

**D01**

**DOCUMENT**

**TEST DESIGN SPECIFICATION (TDS)**

**UTHM STUDENTS’ EVENT MANAGEMENT SYSTEM (USEM)**

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SAMPLE

# Document Control

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# Introduction

## Purpose

## Scope

## References

# Test Design

## Features To Be Tested

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature ID** | **Description** | **Risk Level** | **Test level** |
| USEM\_REQ\_100 | Login |  |  |
|  |  |  |  |

## Approach Refinements

Test cases for USEM will be designed using five techniques which are covered in this section. Techniques are applied based on suitability of techniques according to nature of features. The techniques that will be applied are as follows:

1. Equivalence Partitioning
2. Boundary Value Analysis
3. Decision Table Testing
4. State Transition Testing
5. Use Case Testing

Nature of feature as below:

* USEM\_REQ\_100 Login – < >
* USEM\_REQ\_200 Register User – < >
* USEM\_REQ\_300 Manage Event Application – < >

### USEM\_REQ\_100 Login

Two techniques are identified for designing test for this feature, including:

1. Decision Table Testing
2. State Transition Testing

#### Decision Table Testing

Table <>: <>

|  |  |  |
| --- | --- | --- |
| Test Condition ID | Test Condition | Example Test Data |
| TCON-01-001 | Valid username |  |
| TCON-01-002 | < > |  |
| TCON-01-003 | < > |  |
| TCON-01-004 | < > |  |
| TCON-01-00*n* | < > |  |

Table <>: <>

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Condition** | **Rule 1** | **Rule 2** | **Rule 3** | **Rule 4** | **Rule 5** | **Rule 16** | **Rule 7** | **Rule *n*** |
| **<C1>** | Y | Y | Y | Y | N | N | N | N |
| **<C2>** | Y | Y | N | N | Y | Y | N | N |
| **<C*n*>** | Y | N | Y | N | Y | N | Y | N |
| **Actions** |  | | | | | | | |
| **<A1>** | X |  |  |  |  |  |  |  |
| **<A2>** |  | X | X | X |  |  |  |  |

#### State Transition Testing

|  |
| --- |
|  |

Figure <>: <>

The test condition for the state transition testing is as follows:

* + - * 1. TCON-01-006 Login State Transitions.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Input**  **State** | **Username Not Null**  **(UNN)** | **Invalid username (IU)** | **Invalid**  **Password (IP)** | **Password Not Null (PNN)** | **Valid Account (VA)** | **Invalid Account (IV)** |
| **Enter Username (S1)** | S2/RP  TCON-01- 009 | S1/RU  TCON-01- 010 | S1/- | S1/- | S1/- | S1/- |
| **Enter Password (S2)** | S2/- | S2/- | S1/ RP  TCON-01- 011 | S3/VA  TCON-01-012 | S2/- | S2/- |
| **Performing Validation (S3)** | S3/- | S3/- | S3/- | S3/- | S4/DH  TCON-01- 013 | S1/EM  TCON-01-014 |
| **Display Homepage (S4)** | S4/- | S4/- | S4/- | S4/- | S3/DH  TCON-01-015 | S4/- |

Table <> : Login State Table

|  |  |
| --- | --- |
| **Test Coverage ID** | **Test Coverage** |
| TCOV-01-009 | S1 to S2 with input UNN |
| TCOV-01-010 | S1 to S1 with input RU |
| TCOV-01-011 | S2 to S1 with input RP |
| TCOV-01-012 | S2 to S3 with input VA |
| TCOV-01-013 | S3 to S4 with input DH |
| TCOV-01-014 | S3 to S1 with input EM |
| TCOV-01-015 | S4 to S4 with input DH |

Table <>: Login State Coverage

### USEM\_REQ\_200 Register User

<number> techniques are identified for designing test for this feature, including:

1. <Test Technique *1>*
2. <Test Technique *2>*
3. <Test Technique *n-minimum 2 technique>*

#### Test Technique 1

#### Test Technique 2

### USEM\_REQ\_300 Manage Event Application

<number> techniques are identified for designing test for this feature, including:

1. <Test Technique *1>*
2. <Test Technique *2>*
3. <Test Technique *n-minimum 2 technique>*

#### Test Technique 1

#### Test Technique 2

## Test Identification

This section should contain information at least as below:

|  |  |  |
| --- | --- | --- |
| **Test Case ID** | **Description** | **Test Condition ID** |
| **USEM\_REQ\_100 Login** | | |
| TC-01-001 | Valid Account Verification (Valid login & password) | TCON-01-001 |
| TCON-01-004 |
| TCON-01-019 |
| TC-01-002 | Wrong credential information (Invalid login & password) | TCON-01-002 |
| TCON-01-003 |
| TCON-01-005 |
| TCON-01-006 |
| TCON-01-007 |
| TCON-01-008 |
| TCON-01-009 |
| TCON-01-010 |
| TCON-01-020 |
| TC-01-003 | Wrong credential information more than 3 times (Invalid login & password more than 3 times) | TCON-01-010 |
| TCON-01-011 |
| TCON-01-021 |
| TC-01-004 | Forget Username | TCON-01-012 |
| TCON-01-013 |
| TCON-01-014 |
| TCON-01-022 |
| TC-01-005 | Forget Password | TCON-01-005 |
| TCON-01-006 |
| TCON-01-007 |
| TCON-01-008 |
| TCON-01-009 |
| TCON-01-015 |
| TCON-01-016 |
| TCON-01-017 |
| TCON-01-018 |
| TCON-01-023 |
| **USEM\_REQ\_200 Register User** | | |
| TC-02-001 | Valid Register Acccount Verification (Valid input in sign-up form) | TCON-02-002 |
| TCON-02-003 |
| TCON-02-005 |
| TCON-02-007 |
| TCON-02-011 |
| TCON-02-013 |
| TCON-02-016 |
| TCON-02-020 |
| TCON-02-024 |
| TC-02-002 | Invalid Register Acccount Verification (Invalid input in sign-up form) | TCON-02-001 |
| TCON-02-004 |
| TCON-02-006 |
| TCON-02-008 |
| TCON-02-009 |
| TCON-02-010 |
| TCON-02-012 |
| TCON-02-014 |
| TCON-02-015 |
| TCON-02-017 |
| TCON-02-018 |
| TCON-02-019 |
| TCON-02-022 |
| TC-02-003 | Existing User (Input valid input registered account) | TCON-02-002 |
| TCON-02-003 |
| TCON-02-005 |
| TCON-02-007 |
| TCON-02-011 |
| TCON-02-013 |
| TCON-02-016 |
| TCON-02-020 |
| TCON-02-023 |
| **USEM\_REQ\_300 Manage Event Application** | | |
| TC-02-001 | Successful Submit Event Application | TCON-03-001 |
| TCON-03-002 |
| TCON-03-003 |
| TCON-03-004 |
| TCON-03-005 |
| TCON-03-006 |
| TCON-03-007 |
| TCON-03-011 |
| TC-02-002 | Approval (Pegawai Belia dan Sukan Kanan) | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-012 |
| TC-02-003 | Approval (Unit Pentadbiran Dan Kewangan) | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-013 |
| TC-02-004 | Approval (Pengarah Pusat Sukan Universiti) | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-014 |
| TC-02-005 | Approval (Bendahari) | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-015 |
| TC-02-006 | Approval (Timbalan Naib Canselor (Hal Ehwal Pelajar dan Alumni)) | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-016 |
| TC-02-007 | Organizer Manage Events | TCON-03-004 |
| TCON-03-008 |
| TCON-03-009 |
| TCON-03-010 |
| TCON-03-017 |
| TC-02-008 | Student Book Event | TCON-03-004 |
| TCON-03-018 |

## Feature Pass/Fail Criteria

This section should contain information at least as below:

|  |  |
| --- | --- |
| **Feature ID** | **Pass/Fail Criteria** |
|  |  |

## Test Deliverable