# **Traceability Matrix**

for

## **AVAILSYS**

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## **Traceability Matrix**

**REQUIREMENT ID**: from software requirement specifications document(**4.1\*.1\***)

**USE CASE - ID:** from software requirement specifications (represented as **UC - 1\***)

**HIGH LEVEL DESIGN**: from Sequence Diagram (represented by **SD - 1\*.1\***)

**LOW LEVEL DESIGN - 1:** from class diagram classes (represented by **CD - 3.2.1\***)

LOW LEVEL DESIGN - 2: from class diagram methods (represented by M1\*)

For the meaning of each part, check after the table.

REQUIREME NT ID	USE CASE - ID	HIGH LEVEL DESIGN	LOW LEVEL DESIGN 1	LOW LEVEL DESIGN 2	STATUS
4.1.1	UC - 1,UC - 8	SD - 1.1	CD - 3.2.1	M1,M2	PASSED
4.1.2	UC - 2	SD - 1.2 SD - 1.6	CD - 3.2.1 CD - 3.2.2 CD - 3.2.4 CD - 3.2.5	M3,M12,M14, M15,M16	PASSED
4.1.3	UC - 3	SD - 1.2 SD - 1.3	CD - 3.2.1 CD - 3.2.2	M5,M6,M19	PASSED
4.1.4	UC - 4	SD - 1.2 SD - 1.5	CD - 3.2.1 CD - 3.2.2	M7,M9,M17	PASSED
4.1.5	UC - 5	SD - 1.2 SD - 1.4	CD - 3.2.1	M8	PASSED
4.1.6	UC - 6 , UC - 13	SD - 1.2 SD - 1.4 SD - 1.5	CD - 3.2.1	M7	PASSED
4.2.1	UC - 7	SD - 2.1	CD - 3.2.2	M19	PASSED
4.2.2	UC - 1,UC - 8	SD - 2.1	CD - 3.2.2	M10,M11	PASSED
4.2.3	UC - 9	SD - 2.2	CD - 3.2.1	M5,M6	PASSED
4.2.4	UC - 10	SD - 2.2 SD - 2.3	CD - 3.2.2 CD - 3.2.5	M15,M16	PASSED
4.2.5	UC - 11	SD - 2.2 SD - 2.3 SD - 2.4	CD - 3.2.1 CD - 3.2.2	M9,M17	PASSED

<sup>\* -</sup> represents the continuation of series

4.2.6	UC - 12	SD - 2.2 SD - 2.3 SD - 2.5	CD - 3.2.2 CD - 3.2.5	M18,M21	PASSED
4.2.7	UC - 6, UC - 13	SD - 2.2	CD - 3.2.2	M13	PASSED
4.2.8	UC - 14,UC - 15	SD - 2.2 SD - 2.3 SD - 2.4 SD - 2.5	CD - 3.2.1 CD - 3.2.2 CD - 3.2.3 CD - 3.2.4	M7,M9,M13, M17,M20	PASSED
4.3.1	UC - 14,UC - 15	SD - 2.2 SD - 2.3 SD - 2.4 SD - 2.5	CD - 3.2.1 CD - 3.2.2 CD - 3.2.3 CD - 3.2.4	M7,M9,M13, M17,M20	PASSED

## Appendix:

### Requirements:

**4.1.1** - Login

**4.1.2** - Manage Student Database

4.1.3 - Manage Faculty Database

**4.1.4** - Manage Lab

**4.1.5** - Manage Resource Database

4.1.6 - Cancel the Slot

**4.2.1 -** Register

**4.2.2 -** Login

**4.2.3** - Update Details

**4.2.4** - Manage Section

4.2.5 - Schedule a Slot

**4.2.6** - Schedule Resource

**4.2.7 -** Cancel Slot

4.2.8 - Receive Emails

4.1.1 - Receive Emails

Use Case - 1:Login

Use Case - 2: Manage Student

Database

**Use Case - 3:** Manage Faculty Database

Use Case - 4: Manage Labs

**Use Case - 5**: Manage Resource

Database

**Use Case - 6**:Cancel the Slot

**Use Case - 7**:Register

Use Case - 8:Login

**Use Case - 9:**Update Details

Use Case - 10: Manage Sections

Use Case - 11: Schedule Lab

Use Case - 12:Schedule Resource

Use Case - 13: Cancel Slot

Use Case - 14: Receive Emails

Use Case - 15: Receive Emails

## Use Case Diagram:

#### Sequence Diagram:

#### Sequence Diagram - 1: Admin

**1.1 -** Login

**1.2** - Dashboard

**1.3** - Faculty Management

**1.4** - Resource Management

**1.5** - Lab Management

**1.6** - Student Management

#### Sequence Diagram - 2:Faculty

2.1 - Login Success

**2.2 -** Dashboard

**2.3** - Section management

**2.4** - Lab Management

**2.5** - Resource Management

### Class Diagram Classes:

Class Diagram - 3.2.1: Admin

Class Diagram - 3.2.2: Faculty

Class Diagram - 3.2.3:Lab

Class Diagram - 3.2.4: Student

Class Diagram - 3.2.5: Section

Class Diagram - 3.2.6:Resource

#### Class Diagram Methods:

Method-1: Login() - M1

Method-2: Logout() - M2

Method-3: ModifyStudent() - M3

Method-4: CancelTheSlot() - M4

Method-5: AddNewFaculty() - M5

Method-6: ModifyFaculty() - M6

Method-7: ManageLabs() - M7

Method-8:

ManageResourceDatabase() - M8

Method-9: ManageTimeSlot() - M9

**Method-10**: Login() - **M10** 

Method-11: Logout() - M11

Method-12: ModifyStudent() - M12

Method-13: CancelTheSlot() - M13

Method-14: AddNewStudent() - M14

Method-15: AddNewSection()- M15

Method-16: ModifySection()- M16

Method-17: ScheduleASlot()- M17

Method-18: ScheduleResource()- M18

Method-19: Register()- M19

Method-20: SendNotification()- M20

Method-21: AssignmentResources()-

M21

CLASS DIAGRAM	METHODS		
CD - 3.2.1	M1,M2,M3,M4,M5,M6,M7,M8,M9		

CD - 3.2.2	M10,M11,M12,M13,M14,M15,M16,M17,M1 8,M19
CD - 3.2.3	M20
CD - 3.2.4	NIL
CD - 3.2.5	NIL
CD - 3.2.6	M21