

Take-home Assignment: Workflow Builder in Angular

- Objective -

Build a simple workflow builder UI using Angular, where users can drag and drop dummy nodes onto a canvas and connect them visually to form a basic flow.

Requirements

Basic Setup

Use Angular (v13+ preferred).

Use any styling approach (CSS, SCSS, Tailwind, etc.).

Responsive layout not necessary, but clean UI is appreciated.

1. Workflow Builder UI

- o A sidebar with 4 dummy node types (e.g., Start, Action 1, Action 2, End).
- The action node should have some configurable parameters.
- o A central canvas area where users can drag & drop these nodes.
- o Allow nodes to be positioned freely on the canvas.
- O Nodes should be connectable with simple visual arrows (lines).

2. Node Features

- o Each node can have:
- o A title (e.g., "Start", "Send Email", "End").
- O A fixed shape (e.g., rectangle or circle depending on type).
- An output port and input port for connection.

3. Connecting Nodes

- o Simple mouse-based connection (e.g., click + drag from one node to another).
- o Highlight connection points when hovered.
- o Show lines/arrows between connected nodes.

4. Bonus (Optional)

- Save the workflow structure to JSON.
- Load from saved JSON (recreate layout).
- O Validation: Ensure "Start" connects to at least one node, and "End" has one input.

Deliverables

- A GitHub repo link with your Angular project.
- A short README (12 mins read) explaining:
 - How to run the project
- Small Overview of Design and Architecture Decisions

Time Estimate

This should take about 12 hours depending on experience. Please don't overengineer; we care more about clear code and problem-solving than pixel perfection.

Evaluation Criteria

- Clear Angular component structure
- Usability of drag/drop and connections.
 - Code quality and organization
- Bonus points for JSON handling or node validation

Submission

Please submit materials to

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