**YOUR LOGO**

**SHARE2TEACH**

**FUNCTIONAL & TECHNICAL SPECIFICATIONS**

**John Klerck**

**21/05/2024**

**Version 0.1.0**

| VERSION HISTORY | | | | |
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| VERSION | APPROVED BY | REVISION DATE | DESCRIPTION OF CHANGE | AUTHOR |
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**Functional & Technical Specifications Document**

**Authorization Memorandum**

I have carefully assessed the Functional & Technical Specifications Document for Share2Teach.

MANAGEMENT CERTIFICATION - Please check the appropriate statement.

\_\_\_\_\_\_ The document is accepted.

\_\_\_\_\_\_ The document is accepted pending the changes noted.

\_\_\_\_\_\_ The document is not accepted.

We fully accept the changes as needed improvements and authorize initiation of work to proceed. Based on our authority and judgment, the continued operation of this system is authorized.

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# Introduction

## Purpose

This Technical and Functional Specifications document serves to inform all project stakeholders of the agreed upon project scope, functionality expectations and technical expectations and responsibility.

## Intended Audience and Pertinent Sections

Project Sponsor -

Project Manager -

Development Lead -

## Project Scope

This project aims to extend upon the Share2Teach platform by implementing the following features:

1. Account Creation and Secure Sign-in
   1. User verification for Educator Role required
2. File Uploading & Storage
3. File Moderation (Gatekeeping, reviewing, approving/denying of documents)
4. File Reporting
5. Pre-pending Watermark/License to files
6. Allow tagging of Documents when uploading
7. Allow Searching of Documents
8. Implement Analytics to monitor user engagement and behaviour
9. Facilitate document ratings by Users.
10. Create an FAQ page

## Document Conventions

## References

# General Description

## Product Context

Share2Teach is introduced as a vibrant open educational resource (OER) project crafted to nurture a global community of learners and educators. At its core lies the principle that knowledge should be accessible, collaborative, and freely available. Share2Teach is a testament to the power of collective endeavor, co-crafted by students under the guidance of their facilitators.

The project was initiated by Dr. Chantelle Bosch, a dedicated lecturer and sub-area leader for Blended Learning to Enhance Self-Directed Learning within the Research Unit Self-Directed Learning at the North-West University (NWU). Alongside her, Prof. Dorothy Laubscher, the chair-holder of the UNESCO Chair on Multi-modal Learning and OER, has played a pivotal role in shaping the vision and trajectory of Share2Teach.

Together, a platform has been cultivated where diverse educational resources are brought to life, crafted by students for students. From comprehensive semester planning documents to topic-specific insights, Share2Teach offers a wide array of materials tailored to enhance self-directed learning through cooperative learning and project-based teaching strategies.

Share2Teach serves as a beacon for educational innovation, extending an invitation to educators and learners worldwide to contribute, explore, and evolve within this open, inclusive community. Joining this journey means participating in the endeavor to transform learning into a shared adventure, dismantling barriers and erecting bridges toward a more knowledgeable and interconnected world.

## Operating Environment

Illustrate where software will function: hardware platform, operating systems, and other software components or applications with which it must work in conjunction.

## User Overview

Four user groups have been identified. They are presented as follows:

1. Admin
   1. This user role represents the project owner and/or sponsor and the developers maintaining the system. This user has unrestricted access to all components of the system. The only unique component that this user has access to, is the analytics component. Access to this user role is tightly controlled.
2. Moderator
   1. This user role represents a subset of subject experts as selected by the project owner and/or sponsor. This user has access to the following features:
      1. Document Searching
      2. Document Viewing
      3. Document Contribution
      4. Document Rating
      5. Using the FAQ
      6. Moderating Documents
3. Educator
   1. This user role represents any user who registers for an educator’s account. This user has access to the following functionality:
      1. Document Searching
      2. Document Viewing
      3. Document Contribution
      4. Document Rating
      5. Using the FAQ
4. Open Access User
   1. This user role represents any user that accesses the site and does not sign in. This user has access to the following functionality:
      1. Document Searching
      2. Document Viewing
      3. Document Rating
      4. Using the FAQ

## Overview of Functional Requirements

The following Functional Requirements have been stipulated by the client:

* Account Creation and Secure Sign-in - (User verification for Educator Role required)
* File Uploading & Storage
* File Moderation (Gatekeeping, reviewing, approving/denying of documents)
* Pre-pending Watermark/License to files
* Tagging of Documents when uploading (Metadata)
* Searching of Documents
* Analytics to monitor user engagement and behaviour
* Document Ratings
* FAQ page

## Overview of Data Requirements

The following Data Requirements have been stipulated by the client:

* File Storage
* File Metadata
* File Ownership
* Moderation History
* User Data - Account Creation
* User Analytics

## Overview of Technical Requirements

Brief overview of requirements for technology

Scale-able File storage and manipulation methods

## Constraints

Describe limitations impacting development.

## Assumptions

Detail all assumed factors (not known facts) that could potentially impact technical specifications set forth. Include external factors.

## Dependencies

Detail all assumed factors (not known facts) that could potentially impact technical specifications set forth. Include external factors.

## Guidelines

### Communication

### User Documentation

Describe content, mode of delivery, and standards.

# Requirements

## External Interface Requirements

### User Interfaces

Describe product / user interface characteristics, including standards, style guides, constraints, functionality, and sample screens if applicable.

### Hardware Interfaces

Describe product / hardware interface characteristics, nature of interactions, and communication protocols.

### Software Interfaces

Describe product / other software interface characteristics, including component names and versions, databases, operating systems, libraries, tools, etc. Specify any constraints, along with nature of communications and what data is coming in and being disseminated.

### Communications Interfaces

List requirements of communication functions: email, browsers, servers, forms, etc. Describe standards employed, security or encryption measures, data transfer rates, and synching.

## Functional Requirements

|  |  |
| --- | --- |
| Purpose/Description |  |
| Inputs |  |
| Processing |  |
| Outputs |  |

## Non-Functional Requirements

### Performance

### Safety

### Security

### Software Quality

## Technical Requirements

## Performance Requirements

# Appendices

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| --- | --- | --- | --- |
| Appendix Number | Document Name | Description | Location |
| A | Glossary of Terms | A Glossary containing all unique terms and acronyms used within this document that pertains to this project. |  |
| B | Issue List | A list of outstanding issues within this document, to be rectified before the next revision. |  |
| C | Analysis Models | A document containing various diagrams generated during the systems analysis and design phases |  |
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