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**Development Environment and Runtime**

Overview

The Car Interpreter Language (CIL) is a tool that allows users to interpret JavaScript code into CIL, a custom scripting language for cars. This document outlines the development environment and runtime setup for the CIL application.

Development Environment

To set up the development environment for the Car Interpreter Language, follow these steps:

Software Requirements:

Web Browser (e.g., Google Chrome, Mozilla Firefox)

Text Editor or Integrated Development Environment (IDE) for editing HTML, CSS, and JavaScript files.

Project Structure:

Create a directory for your project.

Inside the project directory, create an HTML file (e.g., index.html) to host the CIL application.

Optionally, create a directory for assets such as images or background GIFs used in the application.

HTML Structure:

Copy and paste the provided HTML code into your index.html file.

Customize the background-image URL in the CSS section to point to your desired background GIF file.

JavaScript Functionality:

The JavaScript code provided includes functionality to interpret JavaScript code into CarScript.

Customize the interpretJavaScript function to add additional translation rules or logic as needed for your CarScript language.

Runtime Environment

The runtime environment for the Car Interpreter Language is the web browser. Users can access the CIL application through a supported web browser with JavaScript enabled.

Running the Application:

Open the index.html file in your web browser.

Enter JavaScript code into the input textarea.

Click the "Run JavaScript" button to interpret the code into CarScript.

The interpreted CarScript code will be displayed in the output section below the input textarea.

Interpretation Process:

The application simulates interpretation by replacing instances of "Hello, World!" with "honk! honk!;" in the input code.

Additional interpretation logic can be implemented in the interpretJavaScript function to support more complex translations.

Conclusion

The development environment and runtime setup described above provide a foundation for creating and running the Car Interpreter Language application. Customize the code and functionality to suit your specific requirements and expand the capabilities of the interpreter.