# Touchpanel HMI Example

Build a local operator HMI interface.



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Download the solution Touchpanel HMI Example.dbsln.

This example demonstrates a **touch-first HMI** for truck refueling.
The right-hand panel provides **interactive touch buttons**, while status cards are **read-only indicators**.

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## Workflow

- **Using the UI Tags** – Track truck position, fuel type, process states, and operator messages.
- **Using Tank and Valve Tags** – Simulate product selection and stock levels.
- **Using Touch Controls** – Operate the system with on-screen buttons.
- **Monitoring Runtime** – Observe tag changes and feedback during refuel.

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## UI Tags in Action

The project already includes UI tags such as:

- @Tag.UI/truckPosition  moves with “Position Truck.”
- @Tag.UI/typeOfFuel  updates when a valve is touched.
- @Tag.UI/amountOfFuel  adjusted with +/– buttons.
- @Tag.UI/Message  shows operator prompts, auto-clears after 3–5s.
- @Tag.UI/endOfRefuel  set when refuel completes.

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## Tank and Valve Tags

Touch the valve icons to simulate fuel selection:

- @Tag.Valves/alcohol, @Tag.Valves/Disel, @Tag.Valves/addGAS, @Tag.Valves/addRegularGAS
- Each updates @Tag.UI/typeOfFuel and enables refueling logic.
- Tank level tags (@Tag.Tanks/levelOfAlcohol, etc.) decrease as the truck refills.

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## Touch Controls

Interactive buttons on the right:

- **Confirm and Start Refuel** – Starts loading if truck is positioned and fuel is selected.
- **Reset** – Returns all tags to initial state.
- **Position Truck** – Moves truck graphic into place.
- **Next Truck** – Sends current truck out and resets cycle.
- + / – – Adjust @Tag.UI/amountOfFuel.

These are designed for finger touch, with large hit areas and immediate feedback.

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## Monitoring Runtime

- Status cards update live:
    - **Truck in Motion** (@Tag.UI/enableTruckMovement).
    - **Type of GAS** (@Tag.UI/typeOfFuel).
    - **Amount to Refuel** and **Amount Refilled**.
- Operator messages confirm or block actions.
- Tank visuals on the left decrease as fuel is consumed.

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