**Problem**: Mechanic shop wants to visually track the **mechanic's workflow** of a car repair from customer drop off to customer pick up. Currently the mechanics use a whiteboard to track the progress because software previously used did not track the progress of the car in a useful manner.

**Current visual whiteboard/repair that lists the cars currently being repaired and their statuses**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Car Description** (blue honda, "Jackhole's car") | **Repair Order No.** | **Diagnosed** (mechanic initials) | **Sold** (mechanic initials) | **Parts Ordered** (mechanic initials) | **Parts Received** (mechanic initials) | **Repair Started** (mechanic initials) | **Repair Finished** (mechanic initials) | **Test Driven**  (mechanic initials) | **Paperwork Submitted**  (mechanic initials) | **Customer Contacted for pickup** (mechanic initials) | **Current Status Details** (waiting for approval, waiting for parts, waiting for pickup) |
| blue honda accord | 01 | **Yes** | **No** |  |  |  |  |  |  |  |  |

**Query result displayed on main page of website**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **car.description** | **repair.id** | **repair\_status.status1** | **repair\_status.status2** | **repair\_status.status3** | **repair\_status.status4** | **repair\_status.status5** | **repair\_status.status6** | **repair\_status.status7** | **repair\_status.status8** | **repair\_status.status9** | **repair.current\_status** |

Database Questions:

1. We need 2 many:many relationships for the Step 1, but in the end implement only 1
   1. ASE certifications and mechanics
      1. similar to certifications in lecture
   2. customers and cars
      1. husband brings in car, later wife brings in car for different repair
   3. parts and repairs
      1. Do we actually want to track parts here? If we are calculating cost we could just add a total parts cost. Maybe we include in original design and can take out if too complicated

Website Questions:

1. Inserting, updating and deleting (auto-incremement auto-delete when repair.current\_status is set to complete)
   1. At the end of each row add update/delete, auto-delete once current status is set to complete
   2. Can also have links at top, add customer, add car, add repair, update repair, complete repair