



# Svelte.js

Course Syllabus

# COURSE DESCRIPTION



This Svelte.js course provides a comprehensive exploration of the framework, catering to both beginners and seasoned developers.

Participants will delve into the fundamentals of Svelte.js, mastering component-based architecture, efficient state management, and advanced features. The course progresses towards styling strategies, explores SvelteKit for server-side rendering (SSR), and concludes with in-depth discussions on cutting-edge concepts. Through hands-on projects and real-world applications, learners will gain the expertise to leverage Svelte.js for building performant, reactive web applications.

# COURSE INFO



## Prerequisite knowledge

- Proficiency in HTML, CSS, and JavaScript
- Familiarity with basic web development concepts like DOM manipulation

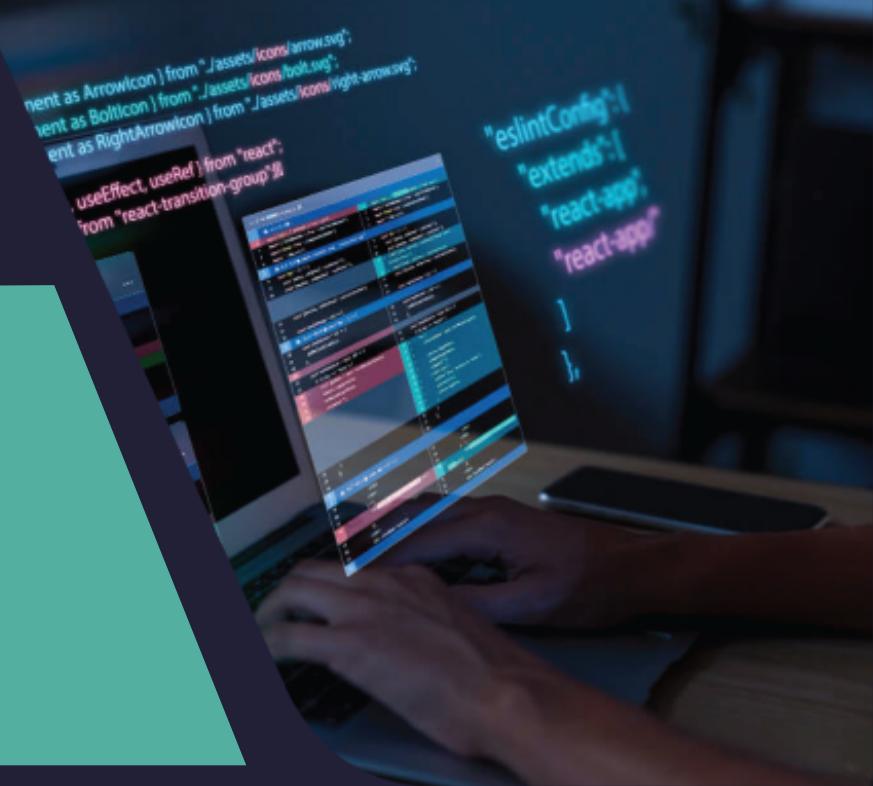
## Target Audience

- Web developers looking to enhance their skills in modern frontend frameworks
- JavaScript developers interested in building efficient and reactive user interfaces
- Students and professionals aiming to stay updated with the latest web development technologies

## Additional Information

- Familiarity with other frontend frameworks (e.g., React, Vue) is beneficial but not mandatory.

# MODULES



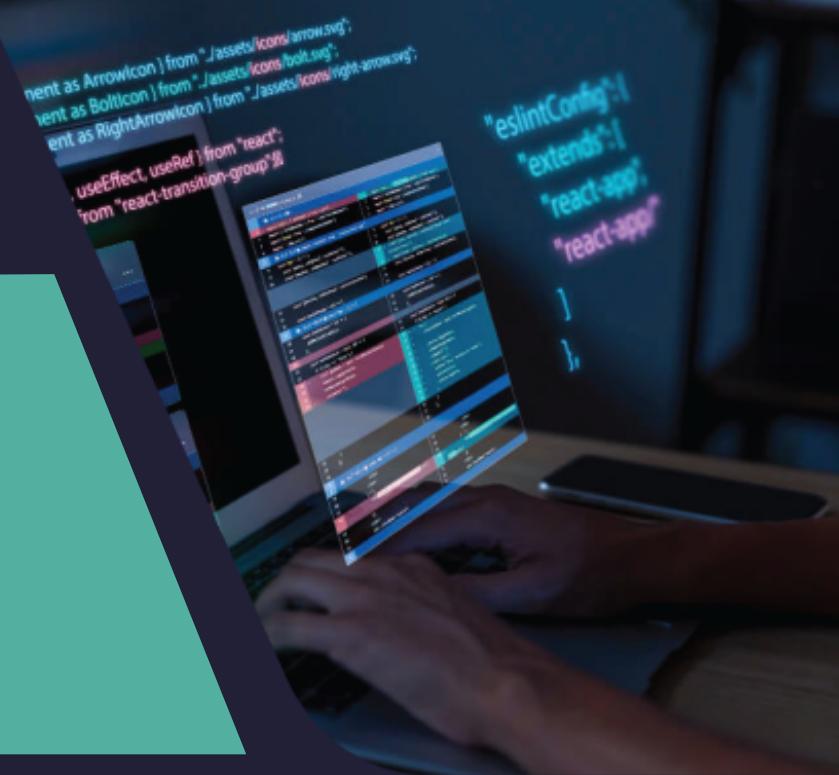
1. Introduction and Components
2. State Management and UI
3. Styling and Advanced Concepts
4. SvelteKit and SSR
5. Advanced Features
6. Routing and Navigation
7. Forms and User Input
8. Testing Svelte Applications
9. Localization and Internationalization (i18n)
10. Web Components Integration
11. Optimizing Svelte Applications
12. Real-time Data with Svelte
13. Security Considerations in Svelte
14. Project Development and Deployment

Note: The modules and subtopics provided here are suggestions and can be tailored based on the specific requirements.

# MODULE 1

## Introduction and Components

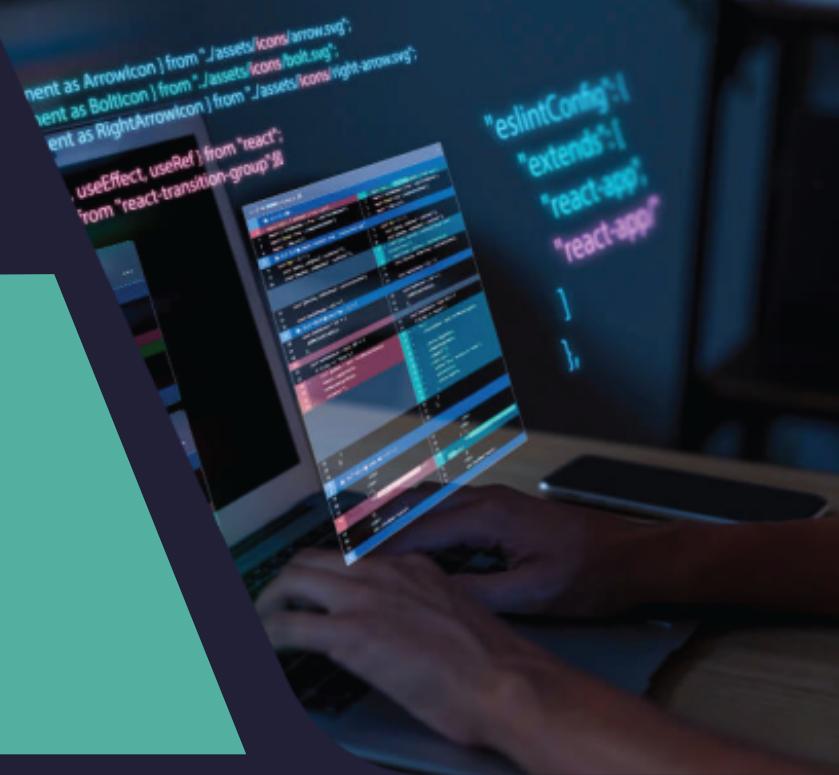
- Svelte.js overview and philosophy
- Setting up a Svelte project
- Understanding and creating components
- Component lifecycle in Svelte
- Communication between components



# MODULE 2

## State Management and UI

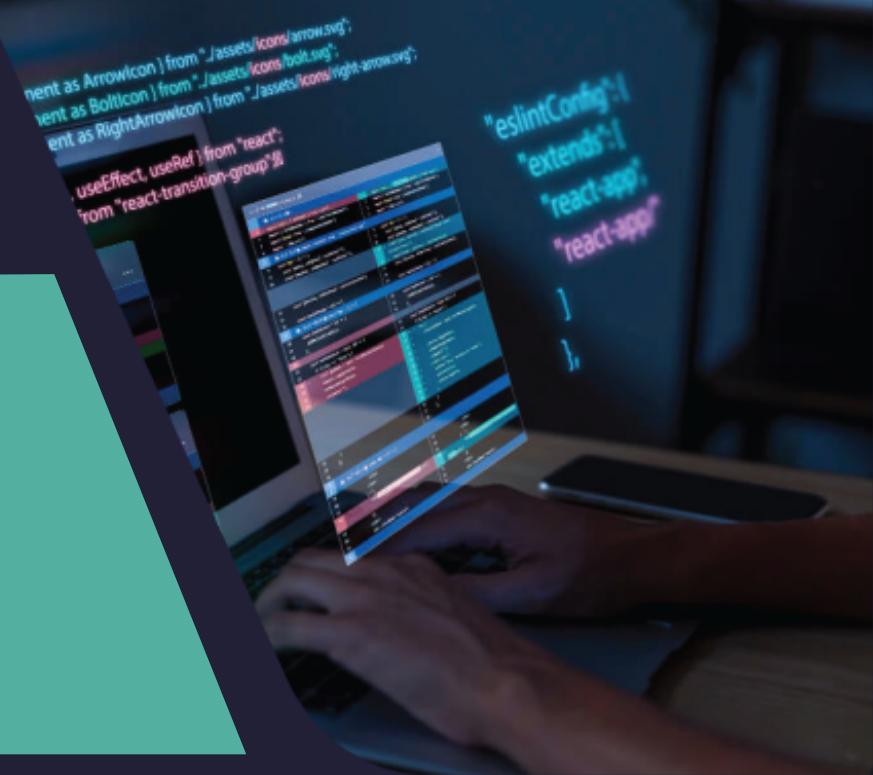
- Managing state in Svelte applications
- Reactive statements and assignments
- Two-way binding in Svelte
- Event handling and DOM interactions
- Dynamic content rendering in Svelte



# MODULE 3

## Styling and Advanced Concepts

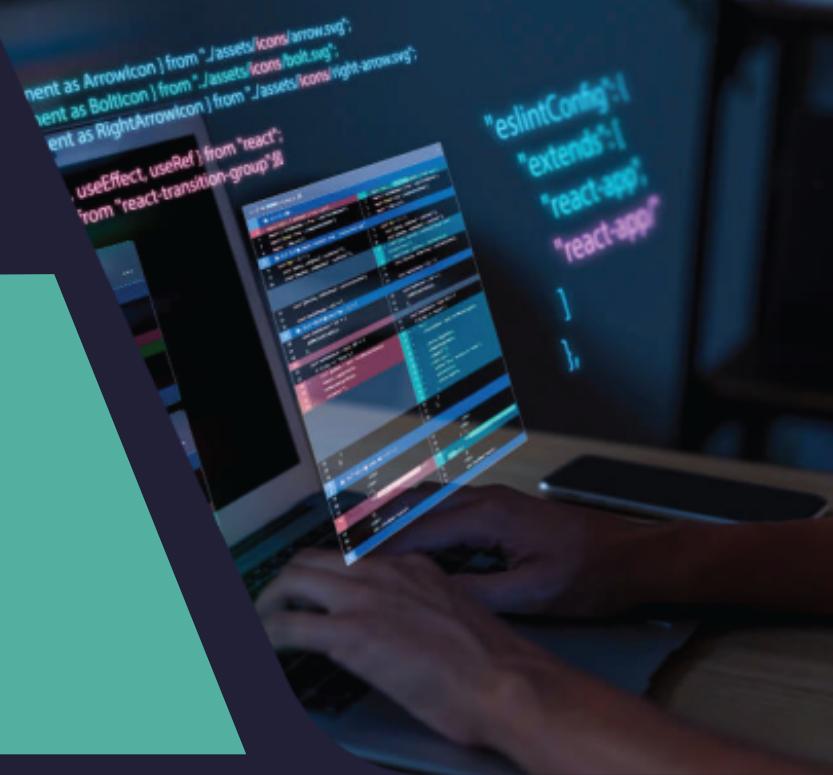
- Styling approaches in Svelte
- Scoped and global styles
- Animation and transitions
- Lifecycle hooks and advanced component features
- Handling side effects in Svelte components



# MODULE 4

## SvelteKit and SSR

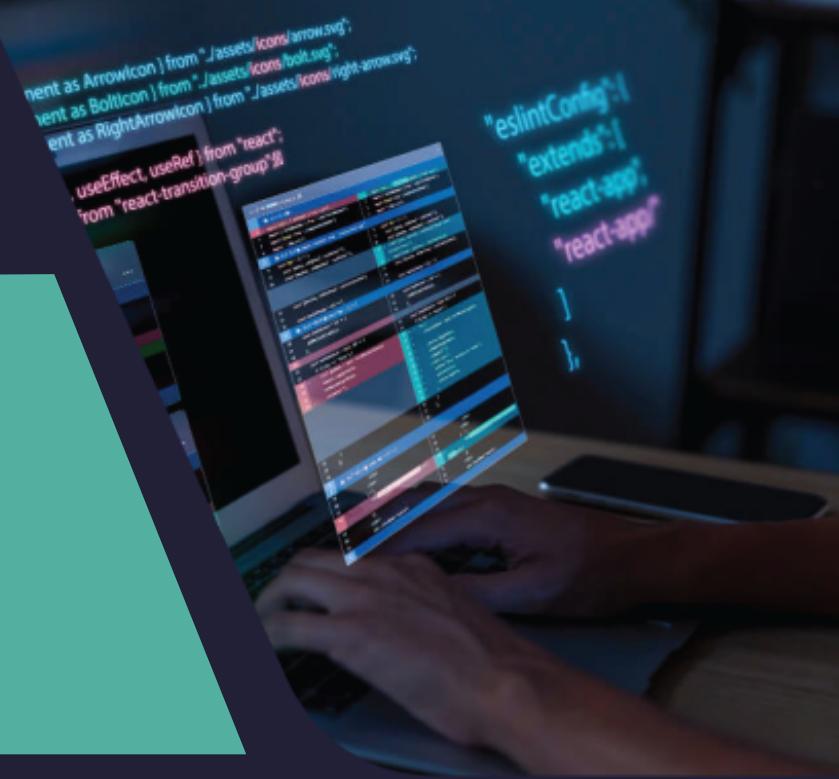
- Introduction to SvelteKit
- Setting up a SvelteKit project
- Server-side rendering (SSR) in Svelte
- Routing and navigation in SvelteKit
- Building and deploying a SvelteKit application



# MODULE 5

## Advanced Features

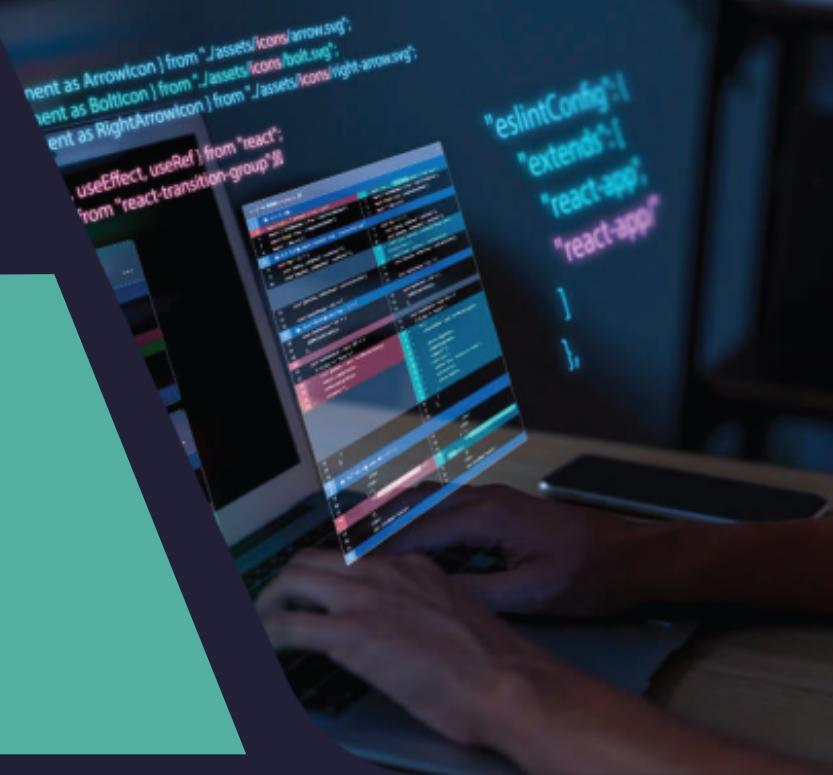
- Svelte stores for global state management
- Custom events and event dispatching
- Dynamic component creation
- Svelte and third-party libraries
- Performance optimization techniques in Svelte applications



# MODULE 6

## Routing and Navigation

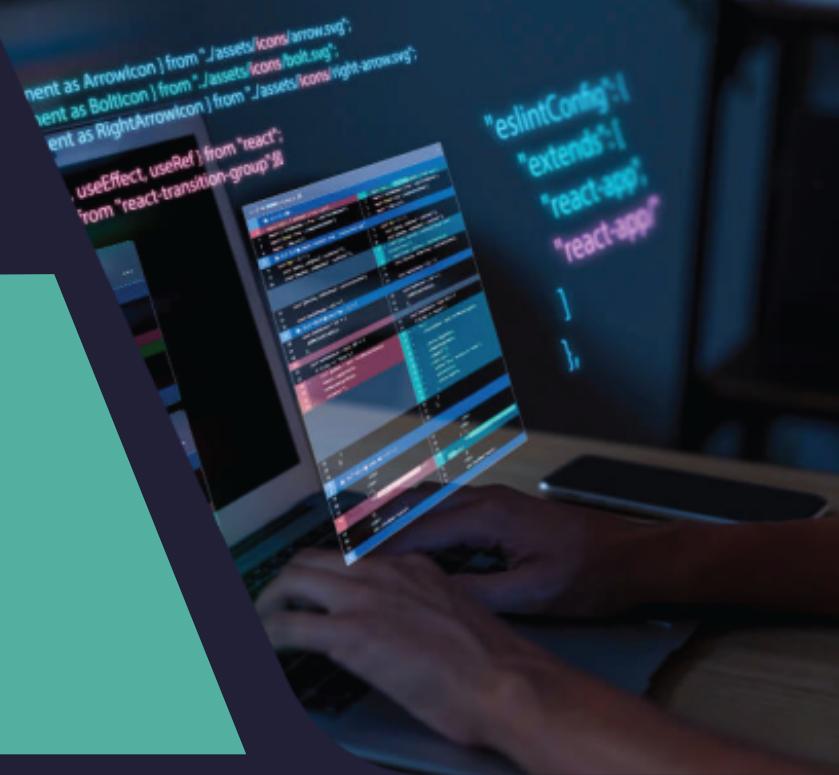
- Client-side routing in Svelte
- Navigating between routes
- Route parameters and query strings
- Route guards and navigation hooks
- Implementing nested routes in Svelte



# MODULE 7

## Forms and User Input

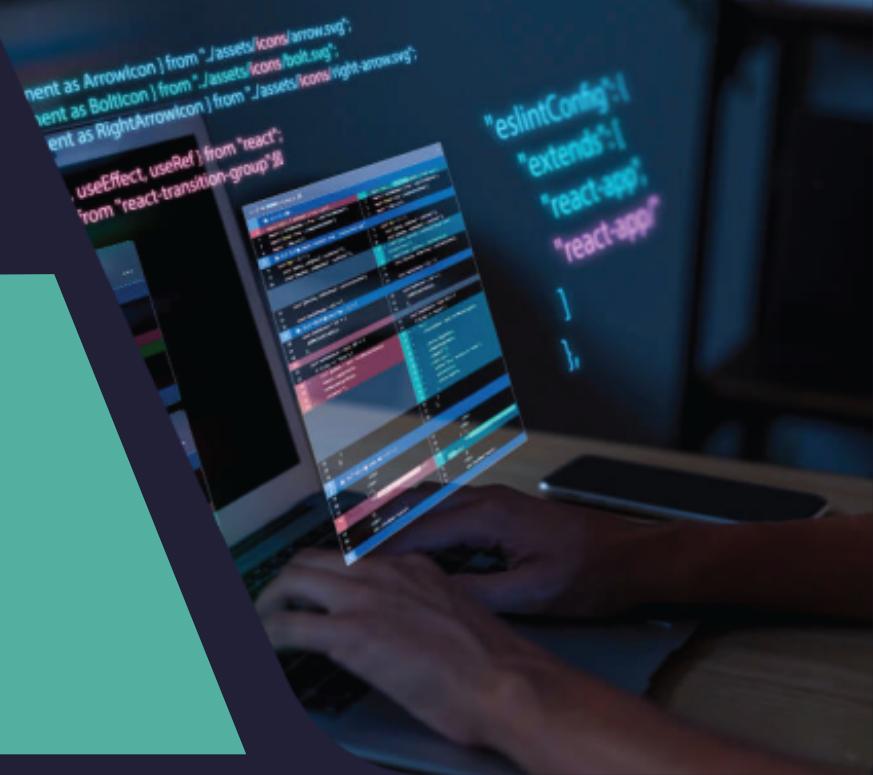
- Handling forms in Svelte
- Form validation and error handling
- Two-way binding with form elements
- Custom form components in Svelte
- Managing user input and interactivity



# MODULE 8

## Testing Svelte Applications

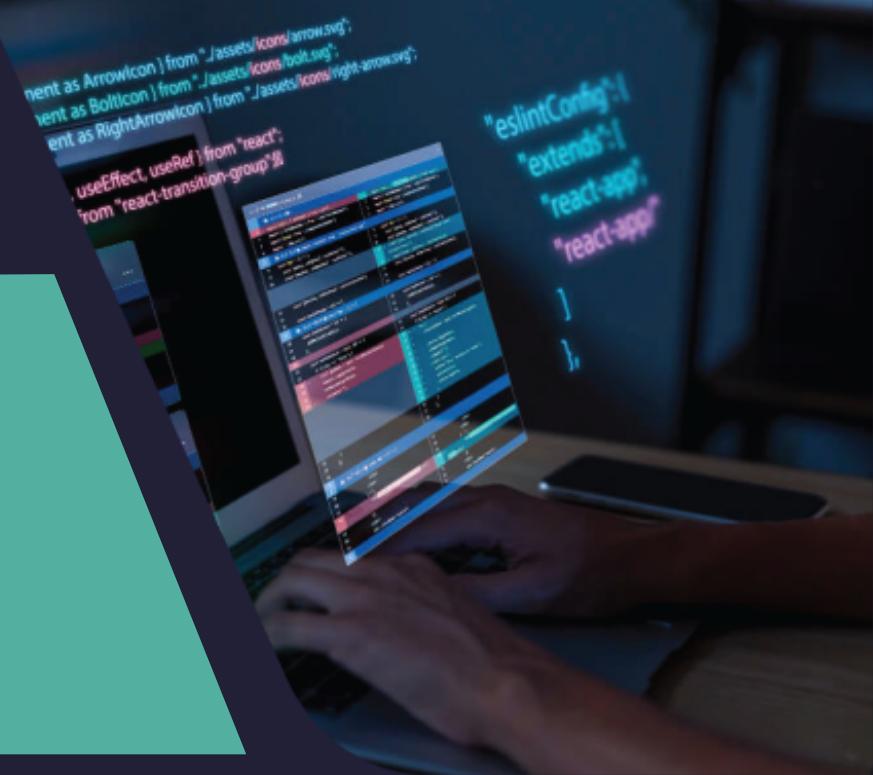
- Overview of testing methodologies in Svelte
- Unit testing components with Jest
- Integration testing with testing libraries
- Mocking and testing asynchronous behavior
- Writing effective test suites for Svelte applications



# MODULE 9

## Localization and Internationalization (i18n)

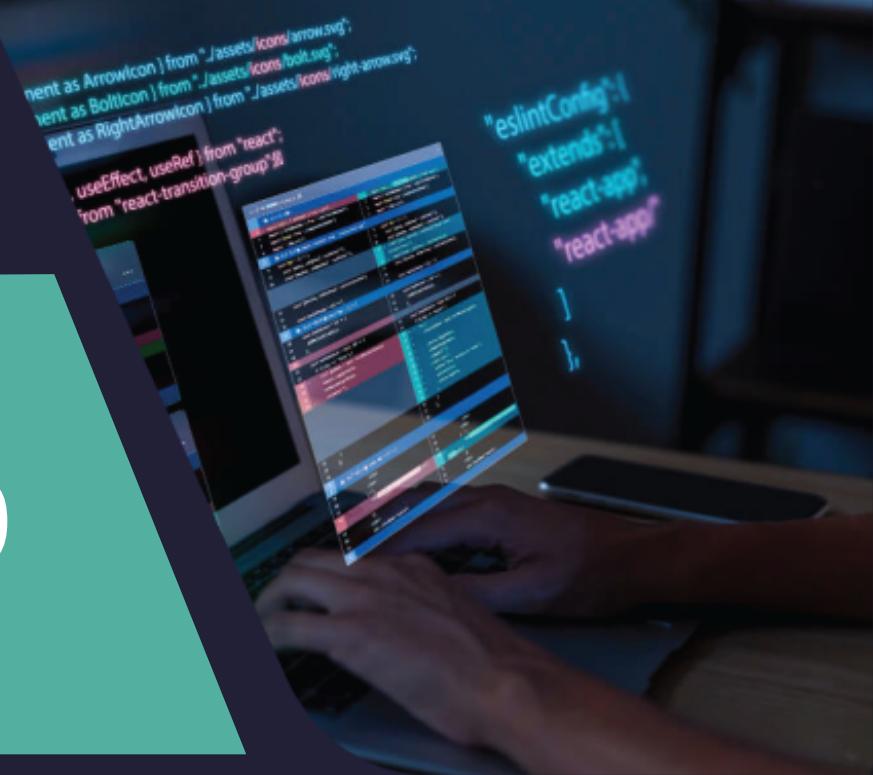
- Implementing multi-language support in Svelte
- Using Svelte for internationalization
- Localization strategies and best practices
- Adapting the user interface for different languages
- Handling date, time, and number formats in Svelte applications



# MODULE 10

## Web Components Integration

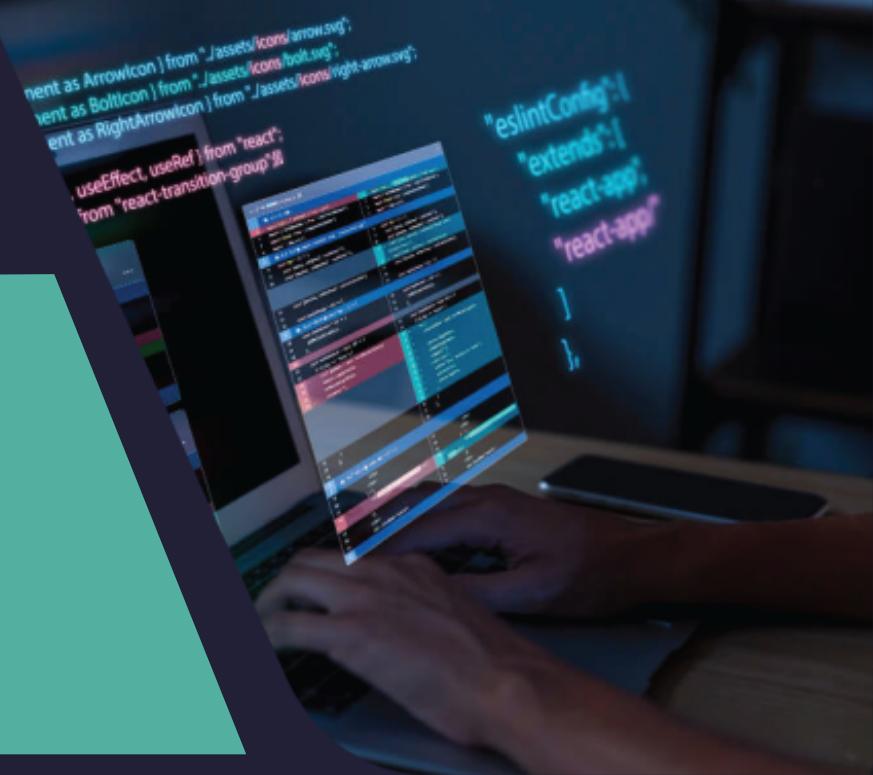
- Incorporating web components into Svelte applications
- Interacting with custom elements
- Styling web components in Svelte
- Communicating between Svelte components and web components
- Best practices for seamless integration



# MODULE 11

## Optimizing Svelte Applications

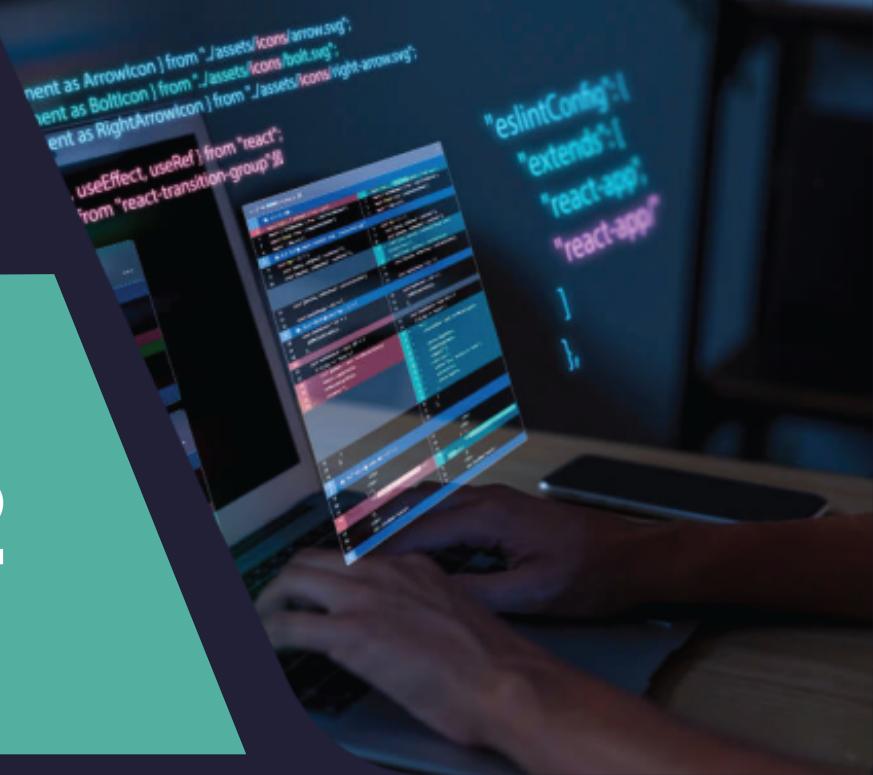
- Code splitting and lazy loading in Svelte
- Bundle analysis and optimization techniques
- Minification and tree shaking in Svelte
- Performance monitoring and profiling
- Strategies for optimizing Svelte applications for production



# MODULE 12

## Real-time Data with Svelte

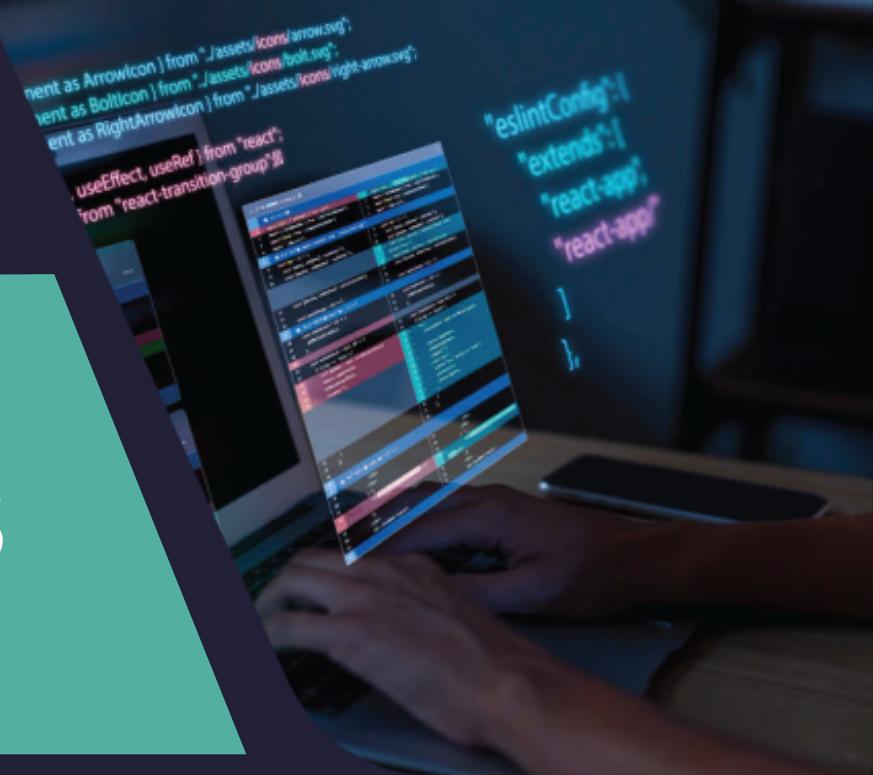
- Integrating real-time data sources with Svelte
- WebSocket communication in Svelte applications
- Building real-time features with Svelte stores
- Handling concurrency and synchronization
- Implementing live updates in Svelte applications



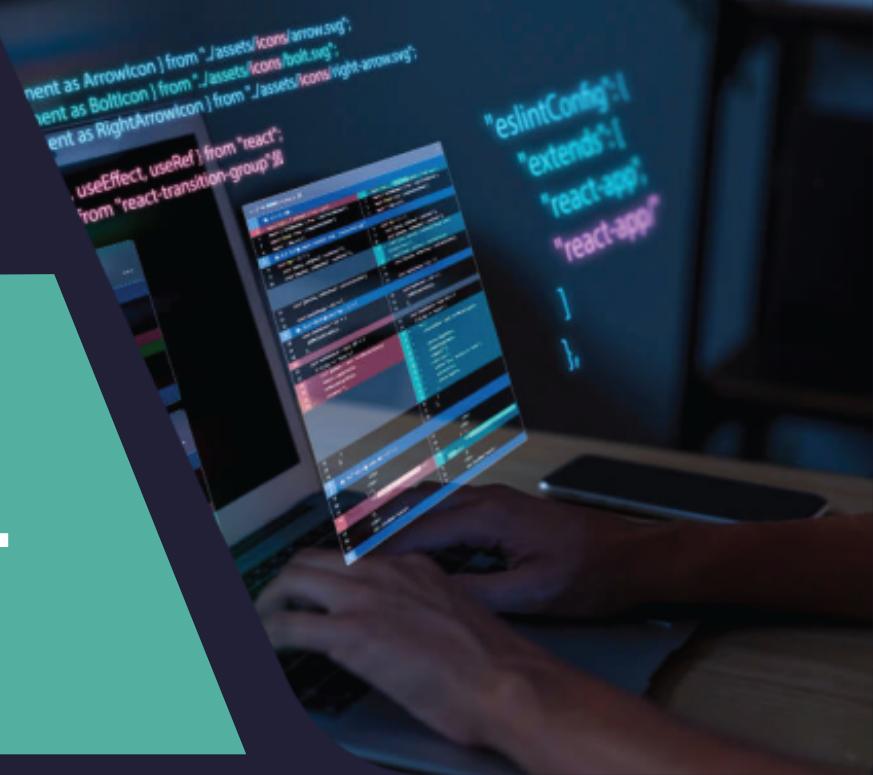
# MODULE 13

## Security Considerations in Svelte

- Cross-site scripting (XSS) prevention in Svelte
- Security best practices for Svelte applications
- Handling authentication and authorization securely
- Mitigating common security vulnerabilities in frontend applications
- Security audits and tools for Svelte projects



# MODULE 14



## Project Development and Deployment

- Structuring and organizing a Svelte project
- Integrating Svelte with backend APIs
- Continuous integration and deployment (CI/CD) for Svelte applications
- Monitoring and error tracking in production
- Best practices for maintaining and evolving Svelte projects

# צホ קשר

## מי אנחנו?

חברה המעבירה הדרכות והשתלמויות בעולמות הטכנולוגיה וההייטק לארגונים ששואפים גבוה ורוצים לגעת בשיא הטכנולוגיה. ההדרכות מותאמות באופן אישי לכל מטרה, כאשר תכני הלימוד נבנימים בהתאם לצורכי הארגון, ייעדו ודרישותיו. CodePro משתמש גם ככוח אדם ומספקת לארגונים מרצים, מפתחים ויועצים טכנולוגיים על פי דרישתך.

בנוסף לתחומי ההדרכה, ל- CodePro בית תוכנה ומחלקה "יעוז המלווה" חברות הייטק וגופים טכנולוגיים בתחום פיתוח ממשקים מאתגרים. לצאות יכולת להעניק "יעוז" ותמכה במקרים מורכבים בהם דרושה טכנולוגיה ספציפית, כמו גם בתחום הקמת צוותים טכנולוגיים בארגונים.

**נשמח לשמעו ממכם!**

## לפרטים נוספים ושאלות

### טלפון

משרד  
02-3812001

### דוא"ל

משרד  
[office@codepro.co.il](mailto:office@codepro.co.il)

### כתובת

רחוב יפו 224  
ירושלים, ישראל

