



BOOTCAMP KRISA SIRI 3/2021: PENGUJIAN SISTEM 28 – 30 JUN 2021 (ISNIN-RABU)

KRISA PANDUAN KEJURUTERAAN
SISTEM APLIKASI SEKTOR AWAM



**PENGUJIAN SISTEM:
PROSEDUR/SKRIP UJIAN
(KRISA)**

TAKLIMAT

07



GLOSSARY

Test Procedure

Sequence of test cases in execution order, and any associated actions that may be required to set up the initial preconditions and any wrap up activities post execution

Test Script

Test procedure specification for manual or automated testing

Test Sets

Set of one or more test cases with a common constraint on their execution.
Example: A specific test environment, specialized domain knowledge or specific purpose.

Test Procedure Specification

Document specifying one or more test procedures, which are collections of test cases to be executed for a particular objective

OBJEKTIF: PENYEDIAAN SPESIFIKASI KES UJIAN

- ✓ The **Test Basis** for each test item is analyzed;
- ✓ The features to be tested are combined into **Feature Sets**;
- ✓ The **Test Conditions** are derived;
- ✓ The **Test Coverage** items are derived;
- ✓ **Test Cases** are derived;
 - **Test Sets** are assembled.
 - **Test Procedures** are derived

TOPIK YANG DIAJAR



- Pengenalan Dokumen
- Langkah-langkah
- Keterangan Dokumen
- Contoh Pengisian

PENGENALAN SPESIFIKASI PROSEDUR UJIAN



**SPESIFIKASI
PROSEDUR
UJIAN**

- Document specifying one or more test procedures, which are collections of test cases to be executed for a particular objective.

LANGKAH-LANGKAH

1. Organizing tests (both manual and automated) into test suites and defining the test execution order
2. Creating automated tests (or identifying the test cases to be automated by a developer or automation engineer)
3. Developing test procedures
4. Finalizing test data and test environments
5. Updating the traceability between the test basis and testware such as test conditions, test cases and test suites.

MANUAL VS AUTOMATED

MANUAL TEST	Dilakukan oleh tester/developer di depan komputer, langkah demi langkah, menggunakan pelbagai kombinasi input semasa melaksanakan langkah-langkah ujian.	AUTOMATED TEST	Menggunakan perisian/ peralatan (tools) untuk melaksanakan kes ujian
	Tester/developer melakukan perbandingan terhadap hasil ujian dan mencatat keputusan ujian		<ul style="list-style-type: none"> • <i>Playback pre-recorded and predefined actions, compare the results to the expected behaviour</i> • <i>No human intervention</i>
	Tester/Developer menyediakan laporan pengujian		Bertujuan meningkatkan keberkesanan kecekapan dan liputan (coverage) pengujian perisian

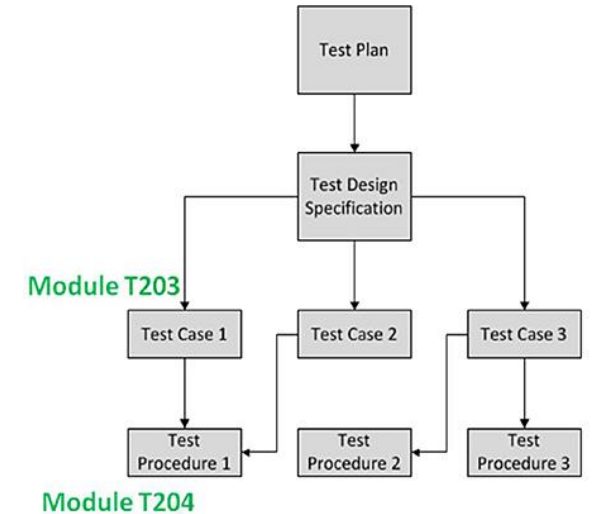
- *High risk - business critical test cases;*
- *Test cases that are repeatedly executed, multiple builds;*
- *Test cases that are very tedious or difficult to perform manually;*
- *Test cases which are time-consuming;*
- *Test cases that tend to cause human error;*
- *Test cases that require multiple data sets;*

Pengujian Automasi TIDAK AKAN
menggantikan Pengujian Manual sama sekali!



Gabungkan KEDUA-DUA pengujian untuk
hasil yang terbaik!





1. Memastikan test procedure telah mengambil semua kira test case yang dibangunkan dengan merujuk kepada dokumen **Spesifikasi Rekabentuk Ujian, Spesifikasi Kes Ujian**.
2. Penetapan **scenario ujian** bagi test prosedur hendaklah merujuk kepada dokumen **BRS, SRS, atau Pelan Induk Pengujian dan juga pemilik projek atau pasukan projek**. Memastikan versi yang betul bagi dokumen rujukan.
3. Bagi pelaksanaan **test automation, test case dipecah kecil** bagi memudahkan *reusable* dan *well maintained*. Cth login, logout
4. Pastikan **Traceability Matrix** dikemaskini.

ID Test Procedure	Nombor unik prosedur ujian
Objektif	Objektif prosedur ujian
Tahap Keutamaan	Keutamaan prosedur ujian
Start up	Tindakan untuk menetapkan prasyarat bagi kes ujian pertama yang akan dilaksanakan
Hubungan dengan Test Procedure lain	kebergantungan prosedur ujian ini kepada prosedur ujian lain

No Langkah	Test Case ID	Aktiviti	Jangkaan Hasil	Hasil Sebenar	Keputusan Ujian
No Tindakan	Senarai test case	Turutan langkah-langkah dalam melaksanakan prosedur ujian	Jangkaan hasil bagi kes ujian	Hasil sebenar yang diperolehi setelah kes ujian dilaksanakan	Keputusan/status kes ujian sama ada Lulus atau Gagal

ID Test Procedure	TP.01.01
Objektif	To activate LMS by driving on the road with multiple lane colors marker
Tahap Keutamaan	High
Start up	Accelerometer, speedometer and torque sensing is working properly
Hubungan dengan Test Procedure lain	None

No Langkah	Test Case ID	Aktiviti	Jangkaan Hasil	Hasil Sebenar	Keputusan Ujian
1	TC-01-27-01, TC-01-27-02, TC-01-27-03, TC-01-27-08, TC-01-27-09,	Driver drives on the road with diversion or construction where yellow markers temporarily being placed on the road.			
2	TC-01-27-04, TC-01-27-05, TC-01-27-06, TC-01-27-07,	Driver drives on the road with diversion or construction where higher degree of danger exists in which red markers temporarily being placed on the road.			
3	TC-01-27-10, TC-01-27-11, TC-01-27-12	Driver drives on the road with old lane markers that have been covered with black color			

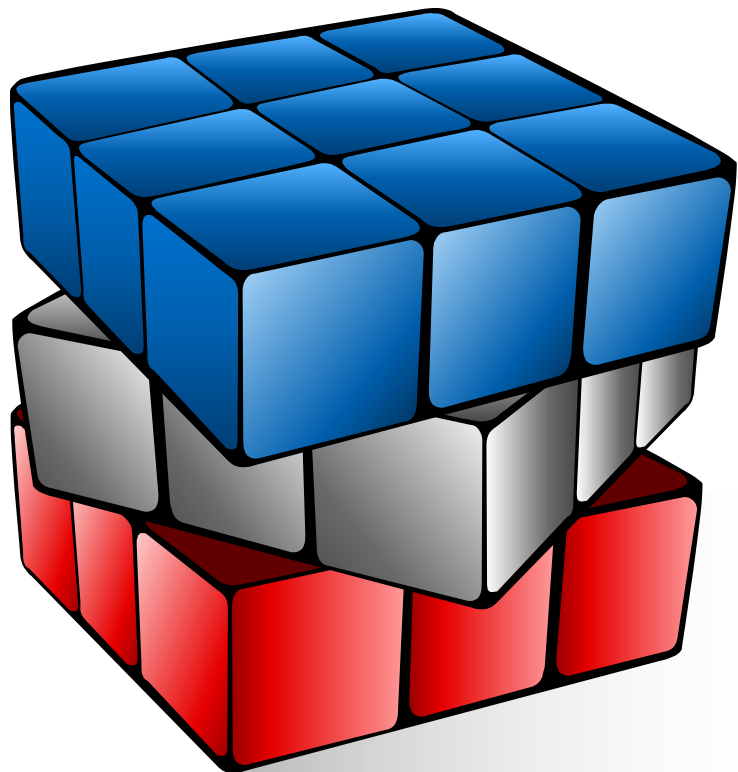


**SKRIP UJIAN
UJIAN PENERIMAAN PENGGUNA
(UAT)**

**SISTEM DASHBOARD MUDAHCARA DAN
INTERVENSI PROJEK NASIONAL
(MyMInD)**

PERANAN PENGUJI	:	KEMENTERIAN
BILANGAN KES UJIAN	:	1. TC06.01.01 (N) 2. TC06.01.02 (N) 3. TC06.02.01 (N) 4. TC01.02.01 (N) 5. TC04.02.01 (N) 6. TC05.01.01 (N)
JENIS/VERSI PELAYAR YANG DIGUNAKAN	:	
TARIKH DOKUMEN	:	17 FEB 2021
VERSI DOKUMEN	:	1.0

Skrip Ujian Penerimaan Pengguna (UAT)



KAJIAN KES

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**TERIMA
KASIH**