

Software Requirements Specification for Software Engineering: Document Management System

Team 15, SyncMaster

Kyle D'Souza

Mitchell Hynes

Richard Fan

Akshit Gulia

Rafeed Iqbal

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Revision History

Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

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12.7 Longevity Requirements

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13 Operational and Environmental Requirements

13.1 Expected Physical Environment

OE-PE1. Application should be functional in City of Hamilton, Water Division sites and offices.

13.2 Wider Environment Requirements

OE-WE1. Application should be functional on Mobile and Desktop web browser environments.

OE-WE2. Application should be able to run on any device with a modern web browser.

13.3 Requirements for Interfacing with Adjacent Systems

OE-IAS1. Application should integrate with existing SharePoint repositories.

OE-IAS2. Application should not create redundant workload by sharing duplicate features with existing systems.

13.4 Productization Requirements

N/A

13.5 Release Requirements

OE-REL1. A change-log should be generated with every release documenting changes in features and requirements.

OE-REL2. Expected release of Revision 0: February 1st, 2024

OE-REL3. Expected release of Revision 1: March 30th, 2025

14 Maintainability and Support Requirements

14.1 Maintenance Requirements

MS-MTN1. A deployment of the system should take no more than 30 minutes (not including testing, and building time).

MS-MTN2. The build time of the system should be no longer than 10 minutes (not including testing time).

MS-MTN3. All automated tests should be able to run in under 10 minutes

MS-MTN4. The system should have rigorous unit testing, line coverage should be $\geq 95\%$, branch coverage should be $\geq 90\%$.

- MS-MTN5. All core functionalities of the system (i.e. Functional Requirements), should have both automated end-to-end and unit testing corresponding to them
- MS-MTN6. The project must be able to be maintained by its users, as original developers will not be maintaining it after April 2, 2025.

14.2 Supportability Requirements

- MS-SUP1. The application should have user-facing documentation on how to use the core functionalities of the system (i.e. functionalities described in functional requirements).
- MS-SUP2. The application should have documentation for all API's for future maintainers.
- MS-SUP3. The application should have documentation of internal functions and abstractions for future maintainers.
- MS-SUP4. The application should have documentation on deployment, so users can deploy this application for themselves.

14.3 Adaptability Requirements

- MS-ADP1. The application must be able to run on at least Google Chrome and Microsoft Edge browsers.
- MS-ADP2. The application must be able to run on tablets, smartphones, and laptops.
- MS-ADP3. The application must be able to run on Android, IOS, and Windows 10

15 Security Requirements

15.1 Access Requirements

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15.2 Integrity Requirements

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Appendix — Reflection

The information in this section will be used to evaluate the team members on the graduate attribute of Lifelong Learning. Please answer the following questions:

1. What knowledge and skills will the team collectively need to acquire to successfully complete this capstone project? Examples of possible knowledge to acquire include domain specific knowledge from the domain of your application, or software engineering knowledge, mechatronics knowledge or computer science knowledge. Skills may be related to technology, or writing, or presentation, or team management, etc. You should look to identify at least one item for each team member.
2. For each of the knowledge areas and skills identified in the previous question, what are at least two approaches to acquiring the knowledge or mastering the skill? Of the identified approaches, which will each team member pursue, and why did they make this choice?