SUPERIOR UNIVERSITY

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Task: 08

Project Report: NASA API Backend + Flask

1. HTML Structure

- The document starts with the `<!DOCTYPE html>` declaration, which specifies that this is an HTML5 document.
- The `<html>` tag wraps the entire content, and the `lang="en"` attribute specifies that the language is English.

2. Head Section

- The `<head>` section contains metadata and styling.
- The `<meta charset="UTF-8">` ensures proper encoding for different characters.
- The `<meta name="viewport" content="width=device-width, initial-scale=1.0">` ensures the page is mobile-responsive.
- The `<title>` tag defines the title of the webpage as "NASA APOD".

3. CSS Styling

- The `<style>` block provides styling rules for the page.
- The `body` has a dark background, white text, and is centered.
- The `h1` (title) is colored yellow (`#ffcc00`).
- The `img` tag ensures the image scales properly and has rounded corners.
- The `.description` class applies styling to the text box, including padding and a semi-transparent background.

4. Body Section

- The `<body>` tag contains the main visible content.
- The `<h1>` tag displays the heading: "NASA Astronomy Picture of the Day".
- The `<h2>` tag dynamically displays the title of the image fetched from NASA's API.
- The `<img>` tag dynamically loads the image using `{{ apod.url }}`.
- The `<div class="description">` contains an explanatory paragraph fetched dynamically using `{{ apod.explanation }}`.

5. Dynamic Content with Flask

- The placeholders `{{ apod.title }}`, `{{ apod.url }}`, and `{{ apod.explanation }}` are Jinja2 template variables.
- These values are passed from the Flask application (`app.py`) to dynamically insert NASA's Astronomy Picture of the Day details.

Summary

This HTML file is a template designed to display NASA's Astronomy Picture of the Day. It uses Flask's templating engine to dynamically update the title, image, and explanation based on API data fetched from NASA.