Project Title: Procurement Management

Overview: The project will focus on part of supply chain management to process and fulfil the order. This system will include roles like admin, inspection manager, procurement manager and client. Admin is the owner of the supply chain. Inspection manager's duty will be to check if the checklist has been met for the goods to transport from point A to point B. Procurement manager's role will be to create the checklist to be verified if all conditions had met/ attach a default checklist for an order to process and verify the details filled by the inspection manager. Clients can track the status of their order and also provide the list of checklists to be followed when transporting the goods, which the procurement manager will be creating later on for the inspection manager to make sure all checklists have been followed.

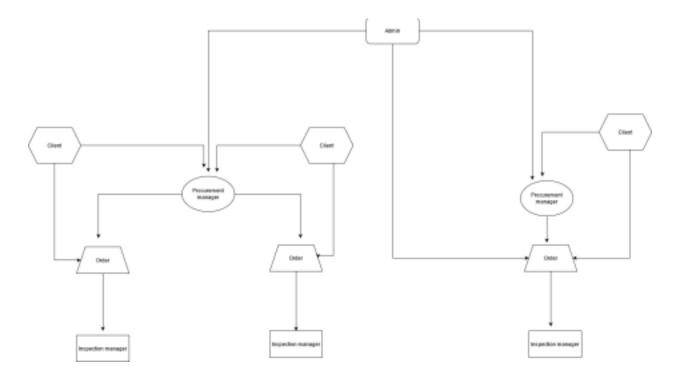
Whole flow for a particular order to process and complete.

- Client sends a document of requirement to be present in a vehicle or to be followed while
 in transit. (this can be taken off the system offline) (client calls admin/ procurement
 manager offline and mentions about the order and about the requirement for the
 vehicle transporting his goods)
- Procurement manager creates the checklist based on the document submitted by the client (this will be submitted offline), creates the order in the system and attaches this checklist with the order/ default one/ already present checklist of the same client. (already present means if same client, list of checklist is to be shown if one of previous checklist is to be attached)
- Inspection manager checks the checklist and adds the value. The value can be from a
 dropDown list/ choice of one/ multiple choice/ summary kind of answer. Along with this
 in the checklist requires an image of the vehicle to be uploaded then the inspection
 manager takes the photo and uploads the photo. (Just like any survey form, try creating
 survey form on google forms or similar platform like survey monkey, this will be the
 checklist)
- Once the inspection manager confirms the checklist as done, the procurement manager also needs to confirm the order (updates order status).
- While the admin can see all this activity going on for a client/ for a particular order.

<u>Guidelines</u>

 Candidate needs to create a checklist having different forms of options to fill and upload the file.

- The image uploaded should be linked to a proper checklist and section and the checklist should be saved for later use.
- The same checklist should be able to update it later on, on updating older checklists and its values should not be affected. (expecting the candidate to store the question answer for a checklist for a particular order and not reference it directly to checklist by any means to avoid any loss of data if its updated in near future).



Functional Requirement

No Client side Needed

Login: 4 hr

- Admin, Client and procurement manager should be able to login with email and password.
- Inspection manager should be able to login with a mobile number and password.
- Should be same API with option to

Register user: 12 hr

- Admin should be able to create procurement manager, inspection manager, client.

 If admin created an inspection manager, then inspection manager can directly work under admin or admin can assign/unassign inspection manager under any procurement manager.
- Procurement manager should be able to create an inspection manager and client. If the

inspection manager is already present in the system then should throw an error as already present and contact admin for the same.

 Inspection manager under one procurement manager will not be visible to another procurement manager.

Order: 12 hr

- Procurement manager will create orders.
- Inspection manager, client, procurement manager and admin will be able to see the status of order.
- Inspection manager, procurement manager and admin will be able to update the status of order.
- Procurement manager should be able to link a proper checklist to a particular order.

Checklist: 22 hr

- This should be like a question answer paper and with multiple forms of answer options available.
- For eg: Cooler present (yes or no/ boolean value expected), category eatable, drinkable, medicine (this can be a list from which one needs to be selected (drop down)), upload image before loading and after loading (expect image to be uploaded). Multiple choice kind of answer expected for driver details (licence present, driver number active, air pressure good) and at end text as answer to fill up overall summary. (all this question to be marked as required or optional to be later used to validate the form submission).
- For better understanding about checklists try the google forms. Also check the images attached below.

Guidelines:

Checklist is like a question paper or you can refer to any survey form where we have multiple
types of options when creating a survey. It's the same over here, it should at least contain 3 of
them.

Answer: 6 hr

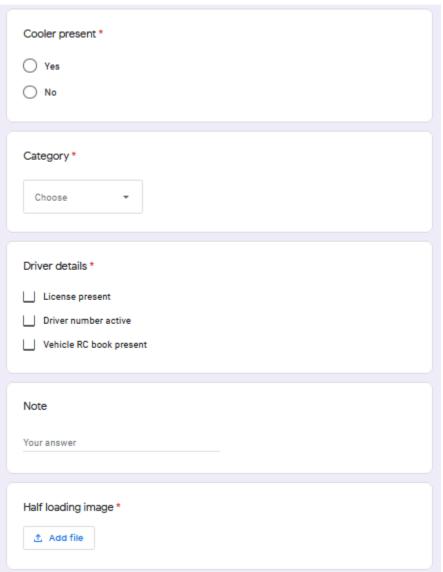
- Answer to checklist, this needs to be validated with respect to the checklist and fields marked with required and optional.
- This document will consist of a question(checklist) and answer to the questions.

Guidelines:

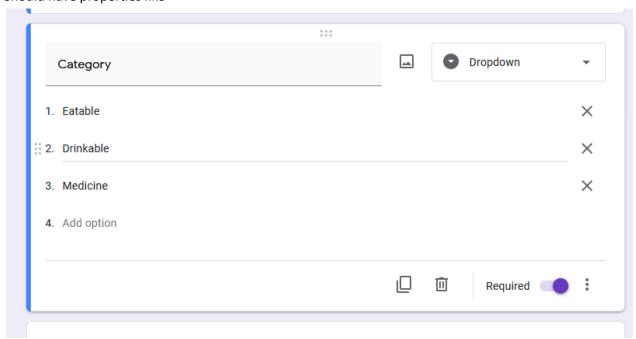
- 1. Should be able to create a login module.
- 2. Should be able to manage roles and access for a particular module.
- 3. Should be able to authorize and unauthorized access to any resource/module based on the user role who made the request. (like inspection manager cannot create any user, procurement manager cannot link any inspection manager to another procurement manager for it one has to contact admin)
- 4. Should be able to upload a file as a stream and link it to the proper data set.
- 5. Should be able to validate the form data properly.

Checklist (Question)

This should be presented as an proper JSON object

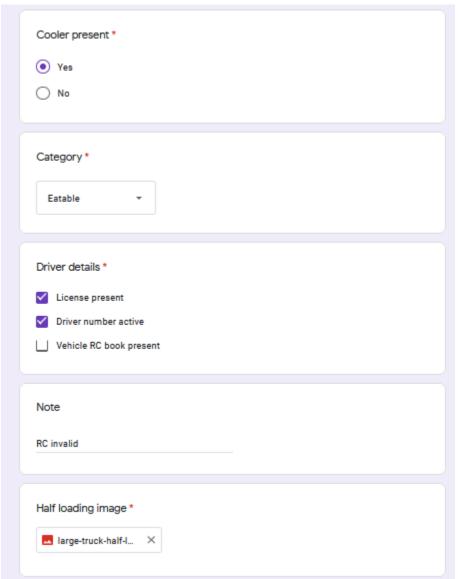


Should have properties like



Answer (checklist filled by inspection manager)

This should be properly presented as a JSON object, with just a JSON object one should be able to make this UI if presented.



Non- Functional Requirement:

- Reuse of modules and Clean coding structure is expected.
- Well maintained folder structure
- Any node framework to be used (preferred express.js)
- Database of your choice
- The main point of this project lies around the checklist.

Delivery format

• GIT.

Delivery Time

66 hours