

Digital Portfolio



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PROJECT TITLE



Javascript framework and libraries

AGEND

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- 1. Problem Statement
- 2. Project Overview
- 3. End Users
- 4. Tools and Technologies
- 5. Portfolio design and Layout
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PROBLEM STATEMENT

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Modern web applications demand rich interactivity, high performance, and maintainable code. Traditional JavaScript, while powerful, becomes complex and hard to manage as application size grows. Developers face challenges like state management, DOM manipulation and component reusability. This project explores how JavaScript frameworks and libraries (such as React, Angular, Vue, and jQuery) solve these challenges, streamline development, and improve user experience.



PROJECT OVERVIEW

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This project focuses on exploring popular JavaScript frameworks and libraries that simplify and accelerate web development. It highlights the need for structured, efficient, and scalable code in modern web applications.

The project provides a comparative study of key frameworks and libraries such as React, Angular, Vue.js, and jQuery—analyzing their core features, use cases, advantages, and limitations.



WHO ARE THE END USERS?



Web developers:

They use these tools to build interactive, efficient, and maintainable web applications.

Businesses and organisations:

They benefit from faster development cycles and better user experiences on their websites or web apps.

Website visitors/users:

They experience improved performance, responsiveness, and richer interfaces powered by these frameworks.



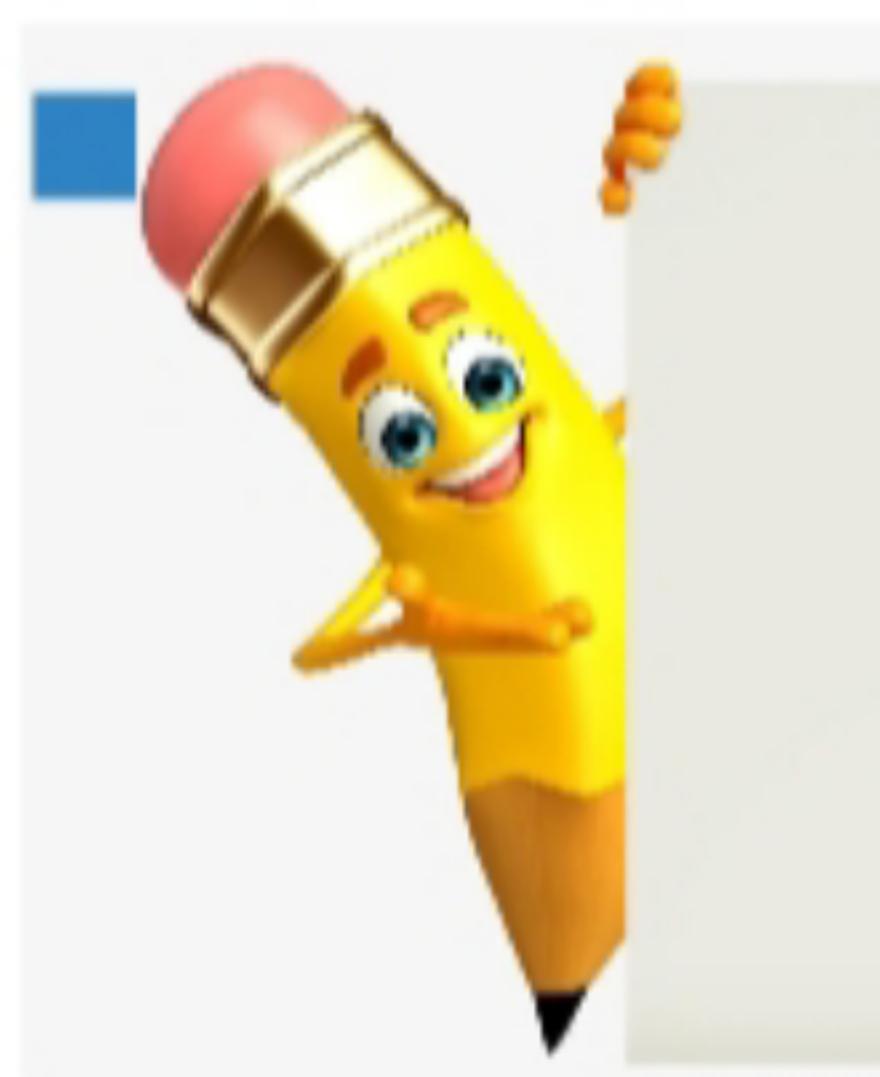
TOOLS AND TECHNIQUES

Tools:

- Code editors and IDEs.
- Package managers.
- Build tools.
- Version control.
- State management libraries.

Techniques:

- Component based architecture.
- State management.
- Virtual DOM.
- Two way data binding.



POTFOLIO DESIGN AND LAYOUT

1. Home/Introduction

Brief intro with animated typing effect (using React or Vue).

Showcase key skills with smooth fade-ins or slides

2. About me

Interactive timeline or card layout with hover animations.

Use transitions for profile picture and skill badges.

3. Project section

Grid or carousel of projects built with different frameworks (React, Angular, Vue).

Each project card includes animated hover effects and modal pop-ups with details.

FEATURES AND FUNCTIONALITY

Component based:

breaks UI into reusable, self-contained components.

Declarative programming:

Allow developer to describe the UI state, and the framework handles rendering

Efficient DOM manipulation:

Uses techniques like virtual DOM to update only necessary part of the page

RESULTS AND SCREENSHOTS



A screenshot of a web browser interface. At the top, there are tabs labeled 'HTML', 'CSS', 'JS', and 'Result'. The 'Result' tab is active, showing a dark-themed website. The website's header includes the text 'priyaa copy; 2025 priya. All rights reserved.', 'BCA Student | Shree raghavendra arts and science college', and 'keezhamoongiladi, chidambaram, Cuddalore, Tamilnadu, India'. Below the header is a navigation bar with links for 'Home', 'About', 'Skills', 'Education', and 'Contact'. The main content area features the name 'p.priya' in a large, bold, black font. Below it, the text 'BCA Student | Shree raghavendra arts and science college' and 'keezhamoongiladi, chidambaram, Cuddalore, Tamilnadu, India' is displayed in a smaller white font. A horizontal line separates this from the footer.



CONCLUSION

JavaScript frameworks and libraries simplify web development by making code more organized, efficient, and scalable. They help build dynamic, responsive, and user-friendly applications faster. Choosing the right tool depends on your project needs.