**SOFTWARE TEST PLAN**

**Project Title:** Plagiarism Detection System for Urdu Language  
**Prepared By:** Syed Ahmed Ali, Syed Shaheer ul Haque  
**Start Date:** 10-April-2025  
**End Date:** 28-April-2025

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| **#** | **Description** | **Test Engineer** | **Start Date** | **End Date** |
| 1 | Login API Test | Syed Ahmed Ali | 10-04-25 | 10-04-25 |
| 2 | Signup API Test | Syed Shaheer | 11-04-25 | 11-04-25 |
| 3 | File Upload (DOCX/PDF/TXT) | Syed Ahmed Ali | 12-04-25 | 12-04-25 |
| 4 | Preprocessing Function Test | Syed Shaheer | 13-04-25 | 13-04-25 |
| 5 | Cosine Similarity Algorithm Test | Syed Ahmed Ali | 14-04-25 | 14-04-25 |
| 6 | BERT Model Inference Accuracy Test | Syed Shaheer | 15-04-25 | 16-04-25 |
| 7 | Highlight Plagiarized Words Algorithm | Syed Ahmed Ali | 17-04-25 | 17-04-25 |
| 8 | Report Generation (PDF via WeasyPrint) | Syed Shaheer | 18-04-25 | 18-04-25 |
| 9 | Mobile App File Picker Test | Syed Ahmed Ali | 20-04-25 | 20-04-25 |
| 10 | Mobile App Result Display | Syed Shaheer | 21-04-25 | 21-04-25 |
| 11 | JWT Token Expiry and Validation | Syed Ahmed Ali | 22-04-25 | 22-04-25 |
| 12 | User History Fetch API Test | Syed Shaheer | 23-04-25 | 23-04-25 |

**TEST CASE DOCUMENT**

**Project Name:** Plagiarism Detection System for Urdu Language  
**Iteration No:** 1  
**Module Name:** Login API  
**Date:** 10-April-2025  
**Test Case ID:** TC-001  
**Test Engineer:** Syed Ahmed Ali  
**Test Case Description:** This test case verifies the login API functionality using valid, invalid, and empty credentials. It ensures the system allows authenticated access and handles errors correctly.

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| S. No | Steps | Input Data | Expected Result | Actual Result | Pass/Fail |
| 1 | Enter valid credentials | user@test.com / 12345 | Login successful | Login successful | Pass |
| 2 | Enter invalid credentials | user@test.com / wrong | Invalid credentials error | Invalid credentials error | Pass |
| 3 | Leave fields empty | - | Validation error message | Validation error message | Pass |

**Module Name:** File Upload API  
**Date:** 12-April-2025  
**Test Case ID:** TC-002  
**Test Engineer:** Syed Ahmed Ali  
**Test Case Description:** This test validates the file upload functionality for different formats. The system must accept PDF, DOCX, and TXT files while rejecting unsupported formats.

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| S. No | Steps | Input Data | Expected Result | Actual Result | Pass/Fail |
| 1 | Upload .DOCX file | sample.docx | File accepted and processed | File accepted and processed | Pass |
| 2 | Upload .PDF file | test.pdf | File accepted and processed | File accepted and processed | Pass |
| 3 | Upload .TXT file | notes.txt | File accepted and processed | File accepted and processed | Pass |
| 4 | Upload unsupported format | image.png | File type error | File type error | Pass |

**Module Name:** Plagiarism Result API  
**Date:** 15-April-2025  
**Test Case ID:** TC-005  
**Test Engineer:** Syed Shaheer  
**Test Case Description:** This test evaluates how accurately the system detects plagiarism levels using the BERT model and cosine similarity. It ensures that files with different plagiarism levels yield corresponding similarity percentages.

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| S. No | Steps | Input Data | Expected Result | Actual Result | Pass/Fail |
| 1 | Upload partially plagiarized | plag\_part.docx | 40–60% similarity | 47% similarity reported | Pass |
| 2 | Upload fully plagiarized | plag\_full.docx | >80% similarity | 88% similarity reported | Pass |
| 3 | Upload original content | original.txt | <20% similarity | 8% similarity reported | Pass |

**Module Name:** PDF Report Generation  
**Date:** 18-April-2025  
**Test Case ID:** TC-008  
**Test Engineer:** Syed Shaheer  
**Test Case Description:** This test checks whether the system correctly generates and stores a plagiarism report in PDF format. It verifies layout accuracy, correct highlighting, and proper download functionality.

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| S. No | Steps | Input Data | Expected Result | Actual Result | Pass/Fail |
| 1 | Run plagiarism check | testfile.pdf | Report generated in PDF | Report generated correctly | Pass |
| 2 | Download report | report link | PDF opens/downloads | PDF downloaded | Pass |