Coding Challenge

Explanation of Task

- You can use any technology/ies to complete this code challenge but preferably use PHP and Laravel.
- Develop the backend API method call mentioned in the API Documentation.
- Develop a simple form page that can handle user input, call the API method and then display the results.
- Error handling must be setup in both frontend and backend.
- Some requirements were left open to interpretation to test your ability in making correct assumptions.
- Expected duration of the task: 1 to 2 hours.
- Note: Copying code or utilizing AI tools for creating the code will invalidate the entry.

You will be judged on

- Correct use of coding standards and practices.
- Overall implementation of the solution.
- Ability to understand requirements.

You will not be judged on

- Frontend Styling.

API Documentation

General Points

- The API conforms to the **REST architecture**.
- Data sent in the request and response bodies are encoded in **JSON**.
- Access to the API is restricted via **authorized JWT tokens**.
- The requests must include these **two required HTTP headers**:

Key	Value
Content-Type	application/json
Authorization	Bearer <JWT Token>

Type of Request: POST

URL Endpoint: /quotation
Request Body Parameters
All the below parameters are required.

Key	Description	Example
age	Comma-separated list of ages.	"28,35"
currency_id	Currency code in ISO 4217 format. Can either be "EUR","GBP" or "USD"	"EUR"
start_date	Start date of trip in ISO 8601 format.	"2020-10-01"
end_date	The end date of the trip in ISO 8601 format.	"2020-10-30"

Response Body Parameters

Key	Description	Example
total	Total Price of Policy	117.00
currency_id	Currency code in ISO 4217 format.	"EUR"
quotation_id	Quotation ID for your reference.	1

Total Calculation
- Total = Fixed Rate * Age Load * Trip Length
- Fixed-rate = 3 per day.

Age Load Table

Age	Load
18-30	0.6
31-40	0.7
41-50	0.8
51-60	0.9
61-70	1

Trip length is inclusive of both start date and end date so a start date of 2020-10-01 and an end date of 2020-10-30 will constitute a trip length of 30 days.

Worked Example:
- Total = (3 * 0.6 * 30) + (3 * 0.7 * 30) = 117.00