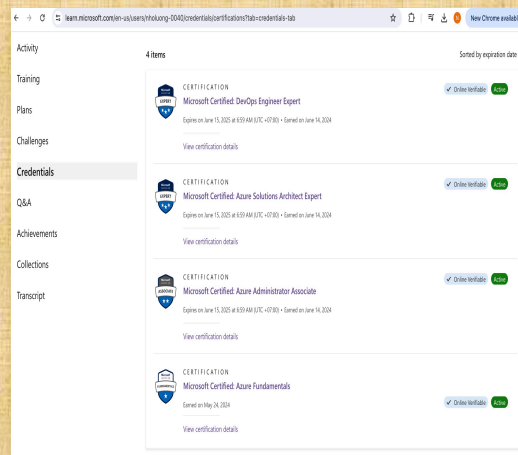
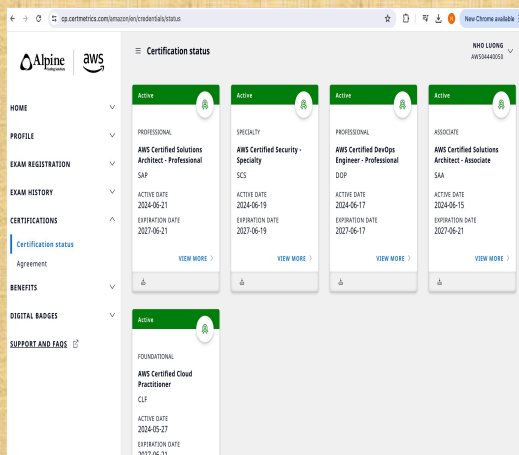


Template Files

Author: Nho Luong

Skill: DevOps Engineer Lead



EXERCISE



Let's Add a Template!

Adding all the information into the recipe did make it hard to read.

Objective:

- ☐ Create a template with chef generate Define the
- ☐ contents of the ERB template Change the file
- ☐ resource to the template resource Update the
- ☐ cookbook's version number Apply the updated
- ☐ recipe and verify the results

GL: What Can chef generate Do?



```
$ chef generate --help
```

Usage: chef generate GENERATOR [options]

Available generators:

app	Generate an application repo	Generate a single
cookbook	cookbook	Generate a new recipe
recipe	attributes file	Generate a file template
attribute	cookbook file	Generate a lightweight
template file	resource/provider	Generate a Chef policy
lwrp repo	repository	

policyfile Generate a Policyfile for use with the install/push commands
(experimental)

LOCAL

GL: What Can chef generate template

Do?



```
$ chef generate template --help
```

Usage: chef generate template [path/to/cookbook] NAME [options]

-C, --copyright COPYRIGHT defaults to 'The Authors'	Name of the copyright holder -
-m, --email EMAIL to ...	Email address of the author - defaults
-a, --generator-arg KEY=VALUE VALUE in the	Use to set arbitrary attribute KEY to
-l, --license LICENSE - defaults to	all_rights, apache2, mit, gplv2, gplv3
-s, --source SOURCE_FILE -g GENERATOR_COOKBOOK_PATH, code_generator	Copy content from SOURCE_FILE Use GENERATOR_COOKBOOK_PATH for the
--generator-cookbook	

LOCAL

Generating a motd Template



```
> chef generate template cookbooks/workstation motd
```

```
Recipe: code_generator::template
```

```
* directory[cookbooks/workstation/templates/default] action  
create
```

```
  - create new directory  
cookbooks/workstation/templates/default
```

```
* template[cookbooks/workstation/templates/motd.erb] action  
create
```

```
  - create new file cookbooks/workstation/templates/motd.erb  
  - update content in file
```

```
cookbooks/workstation/templates/motd.erb from none to e3b0c4  
(diff output suppressed by config)
```

Examining the templates Directory



```
> tree cookbooks/workstation/templates
```

```
cookbooks/workstation/templates/
```

```
├── default
```

```
└── motd.erb
```

```
1 directory, 1 file
```



Cleaner Recipes

Adding the node attributes to the default page did make it harder to read the recipe.

Objective:

- ✓ Create a template with chef generate Define the contents of the ERB
- ✓ template Change the file resource to the template resource in the 'apache'
- ✓ cookbook

CONCEPT

ERB

An Embedded Ruby (ERB) template allows Ruby code to be embedded inside a text file within specially formatted tags. Ruby code can be embedded using expressions and statements.



<https://docs.chef.io/templates.html#variables>

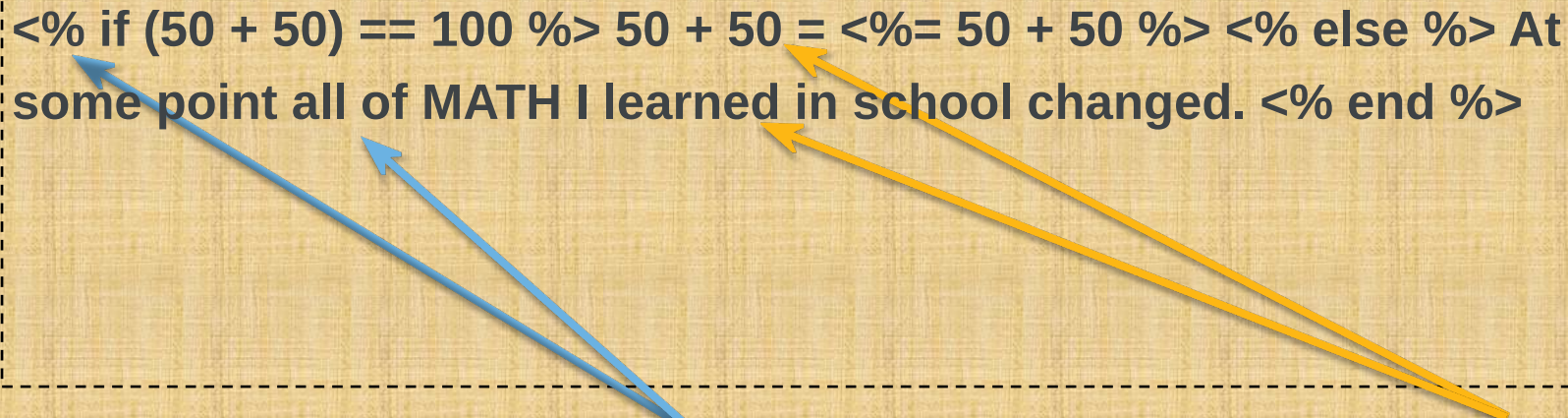
Text Within an ERB Template

```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At  
some point all of MATH I learned in school changed. <% end %>
```

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At  
some point all of MATH I learned in school changed. <% end %>
```

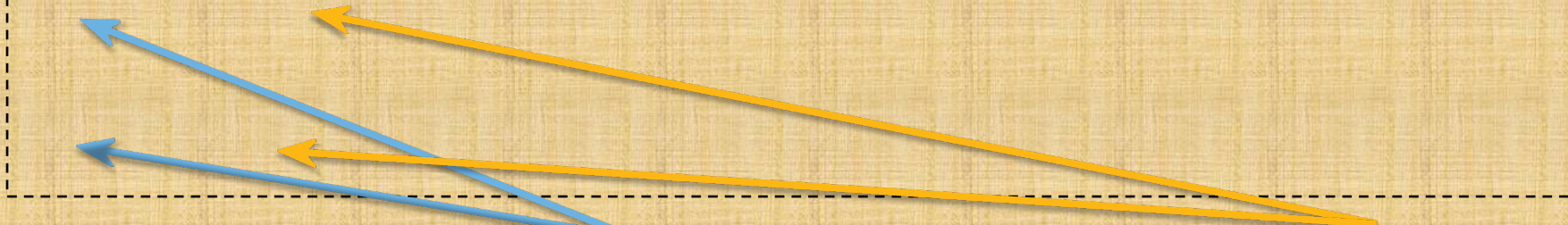


The diagram illustrates the structure of ERB (Embedded Ruby) tags within a text template. It shows a code snippet enclosed in a dashed box. The code contains an if-else statement. Blue arrows point from the opening tags to their corresponding closing tags: from `<% if (50 + 50) == 100 %>` to `<% end %>`, and from `<%= 50 + 50 %>` to `<%= 50 + 50 %>`. Yellow arrows point from the closing tags back to the opening tags: from `<% end %>` to `<% if (50 + 50) == 100 %>`, and from `<%= 50 + 50 %>` to `<%= 50 + 50 %>`.

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At  
some point all of MATH I learned in school changed. <% end %>
```



The diagram illustrates the matching of ERB tags. It features a dashed rectangular box containing the ERB code from the previous block. Below the box, the text 'Each ERB tag has a beginning tag and a matched ending tag.' is displayed. Four arrows originate from the right side of the box and point to the left, indicating the matching pairs: two blue arrows point to the opening tags (<% if (50 + 50) == 100 %> and <% else %>) and two yellow arrows point to the closing tags (<% end %> and <%= 50 + 50 %>).

Each ERB tag has a beginning tag and a matched ending tag.

Text Within an ERB Template

```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At  
some point all of MATH I learned in school changed. <% end %>
```

Executes the ruby code within the brackets and do not display the result.

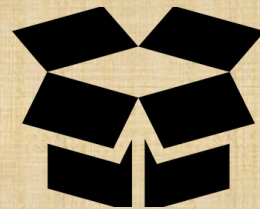
Text Within an ERB Template

```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At  
some point all of MATH I learned in school changed. <% end %>
```

Executes the ruby code within the brackets and display the results.

CONCEPT

The Angry Squid



<0%=

7-13

Copying the Existing Content into the Template

`~/cookbooks/workstation/templates/motd.erb`

Property of ...

IPADDRESS: `#{node['ipaddress']}`

HOSTNAME : `#{node['hostname']}`

MEMORY : `#{node['memory']['total']}`

CPU : `#{node['cpu']['0']['mhz']}`

Changing String Interpolation to ERB Tags



~/cookbooks/workstation/templates/motd.erb

Property of ...

IPADDRESS: <%= node['ipaddress'] %>

HOSTNAME : <%= node['hostname'] %>

MEMORY : <%= node['memory']['total'] %>

CPU : <%= node['cpu']['0']['mhz'] %>

EXERCISE



Cleaner Recipes

The template is created and defined. It now needs to be used within the recipe.

Objective:

- ✓ Create a template with chef generate Define the
- ✓ contents of the ERB template Change the file
- ✓ resource to the template resource Update the
- ✓ cookbook's version number Apply the updated
- ✓ recipe and verify the results



Thank You

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