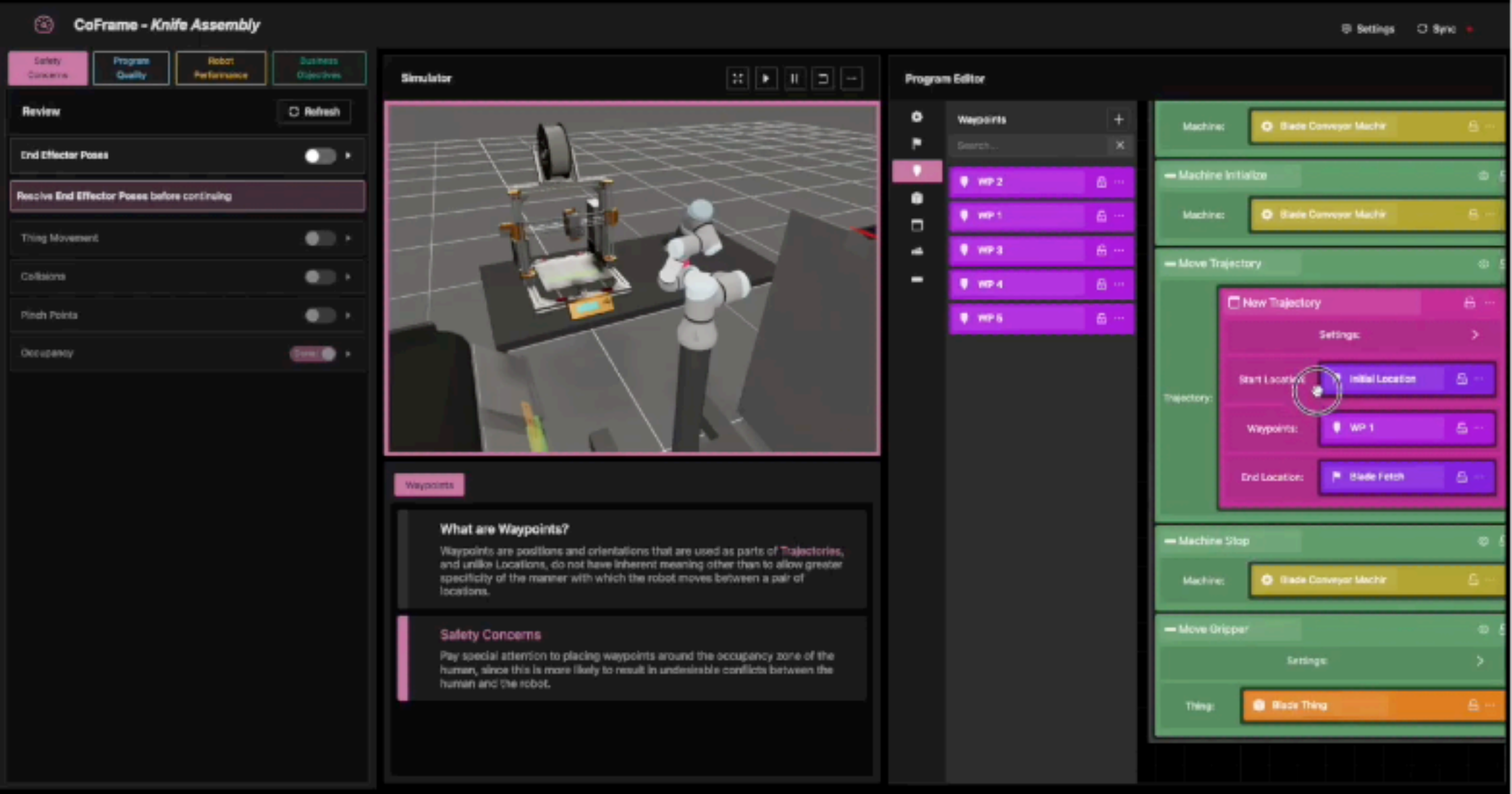
CoFrame - Knife Assembly
Settings
Sync
Safety Concerns
Program Quality
Robot Performance
Business Objectives
Review
Refresh
End Effector Poses
Resolve End Effector Poses before continuing
Thing Movement
Collisions
Pinch Points
Occupancy
Simulator
Program Editor
Waypoints
WP 2
WP 1
WP 3
WP 4
WP 5
Machine:
Blade Conveyor Machir
Machine Initialize
Move Trajectory
New Trajectory
Settings:
Start Location:
Initial Location
Trajectory:
Waypoints:
WP 1
End Location:
Blade Fetch
Machine Stop
Move Gripper
Thing:
Blade Thing
Waypoints
What are Waypoints?
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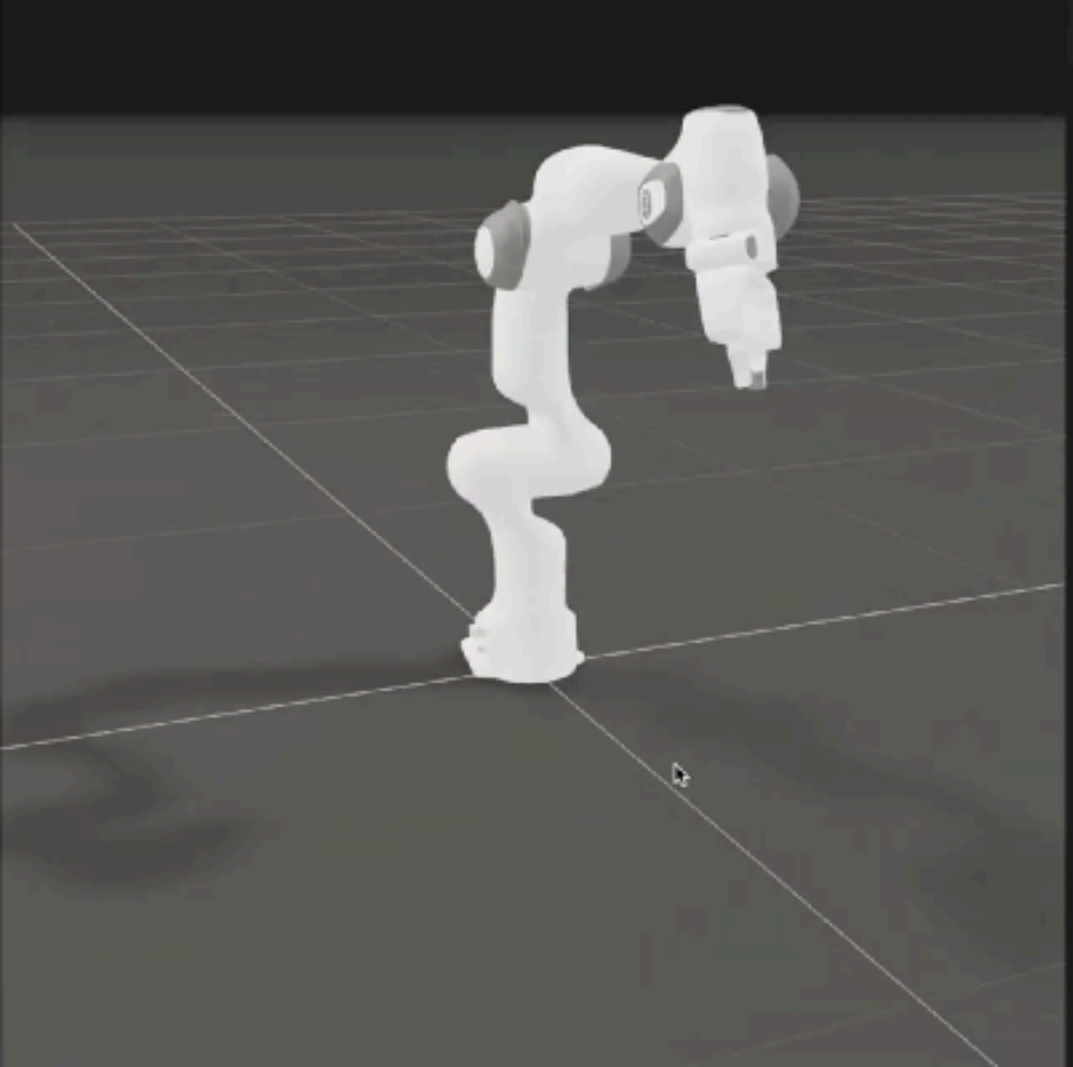
Safety Concerns
Pay special attention to placing waypoints around the occupancy zone of the human, since this is more likely to result in undesirable conflicts between the human and the robot.



Setup

DEFAULTS ROOT

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<!-- |    EDITING THIS FILE BY HAND IS NOT RECOMMENDED
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</collision>
  </link>
  <link name="panda_link1">
    <visual>
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    </visual>
    <collision>
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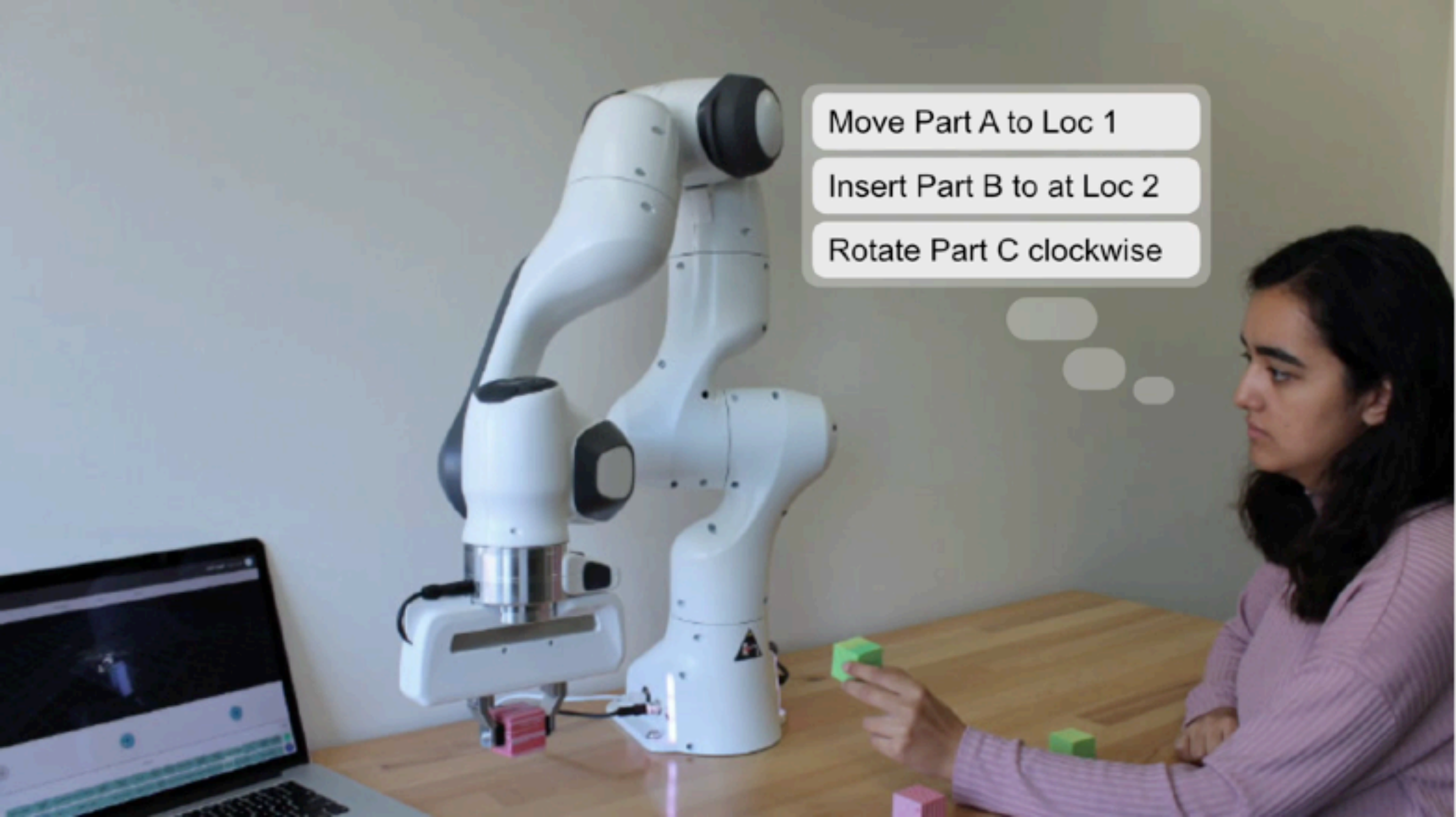
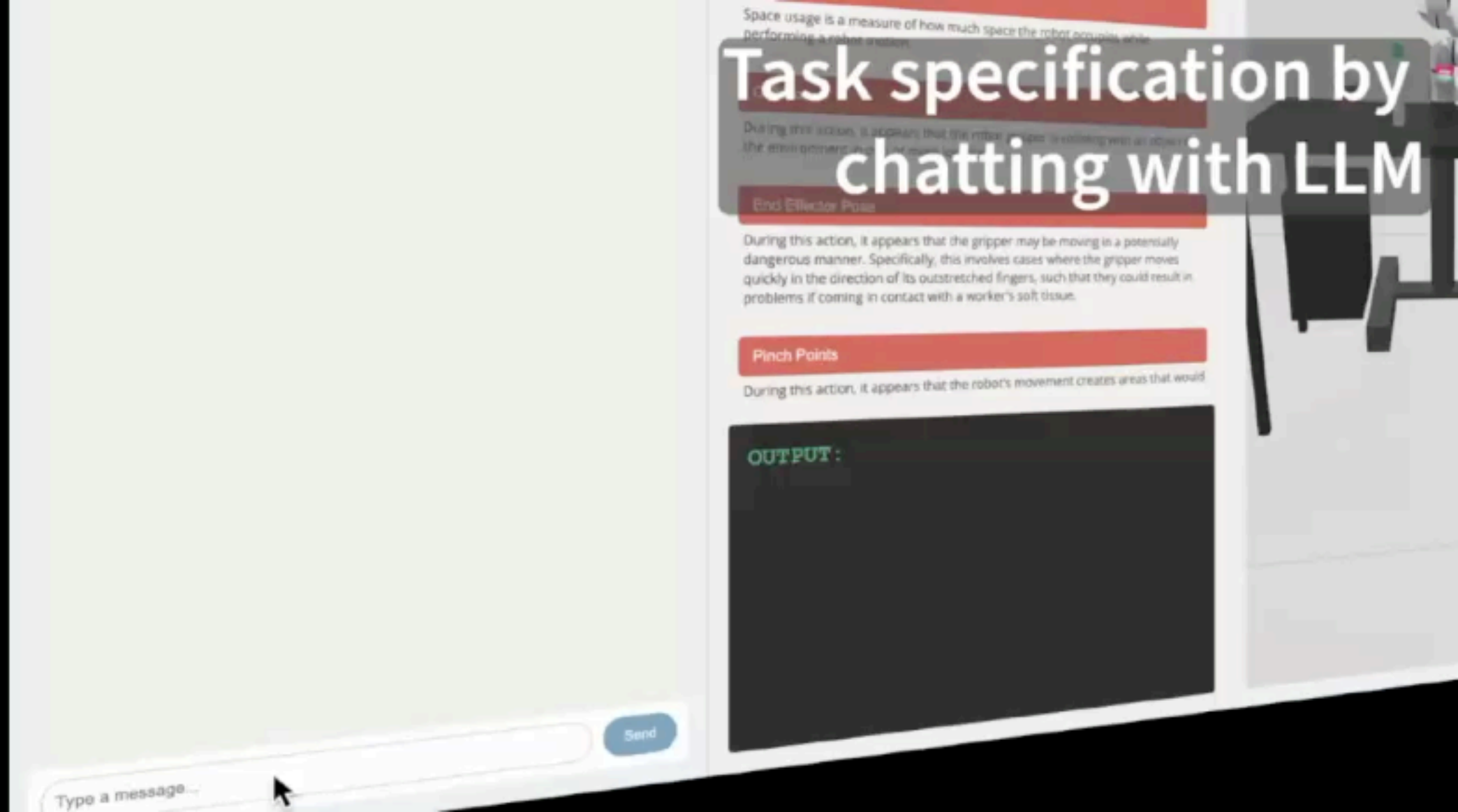
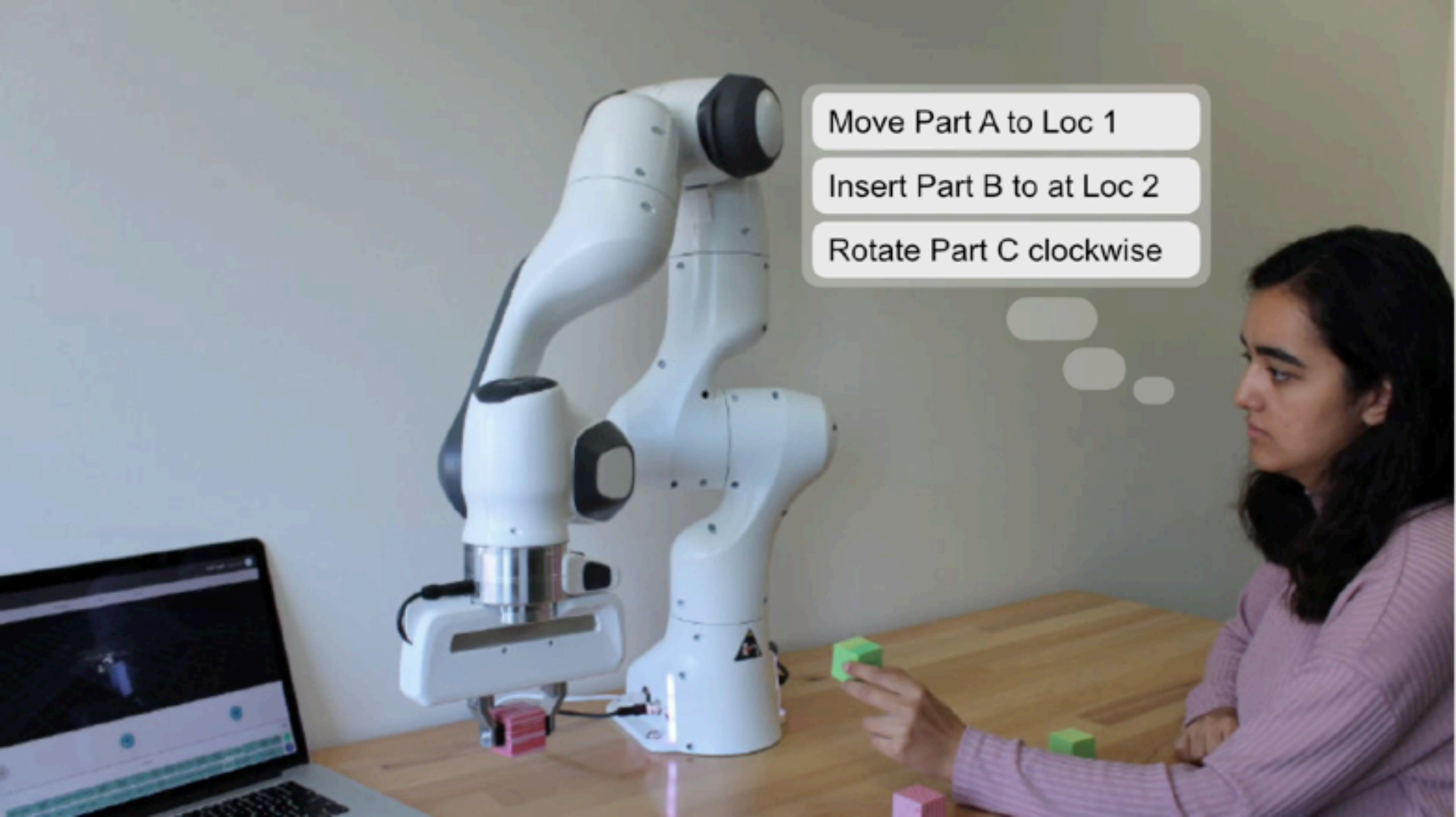

Move Part A to Loc 1
Insert Part B to at Loc 2
Rotate Part C clockwise

Task specification by chatting with LLM

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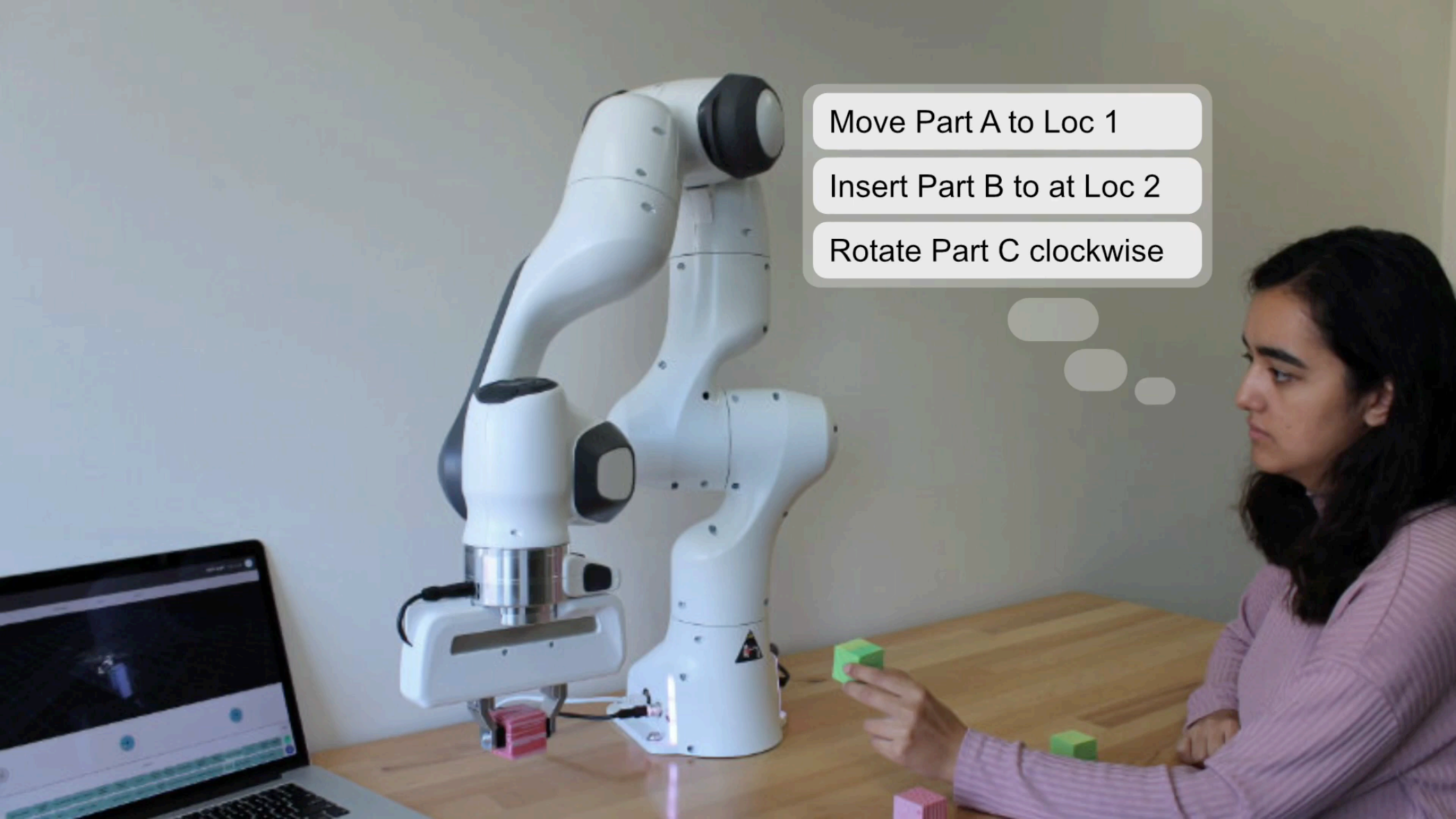
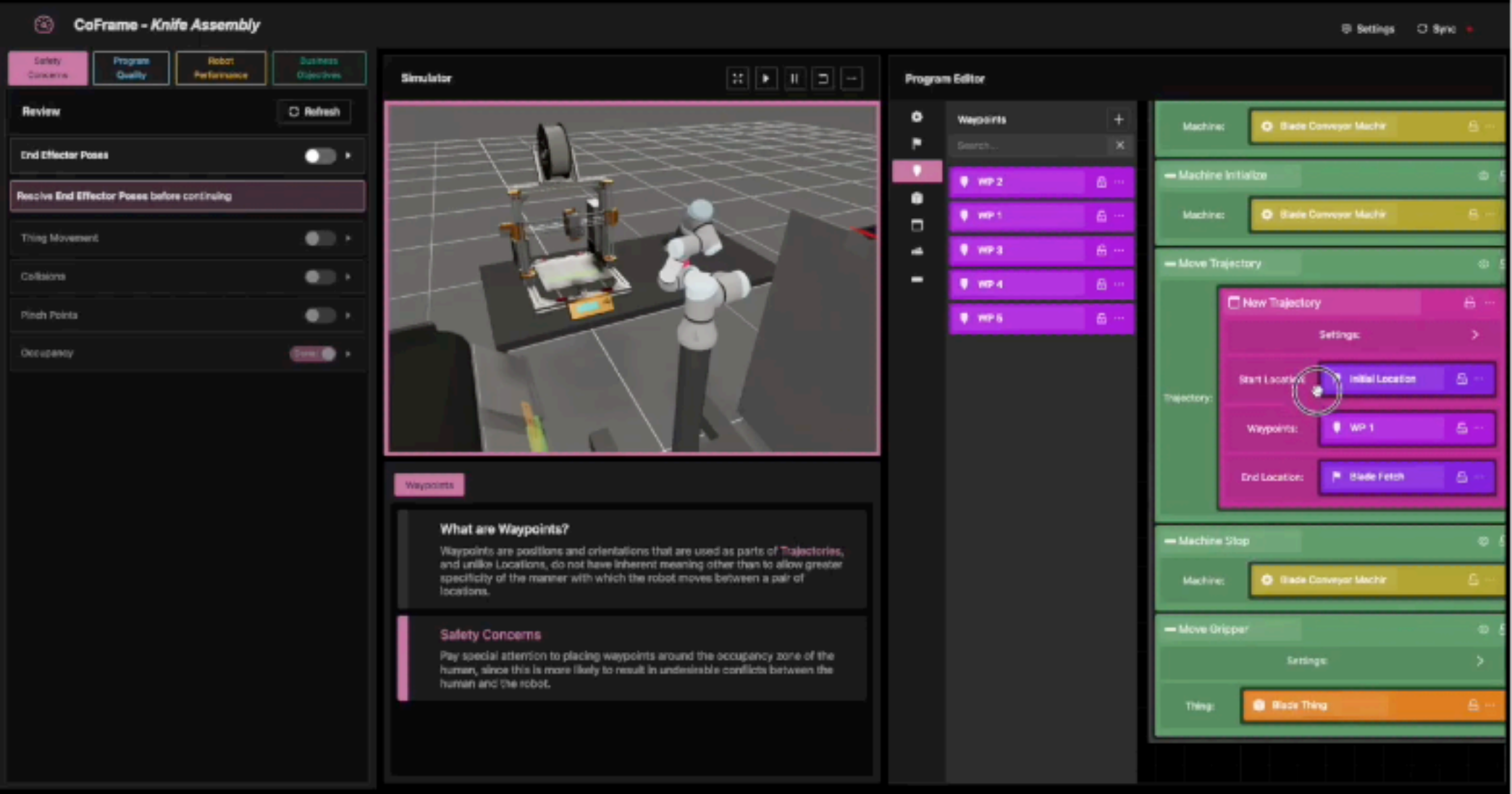

Move Part A to Loc 1
Insert Part B to at Loc 2
Rotate Part C clockwise


CoFrame - Knife Assembly
Settings
Sync
Safety Concerns
Program Quality
Robot Performance
Business Objectives
Review
Refresh
End Effector Poses
Resolve End Effector Poses before continuing
Thing Movement
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Occupancy
Simulator
Program Editor
Waypoints
WP 2
WP 1
WP 3
WP 4
WP 5
Machine:
Blade Conveyor Machir
Machine Initialize
Move Trajectory
New Trajectory
Settings:
Start Location:
Initial Location
Trajectory:
Waypoints:
WP 1
End Location:
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Thing:
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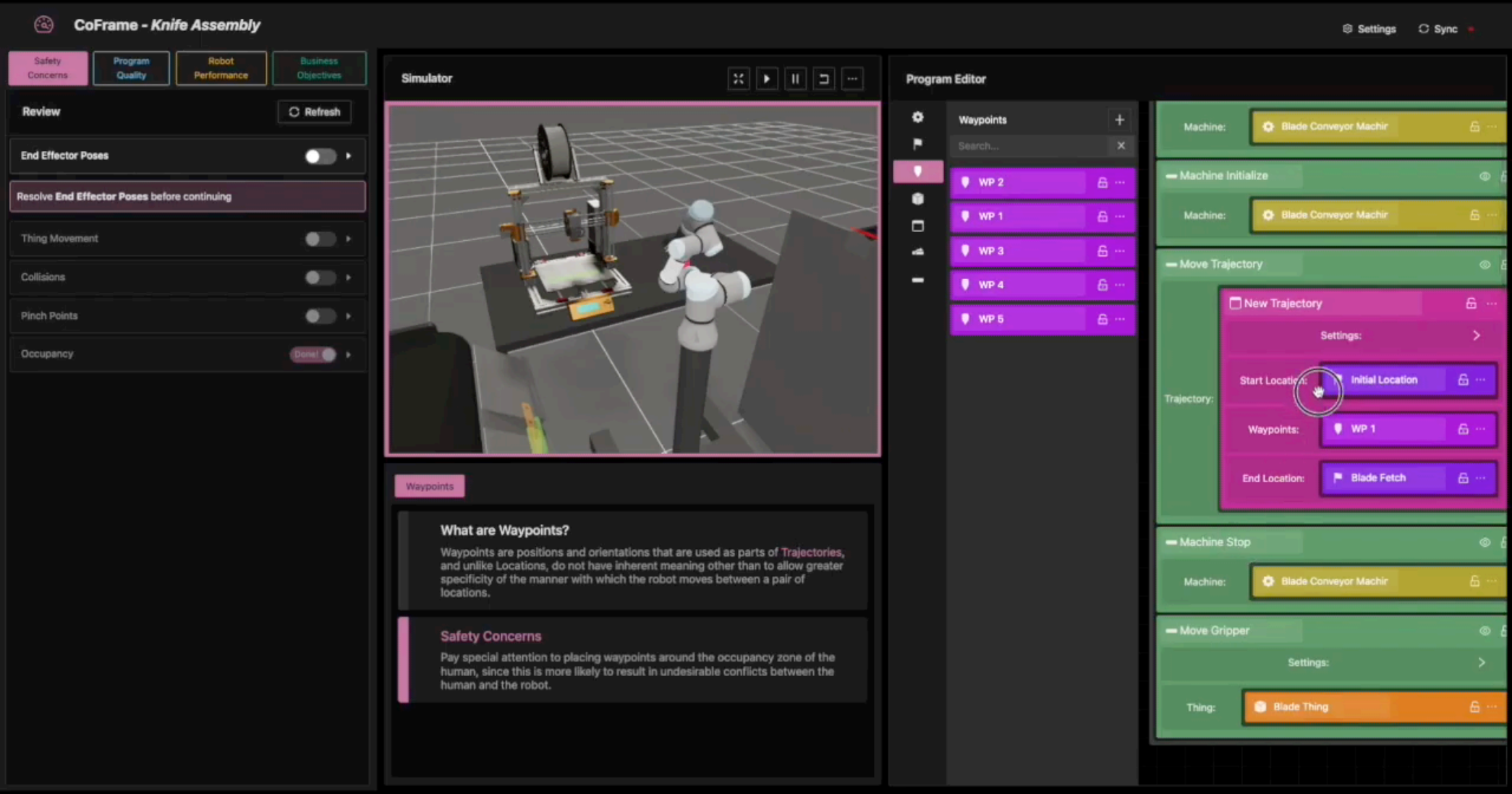
CoFrame - Knife Assembly
Settings
Sync
Safety Concerns
Program Quality
Robot Performance
Business Objectives
Review
Refresh
End Effector Poses
Resolve End Effector Poses before continuing
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Collisions
Pinch Points
Occupancy
Done!
Simulator
Waypoints
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Program Editor
Waypoints
Search...
WP 2
WP 1
WP 3
WP 4
WP 5
Machine:
Blade Conveyor Machir
Machine Initialize
Machine:
Blade Conveyor Machir
Move Trajectory
New Trajectory
Settings:
Trajectory:
Start Location:
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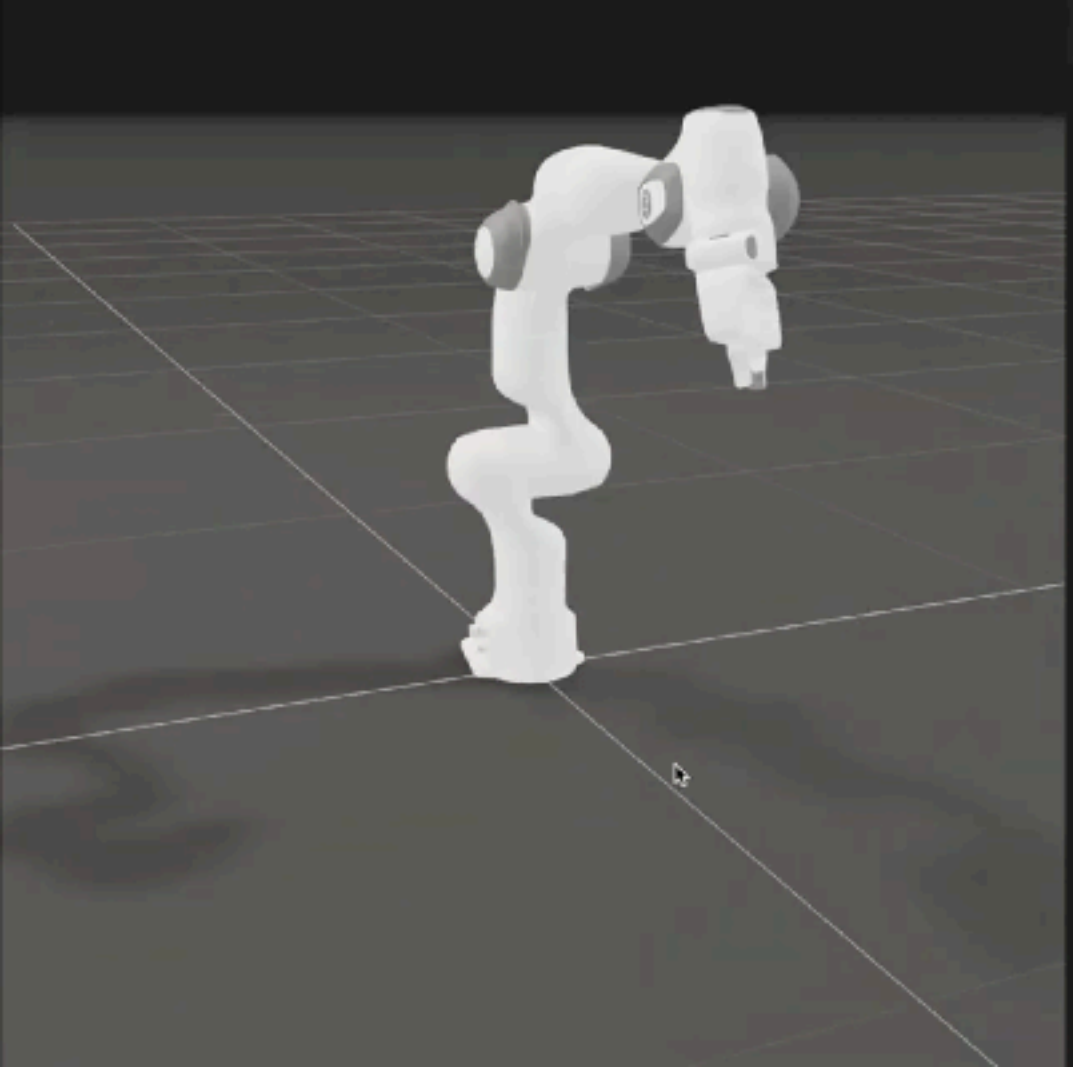
Waypoints:
WP 1
End Location:
Blade Fetch
Machine Stop
Machine:
Blade Conveyor Machir
Move Gripper
Settings:
Thing:
Blade Thing



Setup

DEFAULTS ROOT

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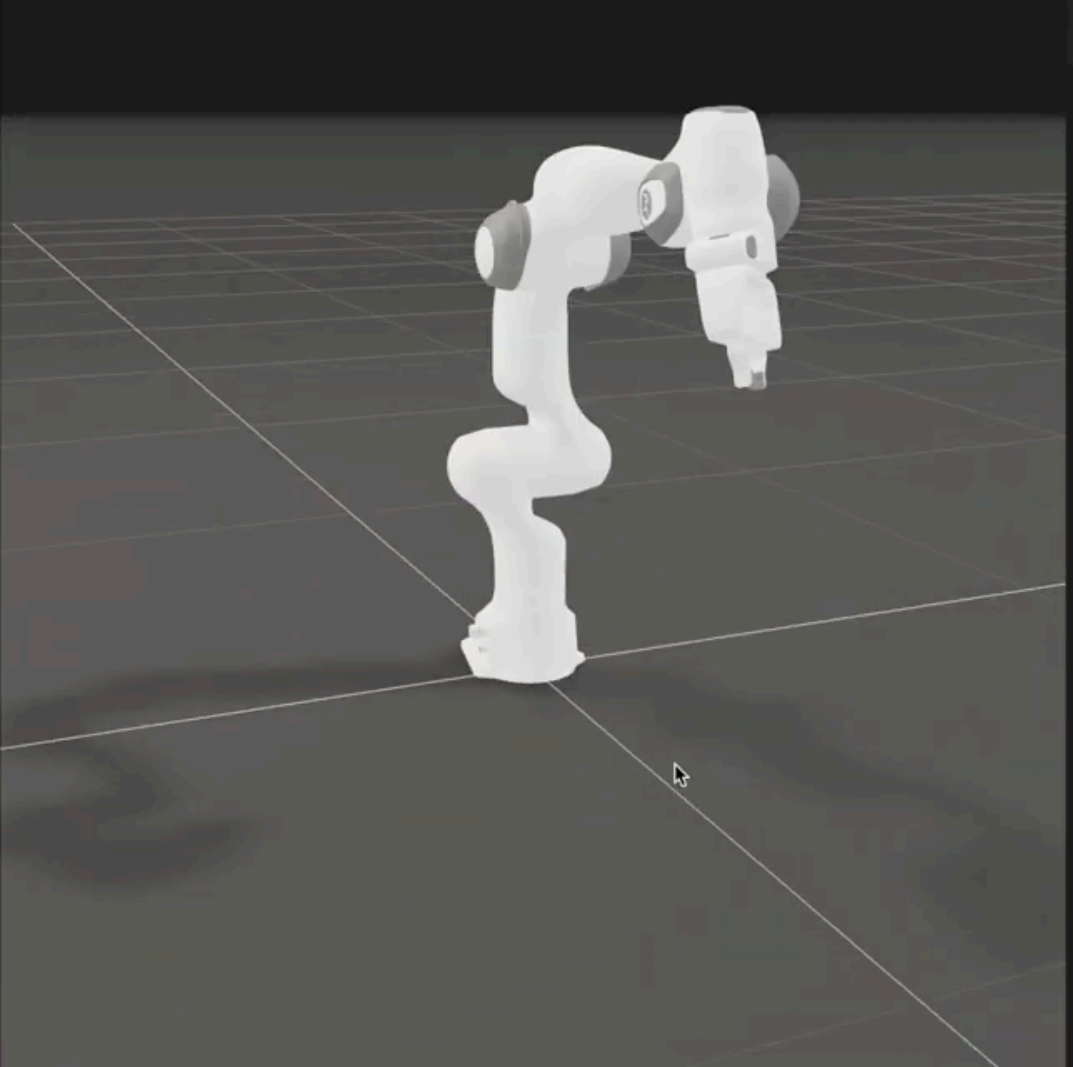

Setup

DEFAULTS ROOT

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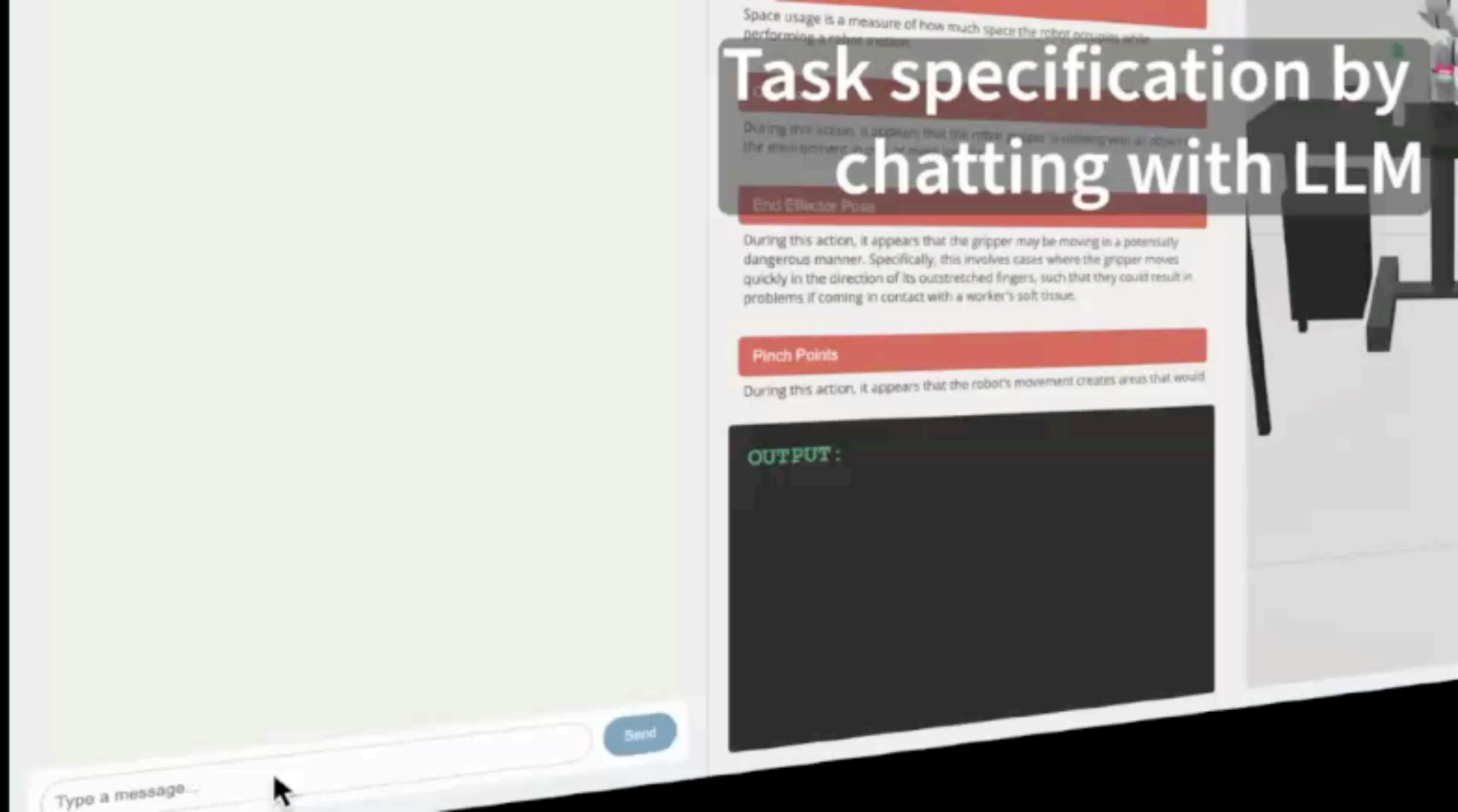
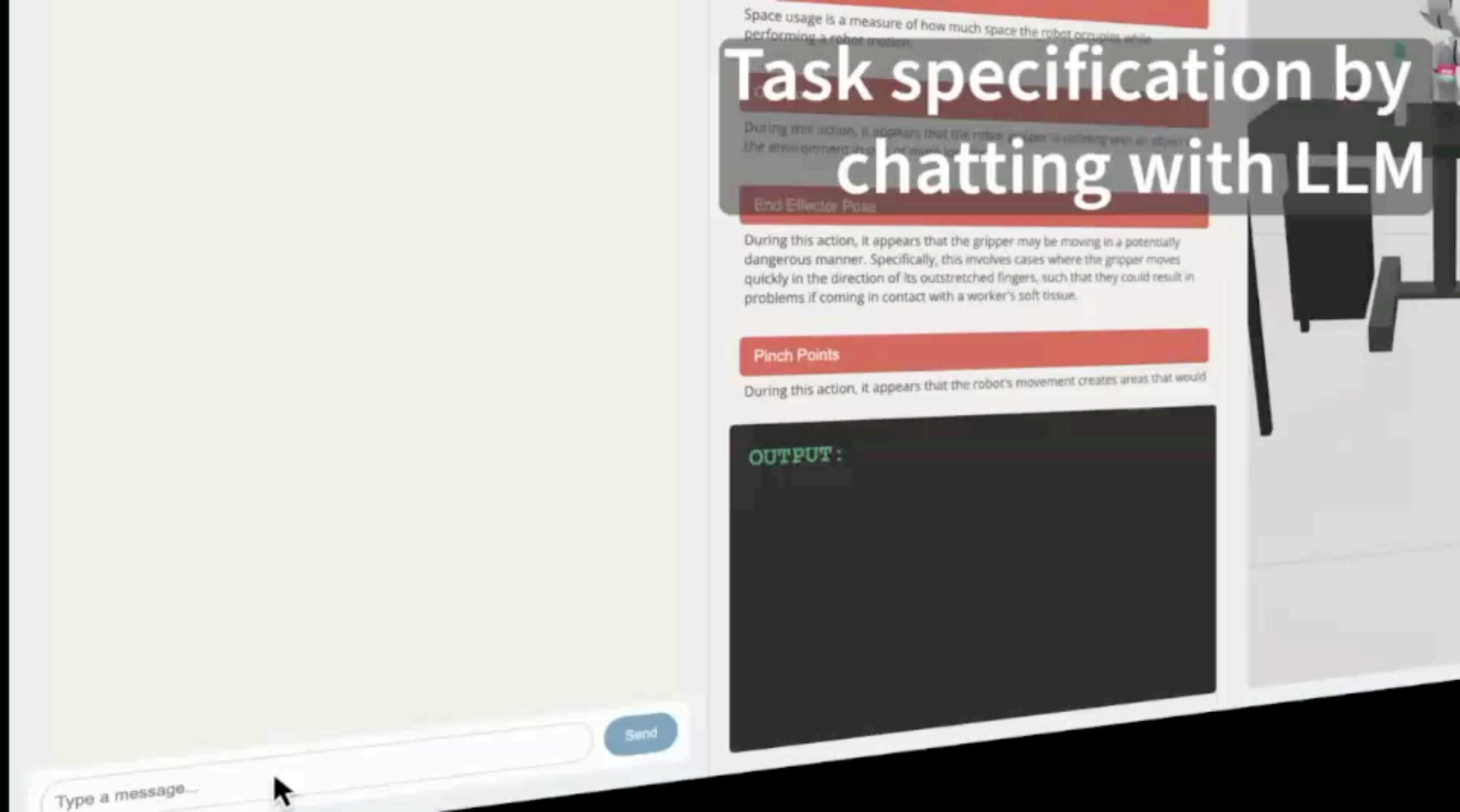
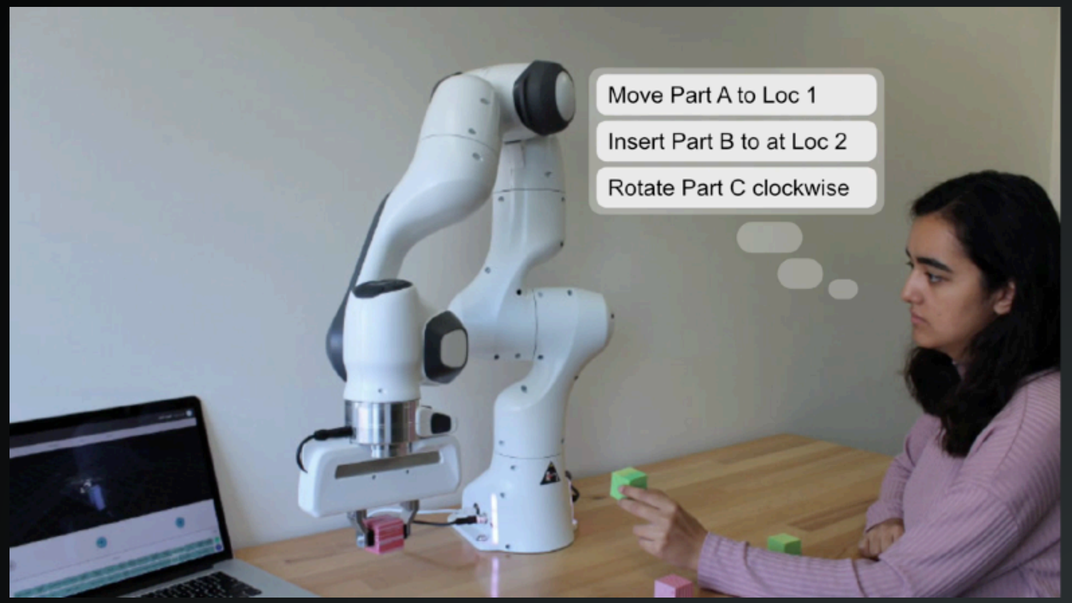
```

Task specification by chatting with LLM

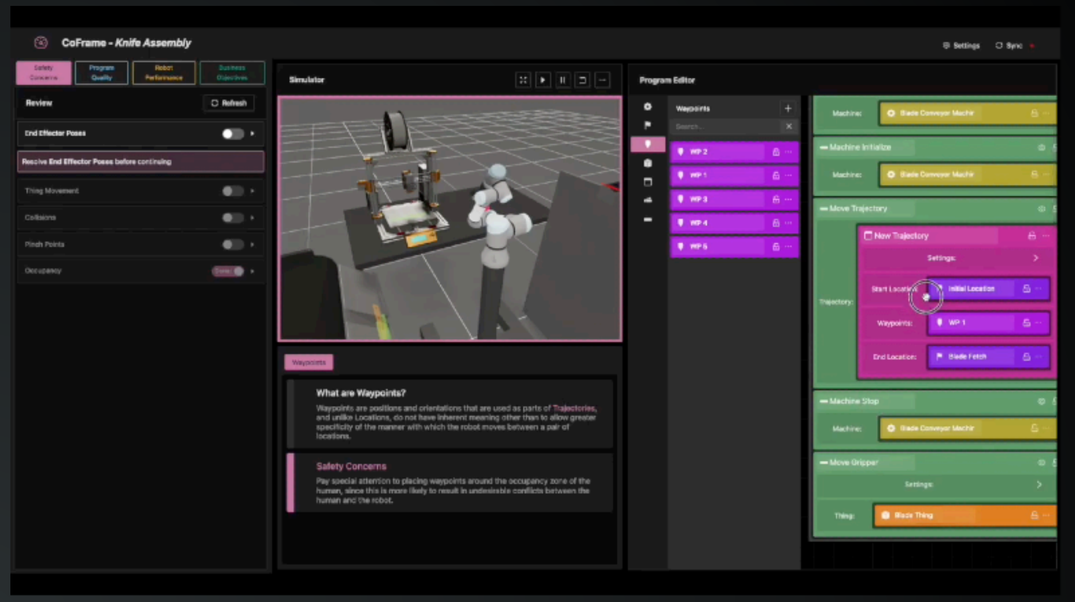


Task specification by chatting with LLM

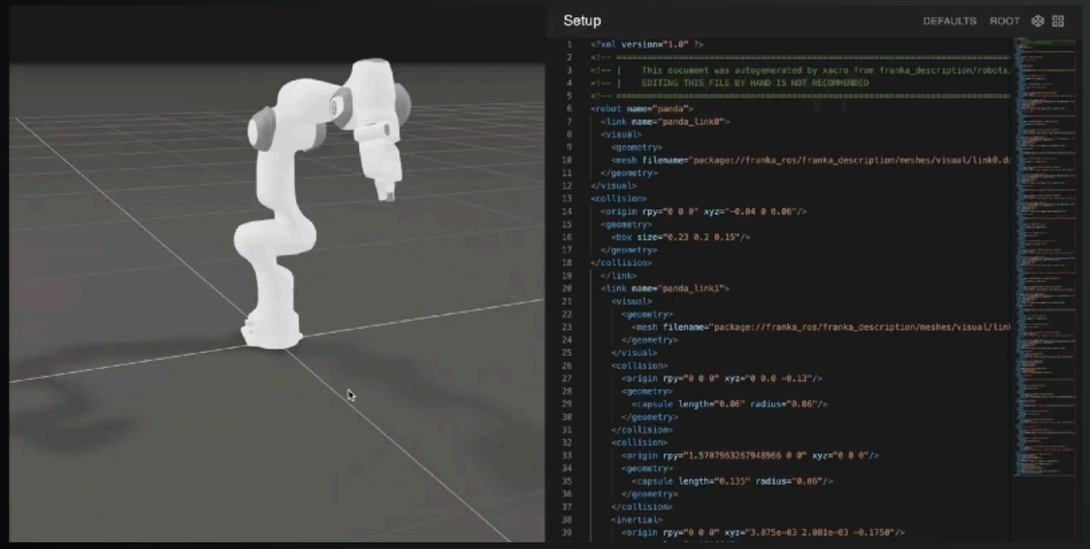




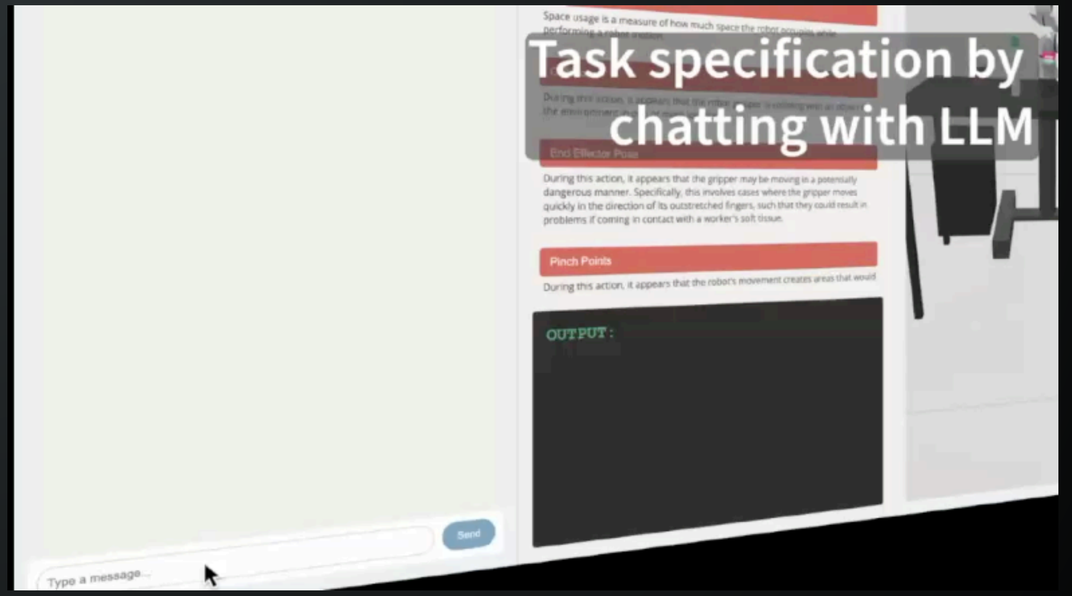
Task modeling, robot programming, human-robot teaming



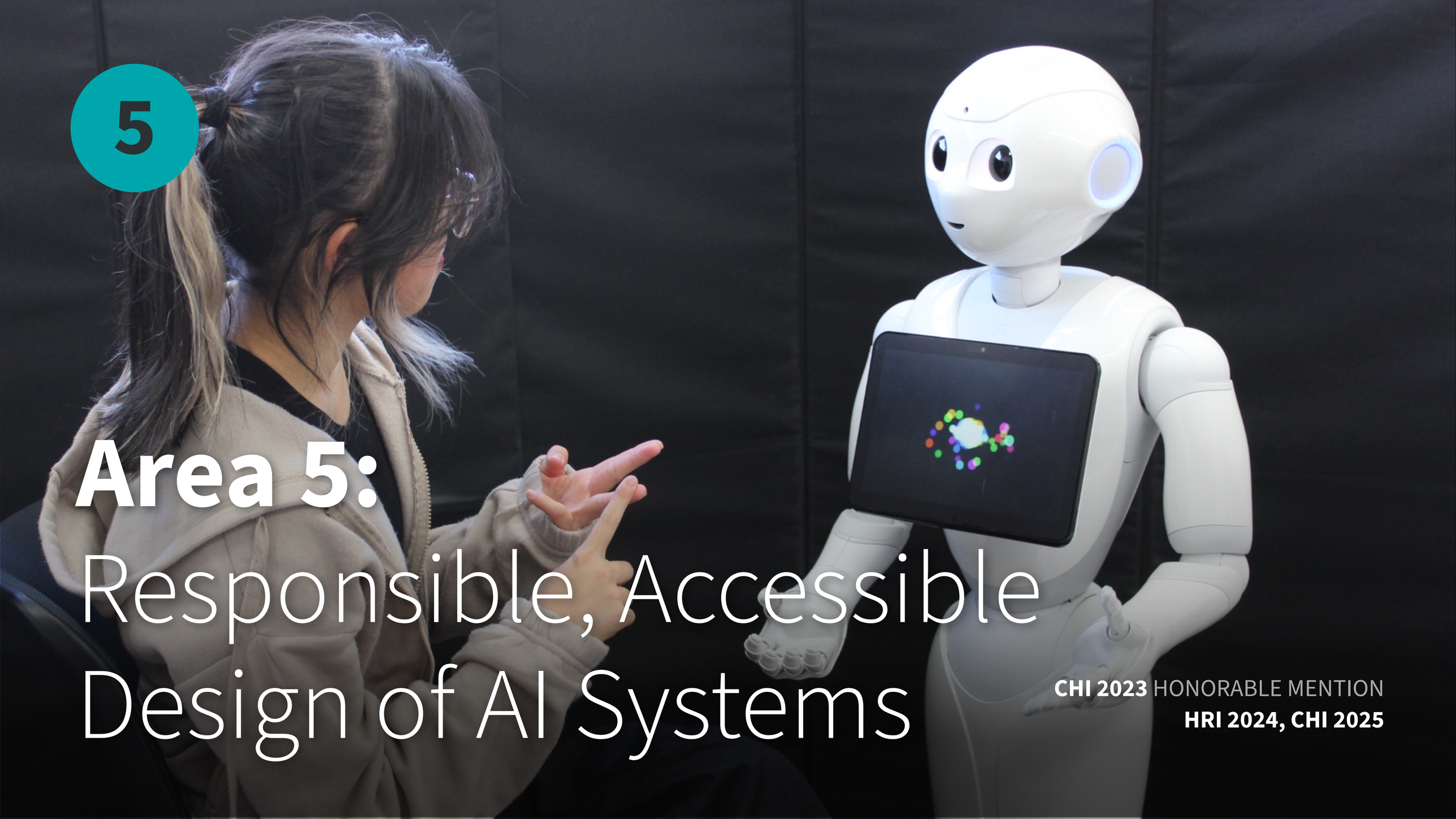
Analysis of program quality, safety, business objectives



Programming expressive motions



Programming using natural language with LLMs



5

Area 5: Responsible, Accessible Design of AI Systems

CHI 2023 HONORABLE MENTION
HRI 2024, CHI 2025