Super-Specialist Instructions

AppHaus

Job Title:

Trigger

What situation triggers the interaction with the super-specialist or its use and how is the interaction initiated?

Step-by-step instructions

How should the super-specialist carry out its job to get a good result? What should it decide and when is human input or action needed?

Tools and Data

What data / systems or agents does it need at each step?

Successful outcome

What does the successful task completion look like?

Step type:
SENSING / REASONING / ACTING / LEARNING

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SENSING / REASONING / ACTING / LEARNING

Types of Steps

Sensing
Captures input from its environment.

Reasoning
Figures something out and/or makes decisions

Acting
Triggers or executes an action or change in another system or application.

Learning
Adapts based on past experience

Super-Specialist Instructions – Example

AppHaus

Job Title: Travel Optimizer 1

Trigger

What situation triggers the interaction with the super-specialist or its use and how is the interaction initiated?

An existing travel booking needs to be changed

Trigger 1 (conversational) A customer requests a travel modification via chat interface of the Travel Agency customer service website

Trigger 2: (system-based) detects a travel disruption from online News sources

Step-by-step instructions

How should the super-specialist carry out its job to get a good result? What should it decide and when is human input or action needed?

Tools and Data

What data / systems or agents does it need at each step?

Successful outcome

What does the successful task completion look like?

The customer receives a confirmed rebooking with all necessary details, ensuring a smooth continuation of their travel plans.

1

Step type: SENSING / REASONING / ACTING / LEARNING

Ask the classifier super-specialist the priority of the modification request. Solve urgent cases first. If not provided, Ask customer information about the reason for the modification.

Multi-agent Interface (classifier), Human-in-the-loop interface (chat interface)

2

Step type: SENSING / REASONING / ACTING / LEARNING

Figure out the details of the request or disruption. If it's from the customer, extract travel details (booking code, destination, date). If it's a disruption, identify impacted flights and affected customers.

Travel Booking system, CRM system (customer profile), News website with disruption information

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3

Step type: SENSING / REASONING / ACTING / LEARNING

Generate and rank alternative itineraries based on real-time availability, customer preferences, (e.g., non-stop, budget), and policy constraints.

Travel Booking system, Airline policy database, CRM (Customer history and preference database), calculator

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4

Step type: SENSING / REASONING / ACTING / LEARNING

Evaluate if manual intervention is needed (e.g., no fitting solution found, complex itinerary, special needs, out-of-policy change). In that case, escalate to a human agent and provide all information about the modification request.

Travel Booking system, Airline Policy Database, Customer Preferences database, Human-in-the-loop interface (contact human agent)

5

Step type: SENSING / REASONING / ACTING / LEARNING

Present top 3 rebooking options to the human agent and request confirmation. Highlight any additional costs. Log interaction for follow-up.

Human-in-the-loop interface (contact human agent)

Types of Steps

Sensing
Captures input from its environment.

Reasoning
Figures something out and/or makes decisions

Acting
Triggers or executes an action or change in another system or application.

Learning
Adapts based on past experience

Super-Specialist Instructions – Example

AppHaus

Job Title: Travel Optimizer 2

Trigger	Step-by-step instructions	Tools and Data	Successful outcome
What situation triggers the interaction with the super-specialist or its use and how is the interaction initiated?	*How should the super-specialist carry out its job to get a good result? What should it decide and when is human input or action needed?*	*What data / systems or agents does it need at each step?*	*What does the successful task completion look like?*
	6 Step type: SENSING / REASONING / ACTING / **LEARNING** Present approved options to customer highlighting changes and any additional costs and ask to select one. Log interaction for follow-up.	Human-in-the-loop interface (contact customer)	
	7 Step type: SENSING / REASONING / **ACTING** / LEARNING Execute booking change for the selected option and update any connected services (hotels, transfers). If connected services fail to update contact a human agent and send all information about the booking.	Travel Booking system (API connections to hotel/transfer systems), Human-in-the-loop interface (contact customer)	
	8 Step type: SENSING / REASONING / **ACTING** / LEARNING Inform the Up-Seller super-specialist about the booking change and request it to generate personalized offers for the affected customer(s).	Multi-agent Interface (Up-Seller)	
	9 Step type: SENSING / REASONING / **ACTING** / LEARNING Send the personalized offerings and the modified booking(s) information to the Customer Messenger super-specialist and request it to send the confirmation and new itinerary to the affected customer(s).	Multi-agent Interface (Customer Messenger)	
	10 Step type: SENSING / REASONING / ACTING / **LEARNING** Log outcomes and customer feedback to improve future prioritization and solution.	Feedback form, analytics system	

Types of Steps

Sensing	Reasoning	Acting	Learning
Captures input from its environment.	*Figures something out and/or makes decisions*	*Triggers or executes an action or change in another system or application.*	*Adapts based on past experience*