

# Testing Document

## 1. Application Overview

Field	Description
Application Name	Digital Learning Resources Platform
Application Type	Web-based Educational Article Management System
Platform Availability	Desktop & Mobile Browsers (Responsive Web App)

## 2. App Description

The **Digital Learning Resources Platform** is an educational web application aimed at providing students, tutors, and administrators with curated content in the fields of **Technology**, **Mathematics**, and **Arts**. It supports a user-role-based system with access controls and features for browsing and searching categorized articles about individuals, concepts, artwork, and inventions.

## 3. Key Features

1. **Subject-Specific Article Collections** (Arts, Mathematics, Technology)
2. **Role-Based Access** (Student, Tutor, Admin)
3. **Browse Articles** by:
  - Category
  - Keyword in title
4. **Add/Edit/Delete Articles** (by Admins and Tutors)

#### 4. Features to Be Tested

Feature	Purpose
Browse Articles by Category	Ensures categorized content access
Browse Articles by Title Keyword	Enables targeted search functionality

#### 5. Test Data Summary




Test dataset: `SampleData.xlsx`

Includes **9 articles** under the following categories:




- **Technology**
- **Mathematics**
- **Arts**

#### 6. Test Scenarios and Cases

Browse Articles by Category

Scenario	Test Case	Steps	Expected Outcome	Status
Valid Category	Arts	Select Arts from filter → call <code>findArticleByCategoryName('Arts')</code>	Returns all articles in the Arts category	 Pass
Invalid Category	tv-series	Select tv-series → call <code>findArticleByCategoryName('tv-series')</code>	Error: <i>Category not found by the name of tv-series</i>	 Pass
Case Sensitivity	tech	Select tech → call <code>findArticleByCategoryName('tech')</code>	no results	 Pass

## Browse Articles by Keyword in Title

Scenario	Test Case	Steps	Expected Outcome	Status
Valid Keyword	Leonardo	Search “Leonardo” → call <code>findArticleByTitle('Leonardo')</code>	Returns articles containing “Leonardo” in the title	 Pass
Invalid Keyword	User	Search “User” → call <code>findArticleByTitle('User')</code>	Error: <i>No article found by the name of User</i>	 Pass
Multiple Keyword Matches	Jobs	Search “Jobs” → call <code>findArticleByTitle('Jobs')</code>	Returns all titles containing “Jobs” (requires at least 2 entries for testing)	 Pass

## 7. Additional Test Cases

Type	Scenario	Expected Outcome
Concurrency Test	2+ users search for Technology at the same time	Both users receive accurate and fast results without conflict
Performance Test	Perform search after populating 1000+ articles	Search speed remains acceptable (under 2s), no crashes or lag

## 8. Bugs / Observations

Issue ID	Description	Status
#BUG001	Case sensitivity in category filter leads to empty result set	Confirm expected behavior
#BUG002	Search does not support partial or fuzzy matches	Consider implementing fuzzy search

## 9. Test Sign-Off

Role	Name	Date
Tester	Jashandeep Singh	30/06/25
Developer	Annta	30/06/25
Supervisor	Prabhjot Kaur	30/06/25

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