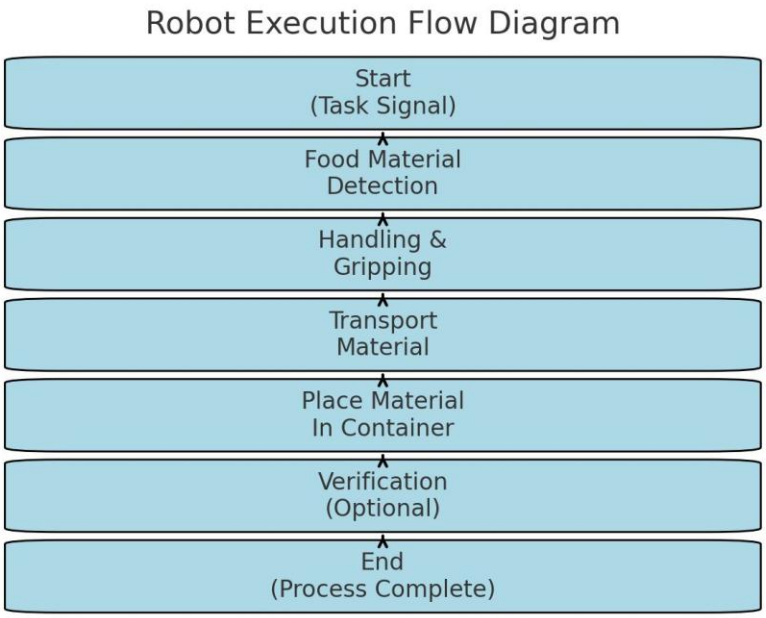
.Execution Flow Diagram (Flowchart):

The flow diagram will show the steps and processes the robot will follow to convert food materials into a container without human intervention. Here's an outline of what this could involve:

- Step 1: Start the process (Initialization)
- Robot receives the task signal (start).
- Step 2: Food Material Detection
- Sensors detect the food material.
- Step 3: Handling and Gripping
- The robot uses a gripper or a specific tool to pick up the food material.
- Step 4: Transport the Material
- The robot moves the material to the container.
- Step 5: Place the Material in the Container
- The material is placed in the container without human touch.
- Step 6: Verification (Optional)
- Sensors confirm that the material has been placed correctly in the container.
- Step 7: End the Process
- The task is complete, and the robot is ready for the next action



Working Envelope:

The working envelope refers to the 3D space within which the robot operates and handles tasks. This will define the robot's reach, movements, and areas of operation. For a robot handling food materials and placing them in a container, the working envelope should include:

- Reachable Area:
- A 3D zone where the robot can move and reach all the components, including the food material and the container.
- Movement Limitations:
- The robot's arms and grippers should be able to move within this zone to handle the food material effectively.
- Object Placement Zone:
- The area where the robot places the material after it's picked up.