

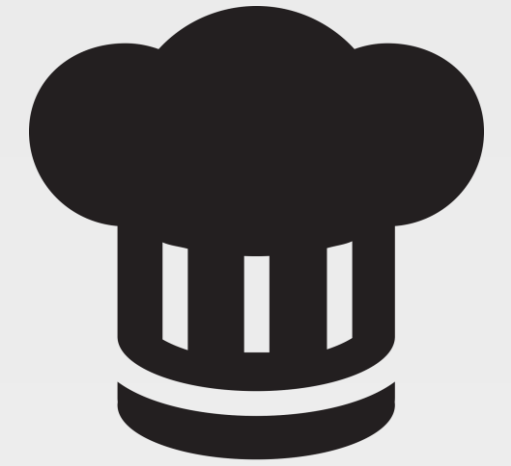
Why Use Custom Resources

Objectives

After completing this module, you should be able to:

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

EXERCISE



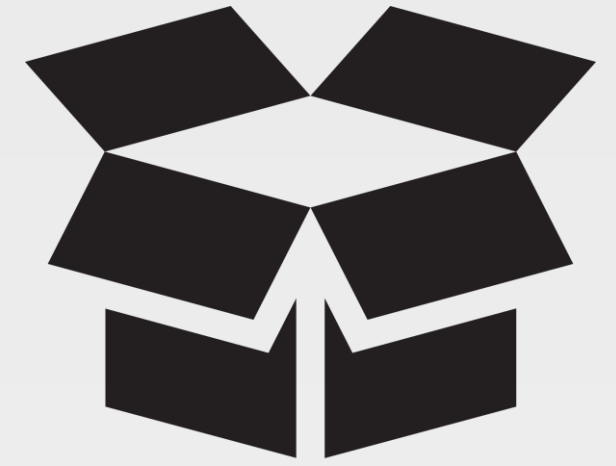
Evaluation Before Pursuit

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

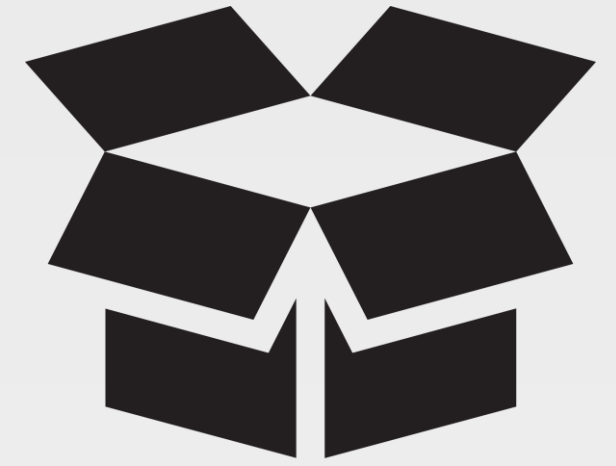
CONCEPT



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.

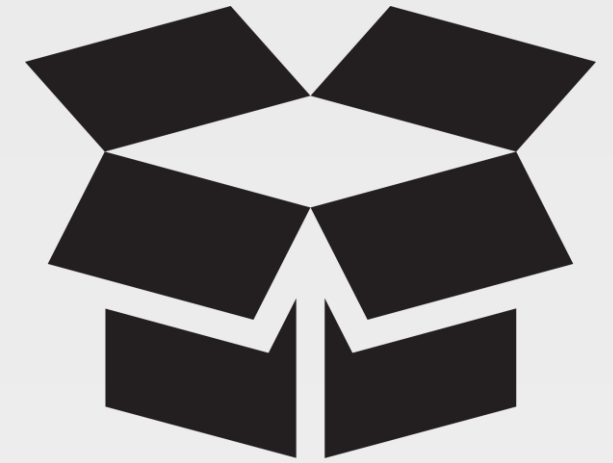
CONCEPT



Software Quality Standards

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

CONCEPT

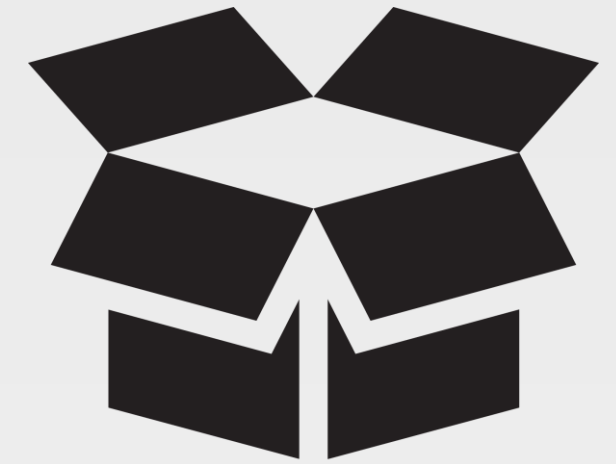


Software Quality Standards

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

Does the code accomplish what it is designed to accomplish?

CONCEPT

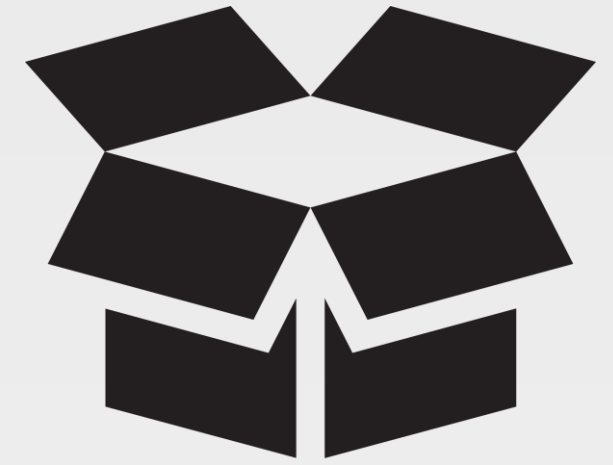


Software Quality Standards

- Functionality
- **Reliability**
- Usability
- Efficiency
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Is the solution able to withstand fault and recover from a failure?

CONCEPT

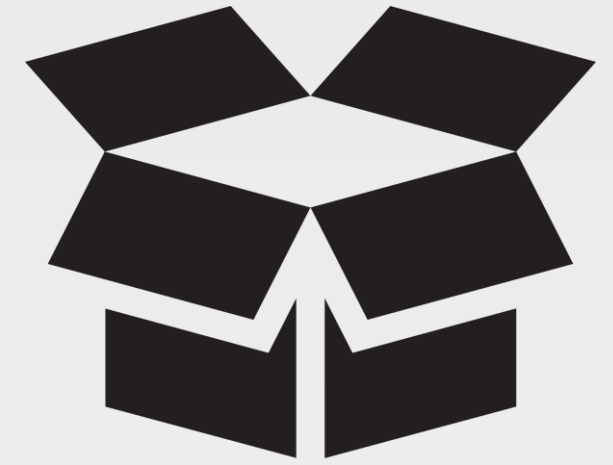


Software Quality Standards

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

CONCEPT

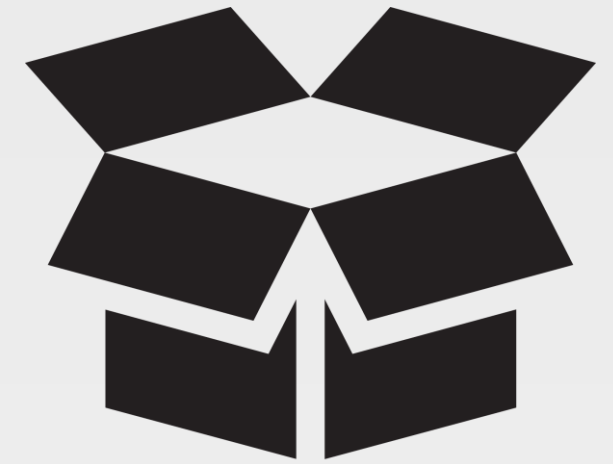


Software Quality Standards

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

CONCEPT



Software Quality Standards

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

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

CONCEPT



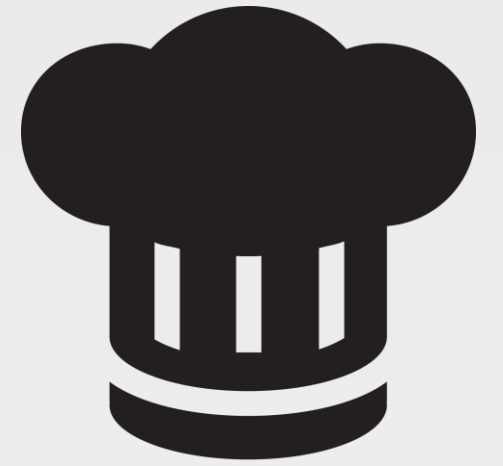
Software Quality Standards

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

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

EXERCISE

Examine the Code Sample



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

Objective:

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

Resource Implementation v Custom Resource

```
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/html',
    port: 8080)
  notifies :restart, 'service[httpd]'
end

file '/srv/apache/admins/html/index.html' do
  content '<h1>Welcome admins!</h1>'
end
```

```
apache_vhost 'admins' do
  site_port 8080
end
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Functionality | Reliability | Usability | Efficiency | Maintainability | Portability

Does the code accomplish what it is designed to accomplish?

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Functionality | **Reliability** | Usability | Efficiency | Maintainability | Portability

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Functionality | Reliability | Usability | **Efficiency** | Maintainability | Portability

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Functionality | Reliability | Usability | Efficiency | **Maintainability** | Portability

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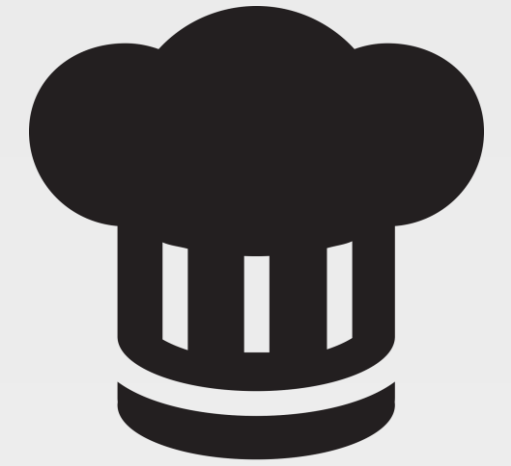
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Functionality | Reliability | Usability | Efficiency | Maintainability | **Portability**

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

EXERCISE



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
- ✓ Evaluate a code sample

DISCUSSION



Discussion

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

DISCUSSION



Q&A

What questions can we answer for you?



CHEF™
