



WEBLOXI

Tool to help with web applications templates

Diploma Thesis

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Motivation

- no waiting for the designer to end his/her work
- no need remembering all CSS styles
- show client nice applications
- extend with required components or templates

Bad code

```
<form action="">  
  <span>Username</span><br>  
  <input type="text"><br>  
  <span>Password</span><br>  
  <input type="password"><br>  
  <input type="submit" value="Login">  
</form>
```

Better code

```
<form action="" class="form">
  <div class="form-group">
    <label for="username">Username</label>
    <input type="text" id="username" class="form-control">
  </div>
  <div class="form-group">
    <label for="password">Password</label>
    <input type="password" id="password" class="form-control">
  </div>
  <button type="submit" class="btn">Login</button>
</form>
```

Possible solution

```
form<with-label>  
  input{Username}  
  password{Password}  
  submit{Login}
```

Problems to solve

- input rules for YAML defining templates
- component's syntax (YAML files)
- package system for components
- parse & virtual DOM
- post-processing hook for transforming output

YAML example

Date: 2001-11-23 15:03:17 -5

User: ed

Fatal:

Unknown variable "bar"

Stack:

- file: TopClass.py

line: 23

code: |

x = MoreObject("345\n")

- file: MoreClass.py

line: 58

code: |-

foo = bar

Result

- ruby command line application
- package implementing CSS framework
- post-processing hook for HTML, HAML, React.js
- documentation for components & template transformers

References

- www.ruby-lang.org - Ruby language homepage
Flanagan, D., & Matsumoto, Y. (2008). *The ruby programming language*. " O'Reilly Media, Inc."
- www.w3.org - W3C homepage
- yaml.org - YAML homepage
Ben-Kiki, O., Evans, C., & Ingerson, B. (2001).
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1.1. *Working Draft 2008*, 5, 11.

References

- Kim, S. M., & Yoo, S. I. (2009). DOM tree browsing of a very large XML document: Design and implementation. *Journal of Systems and Software*, 82(11), 1843-1858.
- Abate, P., DiCosmo, R., Treinen, R., & Zacchiroli, S. (2011, June). MPM: a modular package manager. In *Proceedings of the 14th international ACM Sigsoft symposium on Component based software engineering* (pp. 179-188). ACM.

Thank You!

