

Machine Learning Engineer - Take Home Test

Task

Build a simple web application (for example using Streamlit) where a user can enter a question about a car manual (e.g., "How to turn on indicator in MG Astor?", "Which engine oil to use in Tiago?"). The app should:

Provide a text input field for the user question.

On submission, determine:

If the manual for the asked car/model is in your repository.

If not available → display a friendly message: "Manual is not available for this car/model."

If available → attempt to search the manual, and answer the question. It should also display the answer and citation clearly beneath the input.

You should use the two example manuals you provided (for the MG Astor and the Tata Tiago) as part of your manual repository.

Design Considerations

Below are some design considerations you can consider for creating this application

1. Input - How will you parse and store the data ? For simplicity - focus on textual information first and then focus on extracting more complex data like tabular data.
2. Output - Structure of the response and citations, ensuring output response consistency and handling incomplete queries
3. Scalability - Storage considerations, Input processing strategy, Search optimisations

Data

For the scope of this task, use the below two manuals

<https://www.team-bhp.com/forum/attachments/official-new-car-reviews/2238569d1638110150-mg-astor-review-astor-manual.pdf>

tmtcars.tatamotors.com/images/service/owners/owners-manual/pdf/tiago/APP-TIAGO-FINAL-OMSB.pdf

Submission

Implement your solution using Python 3.6 or above. Make sure to include instructions so that service can be setup in another environment for evaluation.

Submit a zip file containing solution.

Please submit the test within 1 week of receiving

If you have any questions reach out to us and we will answer them