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| molecular visualizer  Report by Anuj Srivastava  REG NO.: 24BSA10176 |
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 **Purpose of the Tool**: The Molecule Visualizer is a web app designed to make learning about molecules fun and interactive. It lets users enter a chemical formula (like "C2H6") and generates a 3D visualization of the molecule.

 **Technology Used**:

* The app is built using basic web technologies: HTML, CSS, and JavaScript.
* It uses the powerful 3Dmol.js library to render molecular structures in 3D.

 **How It Works**:

* Users input a molecular formula or name into a text box.
* The app fetches molecular data from PubChem's database using an API.
* It then displays the molecule in a 3D viewer with sticks and spheres to represent bonds and atoms.

 **User Interface**:

* The app is simple and user-friendly, with a clean layout.
* A background image gives it a polished look, and the input field and buttons are styled for ease of use.

 **Features**:

* Molecules are displayed in 3D, allowing users to zoom and rotate for better exploration.
* Errors are handled gracefully; users get helpful alerts if something goes wrong (like a formula not being found).

 **Who It's For**: Perfect for students, researchers, or anyone curious about molecules!

 **Future Ideas**:

* Support for more input formats, like SMILES strings.
* Offline visualization for even more flexibility.