

Creating a website using the basic and advanced concept of JavaScript and jQuery

Project Overview

Project Date: 22nd December 2025 TO 6th March 2026

This document provides a detailed outline of tasks for each phase of the project. Students are expected to complete all tasks within the specified phases.

Interactive Quiz Application

Description:

A web-based quiz platform where users can take quizzes, answer multiple-choice questions, and receive scores instantly. It will feature real-time feedback and question navigation.

Core Features:

- **Question Bank:** Store and retrieve quiz questions using JS arrays/objects.
- **Real-time Scoring:** Provide instant feedback on answers.
- **Timer-Based Quizzes:** Add countdown timer functionality.
- **Validation:** Prevent empty submissions with form validation.
- **Navigation:** Next/previous question navigation.
- **Progress Tracking:** Track and display user progress dynamically.
- **UI Enhancements:** jQuery animations and transitions.

Technologies you can use: HTML, CSS, Bootstrap/tailwind, JS, JQuery

Weekly Breakdown:

Week	Dates	Tasks
Week 1	22 nd Dec-25 to 27 th Dec-25	Task: Requirement Understanding, Analysis, Layout Planning ✓ Work Completed <ul style="list-style-type: none">• Analysed various quiz websites such as Kahoot, Quizizz, W3Schools Quiz Model, etc. for UI inspiration.• Understood project requirements:<ul style="list-style-type: none">• Multiple-choice questions• Timer-based quiz• Real-time scoring• Question navigation• jQuery animations• Collected references for UI trends (cards, progress bars, timers).• Designed layout rough sketches on paper:<ul style="list-style-type: none">○ Home Page○ Quiz Selection Page○ Quiz Panel (Question + Options)○ Navigation Buttons○ Result Page• Finalized the color theme and typography direction. ✓ Issues Faced <ul style="list-style-type: none">• Deciding a uniform UI theme took time.• Confusion between per-question timer vs overall quiz timer
Week 2	29 th Dec-25 to 3 rd Jan-26	Task: UI Design and Project Setup ✓ Work Completed <ul style="list-style-type: none">• Created complete project structure:• /css

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		<ul style="list-style-type: none"> • /js • /images • index.html • quiz.html • result.html • Designed homepage UI using HTML + CSS. • Added menu, header, footer with basic styling. • Prepared HTML skeleton for: <ul style="list-style-type: none"> ◦ Quiz page ◦ Results page • Linked jQuery library and tested simple animations. • Added sample buttons and navigation layout. <p>✓ Issues Faced</p> <ul style="list-style-type: none"> • Responsive design adjustments required fine-tuning. • Initial animations were lagging on mobile — fixed using <code>.fadeIn()</code> and <code>.slideUp()</code>.
Week 3	5 th Jan-26 to 10 th Jan-26	<p>Task: Continue UI Design + Build Interactive Elements</p> <p>✓ Work Completed</p> <ul style="list-style-type: none"> • Completed UI for all pages: <ul style="list-style-type: none"> ◦ Home ◦ Quiz Panel ◦ Result page ◦ Progress bar section • Created option-selection UI using styled radio buttons. • Implemented: <ul style="list-style-type: none"> ◦ Hover effects ◦ Button animations ◦ jQuery fade effects • Added loader animation for quiz start. <p>✓ Issues Faced</p> <ul style="list-style-type: none"> • Some jQuery effects clashed with CSS transitions. • Option boxes overlapping on small devices (resolved with flexbox).
Week 4	12 th Jan-26 to 17 th Jan-26	<p>Task: JS Event Handling – Question Navigation (Part 1)</p> <p>✓ Work Completed</p> <ul style="list-style-type: none"> • Added event listeners for: <ul style="list-style-type: none"> ◦ Next Question ◦ Previous Question • Built logic to track current question index. • Created basic question loading function. • Integrated: <ul style="list-style-type: none"> ◦ Disable Previous on first question ◦ Disable Next on last question • Added smooth slide transition between questions using jQuery. <p>✓ Issues Faced</p> <ul style="list-style-type: none"> • Navigation caused duplicate DOM nodes (fixed with <code>.html()</code> instead of <code>.append()</code>). • Handling of selected options when navigating back required extra logic.

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Week 5	19 th Jan-26 to 24 th Jan-26	Task: JS Event Handling – Question Navigation (Part 2) ✓ Work Completed <ul style="list-style-type: none"> Implemented answer retention using: <code>userAnswers[currentIndex] = selectedOption;</code> Added progress indicator (e.g., “5 of 10 Questions”). Improved transitions: <ul style="list-style-type: none"> Slide left for Next Slide right for Previous Fixed radio button state restoration. ✓ Issues Faced <ul style="list-style-type: none"> Timer resetting on navigation (fixed by isolating timer function). Edge-case bugs when skipping questions.
Week 6	26 th Jan-26 to 31 st Jan-26	Task: Storing Questions Using Arrays/Objects ✓ Work Completed <ul style="list-style-type: none"> Created question bank: <code>const questions = [</code> <code>{</code> <code> q: "What is JavaScript?",</code> <code> options: ["Language", "Framework", "Library",</code> <code> "Database"],</code> <code> answer: 0</code> <code> }];</code> Developed dynamic question loader to read from array. Integrated question bank with navigation. Tested question rendering logic with sample data. ✓ Issues Faced <ul style="list-style-type: none"> Complex objects needed restructuring for easier use. Multiple-choice character limit caused layout issues.
Week 7	02 nd Feb-26 to 07 th Feb-26	Task: Validation + Scoring Logic (Part 1) ✓ Work Completed <ul style="list-style-type: none"> Added validation: <ul style="list-style-type: none"> Prevent submit if any question unanswered. Show warning using jQuery modal. Implemented scoring logic: <code>score++;</code> Displayed score on result page. ✓ Issues Faced <ul style="list-style-type: none"> Validation popup animation conflicted with existing jQuery slide animation. Some answer comparisons failed due to index mismatch.
Week 8	09 th Feb-26 to 14 th Feb-26	Task: Validation + Scoring Logic (Part 2) ✓ Work Completed <ul style="list-style-type: none"> Added real-time feedback: <ul style="list-style-type: none"> Highlight correct answers in green Highlight wrong answers in red Calculated: <ul style="list-style-type: none"> Total score Percentage Total attempted questions Added result chart using jQuery animation. ✓ Issues Faced <ul style="list-style-type: none"> Result highlight persisted when revisiting questions (fixed with reset CSS).

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		<ul style="list-style-type: none"> Timing issues when loading animations.
Week 9	16 th Feb-26 To 21 st Feb-26	<p>Duration: 16th Feb 2026 – 21st Feb 2026</p> <p>Task: jQuery Animations & Transitions</p> <p>✓ Work Completed</p> <ul style="list-style-type: none"> Added: <ul style="list-style-type: none"> Fade-in question transition Slide-up results Progress bar animation Shake animation for wrong answers Enhanced UI responsiveness with dynamic resizing. Added smooth scroll to top on quiz submit. <p>✓ Issues Faced</p> <ul style="list-style-type: none"> Excessive animations made navigation slow (optimized by reducing durations).
Week 10	23 rd Feb-26 to 28 th Feb-26	<p>Task: Local Storage for Persistence</p> <p>✓ Work Completed</p> <ul style="list-style-type: none"> Stored user answers in local storage: <code>localStorage.setItem("quizData", JSON.stringify(userAnswers));</code> Stored: <ul style="list-style-type: none"> Score Question progress Completion time Added Resume Quiz feature (loads previous state). <p>✓ Issues Faced</p> <ul style="list-style-type: none"> Local storage not clearing on new quiz — fixed. Old data caused confusion during debugging.
Week 11	02 nd Mar-26 To 07 th Mar-26	<p>- Task: Final Optimization + Testing + Deployment</p> <p>✓ Work Completed</p> <ul style="list-style-type: none"> Optimized JS functions for readability. Removed unused variables and dead code. Minified CSS and JS for faster loading. Full testing: Navigation Timer Mobile UI Validation Scoring Final deployment to hosting (GitHub Pages / Netlify). <p>✓ Issues Faced</p> <ul style="list-style-type: none"> Some devices had font scaling issues. Minor delay in animations fixed by reducing jQuery queue.