**Preprocessor**

A preprocessor is a program that converts a type of data into another type. Generally, it aims to help users write a cleaner, shorter and a more readable code.

**HTML Preprocessors**

Here are some of popular preprocessor languages for HTML:

1. Slim

* Slim is a preprocessor language that aims to “reduce the view syntax” (Rubydoc), or the length, of the essential parts of your code by shortening its syntax.

1. Haml

* Short for *HTML Abstraction Markup Language*, Haml is a markup language that aims to provide the ability to write elegant code. It requires Ruby to be installed for it to be compiled into HTML.

1. Pug

* Formerly known as *Jade*, it was renamed to *Pug* in 2015 due to *Jade* already being a registered trademark. Pug is a JavaScript language for creating HTML markups that allows users to write simplified, elegant, and concise code, while being close to the syntax of HTML. It has a number of powerful features such as loops, the use of JavaScript, and interpolation.

**Core Principals**

According to Haml, the core principles surrounding preprocessors were able to largely influence other preprocessors (startae.com) and are listed below:

* “Your Markup should be beautiful.”
  + The code must be easily readable and beautiful to the eyes.
* “Your Markup should be DRY.”
  + With *DRY* standing for “don’t repeat yourself”, the code should not be redundant.
* “Your Markup should be well-indented.”
  + The code should be properly indented to support the first and fourth principle.
* “HTML structure should be clear.”
  + The code’s structure should show the organization of the final output.

**References**

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