Software Design Document

Learning Hub Web Application

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V 1.2

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# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Date | Version | Revision Date |
| Maha Mohamed  Mai Ashraf  Mostafa Gamal | 17/5/2022 | 1.0 | 20/5/2022 |
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# Introduction

## Purpose of Software Design Document

This document is targeting all team members to make the system clearer and describing each function sequence and its inputs & outputs. All functions mentioned in the document is specified to be front-end or back-end coding its functionality and Unique id for each function.

## Summary of Project

The Learning Hub functions as an online free encyclopedia with a variety of material, allowing users to discover and receive knowledge in a variety of life domains while also participating in a community where they may contribute and share their expertise.

## Table of Functions

### 1.3.1 Login Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Login\_1 | Page\_Load | Open the database connection | IP address  Port number  User  password | Page is loaded with open connection | - |
| Login\_2 | LoginBtn\_Click | Compare login data with data in DB and direct to home page based on login data of user/admin | Username  Password | Login sucsessfully and directing to home page | - |
| Login\_3 | signupBtn\_Click | Redirect the user to signup page. |  | Direct user to signup page | - |

### 1.3.2 Choose Category Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Choose\_Category\_1 | Birds\_Click | This function runs when the category “Birds and Parrot” is selected from categories drop-down list |  | User is directed to Birds and Parrot page | - |
| Choose\_Category\_2 | History\_Click | This function runs when the category “History” is selected from categories drop-down list |  | User is directed to History page | - |
| Choose\_Category\_3 | Space\_Click | This function runs when the category “Space and Universe” is selected from categories drop-down list |  | User is directed to Space and Universe page | - |
| Choose\_Category\_4 | Animals\_Click | This function runs when the category “Animals and Plants” is selected from categories drop-down list |  | User is directed to Animals and Plants page | - |

### 1.3.3 Publish an Article Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Publish\_Article\_1 | Page\_Load | Open the database connection | IP address  Port number  User  password | Page is loaded with open connection | - |
| Publish\_Article\_2 | PostBtn\_Click | Get Category ID that user chose, Content ID and Title and send it to Article Table in DB | ContentID  CategoryID  Title | Article Published Successfully | - |

### 1.3.4 Navigate Feature for Admin

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Navigate\_1 | Home\_Click | Redirect the admin to home page |  | Redirect the admin to home page | - |
| Navigate\_2 | logoutBtn\_Click | This function runs when logged in admin click on log out button |  | Admin redirect to guest home as now considered guest | - |
| Navigate\_3 | Birds\_Click | This function runs when the category “Birds and Parrot” is selected from categories drop-down list |  | Admin is directed to Birds and Parrot page | - |
| Navigate\_4 | History\_Click | This function runs when the category “History” is selected from categories drop-down list |  | Admin is directed to History page | - |
| Navigate\_5 | Space\_Click | This function runs when the category “Space and Universe” is selected from categories drop-down list |  | Admin is directed to Space and Universe page | - |
| Navigate\_6 | Animals\_Click | This function runs when the category “Animals and Plants” is selected from categories drop-down list |  | Admin is directed to Animals and Plants page | - |
| Navigate\_7 | DeleteContent\_Click | This function runs when admin select delete content from delete drop-down list |  | Admin is directed to delete content page | - |
| Navigate\_8 | DeleteUser\_Click | This function runs when admin select delete user from delete drop-down list |  | Admin is directed to delete user page | - |
| Navigate\_9 | ReadMoreBTn | This function runs when admin click on read more button |  | Admin is directed to view content page where the article in detail is viewed |  |

### 1.3.5 Register Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Sign-Up\_01 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection | No inputs (only the inputs created by the compiler and database such as IP address, port number, username and password of the database) | The connection is established, and the page is loaded |  |
| Sign-Up\_02 | SignupBtn\_Click | This function runs when the signup button is clicked. | Username, Password,  Email | Account Successfully Created! |  |

### 1.3.6 Admin Delete Content Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Delete\_Content\_ 01 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection | No inputs (only the inputs created by the compiler and database such as IP address, port number, username and password of the database) | The connection is established, and the page is loaded |  |
| Delete\_Content\_ 02 | FollowBtn\_Click | This function runs when the delete button is clicked then choose delete video. | Content ID, Video Name | The video is deleted |  |
| Delete\_Content\_ 03 | FollowBtn\_Click | This function runs when the delete button is clicked then choose delete record. | Content ID, Record name | The record is deleted |  |
| Delete\_Content\_ 04 | FollowBtn\_Click | This function runs when the delete button is clicked then choose delete Article. | Content ID, Article name | The article is deleted |  |

### 1.3.7 Admin Delete User Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Delete\_User\_01 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection | No inputs (only the inputs created by the compiler and database such as IP address, port number, username and password of the database) | The connection is established, and the page is loaded |  |
| Delete\_User\_02 | Delete\_Click | This function runs when the delete button is clicked then choose delete User. | Username,  User Email  Database:   1. IP address 2. Port number 3. Username 4. password | User Deleted successfully |  |

### 1.3.8 View Article Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| View\_Article\_01 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection and views article | 1.ContentID  2.UserID  3.CatID  4.Username  5.Catname  6.Artname  7.PublishDate  8.ArtContent  Database:   1. IP address 2. Port number 3. Username 4. password | The connection is established, and the page is loaded , needed info retrieved from DB then the Article is viewed |  |

### 1.3.9 Logout Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Log-out\_01 | logoutBtn\_Click | This function runs when logged in user click on log out button |  | The user gets redirect to guest home as now considered guest |  |

### 1.3.10 Upload Video Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Upload-Video\_01 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection | No inputs (only the inputs created by the compiler and database such as IP address, port number, username and password of the database) | The connection is established, and the page is loaded |  |
| Upload-Video\_02 | UploadVideo | This function runs automatically when the page is reloaded initializing the database connection  And validate on extension and length of video | Video name,  Video ID, Content ID  Database:   1. IP address 2. Port number 3. Username 4. password | -- |  |
| Upload-Video\_03 | Button1\_Click | This function calls UploadVideo function | -- | The video is uploaded | **Upload-video\_01** |

### 1.3.11 Upload Record Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Upload-Record\_02 | Page\_Load | This function runs automatically when the page is reloaded initializing the database connection | No inputs (only the inputs created by the compiler and database such as IP address, port number, username and password of the database) | The connection is established, and the page is loaded |  |
| Upload-Record\_02 | UploadRecordedVoice | This function runs automatically when the page is reloaded initializing the database connection  And validate on extension and length of the record | Record name,  Record ID, Content ID  Database:   1. IP address 2. Port number 3. Username 4. password | -- |  |
| Upload-Video\_03 | Button1\_Click | This function calls UploadRecordedVoice function | -- | The record is uploaded | **Upload-Record\_01** |

### 1.3.12 Navigate feature for User

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Navigate\_1 | Home\_Click | Redirect the user to home page |  | Redirect the user to home page | - |
| Navigate\_2 | logoutBtn\_Click | This function runs when logged in user click on log out button |  | The user gets redirect to guest home as now considered guest | - |
| Navigate\_3 | Birds\_Click | This function runs when the category “Birds and Parrot” is selected from categories drop-down list |  | User is directed to Birds and Parrot page | - |
| Navigate\_4 | History\_Click | This function runs when the category “History” is selected from categories drop-down list |  | User is directed to History page | - |
| Navigate\_5 | Space\_Click | This function runs when the category “Space and Universe” is selected from categories drop-down list |  | User is directed to Space and Universe page | - |
| Navigate\_6 | Animals\_Click | This function runs when the category “Animals and Plants” is selected from categories drop-down list |  | User is directed to Animals and Plants page | - |
| Navigate\_7 | pubArt\_Click | This function runs when user select Publish Article from Post drop-down list |  | User is directed to publish article page |  |
| Navigate\_8 | upVideo\_Click | This function runs when user select Upload Video from Post drop-down list |  | User is directed to upload video page |  |
| Navigate\_9 | upRecord\_Click | This function runs when user select Upload Record from Post drop-down list |  | User is directed to upload record page |  |
| Navigate\_10 | ReadMoreBTn | This function runs when user click on read more button |  | User is directed to view content page where the article in detail is viewed |  |

### 1.3.13 Navigate Feature for Guest

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Name | Description | Input | Output | Called Function |
| Navigate\_1 | Home\_Click | Redirect the user to home page |  | Redirect the guest to home page | - |
| Navigate\_2 | LoginBtn\_Click | This function runs when guest click the login button |  | Guest is directed to login page | - |
| Navigate\_3 | signupBtn\_Click | This function runs when guest click the signup button |  | Guest is directed to signup page | - |
| Navigate\_4 | Birds\_Click | This function runs when the category “Birds and Parrot” is selected from categories drop-down list |  | Guest is directed to Birds and Parrot page | - |
| Navigate\_5 | History\_Click | This function runs when the category “History” is selected from categories drop-down list |  | Guest is directed to History page | - |
| Navigate\_6 | Space\_Click | This function runs when the category “Space and Universe” is selected from categories drop-down list |  | Guest is directed to Space and Universe page | - |
| Navigate\_7 | Animals\_Click | This function runs when the category “Animals and Plants” is selected from categories drop-down list |  | Guest is directed to Animals and Plants page | - |
| Navigate\_8 | ReadMoreBTn | This function runs when guest click on read more button |  | Guest is directed to view content page where the article in detail is viewed |  |