# Software Requirement Specification (SRS)

**Project Name** Thesishive: DMS Mini Thesis Library

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**Version** Version 3

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Revision History			
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1	Alingas Arado Ayop Bahian Balcita Garridos		October 6, 2023
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Approval History			
Reviewer	Version Reviewed	Signature	Date

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#### 1 Introduction

This document contains information on the application's requirement specification. This is to provide a general introduction and overview of the general functionality of the application. This is to introduce important concepts such as the application's general description, functional requirements, external interface requirements, non-functional requirements, definitions, and acronyms. Moreover, it gives ideas on what to visualize and expect on the application's set of functions.

#### 1.1 Product scope

The application allows users to locate specific mathematics and statistics theses as a mini-search engine without physically engaging in a library search. The goal is for the app to help students in simplifying the process of searching specific theses quickly.

#### 1.2 Product value

In the field of research, the rise of a new study is made possible through an interface of a variety of related studies, thus the need for references on related literature/studies. In the process of searching, engaging oneself physically in searching related studies in the library takes time and may cause inconvenience to others especially when unsure of what specific information of the study is to be searched, it might as well when surfing the World Wide Web as it offers a wider array of choices internationally-based. The application's utility is in value to the user's time and convenience. It helps the user to search on specific Mathematics and Statistics theses work quickly providing a list of results, with the user's accessibility anytime and anywhere the user wants.

#### 1.3 Intended audience

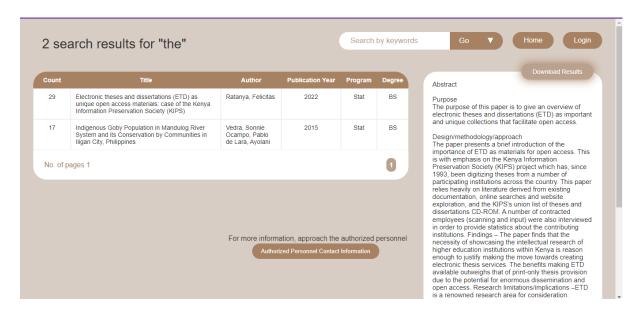
The application is intended to help MSU-IIT users (including different colleges) who seek to search for references or specific Mathematics and Statistics theses works. The application is exclusive only to users within MSU-IIT and shall be accessed locally.

#### 1.4 Intended use

The application as a mini-search engine helps the user in search for specific theses works, then provides right after the list of related Mathematics and Statistics theses works.

#### 1.5 General description

The Thesishive: DMS Mini Thesis Library is an application that allows users to input a free keyword in search for related or specific Mathematics and Statistics theses works. The application then provides a list of these theses references ranked in accordance with the frequency of the searched keyword. The application output will be the list of these theses in the form of a "document-keyword matrix", wherein the rows are the lists of the theses (documents), while the column shows the count on how frequently the keyword appeared in the thesis title, and abstract. The application also provides contact information on whom to reach out in accessing the specific thesis the user wants to view/access.



### **2 Functional Requirements**

List the design requirements, graphic requirements, operating system requirements, and constraints of the product.

#### 2.1 Design Requirements

**REQ001.** The app shall allow users to perform a search operation using keyword/s provided by the user.

**REQ002.** The app will load search results in less than 5 seconds.

**REQ003.** The system shall rank the search results of the DMS thesis according to the most number of keyword/s in the title and abstract. In the event where the user enters a phrase/multiple words (two words or more), the system will treat the phrase as one keyword, take for instance the user enters "independent and identically distributed", the system will only display a result if the specific phrase "independent and identically distributed" exists in the thesis' title and abstract.

**REQ004.** The app shall allow users to click on a specific thesis and view the thesis details (keyword count, title, author, publication year, program, degree) and abstract.

**REQ005.** The download operation of the app shall allow users to download the list of thesis results (thesis details, except the abstract) in the form of a spreadsheet.

**REQ006.** The system shall be able to categorize the type of thesis educational degree level (Bachelor's degree, Master's degree, and Doctorate degree).

**REQ007.** The app shall be able to show the program classification (Mathematics or Statistics) of the thesis.

**REQ008.** The system shall display the title and author of the thesis.

**REQ009.** The columns will also show the count of how frequently the keyword appeared in the thesis.

**REQ010.** The system shall allow the manager of the application to perform Create, Read, Update, Delete (CRUD) operations for the DMS theses at the backend where the database is.

#### 2.2 Graphics Requirements

**REQ011.** The application will make use of a Graphical User Interface (GUI).

**REQ012.** The app shall have a search bar allowing users to input the keyword/s they want to search.

**REQ013.** The app shall have a display page for the results of searches.

**REQ014.** The system will incorporate another window interface for the manager where he can perform CRUD operations.

#### 2.3 Operating System Requirements

**REQ015.** The software will require Windows 10.

**REQ016.** The app will not require an internet connection.

**REQ017.** The app will not require external devices (i.e. printer, scanner).

**REQ018.** The hard drive space shall be at least 20 GB to cater the installation of the server and its operation.

**REQ019.** Available free disk space of 10 GB shall also be a concern to note.

**REQ020.** The app will also require a suitable processor for it to run, such as core i3 with 64-bit operating system, and x64-based processor.

**REQ021.** It shall also require a sufficient amount of memory (RAM) with estimates running from 4 to 6 GB of RAM.

#### 2.4 Constraints

**REQ022.** The system shall enforce a prohibition on downloading any electronic copies of the thesis paper's abstract. Users shall only have access in viewing the abstract.

**REQ023.** The app might not run if the minimum operating system requirements are not sufficient, such as Windows 10, core i3 with 64-bit operating system, x64-based processor, and 4 to 6 GB of RAM.

# **3 External Interface Requirements**

# 3.1 User Interface Describe the logic behind the interactions between the users and the software (screen layouts, style guides, etc.)

#### 3.1.1. Search Thesis Record

**REQ024.** The system shall display a list of theses (which are sorted according to the frequency of the searched keyword) including the title, the author, the program classification (Mathematics/ Statistics), and education degree level classification (Bachelor's degree/Master's degree/ Doctorate degree).

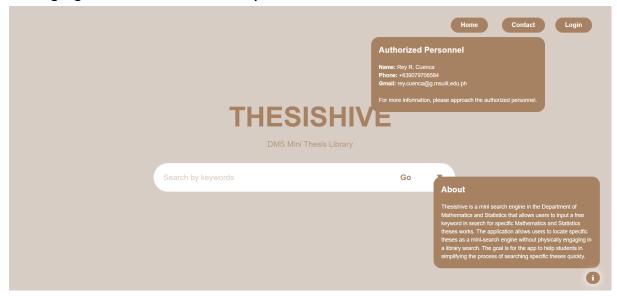
**REQ025.** The system shall have an interface that will allow the user to input the information that they want to search, which is the keyword/s.

**REQ026.** The system shall allow the user to choose whichever from the lists of results they want to view (abstract).

#### 3.1.2. Screen Layout

**REQ027.** Display the name of the application: "Thesishive: DMS Mini Thesis Library".

**REQ028.** Provide contact information for authorized personnel responsible for managing the 'DMS Thesis Library.'



#### 3.1.3. Style Guide

**REQ029.** Maintain a font size not less than 12 points throughout the application for readability.

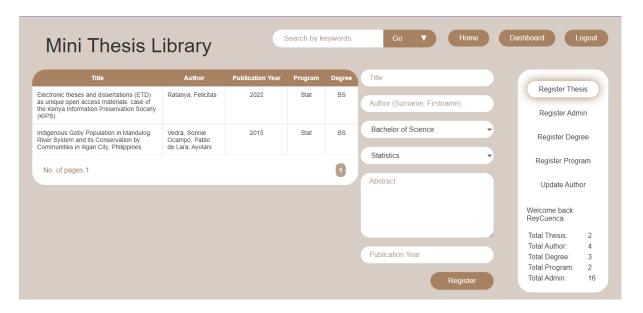
**REQ030.** Shades of brown shall be the color scheme of the interface.

#### **3.1.4.** System Administrator

**REQ031.** The on-site System Administrator shall be the only user who can access and perform CRUD operations in the backend of the system.

**REQ032.** The system shall provide input fields for the System Administrator to enter or edit or remove such as the thesis title, author's name, publication year, educational degree level (Bachelor's degree/Master's degree/Doctorate degree) of the thesis, thesis' program (Mathematics/Statistics), and the abstract.

**REQ033.** The system shall display clear error messages if there are issues with the data provided by the System Administrator. In cases of adding multiple authors of a thesis, the system is case sensitive so a comma is needed to separate the surname and first name of the author, and to add another author, the admin must first click enter to add another author's name.



# 3.1 Hardware Interface Requirements

List the supported devices the software is intended to run on, the network requirements, and the communication protocols to be used.

#### 3.2.1 Supported Device

**REQ034.** The software should also meet the operating system requirements to ensure Key Performance Indicators (KPIs) are satisfied.

#### 3.2.2 Network Requirements

**REQ035.** The thesis library operates in offline mode, meaning it does not rely on an internet connection for core functionalities.

# Requirements

3.3 Software Interface Include the connections between your product and other software components, including frontend/backend framework, libraries, etc.

REQ036. Employ SQL as the database management tool for thesis data storage and retrieval.

#### 3.4 Communication **Interface Requirements**

List any requirements for the communication programs your product will use, like emails or embedded forms.

# **4 Non-functional Requirements**

4.1 Security	Include any privacy and data protection regulations
	that should be adhered to.

**REQ037**. The system shall have limited access to the application, only users within the MSU-IIT network.

**REQ038.** The system shall clearly define data ownership and establish document retention and deletion policies to manage the data lifecycle.

**REQ039.** The system does not allow downloads of the thesis' abstract to avoid copyright infringement; users must request permission to view the whole thesis from the admin.

4.2 Capacity	Describe the current and future storage needs of your
	software.

**REQ040.** The system shall be able to handle a large number of thesis documents, with a minimum capacity of 1,000 documents.

**REQ041.** Each document can vary in size but should be able to accommodate at least 1 MB of data per document.

**REQ042.** The system should support the efficient indexing of all thesis titles and abstracts.

4.3 Compatibility	List the minimum hardware requirements for your
	software.

**REQ043.** The system shall be compatible with common relational database management systems (RDBMS) such as SQL.

**REQ044.** The system should work seamlessly on different operating systems, such as Windows.

**REQ045.** The search engine shall be compatible with standard web browsers such as Google Chrome.

4.4 Reliability	Calculate what the critical failure time of your product
	would be under normal usage.

**REQ046.** The system shall calculate and ensure that its response time remains within a five-second threshold under normal usage, as specified by the client's KPIs.

**REQ047.** The system shall undergo rigorous testing to rectify glitches and ensure the application's reliability.

**REQ048.** The system shall ensure that all interface buttons work correctly and do not overlap in functionality.

**REQ049.** The system shall have regular scheduled system maintenance to ensure continued reliability.

4.5 Scalability	Calculate the highest workloads under which your
	software will still perform as expected.

**REQ050.** The system shall adapt its speed based on data volume for optimal performance.

**REQ051.** The system shall be optimized for tasks such as downloading 20 thesis lists within 5 seconds.

4.6 Maintainability	Describe how continuous integration should be used
	to deploy features and bug fixes quickly.

**REQ052:** The system shall leverage Git in conjunction with a Continuous Integration (CI) tool to maintain application stability, allowing for the rapid deployment of new features and bug fixes.

**REQ053:** The system shall use Git integrated with a CI tool to facilitate frequent code integration and conduct rigorous testing, enabling swift error identification and precise tracking of their sources.

**REQ054:** The combined use of Git with a CI tool shall function as a safety net, ensuring code stability and functionality while allowing early detection of integration issues.

4.7 Usability.	Describe how easy it should be for end-users to use
	your software.

**REQ055.** The system shall provide an area or space for specific result information.

4.8 Others	List any additional non-functional requirements.
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# **5 Definitions and Acronyms**

KPI	Key Performance Indicators
Efficient	It is said to be efficient if it conforms to the standards provided by the KPI of the client.
RAM	Random Access Memory (RAM) is where data is temporarily stored and accessed while the system is running.

#### Interview Notes Approved by: Rey R. Cuenca

#### Person Interviewed: Rey R. Cuenca, Instructor

#### **Interviewers:**

Charlene Garridos Lavina Grace Alingas Ken Andrea Bahian Jolia Keziah Balcita

Stena Luz Arado Kyla Ayop

#### **Purpose of Interview:**

Recognize any difficulties or problems in their field that they need help with.

- Determine information requirements for the system.
- Gain a deeper understanding of the proposed project, its objectives, scope, and outcome.

#### Summary of Interview:

- ❖ The creation of the system resulted from the demand for simple access to the theses of the Department of Mathematics and Statistics, allowing for speedy retrieval and identification.
- The mini library system incorporates statistics with the algorithm to be employed.
- ❖ The primary search criteria include keywords from the thesis abstract and title. Additionally, there is a dropdown menu for specifying the degree type, distinguishing between undergraduate, master's, and Ph.D. theses for Mathematics and Statistics programs.

#### **Open Items:**

Gather records and essential information for every available thesis (abstract) from the Department of Mathematics and Statistics.

#### **Detailed Notes:**

- The application is designed to create a dedicated digital mini library for theses belonging to Department of Mathematics and Statistics students. Its primary goal is to simplify the process for users to locate specific theses quickly. Additionally, it provides users with information about where to access particular theses, offering valuable insights and guidance.
- 2. The ideal user experience for this application involves it being user-friendly, efficient, and accessible to individuals within the

- MSU-IIT network. All buttons should work properly, there should be no unnecessary repetition, and different functions must not overlap.
- 3. As a mini-search engine of Statistics and Mathematics theses relating to that of an OPAC, the key feature and functionalities that are expected to be present is that it will allow the user to search keywords related to thesis work. This allows users to conveniently access possible related thesis work through a free keyword search. After entering the free search keyword, the app then shows the user the list of thesis references (documents) ranked according to how frequently the word appears on that thesis' abstract as its text basis. The application output will be the list of documents in the form of a "document-term matrix", wherein the rows are the list of documents/theses, while the column shows keywords present in the thesis' title and abstract, and how frequent it appears in it. The font size to be used shall also be considered.
- 4. As this application is centered on accessing thesis works that should adhere to such ethical considerations such as the intellectual property of the work's author, a subject to copyright, the app considers a non-negotiable feature or function. Even though the user can search the thesis' details through the free search keyword, the application does not allow the user to view the pdf file of the thesis itself, but in such a way that the user may have an idea of what thesis he/she must ask for permission to view. The goal of this functionality is for the pdf to not be downloadable to the users to avoid such issues as copyright infringement; hence the user must ask permission from the person in charge in the department first for the thesis that he would like to view. For data security and privacy, this application can't be remotely accessed, it is exclusive and within use only for MSU-IIT users.
- 5. The application must adhere to the client's Key Performance Indicators (KPI). It must be efficient, and quick as possible. The application must not exceed a running time of 5 seconds the lesser running time, the better.
- 6. The app is exclusive only to users within MSU-IIT. It shall be accessed locally, internet-based but local.
- 7. The application will adopt a similar style to OPAC but will focus exclusively on showcasing the theses authored by DMS students,

- encompassing individuals pursuing Bachelor of Science, Master's, or Ph.D. degrees.
- 8. The expected data security standards for this application include ensuring it is accessible to individuals within the MSU-IIT network. The design should prevent users from tampering with any information. However, data extraction should be publicly accessible.
- 9. A web-based system that functions entirely within the MSU-IIT network. The application shall be of a local network. It does not establish external connections and remains inaccessible from remote locations outside the MSU-IIT network.
- 10. The client expresses a lack of familiarity with both Agile and Waterfall development methodologies, particularly in terms of their associated advantages and disadvantages. The client will go along with an approach that offers a quicker completion timeline and greater flexibility for editing.
- 11. The application will be measured through an array of key performance indicators (KPIs) such as efficiency assessments, swift responsiveness, meticulous glitch detection, and examination of all interface buttons for proper functionality. There must be no redundant functionalities. The font size must be taken into consideration and the stringent requirement that application loading times remain within a five-second threshold.

# **Functional Requirements**

#### **Requirement Review**

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ001

Requirement Description: The app shall allow users to perform a search operation using keyword/s provided by the user.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing	Yes

	beyond the essential?	
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ002

Requirement Description: The app will load search results in less than 5 seconds.

Requirement Description: The app will load search results in less than 5 seconds.		
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis,	Yes

	demonstration or test?	
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ003

Requirement Description: The system shall rank the search results of the DMS thesis according to the most number of keyword/s in its abstract. In the event where the user enters a multi-word phrase (two words or more), take for instance the user enters "data science", the system will first rank and display the thesis with the most number of the keyword data science, then ranks and display thesis with the most number of the separate keywords 'data' and 'science' depending to its word count.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended	Yes

	descriptive or numeric value?	
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ004

Requirement Description: The app shall allow users to click on a specific thesis and view its abstract.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes

5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

	Requirement Review	
Proj	ect Name: DMS Thesis Mini Search Engine	
Requ	uirement ID: REQ005	
Requirement Description: The download operation of the app shall allow users to download the list of thesis results in the form of a spreadsheet.		download
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes

2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ006

Requirement Description: The system shall be able to categorize the type of thesis (Bachelor's degree, Master's degree, and Doctorate degree).

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the	Yes

	essential physical characteristic, only the essential quality and nothing beyond the essential?	
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ007

Requirement Description: The app will be able to show the subject classification (Mathematics or Statistics) of the thesis.

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	Questions	
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes

11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ008

Requirement Description: The system shall display the title and author of the thesis.

Keq	airement Description: The system shall display the title and author of the thesis.	
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes

10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ009

Requirement Description: The columns will also show the count of how frequently the keyword appeared in the thesis.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes

8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ010

Requirement Description: The system shall allow the manager of the application to perform Create, Read, Update, Delete (CRUD) operations for the DMS theses at the backend where the database is.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes

5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ011

Requirement Description: The application will make use of a Graphical User Interface (GUI).

Requirement Description: The application will make use of a Graphical User Interface (		æ (UU1).
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the	Yes

	requirement should be met?	
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ012

Requirement Description: The app shall have a search bar allowing users to input the keyword they want to search.

Rey	Reyword they want to scaren.	
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ013

Requirement Description: The app shall have a display page for the results of searches.

1104	requirement bescription. The app shart have a display page for the results of scarciles.	
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes

11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ014

Requirement Description: The system will incorporate another window interface for the manager where he can perform CRUD operations.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology	Yes

	and avoid technical terminology?	
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

	Requirement Review	
Proj	ect Name: DMS Thesis Mini Search Engine	
Requ	uirement ID: REQ015	
Requ	uirement Description: The software will require Windows 10.	
Questions		Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes

7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

	Requirement Review	
Proj	ect Name: DMS Thesis Mini Search Engine	
Requ	uirement ID: REQ016	
Requ	uirement Description: The app will not require an internet connection.	
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes

5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ017

Requirement Description: The app will not require external devices (i.e. printer, scanner).

Requirement Description: The app will not require external devices (i.e. printer, scanner).		
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ018

Requirement Description: The hard drive space shall be at least 20 GB to cater the installation of the app and its operation.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what	Yes

	must be done?	
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ019

Requirement Description: Available free disk space of 10 GB shall also be a concern to note.

Requirement Description. Available free disk space of 10 GB shall also be a concern to note.		to note.
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ020

Requirement Description: The app will also require a suitable processor for it to run, such as core i3 with 64-bit operating system, and x64-based processor.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes

11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ021

Requirement Description: It shall also require a sufficient amount of memory (RAM) with estimates running from 4 to 6 GB of RAM.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology	Yes

	and avoid technical terminology?	
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ022

Requirement Description: The system shall enforce a prohibition on downloading any electronic copies of the thesis paper, including the abstract, and users shall only have access to view the abstract.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes

6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ023

Requirement Description: The app might not run if the minimum operating system requirements are not sufficient, such as Windows 10, core i3 with 64-bit operating system, x64-based processor, and 4 to 6 GB of RAM.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes

2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

# **External Interface Requirements**

# **Requirement Review**

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ024

Requirement Description: The system shall display a list of theses (which are sorted according to the frequency of the searched keyword) including the title, the author, the subject classification (Mathematics/ Statistics), and education level classification (Bachelor's degree/Master's degree/ Doctorate degree).

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes

15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ025

Requirement Description: The system shall have an interface that will allow the user to input the information that they want to search, which is the keyword.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ026

Requirement Description: The system shall allow the user to choose whichever from the lists of results they want to view (abstract).

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes

11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ027

Requirement Description: Display the name of the application: "Department of Mathematics and Statistics Mini Thesis Library".

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology	Yes

	and avoid technical terminology?	
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ028

Requirement Description: Provide contact information for authorized personnel responsible for managing the 'DMS Thesis Library.'

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes

7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ029

Requirement Description: Maintain a consistent font size of 11.5 points throughout the application for readability.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes

5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

	Requirement Review	
Proj	ect Name: DMS Thesis Mini Search Engine	
Requirement ID: REQ030		
Requirement Description: Shades of blue shall be the color scheme of the interface.		
Questions		Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes

3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ0031

Requirement Description: The on-site System Administrator shall be the only user who can access and perform CRUD operations in the backend of the system.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ032

Requirement Description: The system shall provide input fields for the System Administrator to enter or edit or remove such as the Author's name, educational level classification (Bachelor's degree/Master's degree/Doctorate degree) of the thesis, thesis' subject classification (Mathematics/Statistics), date of publication and the abstract.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes

15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ033

Requirement Description: The system shall display clear error messages if there are issues with the data provided by the System Administrator.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ034

Requirement Description: The software should also meet the operating system requirements to ensure Key Performance Indicators (KPIs) are satisfied.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes

11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ035

Requirement Description: The thesis library operates in offline mode, meaning it does not rely on an internet connection for core functionalities.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology	Yes

	and avoid technical terminology?	
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ036

Requirement Description: Employ SQL Buddy as the database management tool for thesis data storage and retrieval.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes

7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

# **Non-functional Requirements**

	Requirement Review	
Proj	Project Name: DMS Thesis Mini Search Engine	
Req	Requirement ID:REQ037	
1	Requirement Description: The system shall have limited access to the application, only us within the MSU-IIT network.	
	Questions	
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes

2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Requirement Review	
Project Name: DMS Thesis Mini Search Engine	
Requirement ID: REQ038	

Requirement Description: The system shall clearly define data ownership and establish document retention and deletion policies to manage the data lifecycle.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ039

Requirement Description: The system does not allow downloads of the thesis' abstract to avoid copyright infringement; users must request permission to view the whole thesis from the admin.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes

15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ040

Requirement Description: The system shall be able to handle a large number of thesis documents, with a minimum capacity of 10,000 documents.

docu	documents, with a minimum capacity of 10,000 documents.	
	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ041

Requirement Description: Each document can vary in size but should be able to accommodate at least 1 MB of data per document.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum	Yes

	without precise quantification?	
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ042

Requirement Description: The system should support the efficient indexing of all thesis titles and abstracts.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended	Yes

	descriptive or numeric value?	
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ043

Requirement Description: The system shall be compatible with common relational database management systems (RDBMS) such as SQL Buddy.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other	Yes

	requirements?	
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

	Requirement Review	
Proj	Project Name: DMS Thesis Mini Search Engine	
Req	Requirement ID: REQ044	
Requirement Description: The system should work seamlessly on different operating systems, such as Windows.		systems,
Questions		Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes

2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Requirement Review
Project Name: DMS Thesis Mini Search Engine
Requirement ID: REQ045

Requirement Description: The search engine shall be compatible with standard web browsers such as Google Chrome.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ046

Requirement Description: The system shall calculate and ensure that its response time remains within a five-second threshold under normal usage, as specified by the client's KPIs.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what	Yes

	must be done?	
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ047

Requirement Description: The system shall undergo rigorous testing to rectify glitches and ensure the application's reliability.

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	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes

12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ048

Requirement Description: The system shall ensure that all interface buttons work correctly and do not overlap in functionality.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes

10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ049

Requirement Description: The system shall have regular scheduled system maintenance to ensure continued reliability.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes

7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

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Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ050

Requirement Description: The system shall adapt its speed based on data volume for optimal performance.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative	Yes

	impact on other requirements and systems?	
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Requirement Review	
Project Name: DMS Thesis Mini Search Engine	
Requirement ID: REQ051	
Requirement Description: The system shall be optimized for tasks such as downloathesis abstracts within 5 seconds.	pading 20
Questions	Yes/No

1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ052

Requirement Description: The system shall leverage Git in conjunction with a Continuous Integration (CI) tool to maintain application stability, allowing for the rapid deployment of new features and bug fixes.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the	Yes

	requirement should be met?	
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ053

Requirement Description: The system shall use Git integrated with a CI tool to facilitate frequent code integration and conduct rigorous testing, enabling swift error identification and precise tracking of their sources.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes

13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ054

Requirement Description: The combined use of Git with a CI tool shall function as a safety net, ensuring code stability and functionality while allowing early detection of integration issues.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes
8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault	Yes

	tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes

Project Name: DMS Thesis Mini Search Engine

Requirement ID: REQ055

Requirement Description: The system shall provide an area or space for specific result information.

	Questions	Yes/No
1	Is the requirement detailed enough and adequate to develop an estimate and clear enough so the business knows what will be delivered?	Yes
2	Is the stated requirement technically achievable?	Yes
3	Is the stated requirement complete, with no further clarification required?	Yes
4	Has it been verified that the stated requirement does not have a negative impact on other requirements and systems?	Yes
5	Is it stated that the requirement is unique in that it does not duplicate other requirements?	Yes
6	Is the stated terminology used for the same elements as in all other requirements?	Yes
7	Does the stated requirement have one and only one interpretation?	Yes

8	Is the language clear enough to leave no doubt about the intended descriptive or numeric value?	Yes
9	Does the stated requirement use commonly used nontechnical terminology and avoid technical terminology?	Yes
10	Does the stated requirement use standard words or phrases such as "shall" and "will" and avoid ambiguous words like user friendly, flexible, fault tolerant, state-of-the-art, simple, efficient, easy and minimum/maximum without precise quantification?	Yes
11	Can the stated requirement be verified by inspection, analysis, demonstration or test?	Yes
12	Has the stated requirement been assigned to a unique identifier in order to follow its life through all frames of the project?	Yes
13	Does the stated requirement have only the essential capability, only the essential physical characteristic, only the essential quality and nothing beyond the essential?	Yes
14	Is the stated requirement clear, easy to understand and states only what must be done?	Yes
15	Does the stated requirement document WHAT is required, not HOW the requirement should be met?	Yes
16	Is the requirement traceable?	Yes