Template Files
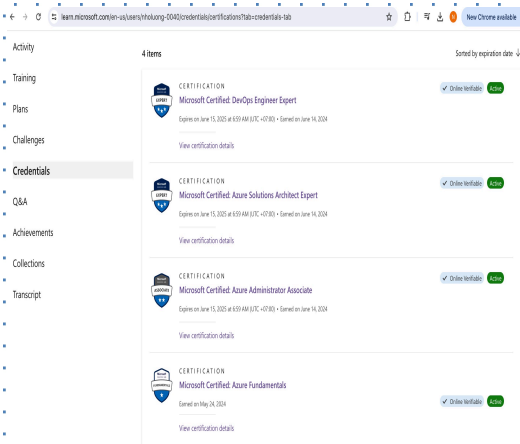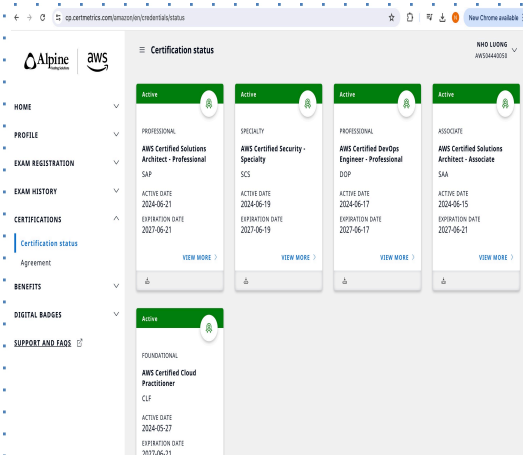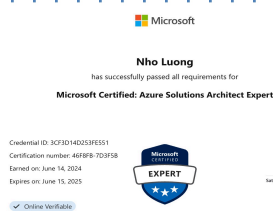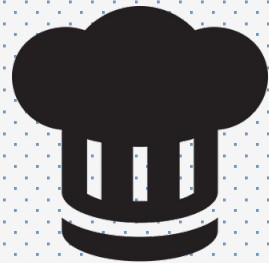
Author: Nho Luong

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

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

GL: What Can **chef generate** Do?

```
$ chef generate --help

UsaGL: chef generate GENERATOR [options]


Available generators:
    app            Generate  an  application  repo  Generate  a  single
    cookbook       cookbook  Generate  a  new  recipe  Generate  an
    recipe         attributes file Generate a file template Generate a
    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

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

GL: What Can **chef generate template** Do?

$ chef generate template --help

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

```
    -C, --copyright COPYRIGHT                    Name of the copyright holder -
defaults to 'The Authors'

    -m, --email EMAIL                            Email address of the author - defaults
to ...

    -a, --generator-arg KEY=VALUE                Use to set arbitrary attribute KEY to
VALUE in the

    -l, --license LICENSE                        all_rights, apache2, mit, gplv2, gplv3
- defaults to

    -s, --source SOURCE_FILE                     Copy content from SOURCE_FILE
    -g                                           Use GENERATOR_COOKBOOK_PATH for the
    GENERATOR_COOKBOOK_PATH,
code_generator

        --generator-cookbook
```

LOCAL

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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)
```

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

Examining the templates Directory
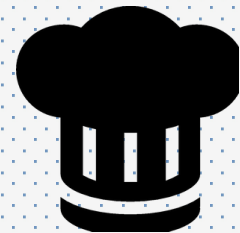
```
> tree cookbooks/workstation/templates
```

```
cookbooks/workstation/templates/
└── default

└── motd.erb


1 directory, 1 file
```

Author: Nho Luong
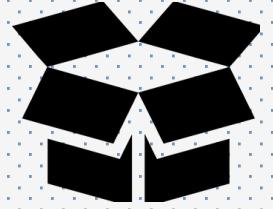Skill: DevOps Engineer Lead

CHEF

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

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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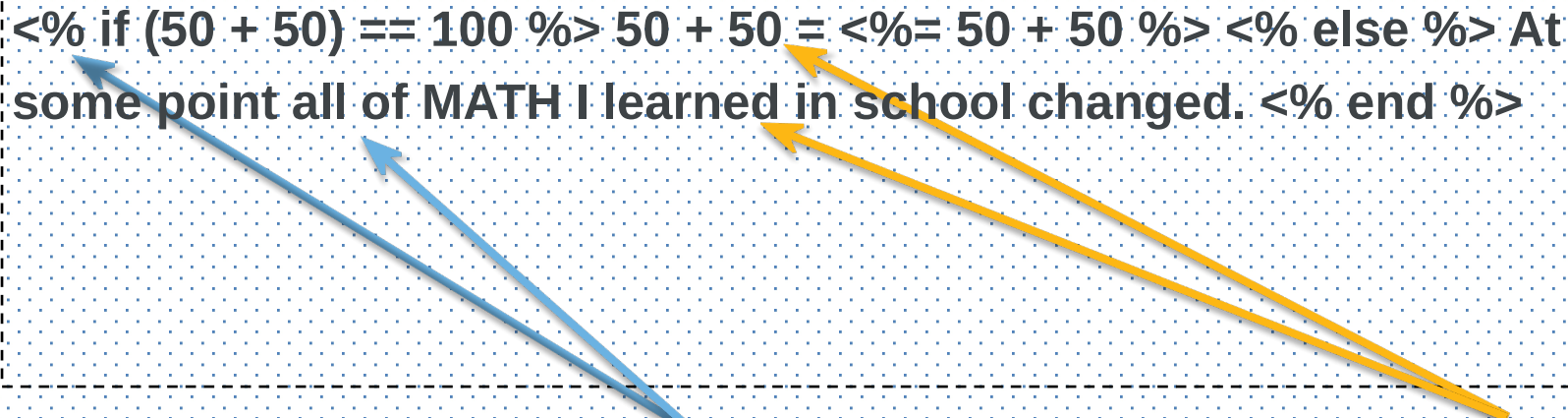
https://docs.chef.io/templates.html#variables

Author: Nho Luong
Skill: DevOps Engineer Lead

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.

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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.

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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.

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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.

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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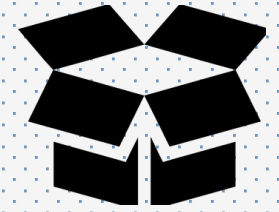
```
<% if (50 + 50) == 100 %> 50 + 50 = <%= 50 + 50 %> <% else %> At
some point all of MATH I learned in school changed. <% end %>
```

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

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

CONCEPT

The Angry Squid

<%=

7-13

CHEF

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']}
```

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

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'] %>
```

Author: Nho Luong
Skill: DevOps Engineer Lead
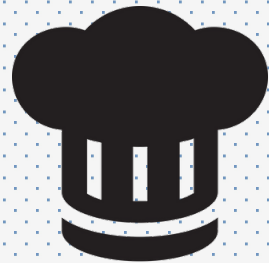
CHEF

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

Author: Nho Luong
Skill: DevOps Engineer Lead

CHEF

Thank You

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Skill: DevOps Engineer Lead