**Project Overview**

The Interactive Quizzes Website is a responsive web application designed to let users take fun and educational quizzes online. The main goal is to create an easy-to-use platform where users can log in, choose a quiz topic, answer questions, and instantly see their results.

**Key Features:**

* User registration and login system
* Multiple-choice quizzes on various topics
* Instant feedback and scoring
* Mobile-friendly design
* Simple and clean user interface

**REQUIREMENT ANALYSIS**

**Objective**

To design and implement a responsive, user-friendly website intended for demonstration purposes. This site will serve as a prototype or example site, showcasing core web functionality and UI/UX principles.

**Functional Requirements**

* These are the features that the system must perform to meet user needs.
  + 1. User Registration and Login
* Registration Page:
* Collects user details: Name, Email, Password (minimum 8
* characters), Confirm Password.
  + Validates email format and password strength.
  + Stores user credentials securely using encryption (e.g., bcrypt).
* Login Page:
  + Allows registered users to log in using email and password.
  + Displays error messages for invalid credentials.
  + Redirects to the dashboard/homepage upon successful login.
* Session Management:
  + Implements session or token-based authentication (e.g., JWT or cookies).
  + Ensures users stay logged in during navigation unless they log out.
* Password Recovery:
  + Option to reset forgotten passwords via email link (optional for demo purposes).
* 2. Navigation Across Pages
* A consistent navigation bar present on all main pages.
* Navigation links include: Home, About, Features, Contact, Login/Register (or Profile/Logout when logged in).
* Supports dropdown menus (if applicable).
* Smooth scrolling to in-page sections (e.g., using anchor tags).
* 3. Contact Form Submission
* A form where users can submit:
  + Name
  + Email
  + Subject (optional)
  + Message
* Frontend validations:
  + Required fields must be filled.
  + Email format must be valid.
* Backend logic:
  + Submits data to server or third-party service (e.g., Formspree, EmailJS).
  + Optional: Stores data in a database or sends confirmation email.
* Displays success/failure message to users after submission.

🧰 **Non-functional Requirements**

These define how the system performs its functions.

1. Mobile Responsiveness

* Website layout adapts to different screen sizes: desktop, tablet, and mobile.
* Uses flexible grid systems (e.g., CSS Flexbox, Grid) and media queries.
* Hamburger menu for small screens.
* Tap-friendly elements and accessible font sizes.
* 2. Fast Loading Time
* Optimized images and assets (compressed JPEGs/PNGs, WebP format).
* Minified CSS and JavaScript.
* Lazy loading of images or scripts when appropriate.
* Server-side or static site rendering options for faster performance.
* Use of browser caching and content delivery networks (CDNs).
* 3. Cross-browser Compatibility
* Ensures consistent experience across major browsers:
  + Chrome
  + Firefox
  + Safari
  + Edge
  + Opera
* Uses standardized HTML5/CSS3/JS features.
* Avoids deprecated or browser-specific features unless polyfilled