SE 3XA3: Software Requirements Specification
Save The Date

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Table 1: **Revision History**

Date	**Version**	**Notes**
February 10	1.0	SRS was created

This document describes the requirements for .... The template for the Software Requirements Specification (SRS) is a subset of the Volere template (**?**). If you make further modifications to the template, you should explicity state what modifications were made.

1 Project Drivers

1.1 The Purpose of the Project

Notion is an all-in-one workspace where users can write, plan, collaborate and organize their thoughts, projects, and other information. Notion has a variety of features that allows users to take notes, add tasks, and even create custom page layouts. Alongside its many features, Notion gives users the ability to upload PDF (Portable Document Format) documents onto a page, providing a built-in view of the document, rather than having to download the PDF every time to view it. Currently, many McMaster students skim through multiple course outlines throughout each semester to jot down or remind themselves of important dates. As a result, students are not only spending extra time reading dense pages of course outlines, but also run the risk of missing important dates and deadlines for different courses.

With students taking multiple courses per semester, our team would like to automate the process of sifting through documents for due dates and deadlines. We plan to create easy-to-read dashboards for users to quickly access such information for each respective course they are taking.

1.2 The Stakeholders

1.2.1 The Client

The clients of this project are the instructor of SFWRENG 3XA3, Dr. Asghar Bokhari and the teaching assistants (TAs) Stephanie Koehl and Abdul Rab Mohammad. The clients will provide information regarding deadlines for weekly deliverables, insight and guidance when needed and assess how well the application meets requirements.

1.2.2 The Customers

The customers for this product are university students. The customers/users have an influence on the requirements of the application and its overall development since the purpose of the application is intended to help students organize their dates.

1.2.3 Other Stakeholders

The customers for this product are university students. The customers/users have an influence on the requirements of the application and its overall development since the purpose of the application is intended to help students organize their dates.

1.3 Mandated Constraints

1.4 Naming Conventions and Terminology

1.5 Relevant Facts and Assumptions

User characteristics should go under assumptions.

2 Functional Requirements

2.1 The Scope of the Work and the Product

2.1.1 The Context of the Work

2.1.2 Work Partitioning

2.1.3 Individual Product Use Cases

2.2 Functional Requirements

2.2.1 FR1

Description: The system shall provide the user with a button to begin scraping.

Rationale: The design must be intuitive to use, hence a visual interface for the user.

Priority: High

2.2.2 FR2

Description: The system shall have a way to select the page range they want to scrape.

Rationale: If the user knows the range in which the deadlines might exist in the document, the application can scrape over a specified page range, minimizing processing time.

Priority: High

2.2.3 FR3

Description: The system shall have a way to identify deadline tables in the PDF.

Rationale: It is crucial that the application properly identifies tables with deadlines in a PDF as a PDF might contain a lot of tables irrelevant to deadlines, i.e., tables containing names of professors and their office hours.

Priority: High

2.2.4 FR4

Description: The system shall have a way to structure the output table data.

Rationale: The data obtained from a PDF may not be in a table format when read. Hence, there needs to be a way to structure the data into a table before being output in a Notion page.

Priority: High

2.2.5 FR5

Description: The system shall have a way to create a Notion table in a page.

Rationale: The application must be able to automatically read the data from the PDF and make a page with the read table. Hence, the system must be able to create a Notion table once it has been given the data for the table.

Priority: High

2.2.6 FR6

Description: The system shall display the deadlines as a table in a Notion page.

Rationale: The application should be capable of reading the data and putting it into a Notion table. The table that should be displayed needs to be structured well, in the same if not a better format than that in the PDF.

Priority: High

2.2.7 FR7

Description: The system shall make the table editable.

Rationale: The user might think of changing the deadline in a table, for example, if the due date has been changed by the course instructor. Hence, it is crucial that the table created by the application is editable.

Priority: High

2.2.8 FR8

Description: The system shall ask the user to input the course name/code for the table.

Rationale: Since the name of the course might not be explicitly listed in a PDF, i.e. a PDF with only deadlines or a shared course having several course codes. We required the user to input the course code to include a tag and title with the table.

Priority: High

2.2.9 FR9

Description: The system shall create a new page when the scraper is used for the first time.

Rationale: The idea is to have all the deadlines listed in an easy to access page. Hence a central page for all course deadlines.

Priority: High

2.2.10 FR10

Description: The system shall allow the user to scrape multiple PDFs into one page.

Rationale: To increase functionality of our application, the user must be able to insert multiple deadlines from different PDFs into the same page.

Priority: High

3 Non-functional Requirements

3.1 Look and Feel Requirements

3.1.1 Appearance Requirements

LF1. The application shall be consistent with the Notion theme.

3.1.2 Style Requirements

LF2. The application shall be consistent with the Notion theme.

3.2 Usability and Humanity Requirements

3.2.1 Ease of Use Requirements

UH1. The application must be accessible to the users in an easy-to-access menu.

3.2.2 Learning Requirements

UH2. The users should be able to use the application without prior experience or training.

3.2.3 Accessibility Requirements

UH3. The application must adhere to the same accessibility range as the Notion application.

3.3 Performance Requirements

3.3.1 Speed and Latency Requirements

PE1. The application shall be able to scrape a PDF within a reasonable time.

PE2. The application shall be able to make a Notion page within a reasonable time.

3.3.2 Safety-Critical Requirements

N/A

3.3.3 Precision or Accuracy Requirements

PE3. The application shall be able to identify tables with deadlines with an 85% accuracy.

PE4. The application shall be able to recreate tables with 90% accuracy.

3.3.4 Reliability and Availability Requirements

N/A

3.3.5 Robustness or Fault-Tolerance Requirements

N/A

3.3.6 Capacity Requirements

N/A

3.3.7 Scalability or Extensibility Requirements

N/A

3.3.8 Longevity Requirements

PE5. The application must be functional with existing software and hardware by May 2022.

3.4 Operational and Environmental Requirements

3.4.1 Expected Physical Environment

OE1. The system must not require an Internet connection to function correctly.

3.5 Release Requirements

RR1. The product will have a final release on April 10th, 2022.

3.6 Maintainability and Support Requirements

3.6.1 Maintenance Requirements

MA1. The source code must be fully documented, via commenting and class diagrams.

MA2. The source code must all adhere to the same standard style.

3.6.2 Supportability Requirements

MA3. The project's main repository shall be made public, to allow users to raise issues.

3.6.3 Adaptability Requirements

MA4. The application shall be supported by any machine running Windows 7 or newer, macOS Sierra 10.12 or newer, or Linux Ubuntu 16.04 or newer.

MA5. The application shall be supported by Chrome 98.0.X, FireFox 97.0 and Microsoft Edge 97.0.X.

3.7 Security Requirements

N/A

3.8 Cultural Requirements

3.8.1 Cultural Requirements

CR1. The system shall not allow users to input course names that are culturally offensive/inappropriate.

CR2. The system shall not allow users to input course names that are in languages asides from English.

3.9 Legal Requirements

N/A

3.10 Health and Safety Requirements

N/A

4 Project Issues

4.1 Open Issues

4.2 Off-the-Shelf Solutions

4.3 New Problems

4.4 Tasks

4.5 Migration to the New Product

4.6 Risks

4.7 Costs

4.8 User Documentation and Training

4.9 Waiting Room

4.10 Ideas for Solutions

5 Appendix

This section has been added to the Volere template. This is where you can place additional information.

5.1 Symbolic Parameters

The definition of the requirements will likely call for SYMBOLIC_CONSTANTS. Their values are defined in this section for easy maintenance.