Why Use Custom Resources

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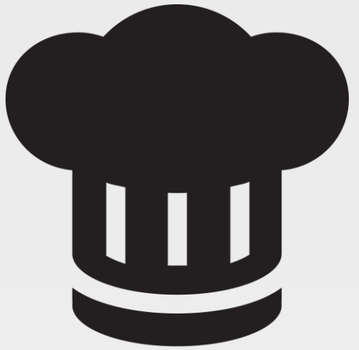
Objectives

After completing this module, you should be able to:

- Determine when a Custom Resource would be beneficial for clarity and reusability

EXERCISE



Evaluation Before Pursuit

Just because I can does not mean I should. It is important to implement solutions that are arguably better software design.

Objective:

- ❑ Define the judgment criteria
- ❑ Evaluate a code sample

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CONCEPT

Software Quality Standards

When defining resources within our recipes we are writing software. Software has a number of quality characteristics that have already been defined. ISO/IEC 9126 is an international standard for evaluation of software quality.

CONCEPT

Software Quality Standards

- Functionality
- Reliability
- Usability
- Efficiency
- Maintainability
- Portability

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CONCEPT

Software Quality Standards

- **Functionality**
- Reliability
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Does the code accomplish what it is designed to accomplish?

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CONCEPT

Software Quality Standards

- Functionality
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Is the solution able to withstand fault and recover from a failure?

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CONCEPT

Software Quality Standards

- Functionality
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Is the code easy to understand?
Is it easy to learn?

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CONCEPT

Software Quality Standards

- Functionality
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Does the code consume too many physical resources when it executes (e.g. CPU, memory)?

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Are you able to easily adapt the solution? Is it testable?

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CONCEPT

Software Quality Standards

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- **Portability**

Can the software adapt to changes in its environment? Or changes to its requirements?

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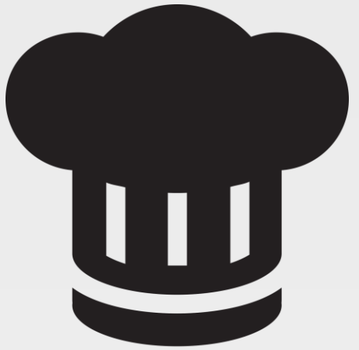
EXERCISE



Examine the Code Sample

With the criteria defined we can now examine code samples...

Objective:

- ✓ Define the judgment criteria
- ❑ Evaluate a code sample

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Resource Implementation v Custom Resource

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directory '/srv/apache/admins/html' do
  recursive true
  mode '0755'
end

template '/etc/httpd/conf.d/admins.conf' do
  source 'conf.erb'
  mode '0644'

variables(document_root:'/srv/apache/admins/ht
ml',
port: 8080)
  notifies :restart, 'service[httpd]'
end

file '/srv/apache/admins/html/index.html' do
  content '<h1>Welcome admins!</h1>'
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```
apache_vhost 'admins' do
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Functionality | Reliability | Usability | Efficiency | Maintainability | Portability

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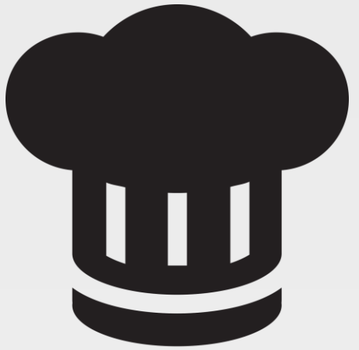

Evaluation Before Pursuit

There are many ways to critically evaluate code ... if these do not suit your or your team find the ones that do; talk about them and share them.

Objective:

- ✓ Define the judgment criteria
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Discussion

What value does reviewing code for functionality, reliability, usability, efficiency, maintainability, portability bring?

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DISCUSSION

Q&A

What questions can we answer for you?

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