**EASYWEB – LIGHTWEIGHT PROGRAMMING LANGUAGE**

**Abstract:**

Web development traditionally demands mastery over HTML, CSS, and JavaScript, creating a steep learning curve for beginners. To address this, we propose EasyWeb IDE, an innovative, beginner-friendly Integrated Development Environment that simplifies web development through a custom Domain-Specific Language (DSL). EasyWeb enables users to build fully functional web pages within a single file, eliminating the need to switch between multiple coding languages or manage complex file structures. The system employs a Lexer–Parser–Generator pipeline to transform simplified user inputs into structured HTML, CSS, and JavaScript code. Key features include real-time preview, error detection with user-friendly feedback, and single-click export functionality. Designed with educational and accessibility goals in mind, EasyWeb democratizes web development by lowering technical barriers and offering an intuitive platform for students, hobbyists, and non-technical users. Benchmark results demonstrate a significant reduction in development time, enhanced code readability, and improved user engagement. The project sets a foundation for future enhancements such as backend integration, cloud-based collaboration, mobile app export capabilities, and AI-assisted coding, making EasyWeb a versatile tool for the next generation of web creators.