## Test Metrics:

Summarize here the common ground of attributes of test case metrics.

### SignUp Test case Matric.No.1

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| Metric: | Purpose |
| Number of Test Cases: | 8 |
| Number of Test Cases Passed: | 8 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  | | --- | | (0 × 100) / 8 = **0%** | |
| Test Case Effectiveness: | (0 × 100) / 0 = **0%** (No defects reported) |
| Traceability Matrix: | Fully covers **Use Case 3.4.1**: valid sign-up, input validation, email format, duplicate email, short password, missing fields, server error, and email verification. |

### Login Test case Matric.No.2

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| Metric: | Purpose |
| Number of Test Cases: | 7. |
| Number of Test Cases Passed: | 6 |
| Number of Test Cases Failed: | 1 |
| Test Case Defect Density: | (1 \* 100) / 7 = 14.28% |
| Test Case Effectiveness: | (1 \* 100) / 1 = 100% |
| Traceability Matrix: | Each step in the test case maps directly to requirements in Use Case 3.4.2 (login validation, redirection, error messages, forgot password, HTTPS security). Every requirement has a test case, and each test case corresponds to a feature in the implemented system. |

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### Create Profile Test case Metric.No.3

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| Metric: | Purpose |
| Number of Test Cases: | 7. |
| Number of Test Cases Passed: | 6 |
| Number of Test Cases Failed: | 1(Invalid user input not caught due to missing field validation) |
| Test Case Defect Density: | (1 × 100) / 7 = 14.29% |
| Test Case Effectiveness: | (1 × 100) / 1 = 100% (One defect was successfully detected via test case execution) |
| Traceability Matrix: | Each step of use case 3.4.3 “Create Profile” has been directly mapped and tested. The test cases cover the profile creation process for Patients, Doctors, and Admins, verifying both success and failure scenarios as required in the functional specification. |

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### Edit Profile Test case Metric.No.4

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| Metric: | Purpose |
| Number of Test Cases: | 5 |
| Number of Test Cases Passed: | 5 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | (0 × 100) / 5 = 0% |
| Test Case Effectiveness: | (0 × 100) / 0 = 0% (No defects found during testing) |
| Traceability Matrix: | Each flow and alternative flow from Use Case 3.4.4 was tested. Steps 1–6 from the Basic Flow and 4.1–4.2 from the Alternative Flow were covered, ensuring alignment with requirements. |

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### Email Verification Test case Metric.No.5

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| Metric: | Purpose |
| Number of Test Cases: | 6 |
| Number of Test Cases Passed: | 6 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | (0 × 100) / 6 = **0%** |
| Test Case Effectiveness: | (0 × 100) / 0 = **0%** (No defects found during testing) |
| Traceability Matrix: | Steps 1–6 of the Basic, Alternative, and Exception flows from Use Case 3.4.5 were fully tested. Coverage includes normal, invalid, and failure conditions ensuring compliance with requirements.. |

### Forgot Password Test case Metric.No.6

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| Metric: | Purpose |
| Number of Test Cases: | 6 |
| Number of Test Cases Passed: | 6 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  | | --- | | (0 × 100) / 6 = **0%** | |
| Test Case Effectiveness: | (0 × 100) / 0 = **0%** (No defects found during testing) |
| Traceability Matrix: | All steps in Use Case 3.4.6 (Basic, Alternative, Exception) are verified for completeness and traceability to requirements |

### LogOut Test case Metric.No.7

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| Metric: | Purpose |
| Number of Test Cases: | 4 |
| Number of Test Cases Passed: | 4 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | (0 × 100) / 4 = **0%** | | |
| Test Case Effectiveness: | |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | (0 × 100) / 0 = **0%** (No defects reported) | | |
| Traceability Matrix: | Fully aligned with Use Case 3.4.7, validating success, expired session, and failure handling. |

### Search Doctor Test case Metric.No.8

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| Metric: | Purpose |
| Number of Test Cases: | 5 |
| Number of Test Cases Passed: | 5 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | (0 × 100) / 5 = **0%** | | |
| Test Case Effectiveness: | |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | (0 × 100) / 0 = **0%** (No defects reported) | | |
| Traceability Matrix: | |  | | --- | |  |  |  | | --- | | Fully covers Use Case 3.4.9 including filtered search, blank input behavior, and failure response | |

### Upload Eye Images Test case Metric.No.9

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| Metric: | Purpose |
| Number of Test Cases: | 6 |
| Number of Test Cases Passed: | 6 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  | | --- | | (0 × 100) / 6 = **0%** | |
| Test Case Effectiveness: | |  | | --- | |  |  |  | | --- | | (0 × 100) / 0 = **0%** (No defects reported) | |
| Traceability Matrix: | Fully maps to Use Case 3.4.8 including valid image upload, validation, cancel behavior, and failure recovery. |

### Book Appointment Test case Metric.No.10

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| Metric: | Purpose |
| Number of Test Cases: | 5 |
| Number of Test Cases Passed: | 5 |
| Number of Test Cases Failed: | 0 |
| Test Case Defect Density: | |  | | --- | |  |  |  | | --- | | (0 × 100) / 5 = **0%** | |
| Test Case Effectiveness: | |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | (0 × 100) / 0 = **0%** (No defects reported) | | |
| Traceability Matrix: | Fully covers Use Case 3.4.10: slot availability, valid booking, cancellation, and failure handling. |

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| Metric: | Purpose |
| Number of Test Cases: | Total number of test cases that you have developed for your system. |
| Number of Test Cases Passed: | The number of test cases that successfully passed |
| Number of Test Cases Failed: | The number of test cases that failed |
| Test Case Defect Density: | (No of test cases failed \* 100)  No of test cases executed |
| Test Case Effectiveness: | No of defects detected using test cases \*100  Total number of defects detected |
| Traceability Matrix: | Traceability is the ability to determine that each feature has a source in requirements and each requirement has a corresponding implemented feature. |