

1 Introduction

Overview

Kudumbashree NRO has been actively working towards promoting rural livelihoods and local governance, by nurturing an ecosystem to encourage entrepreneurial activities, promote sustainable micro-enterprises and enhance participatory planning and development. Since 2012, NRO has been developing context-specific strategies to promote entrepreneurship in rural areas through community based organisations (CBOs), where Self Help Group (SHG) women and their federations' capacity has been developed towards driving entrepreneurship activities and establishing active democratic platforms.

Objective

To procure a Learning Management System (LMS) to manage the training process and provide stakeholders with the resources they need to learn effectively. Platform shall allow Kudumbashree-NRO administration, documentation, tracking, reporting, and delivery of training modules, conduct online training programs, or learning and development programs.

Users

LMS will be accessed by participants including various stakeholders and resource pools who will go through the comprehensive learning experience hosted by Kudumbashree NRO. These includes:

- Community Resource Persons
- NRO Professionals
- SRLM Professionals
- NRLM Professionals
- Professionals within Kudumbashree
- Professionals from Other Organisations

Content Type

Kudumbashree-NRO has existing content in PDF, and Video mode that needs to be uploaded in the platform. Further, the content will be segregated in the following heads:

- Organisations – Knowledge about the organisation
- Projects – Guidelines and other materials of the various projects.

- Business Management – Business management content developed by Kudumbashree-NRO
- Soft Skill – Content with regards to soft Skills.

2 Technical Requirements

- **Platform:** LMS should be cloud-based, platform-independent and should run on multiple devices such as desktop, laptops, tablets, and smartphones (including Android and iOS).
- **User Management:** Should support the creation of user accounts, and the assignment of roles such as admin, Trainer, and Trainees.
- **Course Management:** Ability to create, manage and organize courses, lessons, and assessments.
- **Content Management:** Supports various formats of digital content such as text, images, videos, audio, and interactive multimedia.
- **Language Support:** Platform should allow users to change the interface language. Must have support for multiple language subtitle over video, Support for multiple language assessments.
- **Reporting & Analytics:** Provides data and insights into the performance of the learners, courses, and the entire system.
- **Offline/Low Bandwidth Compatibility:** Must work in low bandwidth, with provision for Offline learning.
- **Integration:** Ability to integrate with third-party tools such as payment gateways, video conferencing, and single sign-on (SSO) systems.

3 Functional Requirements

- **User Experience:** User-friendly interface with intuitive navigation, customization options and accessibility features.
- **Course Delivery:** Supports online delivery of courses with features such as discussion forums, quizzes, assignments, and feedback.
- **Assessment:** Supports various types of assessments, grading and feedback mechanisms.

- **Compliance & Certification:** Should support compliance with industry standards and provide certification options for learners.
- **Collaboration:** Supports collaboration between instructors and students, such as group discussions and peer feedback.
- **Scalability:** Can handle a large number of users and courses, with the option to scale up as needed.

3.1 Assessment Module

The Assessment Module being an important component of the LMS. Should provide the following functionalities:

- **Creation and management of assessments:** Should allow instructors to create and manage assessments such as quizzes, tests, and exams.
- **Question Bank:** A repository of questions that can be reused and randomized in assessments.
- **Automated Grading:** Automatically grades assessments and provides learners with instant feedback.
- **Question Types:** Supports various question types such as multiple choice, true/false, short answer, and essay questions.
- **Randomization:** Option to randomize questions, answer options, and assessments.
- **Remote Monitoring:** Platform should have an inbuilt feature to monitor the screen and learner while giving assessment.
- **Reporting:** Generates reports on the performance of the learners, including their scores and progress in assessments.
- **Compliance:** Supports compliance with industry standards and regulations, such as accessibility requirements.

3.2 Auto-Generated Course Completion Certificate

One of the features that we are looking in an LMS is to allow learners to receive a certificate upon successfully completion of a course. The certificate should include the following details:

- **Certificate Number:** A unique identifier for the certificate, which can be used to verify its authenticity.
- **Learner Name:** The name of the learner who has completed the course.
- **Organisation:** Name of the organisation of the learner.
- **Course/Module Name:** The name of the course that has been completed.
- **Date of Completion:** The date on which the learner completed the course.
- **Certification Level:** Each course will have defined certification level, this information should also reflect in the certificate.
- **Grade:** Grade obtained for the learner should also reflect in the certificate.
- **Validity:** System should allow instructor to define validity of each course/module and same should reflect in the certificate.
- **Signature & Seal:** A digital signature and seal from the issuing authority, to validate the certificate.

3.3 Module Usage Analysis

The LMS should have the capability to analyze the amount of time each learner spends in each module of a course. So that this information can be used in understanding learner engagement and how effectively they are using the course content. This information can also be used to continuously improve the course and make it more engaging and effective for learners.

The following details should be captured:

- **User:** The name of the learner who is accessing the course.
- **Module:** The name of the module being accessed.
- **Start Time:** The time when the learner started accessing the module.
- **End Time:** The time when the learner stopped accessing the module.
- **Duration:** The total amount of time spent by the learner in the module.

3.4 Platform Usage Analytics

The LMS should have the capability to track and analyze the number of people visiting the platform. This information can be valuable in understanding the popularity and usage of the platform, as well as identifying areas for improvement.

The following details should be captured:

- **Total Visitors:** The total number of people who have visited the platform.
- **Unique Visitors:** The number of unique individuals who have visited the platform.
- **Page Views:** The number of pages viewed by visitors on the platform.
- **Bounce Rate:** The percentage of visitors who leave the platform after only visiting one page.
- **Average Session Duration:** The average amount of time visitors spend on the platform.
- **Devices:** The types of devices used by visitors to access the platform (e.g. desktop, mobile, tablet).
- **Location:** The geographical location of visitors.

3.5 User Profile and Guest User

The LMS should have the capability to manage user profiles, including both registered users and guest users.

A user profile should include the following details:

- **User Name:** A unique identifier for the user.
- **Personal Information:** Information such as name, email address, and contact details.
- **Profile Picture:** An optional profile picture for the user.
- **Role:** The role of the user within the platform, such as student, instructor, or administrator.
- **Courses Enrolled:** A list of courses the user is enrolled in.
- **Progress:** The progress of the user in each course.
- **Assessment Results:** The results of assessments taken by the user.
- **Certificates:** A list of certificates earned by the user.
- **Guest User:** Platform should allow users to login as guest and access the limited course content. Guest user should be able to view course content, but not participate in assessments or earn certificates. Platform should provide an option to the guest user to register as full user.

Kudumbashree-NRO intends to procure an interactive learning management platform. The procurement process will follow either Direct Procurement or Limited Tender, as approved by the Government of Kerala to directly purchase IT products from startups registered under the Kerala Startup Mission. Kudumbashree-NRO shall engage Kerala Startup Mission in the tendering and onboarding processes.