

Skill Dictionary

Communication and Explainability Skills

- 1 **StreamRobotView** (Points: 10)
Description: Stream the robot's view to the arena screen using VizBox
- 2 **StreamRobotMic** (Points: 10)
Description: Stream the robot microphone (transmit direct audio perception)
- 3 **StreamRobotVoice** (Points: 10)
Description: Stream the robot's voice and filter it out in audio perception
- 4 **DisplayRecogObjects** (Points: 10)
Description: Display ROIs for recognized objects
- 5 **DisplaySTTResults** (Points: 10)
Description: Display Speech-to-Text result as subtitle file in video
- 6 **DisplayExecSubtask** (Points: 10)
Description: Display currently executed subtask/skill
- 7 **DisplayRobotPosPath** (Points: 10)
Description: Display robot position estimation, navigation goal, and planned path

Safe Interactions Skills

- 8 **StopOnTrigger** (Points: 10)
Description: On defined trigger (e.g. shouting 'Stop' or touching the robot's arm): Immediately stop the current action
- 9 **ContinueOnTrigger** (Points: 10)
Description: On defined trigger (e.g. saying 'Continue' or pressing the robot finger): Continue with the interrupted action

Perception Skills

- 10 **RecogKnownObj** (Points: 10)
Description: Recognize a known object or person in an image or other sensor data
- 11 **RecogUnknownObjClass** (Points: 10)
Description: Recognize the class of an unknown object in an image
- 12 **Recog3DPoseKnownObj** (Points: 10)
Description: Recognize 3D pose of a known static object
- 13 **Recog3DPoseUnknownObj** (Points: 10)
Description: Recognize 3D pose of an unknown static object
- 14 **RecogPointingTarget** (Points: 10)
Description: Recognize the target object a human is pointing at
- 15 **DetectPlacementSurface** (Points: 10)
Description: Detect a surface suitable for placing an entity
- 16 **FindSimilarObjects** (Points: 10)
Description: Find the most similar objects given a reference object
- 17 **DetectAbsenceObjClass** (Points: 10)
Description: Detect absence of an object class in the environment

- 18 **DescribePersonOrObject** (Points: 10)
Description: Describe a person or an object based on visually perceived features (e.g., height, age-range, clothes, hair color and length)
- 19 **DetectHumanPoseAction** (Points: 10)
Description: Detect a human pose or an action (e.g., waving, calling)
- 20 **LookAtInterestingPerson** (Points: 10)
Description: Look at the face of the interesting person
- 21 **LookAtTalkingPerson** (Points: 10)
Description: Look at the person that is talking to the robot (sound source localization)
- 22 **DetectStoppedConv** (Points: 10)
Description: Detect that a conversation (between at least two humans) has stopped

Dialog Skills

- 23 **UnderstandNonExpertCmds** (Points: 10)
Description: Understand commands from non-expert operators (understand synonym sentences)
- 24 **GenerateDialogLog** (Points: 10)
Description: Generate a dialog log of a task
- 25 **SummarizeDialogEvents** (Points: 10)
Description: Summarize the dialog and generally what happened in a task
- 26 **BehaveFriendlyLikable** (Points: 10)
Description: Always be pleasant to the person you are talking to
- 27 **DescribeStoredPersonOrObject** (Points: 10)
Description: Describe a person or an object using the stored information

Knowledge Skills

- 28 **SaveLocationRequest** (Points: 10)
Description: Save the location of an object or person upon request
- 29 **SaveReRecogPersonFace** (Points: 10)
Description: Save and re-recognize a person's face
- 30 **SaveReRecogPersonVoice** (Points: 10)
Description: Save and re-recognize a person's voice
- 31 **SaveSpeakerInfo** (Points: 10)
Description: Save provided information about a speaker (e.g., name, preferences, object ownership, order)

Navigation Skills

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location
- 33 **TrackFollowPerson** (Points: 10)
Description: Detect, track and follow a person
- 34 **AvoidNavigationObstacle** (Points: 10)
Description: Avoid an object in the navigation path

- 35 **AvoidSmallObstacle** (Points: 10)
Description: Avoid a small object in the navigation path
- 36 **AvoidHardToSeeObstacle** (Points: 10)
Description: Avoid a hard-to-see object in the navigation path
- 37 **AvoidMarkedAreas** (Points: 10)
Description: Avoid predefined marked areas during navigation
- 38 **AvoidPersonCrowd** (Points: 10)
Description: Avoid a person or a crowd of people obscuring the path
- 39 **TransportWithTray** (Points: 10)
Description: Use an unattached carried tray to transport items

Manipulation Skills

- 40 **PickTinyKnown** (Points: 10)
Description: Pick up a tiny known object
- 41 **PickNormalKnown** (Points: 10)
Description: Pick up a normal-sized (hardy) known object
- 42 **PickLargeKnown** (Points: 10)
Description: Pick up a large known object
- 43 **PickHeavyKnown** (Points: 10)
Description: Pick up a heavy known object
- 44 **PickTinyUnknown** (Points: 10)
Description: Pick up a tiny unknown object
- 45 **PickNormalUnknown** (Points: 10)
Description: Pick up a normal-sized (hardy) unknown object
- 46 **PickLargeUnknown** (Points: 10)
Description: Pick up a large unknown object
- 47 **PickHeavyUnknown** (Points: 10)
Description: Pick up a heavy unknown object
- 48 **PickFabric** (Points: 10)
Description: Pick up fabric or cloth
- 49 **PlaceTinyKnown** (Points: 10)
Description: Place a tiny known object
- 50 **PlaceNormalKnown** (Points: 10)
Description: Place a normal-sized (hardy) known object
- 51 **PlaceLargeKnown** (Points: 10)
Description: Place a large known object
- 52 **PlaceHeavyKnown** (Points: 10)
Description: Place a heavy known object
- 53 **PlaceTinyUnknown** (Points: 10)
Description: Place a tiny unknown object
- 54 **PlaceNormalUnknown** (Points: 10)
Description: Place a normal-sized (hardy) unknown object

- 55 **PlaceLargeUnknown** (Points: 10)
Description: Place a large unknown object
- 56 **PlaceHeavyUnknown** (Points: 10)
Description: Place a heavy unknown object
- 57 **PlaceFabricContainer** (Points: 10)
Description: Place fabric into a container (or into a washing machine/dryer)
- 58 **PourIntoContainer** (Points: 10)
Description: Pour something into a container
- 59 **PlaceTinyObjectInContainer** (Points: 10)
Description: Place a tiny object into a small sized container
- 60 **ReceiveObjectHandover** (Points: 10)
Description: Receive an object by a human hand over
- 61 **PassObjectHandback** (Points: 10)
Description: Pass an object to a human hand back
- 62 **OperateSimpleMechanism** (Points: 10)
Description: Operate a simple mechanism (e.g., press a button, pull a lever)

Furniture Actions Skills

- 63 **OpenEntranceDoor** (Points: 10)
Description: Open an entrance door
- 64 **CloseEntranceDoor** (Points: 10)
Description: Close an entrance door
- 65 **OpenShelfDoor** (Points: 10)
Description: Open a shelf door
- 66 **CloseShelfDoor** (Points: 10)
Description: Close a shelf door
- 67 **PullOutRack** (Points: 10)
Description: Pulling out a rack
- 68 **PushInRack** (Points: 10)
Description: Pushing in a rack
- 69 **OpenDishwasherDoor** (Points: 10)
Description: Open dishwasher door
- 70 **CloseDishwasherDoor** (Points: 10)
Description: Close dishwasher door
- 71 **OpenWashingMachineDoor** (Points: 10)
Description: Open a washing machine door
- 72 **CloseWashingMachineDoor** (Points: 10)
Description: Close a washing machine door
- 73 **StartWashingMachine** (Points: 10)
Description: Start a washing machine

Using Tools Skills

- 74 **PushLightSwitch** (Points: 10)
Description: Pushing a light switch
- 75 **PushButton** (Points: 10)
Description: Pushing a small button (e.g., on a washing machine)
- 76 **StartElectricKettle** (Points: 10)
Description: Starting an electric kettle
- 77 **DustSurfaces** (Points: 10)
Description: Dusting surfaces
- 78 **WipeTableSurface** (Points: 10)
Description: Wiping the table surface

Penalty Skills

- 79 **PenaltyCallHumanHelp** (Points: -10)
Description: Penalty for calling a human to help with the task
- 80 **PenaltyBypassSpeechRec** (Points: -10)
Description: Penalty for bypassing speech recognition
- 81 **PenaltyDropObject** (Points: -10)
Description: Penalty for dropping an object
- 82 **PenaltyDamageObject** (Points: -10)
Description: Penalty for damaging an object
- 83 **PenaltyDangerousPosition** (Points: -10)
Description: Penalty for leaving an object in a dangerous position
- 84 **PenaltySpillWhilePouring** (Points: -10)
Description: Penalty for spilling substance while pouring
- 85 **PenaltyNotDetectPerson** (Points: -10)
Description: Penalty for not detecting a person (no awareness)
- 86 **PenaltyNotRecognizePerson** (Points: -10)
Description: Penalty for not recognizing a person (unable to retrieve associated, stored information)
- 87 **PenaltyBypassManipulation** (Points: -10)
Description: Penalty for bypassing manipulation, but succeeding with the perception (and macro planning, so telling what should be done)
- 88 **PenaltyMisunderstandContext** (Points: -10)
Description: Penalty for misunderstanding the context
- 89 **PenaltyUnfriendlyBehavior** (Points: -10)
Description: Penalty for behaving unfriendly or not attending to interaction partner
- 90 **PenaltyTouchHuman** (Points: -10)
Description: Penalty for touching a human
- 91 **PenaltyCollideStatic** (Points: -10)
Description: Penalty for colliding with a static obstacle
- 92 **PenaltyCollideDynamic** (Points: -10)
Description: Penalty for colliding with a dynamic obstacle

- 93 **PenaltyLeaveArea** (Points: -10)
Description: Penalty for leaving the designated area
- 94 **PenaltyIncorrectTask** (Points: -10)
Description: Penalty for incorrect task execution

1 Carry my Luggage

Group G-1: HandleObstacles

Bonus: 40 **Type:** Selection

Description: Handle obstacles such as avoiding objects, marked areas, and people during navigation

34 **AvoidNavigationObstacle** (Points: 10)

Description: Avoid an object in the navigation path

35 **AvoidSmallObstacle** (Points: 10)

Description: Avoid a small object in the navigation path

36 **AvoidHardToSeeObstacle** (Points: 10)

Description: Avoid a hard-to-see object in the navigation path

37 **AvoidMarkedAreas** (Points: 10)

Description: Avoid predefined marked areas during navigation

38 **AvoidPersonCrowd** (Points: 10)

Description: Avoid a person or a crowd of people obscuring the path

Group G-2: ObtainTargetBagInfo

Bonus: 20 **Type:** Selection

Description: Obtain information about the target bag, either by saving provided information or recognizing the target object

31 **SaveSpeakerInfo** (Points: 10)

Description: Save provided information about a speaker (e.g., name, preferences, object ownership, order)

14 **RecogPointingTarget** (Points: 10)

Description: Recognize the target object a human is pointing at

Group G-3: PickupBag

Bonus: 20 **Type:** Sequential

Description: Navigate to the bag, recognize its 3D pose and pick it up

32 **NavigateToTarget** (Points: 10)

Description: Navigate to a specified target location

13 **Recog3DPoseUnknownObj** (Points: 10)

Description: Recognize 3D pose of an unknown static object

46 **PickLargeUnknown** (Points: 10)

Description: Pick up a large unknown object

Group G-4: FollowSection

Bonus: 20 **Type:** Sequential

Description: Follow a person while handling obstacles

33 **TrackFollowPerson** (Points: 10)

Description: Detect, track and follow a person

G-1. HandleObstacles: Handle obstacles such as avoiding objects, marked areas, and people during navigation

Group G-5: CarryLuggageTask

Bonus: 30 **Type:** Sequential

Description: Complete the 'Carry My Luggage' task

G-2. ObtainTargetBagInfo: Obtain information about the target bag, either by saving provided information or recognizing the target object

G-3. PickupBag: Navigate to the bag, recognize its 3D pose and pick it up

G-4. FollowSection: Follow a person while handling obstacles

32 **NavigateToTarget** (Points: 10)

Description: Navigate to a specified target location

Group G-6: CmL-Penalties

Bonus: -20 **Type:** Penalty

Description: Penalties for various infractions during the task

79 **PenaltyCallHumanHelp** (Points: -10)

Description: Penalty for calling a human to help with the task

81 **PenaltyDropObject** (Points: -10)

Description: Penalty for dropping an object

2 Receptionist

Group G-7: CivilizedBehaviour

Bonus: 10 **Type:** Permanent

Description: Exhibit civilized behaviour like looking at interacting persons and behaving friendly

20 **LookAtInterestingPerson** (Points: 10)

Description: Look at the face of the interesting person

21 **LookAtTalkingPerson** (Points: 10)

Description: Look at the person that is talking to the robot (sound source localization)

26 **BehaveFriendlyLikable** (Points: 10)

Description: Always be pleasant to the person you are talking to

Group G-8: WelcomeGuest

Bonus: 20 **Type:** Sequential

Description: Welcome the guest by navigating to them and handling doors

32 **NavigateToTarget** (Points: 10)

Description: Navigate to a specified target location

63 **OpenEntranceDoor** (Points: 10)

Description: Open an entrance door

64 **CloseEntranceDoor** (Points: 10)

Description: Close an entrance door

Group G-9: IdentifyRememberPerson

Bonus: 30 **Type:** Selection

Description: Identify and remember a person either by face or voice

29 **SaveReRecogPersonFace** (Points: 10)

Description: Save and re-recognize a person's face

30 **SaveReRecogPersonVoice** (Points: 10)

Description: Save and re-recognize a person's voice

Group G-10: RememberFactsAboutPerson

Bonus: 20 **Type:** Sequential

Description: Remember two facts about a person

31. **SaveSpeakerInfo** (Points: 10)

Description: Remember name and preferences

31. **SaveSpeakerInfo** (Points: 10)

Description: Remember object ownership and order

Group G-11: IntroducePerson

Bonus: 20 **Type:** Sequential

Description: Introduce a person using stored and visually perceived information

18. **DescribePersonOrObject** (Points: 10)

Description: Describe a person according to visually perceived features (e.g. height, age-range, cloths, hair-colour and length, gender; at least three features)

27 **DescribeStoredPersonOrObject** (Points: 10)

Description: Describe a person or an object using the stored information

Group G-12: HandleGuest **Bonus:** 40 **Type:** Sequential
Description: Handle the guest by welcoming, remembering facts, navigating, and introducing

G-8. WelcomeGuest: Welcome the guest by navigating to them and handling doors

G-10. RememberFactsAboutPerson: Remember two facts about a person

32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location

G-11. IntroducePerson: Introduce a person using stored and visually perceived information

Group G-13: ReceptionistTask **Bonus:** 50 **Type:** Sequential
Description: Complete the Receptionist task by handling guests and introductions

G-12. HandleGuest: Handle the guest by welcoming, remembering facts, navigating, and introducing (2 times)

G-11. IntroducePerson: Introduce a person using stored and visually perceived information : Introduce Guest1 to Guest2

Group G-14: R-Penalties **Bonus:** -20 **Type:** Penalty
Description: Penalties for failure to detect or recognize persons

85 **PenaltyNotDetectPerson** (Points: -10)
Description: Penalty for not detecting a person (no awareness)

86 **PenaltyNotRecognizePerson** (Points: -10)
Description: Penalty for not recognizing a person (unable to retrieve associated, stored information)

3 Serve Breakfast

Group G-15: PickupBreakfastItem

Bonus: 30 **Type:** Selection

Description: Pick up different breakfast items

40. **PickTinyKnown** (Points: 10)
Description: Spoon
41. **PickNormalKnown** (Points: 10)
Description: Bowl
42. **PickLargeKnown** (Points: 10)
Description: Cereals
43. **PickHeavyKnown** (Points: 10)
Description: Milk

Group G-16: PlaceBreakfastItem

Bonus: 30 **Type:** Selection

Description: Place breakfast items appropriately

49. **PlaceTinyKnown** (Points: 10)
Description: Spoon next to the bowl
50. **PlaceNormalKnown** (Points: 10)
Description: Bowl on the table
51. **PlaceLargeKnown** (Points: 10)
Description: Cereals in the bowl
52. **PlaceHeavyKnown** (Points: 10)
Description: Milk on the table

Group G-17: SetUpBreakfastItem

Bonus: 40 **Type:** Sequential

Description: Set up each breakfast item at the target location

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location

G-15. PickupBreakfastItem: Pick up different breakfast items

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location

G-16. PlaceBreakfastItem: Place breakfast items appropriately

Group G-18: PrepareTable

Bonus: 50 **Type:** Sequential

Description: Prepare the table for breakfast, including setting up all breakfast items

G-17. SetUpBreakfastItem: Set up each breakfast item at the target location (4 times)

Group G-19: ServeBreakfast

Bonus: 60 **Type:** Sequential

Description: Complete the main goal of serving breakfast

G-18. PrepareTable: Prepare the table for breakfast, including setting up all breakfast items

58. **PourIntoContainer** (Points: 10)
Description: Cereal into the bowl

Group G-20: SB-FullGoal

Bonus: 70 **Type:** Sequential

Description: Complete the full goal of the task, including all main and additional objectives

G-19. ServeBreakfast: Complete the main goal of serving breakfast

12. **Recognize3DPoseKnownObj** (Points: 10)

Description: Placing the spoon next to the bowl

58. **PourIntoContainer** (Points: 10)

Description: Pour milk into the bowl

Group G-21: SB-Penalties

Bonus: -20 **Type:** Penalty

Description: Penalties for various infractions during the task

79 **PenaltyCallHumanHelp** (Points: -10)

Description: Penalty for calling a human to help with the task

81 **PenaltyDropObject** (Points: -10)

Description: Penalty for dropping an object

84 **PenaltySpillWhilePouring** (Points: -10)

Description: Penalty for spilling substance while pouring

4 Storing Groceries

Group G-22: PickupItem

Bonus: 30 **Type:** Selection

Description: Pick up various grocery items

- 40 **PickTinyKnown** (Points: 10)
Description: Pick up a tiny known object
- 41 **PickNormalKnown** (Points: 10)
Description: Pick up a normal-sized (hardy) known object
- 42 **PickLargeKnown** (Points: 10)
Description: Pick up a large known object
- 43 **PickHeavyKnown** (Points: 10)
Description: Pick up a heavy known object

Group G-23: PlaceItem

Bonus: 30 **Type:** Selection

Description: Place grocery items appropriately

- 49 **PlaceTinyKnown** (Points: 10)
Description: Place a tiny known object
- 50 **PlaceNormalKnown** (Points: 10)
Description: Place a normal-sized (hardy) known object
- 51 **PlaceLargeKnown** (Points: 10)
Description: Place a large known object
- 52 **PlaceHeavyKnown** (Points: 10)
Description: Place a heavy known object

Group G-24: StoreItem

Bonus: 40 **Type:** Sequential

Description: Store each grocery item at the target location

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location

G-22. PickupItem: Pick up various grocery items

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location

- 16. **FindSimilarObjects** (Points: 10)
Description: Communicate target location

G-23. PlaceItem: Place grocery items appropriately

Group G-25: StoreGroceries

Bonus: 50 **Type:** Sequential

Description: Complete the main goal of storing groceries, including opening and closing shelves

- 65 **OpenShelfDoor** (Points: 10)
Description: Open a shelf door

G-24. StoreItem: Store each grocery item at the target location

- 66 **CloseShelfDoor** (Points: 10)
Description: Close a shelf door

Group G-26: SG-Penalties

Bonus: -20 **Type:** Penalty

Description: Penalties for various infractions during the task

79 **PenaltyCallHumanHelp** (Points: -10)

Description: Penalty for calling a human to help with the task

81 **PenaltyDropObject** (Points: -10)

Description: Penalty for dropping an object

88. **PenaltyMisunderstandContext** (Points: -10)

Description: Storing an object without categorizing it correctly

5 Clean the table

Group G-27: PickupDishItem

Bonus: 30 **Type:** Selection

Description: Pick up various dish items from the table

40. **PickTinyKnown** (Points: 10)
Description: Spoon, Fork, Knife

41. **PickNormalKnown** (Points: 10)
Description: Bowl, Cup

43. **PickHeavyKnown** (Points: 10)
Description: Plate

Group G-28: PlaceDishItem

Bonus: 30 **Type:** Selection

Description: Place dish items appropriately in the dishwasher

49. **PlaceTinyKnown** (Points: 10)
Description: Spoon, Fork, Knife

50. **PlaceNormalKnown** (Points: 10)
Description: Bowl, Cup

52. **PlaceHeavyKnown** (Points: 10)
Description: Plate

Group G-29: HandleDishwasherDoor

Bonus: 20 **Type:** Sequential

Description: Open and close the dishwasher door

69. **OpenDishwasherDoor** (Points: 10)
Description: Open dishwasher door

70. **CloseDishwasherDoor** (Points: 10)
Description: Close dishwasher door

Group G-30: HandleDishwasherRack

Bonus: 20 **Type:** Sequential

Description: Pull out and push in the dishwasher rack

67. **PullOutRack** (Points: 10)
Description: Pulling out a rack

68. **PushInRack** (Points: 10)
Description: Pushing in a rack

Group G-31: HandleDetergentPowder

Bonus: 10 **Type:** Sequential

Description: Handle the detergent powder

46. **PickLargeUnknown** (Points: 10)
Description: Pick up detergent powder

58. **PourIntoContainer** (Points: 10)
Description: Pouring powder into container

Group G-32: HandleDishwasherTab **Bonus:** 10 **Type:** Sequential
Description: Handle the dishwasher tab

- 44. **PickTinyUnknown** (Points: 10)
Description: Pick up a dishwasher tab
- 59. **PlaceTinyObjectInContainer** (Points: 10)
Description: Place tab in small container

Group G-33: HandleDetergent **Bonus:** 10 **Type:** Exclusive
Description: Handle detergent selection process

G-31. HandleDetergentPowder: Handle the detergent powder

G-32. HandleDishwasherTab: Handle the dishwasher tab

Group G-34: PutItemInDishwasher **Bonus:** 20 **Type:** Sequential
Description: Put items into the dishwasher

- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location
- G-27. PickupDishItem:** Pick up various dish items from the table
- 32 **NavigateToTarget** (Points: 10)
Description: Navigate to a specified target location
- 16 **FindSimilarObjects** (Points: 10)
Description: Find the most similar objects given a reference object
- G-28. PlaceDishItem:** Place dish items appropriately in the dishwasher

Group G-35: CleanTheTable **Bonus:** 30 **Type:** Sequential
Description: Main goal of cleaning the table

G-34. PutItemInDishwasher: Put items into the dishwasher (6 times. You are allowed to carry multiple items.)

Group G-36: BonusGoal **Bonus:** 30 **Type:** Sequential
Description: Bonus goals of cleaning the table

G-29. HandleDishwasherDoor: Open and close the dishwasher door

G-30. HandleDishwasherRack: Pull out and push in the dishwasher rack

G-33. HandleDetergent: Handle detergent selection process

Group G-37: CtT-FullGoal **Bonus:** 200 **Type:** Sequential
Description: The complete cleaning the table task

G-35. CleanTheTable: Main goal of cleaning the table

G-36. BonusGoal: Bonus goals of cleaning the table

Group G-38: Penalties

Bonus: -20 **Type:** Penalty

Description: Penalties for various infractions during the task

81 **PenaltyDropObject** (Points: -10)

Description: Penalty for dropping an object

6 Restaurant

Group G-39: DetectCustomer

Bonus: 10 **Type:** Selection

Description: Detect and identify customers entering the restaurant

19. **DetectHumanPoseAction** (Points: 10)
Description: Detecting customer entering

10. **RecogKnownObj** (Points: 10)
Description: Recognizing customer's face

Group G-40: TakeOrder

Bonus: 20 **Type:** Sequential

Description: Take the customer's order

G-39. DetectCustomer: Detect and identify customers entering the restaurant

32. **NavigateToTarget** (Points: 10)
Description: Approach customer

28 **SaveLocationRequest** (Points: 10)
Description: Save the location of an object or person upon request

26. **BehaveFriendlyLikable** (Points: 10)
Description: Welcome customer

23. **UnderstandNonExpertCmds** (Points: 10)
Description: Understand customer's order

31 **SaveSpeakerInfo** (Points: 10)
Description: Save provided information about a speaker (e.g., name, preferences, object ownership, order) (2x, Once per customer)

25. **SummarizeDialogEvents** (Points: 10)
Description: Summarize orders taken

Group G-41: GetOrder

Bonus: 30 **Type:** Sequential

Description: Collect the ordered items from the kitchen

32. **NavigateToTarget** (Points: 10)
Description: Navigate to kitchen

41. **PickNormalKnown** (Points: 10)
Description: Pick up ordered items (2x, Once per customer)

Group G-42: BringOrder

Bonus: 30 **Type:** Sequential

Description: Deliver the order to the customer

32. **NavigateToTarget** (Points: 10)
Description: Navigate to customer's table

50. **PlaceNormalKnown** (Points: 10)
Description: Place order on the table (2x, Once per customer)

Group G-43: HandleTable

Bonus: 20 **Type:** Sequential

Description: Handle an order for a table

G-40. TakeOrder: Take the customer's order

G-41. GetOrder: Collect the ordered items from the kitchen

G-42. BringOrder: Deliver the order to the customer

Group G-44: R-BonusRewards

Bonus: 15 **Type:** Selection

Description: Extra tasks for additional points

26 **BehaveFriendlyLikable** (Points: 10)

Description: Always be pleasant to the person you are talking to

. (Points:)

Description: Describe a person for entertainment

58. **PourIntoContainer** (Points: 10)

Description: Prepare a drink, by pouring it from the bottle into a glass

Group G-45: SpecialVizBoxRewards

Bonus: 15 **Type:** Selection

Description: Special tasks utilizing VizBox

1. **StreamRobotView** (Points: 10)

Description: Stream robot's view for customers

4. **DisplayRecogObjects** (Points: 10)

Description: Display recognized objects

5. **DisplaySTTResults** (Points: 10)

Description: Display speech-to-text results

Group G-46: RestaurantMainGoal

Bonus: 50 **Type:** Sequential

Description: Complete the main goal of the restaurant task

G-43. HandleTable: Handle an order for a table

Group not found: BonusRewards

G-45. SpecialVizBoxRewards: Special tasks utilizing VizBox

Group G-47: PrepareNewTable

Bonus: 20 **Type:** Sequential

Description: Clean and set up the table

78. **WipeTableSurface** (Points: 10)

Description: Clean the table surface

50. **PlaceNormalKnown** (Points: 10)

Description: Place tableware

Group G-48: ProcessPayment **Bonus: 20** **Type: Sequential**
Description: Process guests' payments

14. **RecognizingTarget** (Points: 10)
Description: Recognize payment method pointed by guest

60. **ReceiveObjectHandover** (Points: 10)
Description: Receive payment

Group G-49: ExtraTasks **Bonus: 15** **Type: Selection**
Description: Additional tasks for additional points

G-48. ProcessPayment: Process guests' payments

G-47. PrepareNewTable: Clean and set up the table

Group G-50: FullGoal **Bonus: 15** **Type: Selection**
Description: Be a fully functional robot servant

G-46. RestaurantMainGoal: Complete the main goal of the restaurant task

G-49. ExtraTasks: Additional tasks for additional points

Group G-51: RestaurantPenalties **Bonus: -20** **Type: Penalty**
Description: Penalties for various infractions during the task

89 **PenaltyUnfriendlyBehavior** (Points: -10)
Description: Penalty for behaving unfriendly or not attending to interaction partner

79 **PenaltyCallHumanHelp** (Points: -10)
Description: Penalty for calling a human to help with the task

81 **PenaltyDropObject** (Points: -10)
Description: Penalty for dropping an object

84 **PenaltySpillWhilePouring** (Points: -10)
Description: Penalty for spilling substance while pouring

88 **PenaltyMisunderstandContext** (Points: -10)
Description: Penalty for misunderstanding the context

7 Stickler for the Rules

Group G-52: DetectShoeWearingGuest **Bonus:** 10 **Type:** Selection
Description: Detect guests wearing shoes

19 **DetectHumanPoseAction** (Points: 10)
Description: Detect a human pose or an action (e.g., waving, calling)

10 **RecogKnownObj** (Points: 10)
Description: Recognize a known object or person in an image or other sensor data

Group G-53: DetectDrinklessGuest **Bonus:** 10 **Type:** Selection
Description: Detect guests without a drink

32. **NavigateToTarget** (Points: 10)
Description: Navigate to guest location

17. **DetectAbsenceObjClass** (Points: 10)
Description: Detect absence of a drink

Group G-54: DetectPersonInPrivateRoom **Bonus:** 10 **Type:** Selection
Description: Detect a person in a private room

32. **NavigateToTarget** (Points: 10)
Description: Navigate to room location

10. **RecogKnownObj** (Points: 10)
Description: Recognize person in room

Group G-55: DetectGarbageOnFloor **Bonus:** 10 **Type:** Selection
Description: Detect garbage on the floor

32. **NavigateToTarget** (Points: 10)
Description: Navigate to garbage location

10. **RecogKnownObj** (Points: 10)
Description: Recognize garbage

Group G-56: CheckRuleBreaks **Bonus:** 20 **Type:** Sequential
Description: Check for various rule breaks

G-52. DetectShoeWearingGuest: Detect guests wearing shoes

G-53. DetectDrinklessGuest: Detect guests without a drink

G-54. DetectPersonInPrivateRoom: Detect a person in a private room

G-55. DetectGarbageOnFloor: Detect garbage on the floor

Group G-57: MainGoal **Bonus:** 30 **Type:** Sequential
Description: Complete the main goal of checking for rule breaks

G-56. CheckRuleBreaks: Check for various rule breaks [Check multiple times for rule breaks] (4 times)

Group G-58: Stickler-Penalties

Bonus: -20 **Type:** Penalty

Description: Penalties for failure to detect or recognize rule breaks

85 **PenaltyNotDetectPerson** (Points: -10)

Description: Penalty for not detecting a person (no awareness)

86 **PenaltyNotRecognizePerson** (Points: -10)

Description: Penalty for not recognizing a person (unable to retrieve associated, stored information)

88 **PenaltyMisunderstandContext** (Points: -10)

Description: Penalty for misunderstanding the context