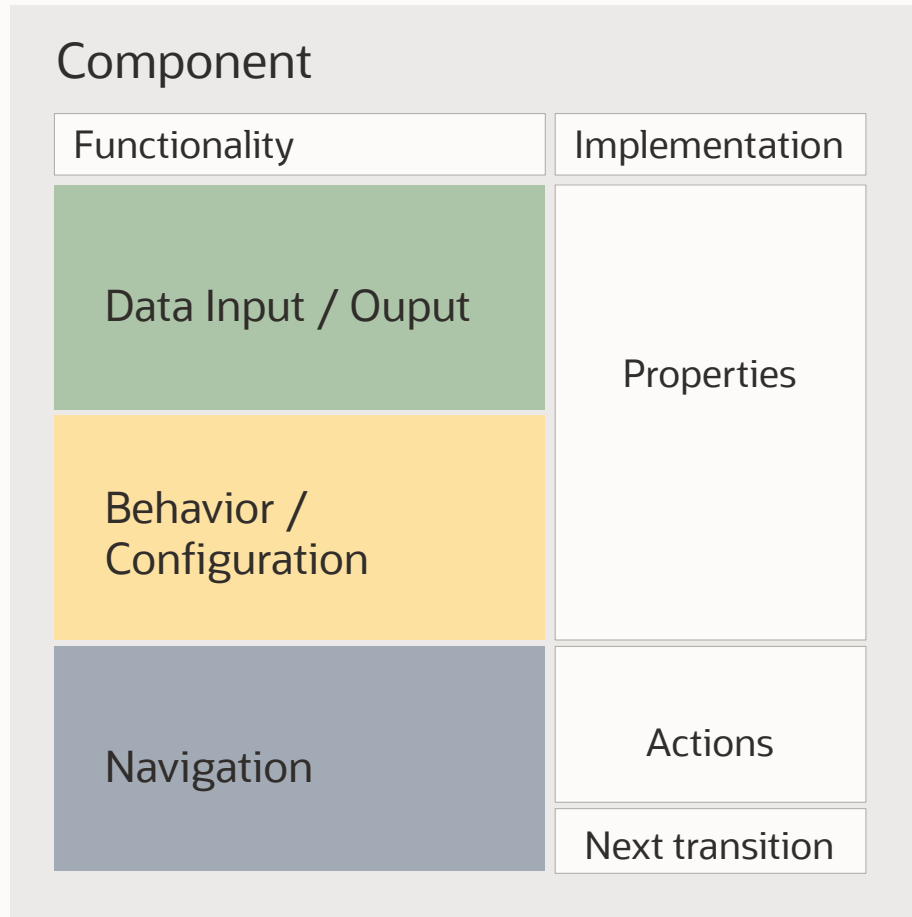
Enable declarative development

- No coding required to display user prompts and messages
- Update variables and perform logical operations

Are added using state templates

- A component may be used in different templates

# Use of components in a dialog flow state



Each dialog state in a dialog flow references a component

Configurable through properties

- Properties are exposed on property panel in visual flow designer
- Properties can be set using a fixed value or an expression to point to variables
- Value input / output through variable references

Components trigger navigation

- A simple "move on" navigation handled by the "next" transition
- Outcome dependent transitions using actions
- Transition target must be mapped on dialog flow state

# Two types of components

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## Built-in components

- Components developed by Oracle
- Rich set of user interface and functional components

## Custom components

- Custom made components using JavaScript
- Created once and then reused elsewhere
- Use for backend integration<sup>1)</sup> and to implement custom logic

From the skill developer's point of view, there is no difference between using built-in or custom components

- Expose properties for input and output values
- May expose action transitions to conditionally determine the next navigation target

<sup>1)</sup> There is a REST component you can also use for backend integration



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Oracle Digital Assistant does its best not to expose you too much to components

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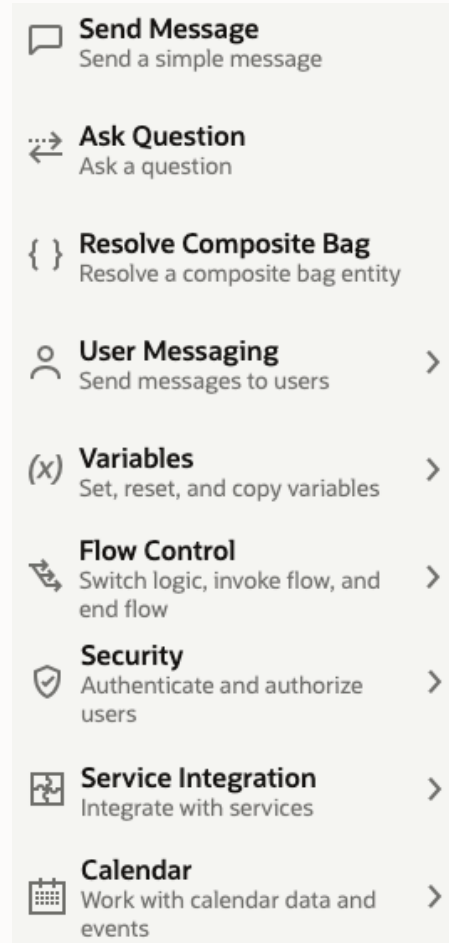
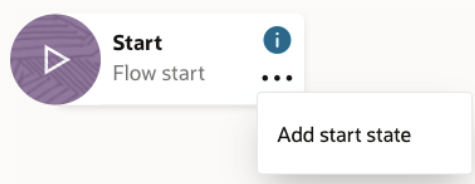
Dialog flow state templates allow focus on what to do rather than how to do it

Increased productivity through abstraction

Just expose component properties you must be aware of

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# Dialog flow state templates



Developers select a template for the function they want in a dialog flow state

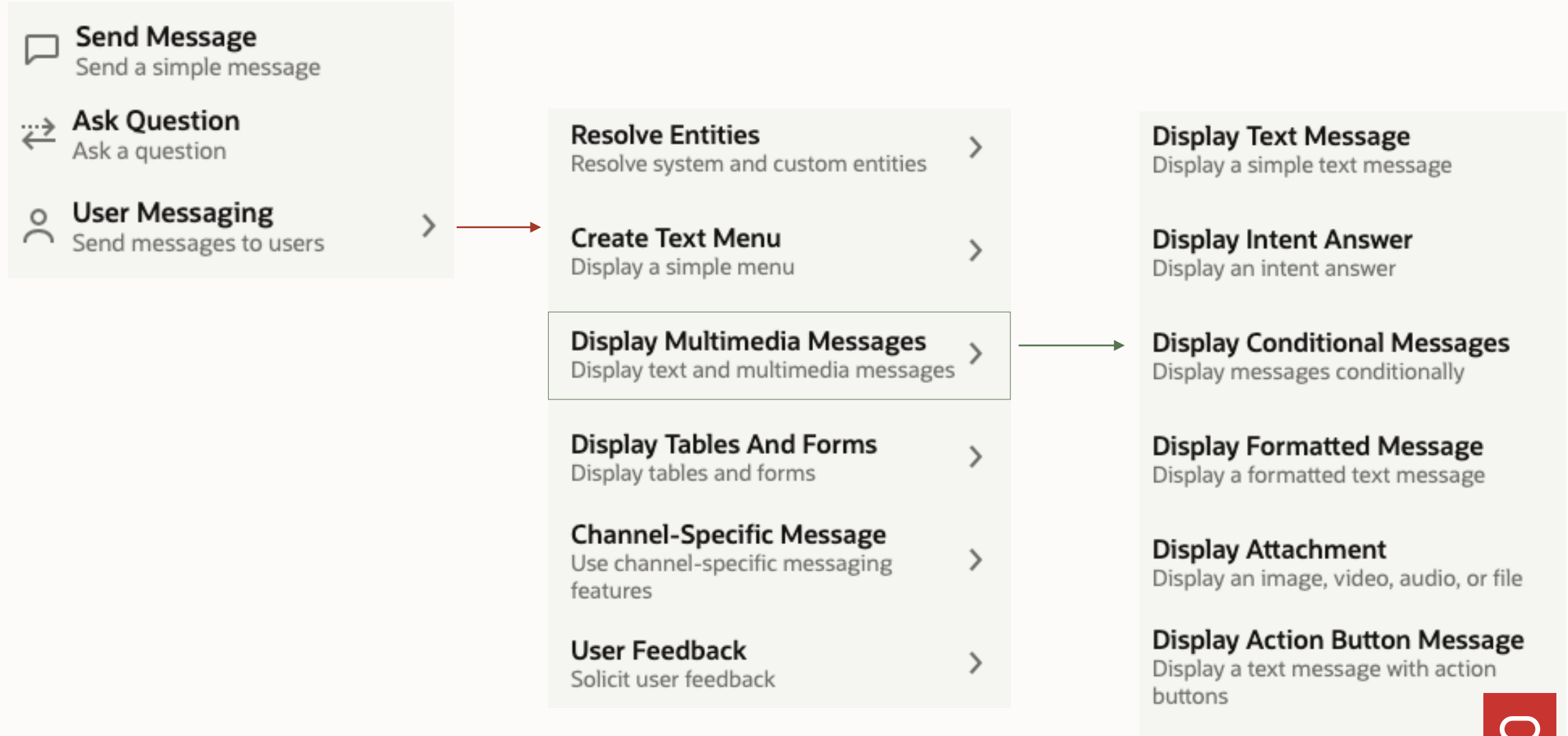
- E.g., prompt users for input, print message, set variables, display OAuth2 login

Each template is associated with a component that it pre-configures for the use case it covers

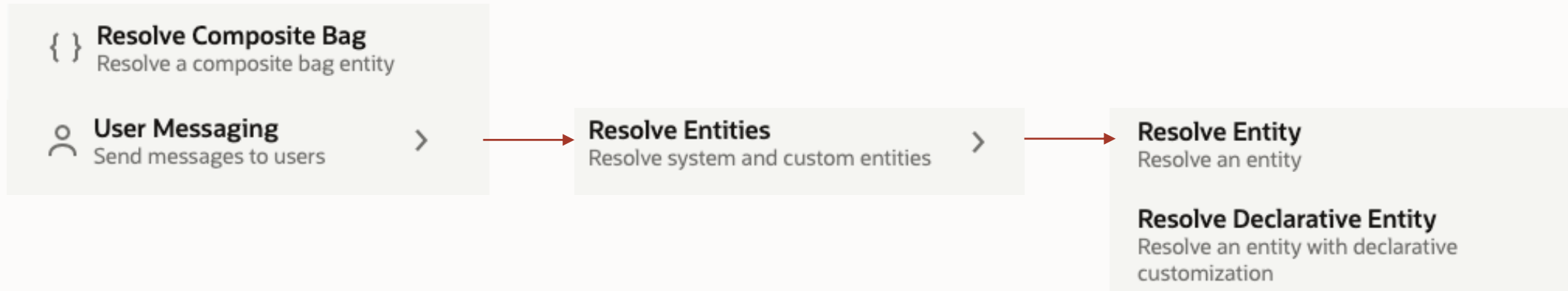
Once dialog flow state is added to a flow, properties can be edited declaratively using the properties panel

- Components that interact with variables need to be mapped to the variables

# User interface templates for displaying prompts and messages



# Composite bag entity generated user interfaces



Composite bag entities can prompt users for a set of information that represents a business object such as an order, customer, or product

- Users can provide information in any order they like
- Information provided when prompted for something else will not be re-prompted for

Composite bag entities can be resolved as is or resolved with declarative customization



# Component properties in property panel

Different component templates expose different numbers of properties

Send message

User Messaging | Previous Display Multimedia Messages |  
Display Text Message

The screenshot shows the 'askForDestination' component property panel. The component icon is labeled 'askForDestinat...' and 'Ask Question'. The 'Component' tab is active, showing the following properties:

- Question**: A text input field containing '1 Where do you want to go?'.
- Variable (Flow Scope)**: A dropdown menu with 'Destination' selected and a 'Create' button.

The screenshot shows the 'askForDestination' component property panel. The component icon is labeled 'askForDestinat...' and 'Common Response'. The 'Component' tab is active, showing the following properties:

- Metadata**: An 'Edit Response Items' button.
- Process User Message**: A dropdown menu with 'False' selected.
- Keep Turn**: A dropdown menu with 'True' selected.
- Variable**: A dropdown menu with 'Not Defined' selected and a 'Create' button.
- Maximum Number of Prompts**: A dropdown menu with 'Not Applicable' selected and an 'Expression' field with up/down arrows.
- Multi-Value**: A dropdown menu with 'Not Applicable' selected.
- Cancel Policy**: A dropdown menu with 'Not Applicable' selected.

# At runtime. Input components only render when they need to

A digital assistant should never prompt users for information it already has

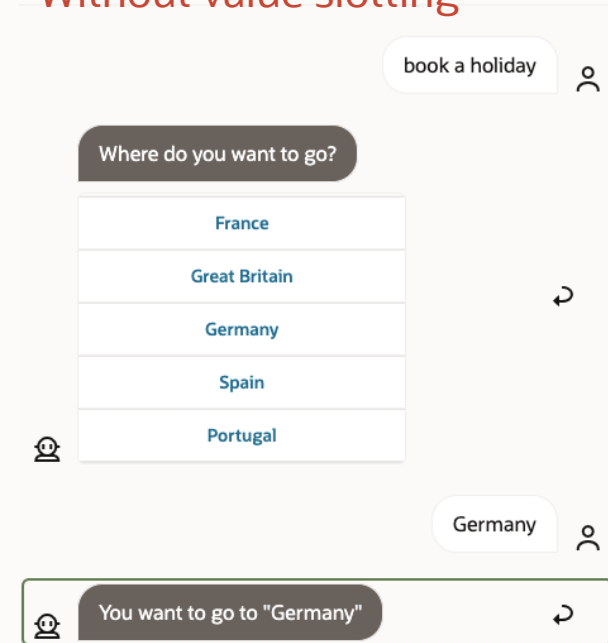
Input components do not render their UI

- if the referenced variable already has a value set
- if an input component references an entity type variable and the entity value could be extracted from the initial user message

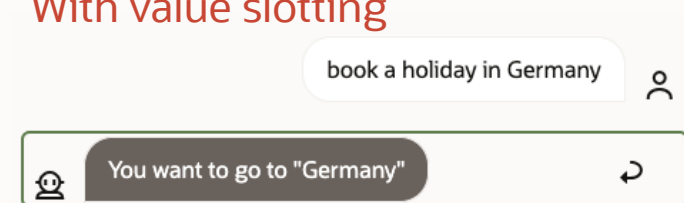
If an entity value is extracted from the initial user message, then this is referred to as "**slotting**"

- To slot entity values, the entity must be explicitly associated with the intent

## Without value slotting



## With value slotting



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Even if an input component is not rendered, the dialog flow state still is processed

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Dialog flow state determines the next navigation target

Use a Flow Control | Switch to skip a complete dialog flow state

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# Determine navigation between states

The component determines the navigation

Select the *Transitions* tab in the properties panel

- The *Next Transition* is a required setting
- *Actions* allow conditional navigation based on the component outcome
  - Assumes component to support actions

If a component supports actions and a dialog flow state does not associate it with a target state, then the "next" transition is followed

Recommendation is to always map component actions in the dialog flow state

General Component **Transitions**

Next Transition

ConfirmDestination ▼

Action ⊕

Action Name	Transition To
▼	▼ ✓ X

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