



Learning Hub Web Application

Software Requirements Specification

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V 2.0

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Revision History

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1. Introduction

1.1 Purpose

This project has been prepared to output as an online free encyclopedia web application. The app aims to help users to get and reach the latest articles, the users can explore and receive knowledge in different life domains, and they can also contribute and share their knowledge

1.2 Intended Audience and Reading suggestions

While the software requirement specification (SRS) document is written for a more general audience, this document is intended for individuals directly involved in the development of Encyclopedia. This includes software developers, project consultants, and team managers. This document need not be read sequentially; users are encouraged to jump to any section they find relevant. Below is a brief overview of each part of the document:

1.2.1 Introduction

This section offers a summary of the encyclopedia project, including goals and objectives, project scope, general system details, and some major constraints associated with the intended platform.

1.2.2 Overall Description

This section describes the overall description of the Encyclopedia system including product perspective, product features, the operating environment, design and implementation constraints, the user documentation and assumptions and dependencies.

1.2.3 System features (functional requirements)

This section covers all the details related to the structure of the functional requirements

1.2.4 External Interface Requirements

This section describes the interfaces requirements which could be user interfaces, Software interfaces, Hardware interfaces.

1.2.5 Non-Functional Requirements

This section covers all the details related to the structure of the non-functional requirements, including performance requirements, safety requirements, security requirements and software quality requirements.

1.2.6 Other Requirements

This section defines any other requirements not covered elsewhere in the SRS. This might include database requirements, legal requirements, design constraints for the project, and so on

1.3 Project Scope

This software system will be a web app that will act as an online free encyclopedia. This system will be designed to host tons of information by providing articles in different categories and navigate between different categories.

More specifically, this system is designed to allow a user to view articles, he can publish an article, upload videos and voice recordings, and he can also follow specific category to get notifications whenever any article is added in that category by any user.

1.4 Naming convention

| Abbreviation | Stand for | Meaning |
|--------------|----------------------------------|---|
| FRXX_U | Functional Requirement S.N_User | Functionality that can only be performed by registered user |
| FRXX_A | Functional Requirement S.N_Admin | Functionality that can only be performed by system admin |
| FRXX_G | Functional Requirement S.N_Guest | Functionality that can only be performed by guest (unregistered user) |

2. Overall Description

2.1 Product Perspective

It is a web-based system, The encyclopedia System provides a simple mechanism for users to receive and explore knowledge and contribute and share knowledge in different life domain. The following are the main features that are included in encyclopedia System:

- **User account:** The system allows the user to create their accounts in the system and provide features of viewing articles.
- **Publish articles** provides users the accessibility of uploading articles once he logged in.
- **Uploading video and voice recordings:** Allow users to upload videos and voice notes but he must log in first.
- **Number of users being supported by the system:** Though the number is precisely not mentioned but the system is able to support many online users at a time.

2.2 Product Features

2.2.1 Functional Requirements

2.2.1.1 Guest

- Functional Requirement 1 (Navigate website) → The guest can navigate the website without registration.
- Functional Requirement 2 (Choose a Category) → The guest can choose a specific category from a drop-down list
- Functional Requirement 3 (Register) → The guest can create an account to perform specific functionalities.
- Functional Requirement 4 (View content) → The guest can view any content under specific category.

2.2.1.2 User

- Functional Requirement 5 (Login) → The user can login to the system by entering his/her username and password.
- Functional Requirement 6 (Logout) → The user can log out from his/her own account in the system.
- Functional Requirement 7 (Choose a Category) → The user can choose a specific category from a drop-down list
- Functional Requirement 8 (Publish an article) → The user can publish his/her own article in a specific category, but he must log in first.
- Functional Requirement 9 (Upload Video) → The user can upload video in a specific category, but he must log in first.
- Functional Requirement 10 (Upload Recorded Voice) → The user can upload voice recordings on the web application.
- Functional Requirement 11 (Navigate website) → The user can navigate the website without registration.
- Functional Requirement 12 (View content) → The user can view any content under specific category.

2.2.1.3 Admin

- Functional Requirement 13 (Delete User Account) → The admin can delete any user account.
- Functional Requirement 14 (Delete User Content) → The admin can delete any content that the user adds to the web application (Videos, Records or Articles) that violates the rules of the system.
- Functional Requirement 15 (Navigate website) → The admin can navigate the website without registration.
- Functional Requirement 16 (Choose a Category) → The admin can choose a specific category from a drop-down list

- Functional Requirement 17 (View content) → The admin can view any content under specific category.
- Functional Requirement 18 (Login) → The admin can login to the system by entering his/her username and password.
- Functional Requirement 19 (Logout) → The admin can log out from his/her own account in the system.

2.3 Operating Environment

Operating environment for the Encyclopedia Web Application is as listed below.

- Operating system: Windows/OS.
- Database: phpMyAdmin XAMPP.
- Platform: Asp.Net
- Front-End: HTML, CSS, JavaScript.

2.4 Design and Implementation Constrains

This system is provisioned to be built on the Asp.Net framework which is highly flexible. Decision regarding which database to use should be taken since databeing exchanged or stored is large, and the appropriate data management system will yield efficient performance.

| No. | Area | Constrains | Comments |
|-----|-----------------------------|---|-----------------------|
| 1 | Project Scope | Project is a web-based application. | Understood and agreed |
| 2 | Non-functional Requirements | Project is PC-based only and compatible with all OS of devices | Understood and agreed |
| 3 | Database | User IDs are unique and auto generated by DB | Understood and agreed |
| 4 | Functional Requirements | 7 Admin features are supported and described in functional Requirements. 8 User features are supported and described in functional Requirements. 4 Guest features are supported and described in functional Requirements. | Understood and agreed |
| 5 | Home Page Design | There'll be a nav bar in the home page, a slider of 3 photos, a brief of the 4 categories | Understood and agreed |

| | | | |
|---|-------------------------|--|--|
| 6 | Encyclopedia categories | 1. Birds and parrots 2. Animals and plants 3. History 4. Space and universe | |
|---|-------------------------|--|--|

2.5 Assumptions and Dependencies

2.5.1 Assumptions

| No. | Assumptions | To Be Validated | Status | Comments |
|-----|---|--------------------------------------|--------|----------|
| 1 | User Password must contain more than 8 characters with a pattern ("^(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,30}\$") | Esraa Abdelhallem Maha Mohamed | Closed | Agreed |
| 2 | Video size is 1min minimum and 2 mins max with no specific extensions | Esraa Abdelhallem Radwa Kamal | Closed | Agreed |
| 3 | Voice recorded size uploaded must be a 30 sec to 1 min with ("mp3") extension | Esraa Abdelhallem Rana Mostafa | Closed | Agreed |
| 4 | Website name and logo | Encyclopedia | Closed | Agreed |

2.5.2 Dependencies

| Function | Depend on |
|----------|-----------|
| FR1_G | None |
| FR2_G | None |
| FR3_G | None |
| FR4_G | FR2_G |
| FR5_U | FR3_G |
| FR6_U | FR5_U |
| FR7_U | None |
| FR8_U | FR5_U |
| FR9_U | FR5_U |
| FR10_U | FR5_U |

| | |
|--------|--------|
| FR11_U | None |
| FR12_U | FR7_U |
| FR13_A | FR18_A |
| FR14_A | FR18_A |
| FR15_A | None |
| FR16_A | None |
| FR17_A | FR16_A |
| FR18_A | None |
| FR19_A | FR18_A |

3. System Features [Functional Requirements]

3.1 Guest

3.1.1 System Feature 1

| | |
|--------------------------------|---|
| ID | FR1_G |
| Title | Navigate website |
| Description | The guest shall navigate through the website without registration |
| Stimulus Sequences | 1. Guest will open the Encyclopedia website. 2. Guest can navigate through the website and choose specific category to read more about it. |
| Response Sequences | None |
| Dependency | None |
| Functional Requirements | FR1_G1.1→ Guest should be able to open any category in the Encyclopedia website. FR1_G1.2→ Guest should be able to read any article on the Encyclopedia website. FR1_G1.3→ Guest should be able to watch any video on the Encyclopedia website. →TBD FR1_G1.4 →Guest should be able to hear any voice record on the Encyclopedia website. →TBD |

3.1.2 System Feature 2

| | |
|--------------------------------|---|
| ID | FR2_G |
| Title | Choose a Category |
| Description | <p>The Guest shall navigate through the system to choose a Specific Category by choosing the category name from a drop-down list through the website.</p> <p>Categories are:</p> <ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe |
| Stimulus Sequences | <ol style="list-style-type: none">1. Guest opens the Encyclopedia website.2. Click on the category drop-down list.3. The categories appear are:<ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe4. Choose the category name.5. Click on the required category.6. The required category will be opened. |
| Response Sequences | <ol style="list-style-type: none">1. After clicking on the required category, the system shall open the category page that the guest chooses.2. In case of poor connection, the system may give a message box stating that "the process failed please try again". |
| Dependency | None |
| Functional Requirements | FR2_G2.1 → Click on a valid drop-down list that opens different categories FR2_G2.2 → Click on the desired category |

3.1.3 System Feature 3

| | |
|--------------------------------|---|
| ID | FR3_G |
| Title | Register |
| Description | <p>The guest shall create an account using signup in homepage to perform specific functionalities. The creation of an account requires:</p> <ul style="list-style-type: none"> • Email • Username (special characters are not allowed), • Strong Password (not less than 8 characters, at least one special character, upper and lower cases, and numbers) • Confirm Password |
| Stimulus Sequences | <ol style="list-style-type: none"> 1. Guest will navigate to the Encyclopedia website. 2. Guest wants to publish article, upload video or upload recorded voice without having account. 3. Guest navigates through the website and clicks on the register button. 4. Guest enters the required fields with valid data. 5. Guest clicks on the register button to submit data. |
| Response Sequences | <ol style="list-style-type: none"> 1. If the required fields are valid the system will respond with a message box "Account Successfully Created " and redirected to login page. 2. In case any Invalid field is entered the system shall output a message box indicating that he must enter valid data. 3. In case of poor connection, the system may give a message box stating that "sign up process failed please try again". |
| Dependency | None |
| Functional Requirements | <p>FR3_G3.1 → Register with valid email</p> <p>FR3_G3.2 → Register with valid and unique username without special characters in case the username is already used a message box should appear indicating that the username is already used.</p> <p>FR3_G3.3 → Register with valid password with specific pattern (not less than 8 characters or more than 30, at least one special character, upper and lowercases, and numbers) ("^(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,30}\$")</p> <p>FR3_G3.4 → Enter valid password in the confirm password field with the same password entered in password field in case both entered values in both fields doesn't match a message box should appear indicating that the entered password doesn't match.</p> <p>FR3_G3.5 → In case the guest did not fill any field a message box should appear indicating all fields is mandatory to be entered.</p> |

3.1.4 System Feature 4

| | |
|--------------------------------|---|
| ID | FR4_G |
| Title | View content |
| Description | The Guest shall be able to view & navigate throw any content available under specific category. |
| Stimulus Sequences | <ol style="list-style-type: none">1. Guest will navigate to the Encyclopedia website.2. Guest navigates to the category that he wants.3. Guest navigates through the category page to the content he wants.4. Guest clicks on the read more button. |
| Response Sequences | <ol style="list-style-type: none">1. If the guest clicks on any content overview the guest should be directed to article page where the content is displayed to the guest.2. If the guest cannot access a specific article duo to poor connection a message box should appear. |
| Dependency | FR2_G |
| Functional Requirements | FR4_G4.1→ Click on a valid drop-down list that opens different categories FR4_G4.2 → Click on the desired category. FR4_G4.3→ Choose a specific article from the page and click on read more. |
| Next Release | View record, View video → TBD |

3.2 User

3.2.1 System Feature 5

| | |
|--------------------------------|--|
| ID | FR5_U |
| Title | Login |
| Description | The user shall be able to login to the system by entering his/her valid Username and password. |
| Stimulus Sequences | <ol style="list-style-type: none">1. User will navigate to the Encyclopedia website2. User tries to access the specific functionality without logging in and the system pops up a message box that the user should login if there is a created account with message "please login first".3. User navigates through the website and clicks on the login button4. User enters the required fields.5. User clicks on the login button to submit data. |
| Response Sequences | <ol style="list-style-type: none">1. If the required fields are valid the system will respond with a message box stating that "Login Successful!" and user will be directed to the home page.2. In case any Invalid field is entered the system shall respond with a message box stating that the user shall enter a valid data with message "Please Enter Username and Password".3. In case of poor connection, the system may give a message box stating that "login process failed please try again". |
| Dependency | FR3_G |
| Functional Requirements | FR5_U5.1 → Login with valid and unique username FR5_U5.2 → Login with valid password |

3.2.2 System Feature 6

| | |
|--------------------------------|--|
| ID | FR6_U |
| Title | Log out |
| Description | The user shall be able to log out from his/her own account out of the system. |
| Stimulus Sequences | <ol style="list-style-type: none">1. User is logged in the system.2. User navigates through the website to log out.3. User clicks on log out button. |
| Response Sequences | <ol style="list-style-type: none">1. The system will log out successfully and message box should appear indicating that the user logged out successfully and directed to the home page.2. In case of poor connection, the system may give a message box stating that"log out process failed". |
| Dependency | FR5_U |
| Functional Requirements | FR6_U6.1 → Logout from an existed account or a logged in user/admin |

3.2.3 System Feature 7

| | |
|--------------------------------|--|
| ID | FR7_U |
| Title | Choose a Category |
| Description | <p>The user shall navigate through the system to choose a Specific Category by choosing the category name from a drop-down list through the website.</p> <p>Categories are:</p> <ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe |
| Stimulus Sequences | <ol style="list-style-type: none">1.User opens the Encyclopedia website.2.Click on the category drop-down list.3.The categories appear are:<ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe4.Choose the category name.5.Click on the required category.6.The required category will be opened. |
| Response Sequences | <ol style="list-style-type: none">1. After clicking on the required category, the system shall open the category page that the user chooses.2. In case of poor connection, the system may give a message box stating that "the process failed please try again". |
| Dependency | None |
| Functional Requirements | FR7_U7.1 → Click on a valid drop-down list that opens different categories FR7_U7.2 → Click on the desired category |

3.2.4 System Feature 8

| | |
|--------------------------------|--|
| ID | FR8_U |
| Title | Publish an article |
| Description | The user shall login into his/her account to be able to publish his/her own Article in a specific category. |
| Stimulus Sequences | <ol style="list-style-type: none">1. User opens the Encyclopedia website.2. User log into his/her own account by entering valid username and password.3. User clicks on post button in navigation bar.4. Drop-down list open and user choose publish article and click on it.5. Directed to another page to publish article on it.6. User chooses on the category that he wants to publish article under it from category drop-down list.7. User type the article title in the required field.8. User type the article in the required field.9. User clicks on Post. |
| Response Sequences | <ol style="list-style-type: none">1. When the article is submitted, the system shall give a message box indicating that the article is published successfully and appears on the system.2. In case of poor connection, the system may give a message box stating that "The process of publishing the article failed please try again". |
| Dependency | FR5_U |
| Functional Requirements | <p>FR8_U8.1 → Click on valid post button to choose from the drop-down list publish article.</p> <p>FR8_U8.2 → Click on valid drop-down list to choose from the drop-down list category.</p> <p>FR8_U8.3 → publish an article that is appropriate to the website policies.</p> <p>FR8_U8.4 → In case that the user didn't enter article title or article content a message box should appear indicating that he must enter all required fields.</p> |

3.2.5 System Feature 9

| | |
|--------------------------------|---|
| ID | FR9_U |
| Title | Upload Video |
| Description | The user shall login into his/her account to be able to upload video in a Specific category, also the video should not exceed two minutes. |
| Stimulus Sequences | <ol style="list-style-type: none">1. User opens the Encyclopedia website.2. User log into his/her own account by entering valid username and password.3. User clicks on the category that he wants to upload video in it.4. User clicks on post button in navigation bar.5. Drop-down list open and user choose upload video and click on it.6. Directed to another page to upload video on it.7. User chooses on the category that he wants to upload video in it from category drop-down list.8. User enter the video title in the required field.9. User choose the video he/she want to upload.10. User click on Upload Video. |
| Response Sequences | <ol style="list-style-type: none">1. When the video is uploaded, the system shall give a message box indicating that the video is uploaded successfully and appears on the system.2. In case of poor connection, the system may give an error message "the process of uploading the video failed please try again".3. In case the video exceeds two minutes, the system shall respond with a message box stating that the "the process of uploading the video failed please try again"4. In case the user uploads something that is not a video the system shall respond with a message box stating that "please select a video only" |
| Dependency | FR5_U |
| Functional Requirements | <p>FR9_U9.1 → Click on post button and from drop-down list choose upload video.</p> <p>FR9_U9.2 → Click on drop-down list to choose category from the drop-down list category.</p> <p>FR9_U9.3 → Upload a video that is appropriate to the system policies.</p> <p>FR9_U9.4 → Upload Video size is 1min minimum and 2 mins max with no Specific extensions.</p> <p>FR9_U9.5 → In case that the user didn't enter video title a message should appear indicating that he must enter all required fields.</p> |

3.2.6 System Feature 10

| | |
|--------------------------------|--|
| ID | FR10_U |
| Title | Upload Recorded Voice |
| Description | The user shall login into his/her account to be able to upload Voice record in a Specific category, also the Voice record size uploaded must be a 30 sec to 1 min with ("mp3") extension |
| Stimulus Sequences | <ol style="list-style-type: none"> 1. User opens the Encyclopedia website. 2. User login into his/her own account by entering valid username and password. 3. User clicks on the category that he wants to upload Voice record in it. 4. User clicks on post button. 5. Drop-down list open and user choose upload voice record and click on it. 6. Directed to another page to upload voice record on it. 7. User chooses on the category that he wants to upload video in it from category drop-down list. 8. User enter the record title in the required field. 9. User choose the voice record he/she want to upload. 10. User click on Upload Record. |
| Response Sequences | <ol style="list-style-type: none"> 1. When the video is uploaded, the system shall give a message box indicating that the record is uploaded successfully and appears on the system. 2. In case of poor connection, the system may give an error message "the process of uploading the voice record failed please try again". 3. In case the Voice record exceeds 1 min, the system shall give the user a message box stating that "the process of uploading the voice failed please try again". 4. In case the user uploads something that is not a voice record the system shall respond with a message box stating that "please select a recorded voice only" |
| Dependency | FR5_U |
| Functional Requirements | <p>FR10_U10.1 → Click on valid post button and from drop-down list choose upload voice record.</p> <p>FR10_U10.2 → Click on valid drop-down list to choose from the drop-down list category.</p> <p>FR10_U10.3 → Upload a record that is appropriate to the system policies</p> <p>FR10_U10.4 → Uploaded Voice record size must be from 30 second to 1 minute with ("mp3") extension.</p> <p>FR10_U10.5 → In case that the user didn't enter video title a message box should appear indicating that he must enter all required fields.</p> |

3.2.7 System Feature 11

| | |
|--------------------------------|---|
| ID | FR11_U |
| Title | Navigate website |
| Description | The user shall navigate through the website while he/she is logged in |
| Stimulus Sequences | <ol style="list-style-type: none">1. User will open the Encyclopedia website.2. User will click on login button and log in to the system by entering his/her valid username and password3. User can navigate through the website and choose specific category to read more about it adding to this he can access more features while navigating the website for ex (Upload voice/record and publish an article). |
| Response Sequences | None |
| Dependency | None |
| Functional Requirements | <p>FR11_U11.1 → User should be able to open any category in the website.</p> <p>FR11_U11.2 → User should be able to read any article on the website</p> <p>FR11_U11.3 → User should be able to watch any video on the website.</p> <p>→TBD</p> <p>FR11_U11.4 → User should be able to hear any voice record on the website.</p> <p>→TBD</p> <p>FR11_U11.5 → User should be able to navigate to upload video page on the website</p> <p>FR11_U11.6 → User should be able to navigate to upload voice record page on the website</p> <p>FR11_U11.7 → User should be able to navigate to publish article page on the website</p> |

3.2.8 System Feature 12

| | |
|--------------------------------|---|
| ID | FR12_U |
| Title | View content |
| Description | The user shall be able to view & navigate throw any content available under specific category. |
| Stimulus Sequences | <ol style="list-style-type: none">1. User will navigate to the Encyclopedia website after logging in to his/her account.2. User navigates to the category that he wants.3. User navigates through the category page to the content he wants.4. User clicks on the read more button. |
| Response Sequences | <ol style="list-style-type: none">1. If the user clicks on any content read more button, the user should be directed to article page where the content of the article is displayed to the user.2. If the user cannot access a specific article in the system, a message box shall pop up stating that "There is something wrong with the system due to poor connection". |
| Dependency | FR7_U |
| Functional Requirements | FR12_U12.1 → Click on a valid drop-down list that opens different categories FR12_U12.2 → Click on the desired category. FR12_U12.3 → Choose a specific article from the page and click on read more. |
| Next Release | View record, view video → TBD |

3.3 Admin

3.3.1 System Feature 13

| | |
|--------------------------------|---|
| ID | FR13_A |
| Title | Delete user Account |
| Description | The admin shall be able to delete any user account |
| Stimulus Sequences | <ol style="list-style-type: none">1. Admin will navigate to the Encyclopedia website.2. Admin should be logged in to the system.3. Admin enter username and user email to delete the user.4. Admin then click on the delete button. |
| Response Sequences | <ol style="list-style-type: none">1. If the admin logged in and chooses to delete a specific user account a message should appear "This user deleted successfully from the website".2. If the admin after logging in cannot delete a specific user, the system shall respond with a message box that "There is something wrong with the system due topoor connection". |
| Dependency | FR18_A |
| Functional Requirements | FR13_A13.1 → Admin enter valid username and user email in required fields. FR13_A13.2 → Click on valid delete button for deleting specific user account in case this user has uploaded any content this content shall be deleted also while deleting this user. |

3.3.2 System Feature 14

| | |
|---------------------------|---|
| ID | FR14_A |
| Title | Delete User Content. |
| Description | The admin shall be able to delete any content that the user adds to the website like (videos, records, published article) that violates the rules of the system. |
| Stimulus Sequences | <ol style="list-style-type: none">1. Admin will navigate to the Encyclopedia website.2. Admin should be logged in to the system.3. Admin click on delete drop down list from nav bar and choose delete user content.4. Admin choose what he wants to delete{video, record, article} from type drop-down list5. Admin enters content ID, and content name to delete user content.6. Admin click on delete button. |

| | |
|--------------------------------|---|
| Response Sequences | <p>1. If the admin chooses delete article and enters a content ID and content name to delete specific article from the website, the system should show a message box stating that "Article deleted successfully".</p> <p>2. If the admin chooses delete video and enters a content ID and content name to delete specific video from the website, the system should show a message box stating that "Video deleted successfully".</p> <p>3. If the admin choose delete record and enters a content ID and content name to delete specific voice record from the website, the system should show a message box stating that "Voice Record deleted successfully".</p> <p>4. If the admin after logged in cannot delete specific content for a specific user the system shall respond with a message box stating that "There is something wrong with the system due to poor connection".</p> |
| Dependency | FR18_A |
| Functional Requirements | <p>FR14_A14.1 → Click on valid delete button for deleting a published article</p> <p>FR14_A14.2 → Click on valid delete button for deleting an uploaded video</p> <p>FR14_A14.3 → Click on valid delete button for deleting an uploaded voice record</p> |

3.3.3 System Feature 15

| | |
|---------------------------|--|
| ID | FR15_A |
| Title | Navigate website |
| Description | The admin shall navigate through the website while he/she is logged in |
| Stimulus Sequences | <p>1. Admin will open the Encyclopedia website.</p> <p>2. Admin will click on login button and log in to the system by entering his/her valid username and password</p> <p>3. Admin can navigate through the website and choose specific category to view it adding to this he can access more features while navigating the website for ex (Delete user content and Delete user account).</p> |
| Response Sequences | None |
| Dependency | None |

| | |
|--------------------------------|--|
| Functional Requirements | FR15_A15.1 → Admin should be able to open any category in the website. FR15_A15.2 → Admin should be able to read any article on the website. FR15_A15.3 → Admin should be able to watch any video on the website. →TBD FR15_A15.4 → Admin should be able to hear any voice record on the website. →TBD FR15_A15.5 →Admin should be able to delete user content on the website FR15_A15.6 → Admin should be able to delete user account on the website |
|--------------------------------|--|

3.3.4 System Feature 16

| | |
|--------------------------------|---|
| ID | FR16_A |
| Title | Choose a Category |
| Description | <p>The admin shall navigate through the system to choose a Specific Category by choosing the category name from a drop-down list through the website.</p> <p>Categories are:</p> <ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe |
| Stimulus Sequences | <ol style="list-style-type: none">1. Admin opens the Encyclopedia website.2. Click on the category drop-down list.3. The categories appear are:<ul style="list-style-type: none">• Birds and Parrots• History• Animals and plants• Space and universe4. Choose the category name.5. Click on the required category.6. The required category will be opened. |
| Response Sequences | <ol style="list-style-type: none">1. After clicking on the required category, the system shall open the category page that the admin chooses.2. In case of poor connection, the system may give a message box stating that "the process failed please try again". |
| Dependency | None |
| Functional Requirements | FR16_A16.1 → Click on a valid drop-down list that opens different categories FR16_A16.2 → Click on the desired category |

3.3.5 System Feature 17

| | |
|---------------------------|--|
| ID | FR17_A |
| Title | View content |
| Description | The admin shall be able to view & navigate throw any content available under specific category. |
| Stimulus Sequences | <ol style="list-style-type: none">1. Admin will navigate to the Encyclopedia website after logging in to his/her account.2. Admin navigates to the category that he wants.3. Admin navigates through the category page to the content he wants.4. Admin clicks on the read more button. |

| | |
|--------------------------------|--|
| Response Sequences | 1. If the admin clicks on any content read more button the admin should be directed to content page where the content of the article is displayed to the admin. 2. If the admin cannot access a specific article in the system a message box shall pop up stating that "There is something wrong with the system due to poor connection". |
| Dependency | FR16_A |
| Functional Requirements | FR17_A17.1 → Click on a valid drop-down list that opens different categories FR17_A17.2 → Click on the desired category. FR17_A17.3 → Choose a specific article from the page and click on read more. |
| Next Release | View record, view video → TBD |

3.3.6 System Feature 18

| | |
|--------------------------------|---|
| ID | FR18_A |
| Title | Login |
| Description | The admin shall be able to login to the system by entering his/her valid username and password. |
| Stimulus Sequences | 1. Admin will navigate to the Encyclopedia website 2. Admin tries to access the specific functionality without logging in and the system pops up a message box that the admin should login if there is a created account with message "please login first". 3. admin navigates through the website and clicks on the login button 4. admin enters the required fields. 5. Admin clicks on the login button to submit data. |
| Response Sequences | 1. If the required fields are valid the system will respond with a message box stating that "the admin is logged in successfully" and admin will be directed to the home page. 2. In case any Invalid field is entered the system shall respond with a message box stating that the admin shall enter a valid data with message "please enter valid data". 3. In case of poor connection, the system may give a message box stating that "login process failed please try again". |
| Dependency | None |
| Functional Requirements | FR18_A 18.1 → Login with valid and unique username FR18_A 18.2 → Login with valid password |

3.3.7 System Feature 19

| | |
|--------------------------------|---|
| ID | FR19_A |
| Title | Log out |
| Description | The admin shall be able to log out from his/her own account out of the system. |
| Stimulus Sequences | <ol style="list-style-type: none">1. Admin is logged in the system.2. Admin navigates through the website to log out.3. Admin clicks on log out button. |
| Response Sequences | <ol style="list-style-type: none">1. The system will log out successfully and directed to the home page.2. In case of poor connection, the system may give a message box stating that"log out process failed". |
| Dependency | FR18_A. |
| Functional Requirements | FR19_A19.1→Logout from an existed account or a logged in user/admin |

4. Specific Requirements

This section contains the specific requirements of the system, to define completely the system, the requirement should be, when possible:

- **Correct:** the requirement shall represent a real need for the system.
- **Not Ambiguous:** each requirement shall have only one possible interpretation.
- **Complete:** the requirements shall cover all the possible system responses.
- **Consistent:** the requirements shall not be contradictory.
- **Classified:** the requirements shall be classified considering the importance of each of them.
- **Verifiable:** a requirement is verifiable if there is a finite, not expensive process to verify it.
- **Modifiable:** a requirement should be modifiable in an easy, complete and consistent way.
- **Traceable:** a requirement is traceable if its origin is known and is easy to reference it.

5. External Interface Requirements

This section of the SRS describes the interface requirements for the system. Requirements for user, hardware and software interfaces are defined.

5.1 User Interfaces

The application GUI provides menus, toolbars, buttons, containers, grids allowing for easy control by a keyboard and a mouse.

| | |
|----------------------|--|
| ID | UIR01 |
| Name | Fast information access |
| Description | The User/Admin shall be able to access all the information in two clicks or less once he/she is logged in. |
| Priority | Medium |
| Stability | Stable |
| Verifiability | Verifiable |

| | |
|----------------------|---|
| ID | UIR02 |
| Name | Familiar input to the user |
| Description | The input actions shall be the standard web application development actions |
| Priority | Medium |
| Stability | Stable |
| Verifiability | Verifiable |

| | |
|----------------------|---|
| ID | UIR03 |
| Name | Familiar output to the user |
| Description | The web application output shall be the web application development standard output |
| Priority | Medium |
| Stability | Stable |
| Verifiability | Verifiable |

| | |
|----------------------|--|
| ID | UIR04 |
| Name | Navigation |
| Description | The User shall be able to go to the next and previous page in the hierarchy level of the web application |
| Priority | High |
| Stability | Stable |
| Verifiability | Verifiable |

| | |
|----------------------|--|
| ID | UIR05 |
| Name | Loading Symbol |
| Description | The User shall be able to show a loading icon if the operation to perform last longer than 1 second. |
| Priority | Low |
| Stability | Stable |
| Verifiability | Verifiable |

5.2 Hardware Interface

| | |
|--------------------|---|
| ID | HIR01 |
| Name | Using Sound System |
| Description | The User shall be able to hear the voices of the video or voice record after 2 clicks or less on the required button. |

| | |
|----------------------|------------|
| Priority | High |
| Stability | Stable |
| Verifiability | Verifiable |

| | |
|----------------------|--|
| ID | HIR02 |
| Name | Using Keyboard |
| Description | The User shall be able to access the keyboard to be able to write articles |
| Priority | High |
| Stability | Stable |
| Verifiability | Verifiable |

5.3 Software Interface

This section describes the software interface specific requirements for the Encyclopedia web application.

| | |
|----------------------|---|
| ID | SIR01 |
| Name | Database Connectors |
| Description | The Cloud services shall connect to each database with a specific connector |
| Priority | NA |
| Stability | Not Stable |
| Verifiability | Verifiable |

6. Nonfunctional Requirements

6.1 Performance Requirements

- After writing the correct username and password the login process should take only 10 seconds,
- While in Register it should only take few seconds to make sure that the email isn't already existed before.
- The system shall take no more than 10 seconds to respond to the user.
- System should upload 1000 pictures per second.

6.2 Security Requirements

- The access permissions for system data may only be changed by the system's data administrator.
- All system data must be backed up every 24 hours and the Backup copies stored in a secure location which is not in the same building as the system.
- All Admin and users Data must be encrypted.

6.3 Software Quality Attributes

6.3.1 Usability

- Well-structured user manuals.
- Informative error messages.
- Help facilities.
- Well-formed graphical user interfaces

6.3.2 Reliability

- The system's downtime should not be more than ten minutes per month.

6.3.3 Portability

- The system should support almost all the browsers due to it is Web application (Internet Explorer, Safari, Chrome, and Firefox).

6.3.4 Compatibility

- The system should support almost all the operating systems due to it is PC based (Android, IOS).

6.3.5 Availability

- The Encyclopedia System should be available 99% at 24 hours per day.

7. Other Requirements

7.1 Database Requirements:

Database will be created on phpMyAdmin XAMPP is an open-source server set up to test the projects on a local server before making it available to everyone over the web. This web app development server comes pre-installed with Apache web server, MySQL database, PHP, and Perl that help you build an offline application with desired features and functions. The disk space on XAMPP Server (phpMyAdmin) should always be at least 10GB available.

7.2 Legal Requirements:

Inappropriate content violates the system rules. Therefore, it will be deleted immediately by the admin and the user will be notified.

7.3 Design Constraints:

The system is provisioned to build A list of compatible browsers are supported by the web application (Chrome, Firefox, Internet E and Internet Explorer).

7.3.1 Client Side:

The installed Memory on each Web Front End server should be at least 32GB using HTML, CSS, and JS technologies.

7.3.2 Server Side:

Backend technologies used are C#, ASP.Net technologies and XAMPP server for database.