# Quote generator with 3D galaxy visualization

This project integrates quote fetching, local storage, event-driven UI updates and a 3D interactive galaxy background.

Quote generator

* Fetches random quotes from two APIs (Quotes Hub as primary, Quotable as secondary in case of failure)
* Displays a new quote upon clicking the “New Quote” Button
* Saves quotes to local storage upon clicking “Save To Storage” Button
  + The saveToStorage function is curried, allowing it to be used for saving data under different keys in the future
* Displays saved quotes in a list format under “Favorites”
* Includes delete option for each saved quote
* Uses localStorage to persist the favorite quotes across sessions

UI and Event handling

* Uses JavaScript to dynamically update the DOM for displaying quotes
* Removes previous quote elements before inserting new one
* Event listeners are set up to handle user interactions
  + “New Quote” fetches and displays a fresh quote
  + “Save to favorites” stores the displayed quote in localStorage
  + “Delete” removes a saved quote for the favorites list

React Component (Quote of the Day)

* Quote of the day element is fetched and shown using React
* Quote of the day element uses localStorage to save one quote as the Quote of the day and saves current day to localStorage
* When current date doesn’t match saved date, it fetches new quote from API to be the next Quote of the day
* There is 1 second delay on the React component because Three.js is also manipulating DOM so React cant use DOMContentLoaded or window.onload normally

3D galaxy visualization (Three.js)

* Implements a 3D animated galaxy using three.js
* Galaxy consists of 2500 particles positioned randomly in a spherical pattern
* Mouse interaction
  + Mouse movement influences the rotation of the galaxy slightly
  + Raycaster is used to determine the mouse position in 3D space
* Animation & Rotation
  + Galaxy rotates at an adjustable speed
  + User can control the rotation speed using slider on the page
* Resizes automatically when browser window size changes