# Introduction

This document identifies the functional/technical requirements for the LMS (Learning management system) web application that will support client’s initiative for improving education system. Web Application functionality has been designed with the express purpose of helping Super Admin, Teachers and students to access their study material with a new and interesting way.

# Functional Scope – System Overview

In addition to the guidelines outlined in the document for the development of the web-based application with “back end” will also be created to allow users to manage all the resources allowed for access. These back end system requirements and capabilities are detailed in the following sections

## User Classification and Privileges

The Web application is designed for three types of users; they all have different accessible area in application.

1. School Admin
2. Teacher

* **School Admin:** Admincan access the web application with the following functionality
  + - **School Management**
    - **User management**
    - **Courses management**
    - **Recourse Management**
    - **Configuration Management**
* **Teacher:** Teacher can access the web application with the following functionality.
  + - **Dashboard**
    - **Course Progress management**
    - **Assignments management**
    - **Dashboard news feeds**

This document further specifies the depth level functionality of each user associated functions/managements.

# Admin Functionality Overview (Phase 2)

Admin is the top level user of this application who will have all functionalities associated in his access. Admin can login in to the system and all functionalities are categorized in following managements,

# School Management

School Admin can control all data of his schools; this section will give admin to **view/add/edit and activate/deactivate** its schools profile. There are 2 ways to add data to every section

1. Manual Data upload
2. Bulk upload via CSV/Excel

School Admin first needs to select the desired method for adding/editing the records, if admin selects the manual method, he can add of schools with the following parameters

* School name
* Description
* Logo (image)
* Website ( url )
* Other images
* Meta data

Bulk upload option will provide a screen to admin for uploading a csv/excel file with predefined fields. Scolere will provide sample csv/excel for uploading schools details through this method. Admin can edit the school data with the same parameters using manual or bulk upload method.

Admin can activate and deactivate the school and once school is deactivated then school teacher and students can’t access their profile.

# User Management (user type – Teacher)

School Admin can control his school’s teacher data; this section will give admin to **view/add/edit and activate/deactivate** teacher’s profile. Admin can choose one the below given method to update teachers.

1. Manual Data upload
2. Bulk upload via CSV/Excel

Admin first needs to select the desired method for adding/editing the records, if admin selects the manual method, he can add teacher with the following parameters

* Teacher name
* Date of birth
* Profile picture
* Date of Association
* Contract Expiry date
* Experience (years)

There will be a section to map the teacher with following mapping.

* List of classes to select (multiple classes for each school)
* List of sections to select (multiple sections for each class )
* List of course to select (multiple course for each teachers)

Bulk upload option will provide a screen to school admin for uploading a csv/excel file with predefined fields. Scolere will provide sample csv/excel for uploading teacher’s details through this method. Admin can edit the teacher’s data with the same parameters using manual or bulk upload method.

Admin can activate and deactivate the teachers and once teacher is deactivated user can still see the course assignments by that teacher.

# User management (User Type – Student)

School Admin can control student’s data; this section will give admin to **view/add/edit and activate/deactivate** student’s profile. Admin can choose one the below given method to update students.

1. Manual Data upload
2. Bulk upload via CSV/Excel

Admin first needs to select the desired method for adding/editing the records, if admin selects the manual method, he can add student with the following parameters.

* Student Name
* Date of birth
* Profile picture
* Social media profile links.
* Date of joining school

There will be a section to map the student with following mapping.

* List of classes to select
* List of sections to select

Bulk upload option will provide a screen to admin for uploading a csv/excel file with predefined fields. Scolere will provide sample csv/excel for uploading student’s details through this method. Admin can edit the student’s data with the same parameters using manual or bulk upload method.

Admin can activate and deactivate the student and once student is deactivated teacher can still see the assignments done by that student.

# Course and Module Management

Admin can control course’s data for his school; this section will give admin to **view/add/edit and activate/deactivate** courses. Admin can choose one the below given method to update students.

1. Manual Data upload
2. Bulk upload via CSV/Excel

Admin first needs to select the desired method for adding/editing the records, if admin selects the manual method, he can add course with the following parameters

* Course Name
* Course Author
* Created Date
* Course Duration
* Meta Data etc

Admin can also create modules for the courses; module can be created using following fields

* Module name.
* Module description
* Meta data
* Assignments

There will be a section to map the course with following mapping.

* List of Modules (multiple selection allowed)
* List of videos (multiple course/modules can have same video)

And

* List of classes to select
* List of sections to select

Bulk upload option will provide a screen to admin for uploading a csv/excel file with predefined fields. Scolere will provide sample csv/excel for uploading course details through this method. Admin can edit the courses data with the same parameters using manual or bulk upload method.

Admin can activate and deactivate the course and once course is deactivated none can see the modules/assignments done by for that course.

# Resource Management

Admin can control All Resource data; this section will give admin to **view/add/edit and activate/deactivate** resource. Resources are of type videos. Admin can choose one the below given method to update students.

1. Manual Data upload
2. Bulk upload via CSV/Excel

Admin first needs to select the desired method for adding/editing the records, if admin selects the manual method, he can add resource with the following parameters

* Resource Name
* Resource Author
* Created Date
* Resource Duration
* Meta Data etc

There will be a section to map the Resources with following mapping.

* List of Modules (multiple selection allowed)

Bulk upload option will provide a screen to admin for uploading a csv/excel file with predefined fields. We will provide sample csv/excel for uploading course details through this method. Admin can edit the resource data with the same parameters using manual or bulk upload method.

Admin can activate and deactivate the resource and once resource is deactivated none can see them in modules/assignments.

# Configuration Management

Admin can control the logos of Application to appear on iPhone Application. Admin can also control if the native application users has access to the feeds of other schools. Which can be enabled or disabled?

# Teacher Access Overview

Teacher will have a vital role in this application; he will be the initiator of the course, modules and can give/review assignments of the students. Majorly a teacher can view these 4 features in his portal.

* School
* Course
* Assignment and
* Leader board/Scoreboard

Teacher will have a menu where all the above features will be displayed. Teacher can access any of the functionality, these are detailed below

# Schools

Bases on his association with school, Teacher will be shown list of classes and section he has been mapped by school admin. With the each school name there will be course name which a teacher is assigned for. Drilling down from school a teacher can view which class/ section he has been assigned for a course. He can view these things with the filter of school. Means in this section teacher can view the class/section/courses assigned for him with a filter of school.

# Course

He can now drill more from course. If he selects any course then he can view all modules associated with that course and track the completion of each module, also he can start a new module once previous one is completed. He can view the in progress modules and a news feed will shown for those which are completed.

# Assignments (Phase 2)

He can view the latest assignment submitted by students for the module completed or in progress, he can drill down to see all latest work updated by a student also he can view the leader board for that student. Teacher can evaluate the assignments and provide rating to students assessments with the pre loaded parameters.

# Leaderboard (Phase 2)

Teacher can view the leader board for students; he can drill to a particular student to view his recent activities and Gradebook he obtained for assignments and his activities. Students can share their assignment review on their wall and a number of likes/ shares comments will be considered making the Gradebook for the students

# iPhone / iPad App

The native application will be having following modules for LMS

* Registration- User Register with his profile credentials in the application
* Authentication- User can login with email id or Facebook ids to the app

Since each User will be associated with a school and as the user logs in the app will be loaded with the logo of the specific school. Once logged in following tabs with functionality listed below will be displayed

* + **Updates(Phase 1)**
    - User will be shown a Facebook like news feed page for the course/recourses/ videos user has access to
    - User can like, share and put a comment on a resource video from the feed.
    - User can select filters for live feed. Filters will be on the basis of district, school and mention the user whose feed user wants to see.
    - User can upload their own videos resources (as part of home work assignment) which can be shared to LMS application
    - User can share Link and Pictures to other users on the LMS Mobile Application
    - User can see the recommended videos bases on preference through the video Recommendation engine; which are most viewed or liked by the users across community or group
    - User can share the videos to Facebook
    - User will be able to see the certificates of the other users and group in the news feed
    - User will be able to hash-tag videos for search
    - User can share URL of article and videos of other web site at the media which can be shared to other users.
    - User will be assigned the Points for Gradebook for sharing links, likes and comments.
  + **Courses(Phase 1)**
    - User will be able to see a course module which will contain the courses that will be assigned to the user.
    - User will be able to see modules in the courses and videos in the modules.
    - User will also be able to see the completion percentage of a particular course next to the course.
    - Below the course videos the assignments of the related courses will be displayed and related videos of the course will be displayed below the assignment.
    - A message will be sent to the teacher when the student completes a course.

* + **Assignments(Phase 2)**
    - Users can create Home work assignment and upload it on LMS.
    - There will be two types of assignment Open and closed.
    - The status of assignment will be automatically pushed to LMS update.
    - User will have capability to see the scorecard next to the assignment if the assignment is evaluated.
    - Assignment will display the course name it is associated with.

* + **Notifications(Phase 2)**
    - User can see all notifications in a notification tab which will keep updating the notifications.
  + **More(Phase 2)**

User will a new page when clicks on more tab. The new page will consist of the following:

* **Settings**: This tab will show the settings related to assign filters for news feed for **self, Public, specific user, school, and district**
* **Instructions**: This tab will have detailed instructions about using the application and its capabilities and features in detail. Instruction page will also have search functionality where the user can search for a particular topic.
* **Profile**: This tab will display the user profile information like name, school, class, email address.
* **Leaderboard:** This tab will show the users grade in assignments. Students will get scores for sharing links, people giving likes to links a student shares.



# Assumption

* + - The orientation of iPhone application will be portrait mode for phase 1
    - iPad portrait mode support will be available in phase 2
    - iOS version support will be iOS 8.X
    - Web Portal browsers:
      * Chrome 43.0.2357.124  and above

Desktop Resolutions

* + - * 1280x800
      * 1366x768
      * 1440x900
      * 1280x1024
      * 1600x900
      * 1920x1080