Software Requirements Specification

Version 1.0

<<Annotated Version>>

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Software Application for video note-taking
(VIDNOTE)

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<<Any comments inside double brackets such as these are *not* part of this SRS but are comments upon this SRS example to help the reader understand the point being made.

Refer to the SRS Template for details on the purpose and rules for each section of this document.>>

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1 Introduction

1.1 Purpose

The purpose of this document is to provide a full description of the video note-taking system. This document will clearly state all the features, functions, use cases, actions, and interactions between system components. This document is intended for both the stakeholders and the developers of the system.

1.2 Scope of Project

This system will help all YouTube videos viewers, who would like to take notes on YouTube videos, to get rid of the usual methods of note-taking by providing a friendly GUI with a rich text editor and a simple way to view, edit, and share notes with other users. Moreover, the user has the ability to make the videos more interactive by adding quizzes and multichoice questions on the video and share them with other users.

1.3 Glossary:

Term	Definition
Database	Collection of all the information monitored by this system.
User	A person who has an account in our system and add videos and notes.
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.

Note	A text that the user adds it to register any information about the video.
Question	A quiz that the user adds it to test a bunch of students and make the video more interactive.
API	Application Programming Interface to communicate with other systems.

1.4 References:

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

1.5 Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2 Overall description

2.1 System Environment

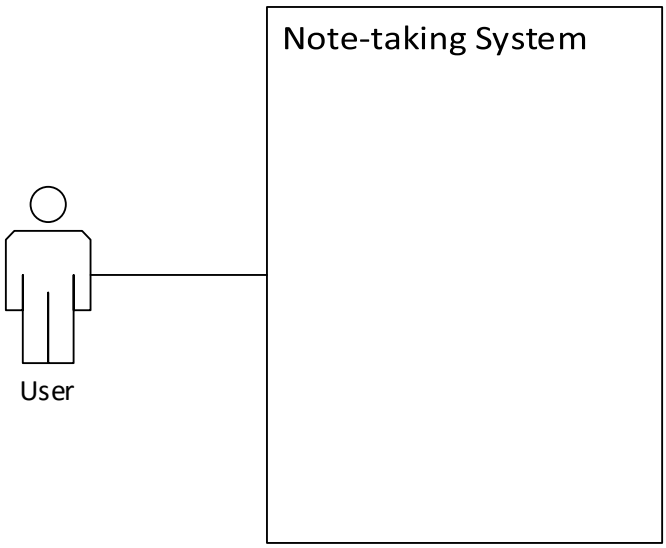

Figure 1- System Environment

The note-taking system has one main actor who can be any user who would like to take notes of YouTube videos. The user can only access the system by an account on the system.

2.2 Functional Requirements Specification

This section states the use cases for the only main actor in the system.

2.2.1 User Use Case

2.2.1.1 Use case: Add video

Diagram:

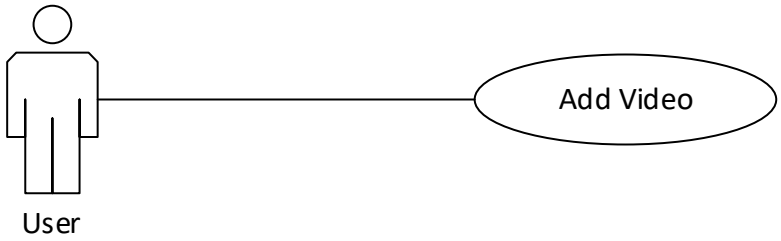

Figure 2- Add Video Use Case

Brief Description

The user accesses the system through his account and adds the link to the YouTube Video.

Initial Step-by-step description

Before this use case is initiated, the user has already logged into his account.

1. The user presses the Add button.
2. The system displays the link-adding interface to the user.
3. The user pastes the link to the desired video, and he has the choice to name it.
4. The system shows the requested video in the note-adding interface

Xref: **Section 3.2.1, Add Video**

2.2.1.2 Use case: Add Note

Diagram

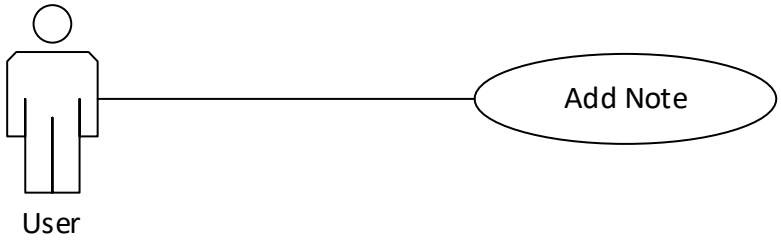

Figure 3- Add Note Use Case

Brief Description

The user types his notes using a text editor and then saves the note.

Initial Step-by-step description

Before this use case is initiated, the user has already chosen the video.

1. The user presses the Add note button.
2. The system pauses the video if it is running.
3. The System provides a rich text editor to the user.
4. The user types the desired text in the text editor.
5. The user clicks the save button.
6. The system adds the new note to the note list and clears the editor.

Xref: **Section 3.2.2, Add Note**

2.3 User Characteristics

The user is expected to be internet literate and has an Email. The user should be familiar with using YouTube and navigating between videos. Also, the user is expected to be able to use internet browsers or familiar with android applications, in addition, the ability to use text editors.

<<The user has the choice to use our system either by using a website or using an Android application. >>

2.4 Non-Functional Requirements

The note-taking system will be deployed on Cloud Web hosting with high-speed internet capability.

The system will run on modern internet browsers.

The system will have a responsive design to work on different screen sizes.

The system will have an Android Application that supports different screen sizes

They system will support Arabic and English language.

3 Requirement's specification

3.1 External Interface Requirements

The only link to an external system is the link to the YouTube API. When the user requests a video, the system uses the YouTube API to fetch the requested video information from the thumbnail to the video title, subtitles, and duration. It is responsible for moving through the video and getting the time of the stopped video when the user adds a note or a question.

3.2 Functional requirements

The logical structure of the data is contained in section 3.3.1

3.2.1 Add video

Use Case Name	Add Video
XRef	Section 2.2.1.1, Add Video
Trigger	The user presses Add video button to paste the link to the video.
Precondition	The user has already logged into his account.
Basic Path	1. The system displays the link-adding interface to the user. 2. The user pastes the link to the desired video and he has the choice to name it.
Alternative Paths	
Postcondition	The system shows the requested video in the note-adding interface.
Exception path	The user may cancel the operation at any time. If the video's link was incorrect the system shows an error message to the user.
Other	

3.2.2 Add Note

Use Case Name	Add Note
XRef	Section 2.2.1.2, Add Note

Trigger	The user presses Add note button to add a new note.
Precondition	The user has already logged into his account and selected a video.
Basic Path	1. The system pauses the video if it is running. 2. The system provides a text editor to the user. 3. The user types the desired text in the text editor. 4. The user clicks the save button to save the note.
Alternative Paths	
Postcondition	The System adds the new note to the note list and clears the editor.
Exception path	The user may cancel the operation at any time. If the system was unable to add new note, it shows an error message to the user.
Other	

3.3 Detailed Non-functional Requirements

3.3.1 Logical structure of the Data

The logical structure of the data to be stored in the internal database is given below

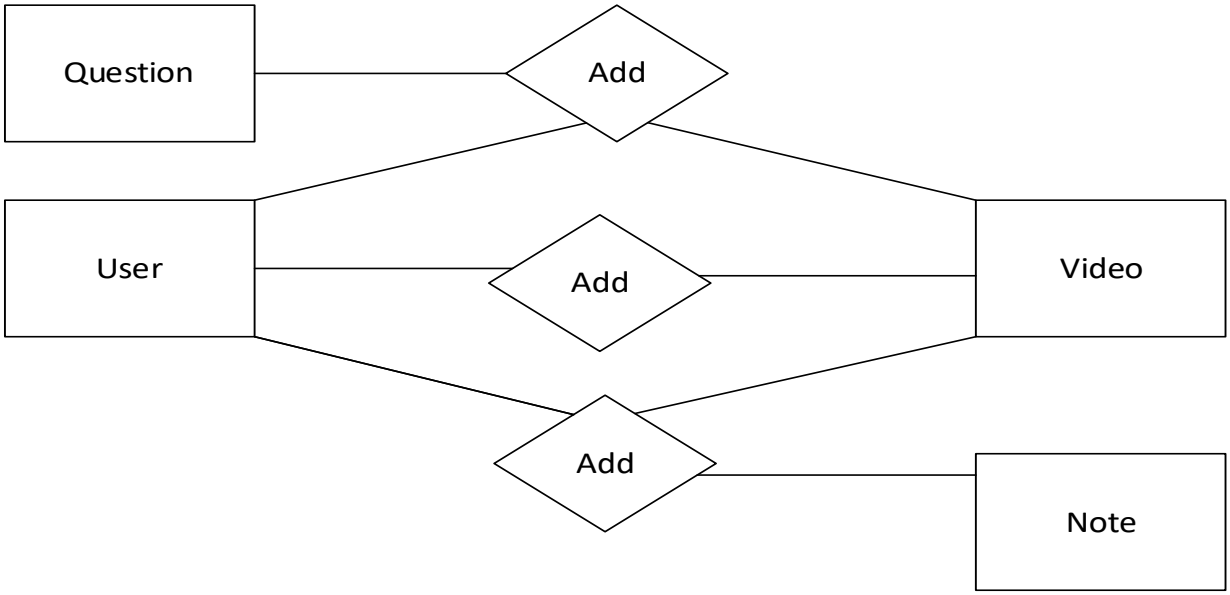

Figure 4 - Logical Structure of Data

The data description of each of these data entities is as follows:

3.3.1.1 User Data Entity

Data Item	Type	Description	Comment
Name	Text	The user's name	
Email	Text	The user's email	
Password	Text	The user's Password	

3.3.1.2 Video Entity

Data Item	Type	Description	Comment
Name	Text	The video's name	
Link	Text	The video's link	
Date	Date	Date of video creation	

3.3.1.3 Note Entity

Data Item	type	Description	Comment
Id	Text	The note's name	
Content	Text	The note's content	
Time	number	The time of the video when the user adds the note	
Date	Date	Date of the note creation	

3.3.1.4 Question Entity

Data Item	type	Description	Comment
Id	Text	The question's id	
Question's text	Text	The question's text	
Type	number	The type of the question (multichoice, true or false)	

Question choices	Array of strings	Possible answer of the question	
Answer	string	The correct answer of the question	
Time	number	The time of the video when the user adds the note	
Date	Date	Date of the question creation	