



KOLEJ SYNERGY

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KERTAS PENERANGAN (*INFORMATION SHEET*)

KOD DAN NAMA PROGRAM / <i>PROGRAM'S CODE & NAME</i>	IT-010-3:2016 SYSTEMS MODULE DEVELOPMENT	
TAHAP / LEVEL	L3	
NO. DAN TAJUK UNIT KOMPETENSI / <i>COMPETENCY UNIT NO. AND TITLE</i>	C02 APPLICATIONMODULES DEVELOPMENT	
NO. DAN PENYATAAN AKTIVITI KERJA / WORK <i>ACTIVITIES NO. AND STATEMENT</i>	1 INTERPRET APPLICATION MODULE DEVELOPMENT REQUIREMENT 2 SETUP LOCAL ENVIRONMENT 3 PLAN MODULE EXPECTED BEHAVIOUR 4 WRITE MODULE CODE 5 COMMIT MODULE SOURCE CODE	
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TAJUK/TITLE: INTRODUCTION TO APPLICATION DEVELOPMENT

TUJUAN/PURPOSE:

The purpose of this Information Sheet is to provide the trainee the general knowledge about programming paradigm.

PENERANGAN/INFORMATION:**3. INTRODUCTION TO MODULE TEST SCRIPT****3.1 Module Test Script**

- a. Software Unit Tests which also are called Software Module Tests and are so called "dynamic tests".
- b. This requires the execution of the software units. The software can be executed in the target system, an emulator, simulator or any other suitable test environment.
- c. Within the range of dynamic tests the state of the art distinguishes between structural and functional tests.
- d. The structural dynamic tests are performed with the knowledge of the module internals in mind.
- e. This means that the branches and paths in functions and modules have to be considered and when the tests will be designed not only the function of the test object is tested, but at the same time it will be checked if all branches in the software have been covered.

3.2 Data Flow Diagram

- a. A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs.
- b. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.
- c. It does not show information about the timing of process or information about whether processes will operate in sequence or in parallel unlike a flowchart which also shows this information.

3.3 Decision Table

- a. Decision tables are a precise yet compact way to model complex rule sets and their corresponding actions.
- b. Decision tables, like flowcharts, if-then-else, and switch-case statements, associate conditions with actions to perform, but in many cases do so in a more elegant way.
- c. Each decision corresponds to a variable, relation or predicate whose possible values are listed among the condition alternatives.
- d. Each decision corresponds to a variable, relation or predicate whose possible values are listed among the condition alternatives.

4. WRITE MODULE CODE**4.1 Types of scripting / programming language such as: Cascading Style Sheets (CSS)**

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
    background-color: lightblue;
}
h1 {
    color: white;
    text-align: center;
}
p {
    font-family: verdana;
    font-size: 20px;
}
</style>
</head>
<body>
<h1>My First CSS Example</h1>
<p>This is a paragraph.</p>
</body>
</html>
```

4.2 Types of scripting / programming language such as: Hyper Text Markup Language

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

4.3 Types of scripting / programming language such as: JavaScript

```
<!DOCTYPE html>
<html>
<body>

<h1>My First JavaScript</h1>

<button type="button"
onclick="document.getElementById('demo').innerHTML = Date()">
Click me to display Date and Time.</button>
```

<p id="demo"></p>

</body>

</html>

4.4 Type of scripting / programming language such as: Java

```
import java.util.*;
import java.lang.*;
import java.io.*;

/* Name of the class has to be "Main" only if the class is public. */
class Ideone
{
    public static void main (String[] args) throws java.lang.Exception
    {
        // your code goes here
    }
}
```

4.5 Type of scripting / programming language such as: PHP

```
<!DOCTYPE html>
<html>
<body>

<?php
echo"My first PHP script!";
?>

</body>
</html>
```

4.6 Type of scripting / programming language such as: SQL

```
SELECT * FROM Customers;
```

5. COMMIT FIXED SOURCE CODE

5.1 Pull

- Contributions to a source code repository that uses a distributed version control system are commonly made by means of a pull request.
- The contributor requests that the project maintainer "pull" the source code change, hence the name "pull request".
- The maintainer has to merge the pull request if he or she decides the contribution should become part of the source base.

5.2 Push

- Copy revisions from one repository into another.
- Pull is initiated by the receiving repository, while push is initiated by the source.
- Fetch is sometimes used as a synonym for pull, or to mean a pull followed by an update.
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5.3 Check Out

- a. To check out (or co) is to create a local working copy from the repository.
- b. A user may specify a specific revision or obtain the latest.
- c. The term 'checkout' can also be used as a noun to describe the working copy.

5.4 Commit

- a. To commit (check in, ci or, more rarely, install, submit or record) is to write or merge the changes made in the working copy back to the repository.
- b. The terms 'commit' and 'checkin' can also be used as nouns to describe the new revision that is created as a result of committing.

5.5 Update

- a. An update (or sync, but sync can also mean a combined push and pull) merges changes made in the repository (by other people, for example) into the local working copy.
- b. Update is also the term used by some CM tools (CM+, PLS, SMS) for the change package concept (see change list).
- c. Synonymous with checkout in revision control systems that require each repository to have exactly one working copy (common in distributed systems).

5.6 Format of Work Progress Report

- a. Progress reports are an important part of project management, whether it's your dissertation or a project at work.
- b. You'll need to use these to keep your supervisors, your colleagues, or your clients updated about the project you're working on.
- c. You'll be focusing on what you've accomplished and what still needs to be done.

EXERCISE

1. Describes 5 steps of programming paradigm:
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
2. Which of the following published internet standard?
 - a. RFC
 - b. IESG
 - c. IETF
 - d. STD
3. Which of the following are not include inside the steps of triaging bugs?
 - a. Prioritize bug
 - b. Find bugs to triage
 - c. Attempt to produce bug
 - d. Set bugs status

REFERENCE:

1. The C programming language, Brian W. Kernighan, Denis M. Ritchie, Publication Date: March 22, 1988, ISBN: 013103628, ISBN-13: 978-01311203627
2. http://en.wikibooks.org/wiki/Introduction_to_Programming_Languages/Programming_Language_Paradigms