**Developer Take Home Test**

**The Problem**

You are tasked with building a simple application that exposes an endpoint to process cURL requests by extracting data from provided PDF files, running a few calculations and returning the calculated information. The PDF file is stored in a publicly accessible Amazon S3 bucket, and the cURL request will contain the file URL in its payload.

**Context**

Turo is an auto rental platform where people can rent vehicles from hosts. The host has trip receipts from their bookings and wants to understand the average trip price they have been charging for the month of October as well as how many days their vehicle was rented for.

**Requirements**

Input:

- Your application should be capable of receiving a cURL request.
- The cURL request payload will include a list of URLs of PDF files stored in an publicly accessible manner.
- Below is a sample of the requests the endpoint should be able to handle:

```
Unset
curl -X POST -H "Content-Type: application/json" -d '{"file_urls":
["https://your-s3-bucket-url/file1.pdf",
"https://your-s3-bucket-url/file2.pdf"]}'
https://your-api-endpoint.vercel.app/calculate
```

Processing:

- Iterate through each provided file URLs - see Exhibit 2 for a list of URLs.
- For each file, extract relevant data, including start date and time, the end date and time, and the trip price (see Exhibit 1 for a labeled anatomy).
- Calculate the total number of days booked during the month of October across all the trip receipts. Name this result “Days Booked”.
- Calculate what percentage of the month the vehicle was booked by taking the “Days Booked” and dividing it by the number of days in October. Name this result “Occupancy Rate”.
- Calculate the total trip price across all bookings for the month of October and divide it by the number of “Days Booked”. Name this result “Average Daily Rate”.

Output:

- Return the extracted data in a structured JSON packet.
- Below is a sample of what the structure might look like.

```
Unset
{
"Days Booked" : "11",
"Occupancy Rate" : "35.4%",
"Average Daily Rate": "$43.44"
}
```

Error Handling:

- Implement proper error handling for cases where the PDF file is not accessible or the extraction process fails.

Deployment

- Please deploy your application on Vercel and set the URL for your endpoint as https://{{yourname}}_greentest_1.vercel.app/testendpoint

Expected Results:

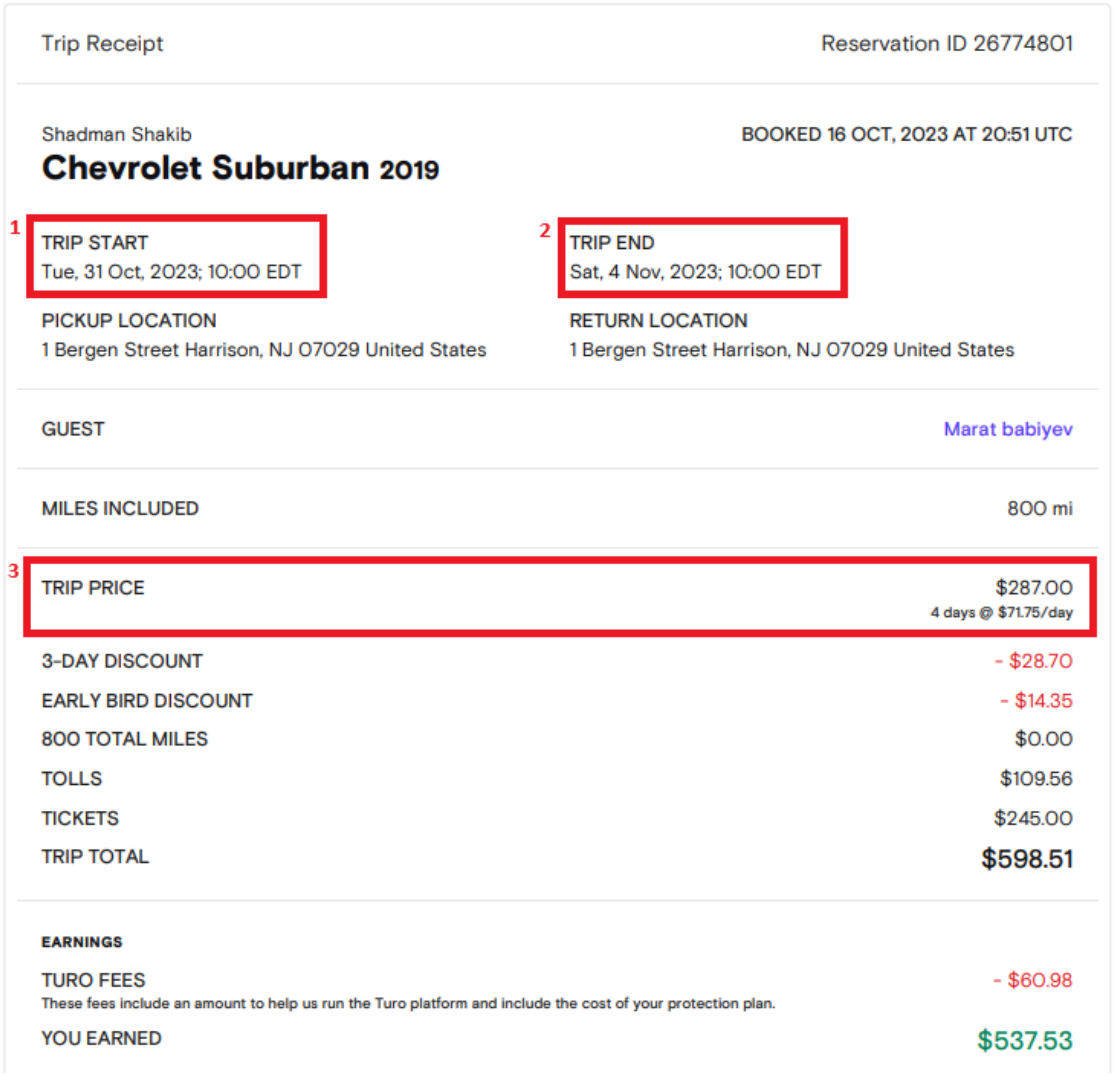
- When your application receives a cURL request, it should successfully extract the required transaction data from the provided PDF file.
- It should be able to calculate the correct values for the required outputs.
- Proper error messages should be returned in case of any issues with the PDF file or extraction process.

Notes

1. You are free to use any programming language or framework of your choice.
2. Ensure that your code is well-documented and includes instructions on how to run and test the application.
3. Consider scalability and maintainability when designing your solution.
4. Feel free to include additional features or optimizations that you think would enhance the functionality of the application.

If you have any questions, please feel free to reach out to us by email at developer.tests@tealandmandy.com.

**Exhibit 1: Anatomy of Turo Receipts**



Trip Receipt — Reservation ID 26774801

Shadman Shakib — BOOKED 16 OCT, 2023 AT 20:51 UTC

**Chevrolet Suburban 2019**

1 TRIP START
Tue, 31 Oct, 2023; 10:00 EDT

2 TRIP END
Sat, 4 Nov, 2023; 10:00 EDT

PICKUP LOCATION
1 Bergen Street Harrison, NJ 07029 United States

RETURN LOCATION
1 Bergen Street Harrison, NJ 07029 United States

| | |
|---|---|
| GUEST | Marat babiyev |
| MILES INCLUDED | 800 mi |
| 3 TRIP PRICE | $287.00 (4 days @ $71.75/day) |
| 3-DAY DISCOUNT | - $28.70 |
| EARLY BIRD DISCOUNT | - $14.35 |
| 800 TOTAL MILES | $0.00 |
| TOLLS | $109.56 |
| TICKETS | $245.00 |
| TRIP TOTAL | $598.51 |

**EARNINGS**

| | |
|---|---|
| TURO FEES (These fees include an amount to help us run the Turo platform and include the cost of your protection plan.) | - $60.98 |
| YOU EARNED | $537.53 |

1. The trip start date and time
2. The trip end date and time
3. The trip price

**Exhibit 2: File URLs for Testing**

```
https://testdocs11.s3.us-east-2.amazonaws.com/26774801.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/26899435.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/26926135.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/27082060.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/27270383.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/27401957.pdf
https://testdocs11.s3.us-east-2.amazonaws.com/27486932.pdf
```