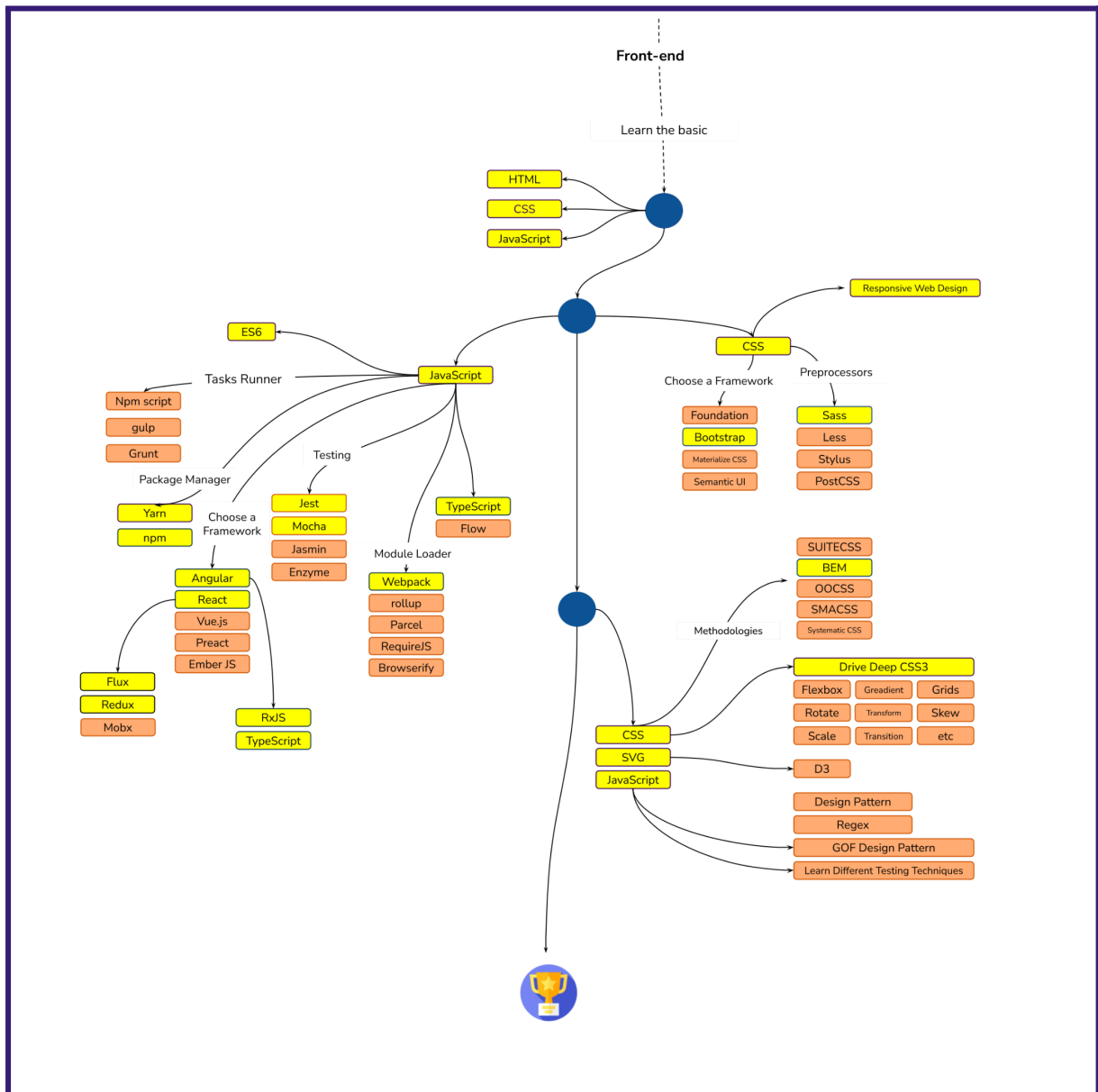# Front-end Developer Roadmap

Step 1: Understand the Basics

1. **Internet Basics**: Grasp foundational concepts like domains, DNS, servers, and HTTP/HTTPS protocols.
2. **HTML**: Learn the standard markup language for structuring web content.
3. **Visual Studio Code**: Familiarise yourself with a powerful code editor for efficient coding.

Step 2: Master Essential Technologies

4. **CSS**: Understand how to style web pages, make layouts responsive, and enhance visual appeal.

5. **JavaScript**: Learn the dynamic programming language that adds interactivity and functionality to websites.

Step 3: Essential Skills for Development Workflow

6. **Prompt Engineering**: Understand how to maximise productivity using language models like ChatGPT.

7. **Version Control (Git/GitHub)**: Learn how to track changes, collaborate, and manage code effectively.

8. **Package Managers**: Master tools like npm or yarn to manage software libraries and dependencies.

Step 4: Advanced Frontend Tools and Frameworks

9. **Bootstrap 5 and SASS**: Utilise Bootstrap for streamlined web design and SASS for advanced styling techniques.

10. **JavaScript Frameworks (React, Vue, Angular)**: Dive into modern frameworks that simplify complex tasks and enhance performance.

11. **Tailwind CSS**: Explore the utility-first approach for rapid UI development.

12. **Build Tools (Vite, etc)**: Understand tools that optimise code for efficient web application performance.

13. **Testing JavaScript (Jest, Cypress)**: Ensure reliability and functionality by testing code using different tools.

14. **TypeScript**: Incorporate TypeScript for more robust and error-free code.

Step 5: Specialised Knowledge and Optimization

15. **Web Security (OWASP)**: Familiarise yourself with web security best practices and common vulnerabilities.

16. **GraphQL**: Explore a more flexible way of querying data compared to traditional RESTful APIs.

17. **Next.js**: Learn about server-rendered React applications for better performance.

18. **Astro**: Discover frameworks like Astro that focus on faster website development.

19. **Performance Best Practices**: Understand optimization techniques for improved user experience.
20. **React Native**: Explore cross-platform mobile app development using React.

Step 6: Continuous Learning and Engagement

Always strive to stay updated with the latest trends, tools, and best practices. Engage with the developer community, experiment with new technologies, and never stop learning.

This roadmap provides a comprehensive foundation, but remember, the journey in frontend development is endless. Continuous learning, hands-on practice, and staying adaptable are key to becoming an exceptional frontend developer.

Visit **Bhylu.com**