Project Edulead

**Requirement Document**

**Student Lifecycle Management**

**Sustainable Outreach and Universal Leadership Limited**

**July 2021, Version 1.0**

Logo, icon

Description automatically generated

**Sign off Date Signature Client Signature Consulting**

Table of Contents

[1. Introduction 4](#_Toc78797558)

[1.1 Project Detail 4](#_Toc78797559)

[1.2 Implementation Methodology 5](#_Toc78797560)

[1.3 Requirement Document 5](#_Toc78797561)

[1.4 SLcM Standard Processes 5](#_Toc78797562)

[2. Process Definition, Requirements and Highlights 6](#_Toc78797563)

[2.1 Organization Structure 6](#_Toc78797564)

[2.1.1 Standard Definition 6](#_Toc78797565)

[2.1.2 Business Process Flow Diagram 8](#_Toc78797566)

[2.1.3 Requirements and Highlights 8](#_Toc78797567)

[2.1.4 Variants 8](#_Toc78797568)

[2.2 Academic Structure 9](#_Toc78797569)

[2.2.1 Standard Definition 9](#_Toc78797570)

[2.2.2 Business Flow Diagram 9](#_Toc78797571)

[2.2.3 Requirements and Highlights 10](#_Toc78797572)

[2.2.4 Variants 11](#_Toc78797573)

[2.3 Master Data Creation 12](#_Toc78797574)

[2.3.1 Standard Definition 12](#_Toc78797575)

[2.3.2 Business Process Flow Diagram 13](#_Toc78797576)

[2.3.3 Requirements and Highlights 14](#_Toc78797577)

[2.3.4 Variants 14](#_Toc78797578)

[2.4 Admission Masters 15](#_Toc78797579)

[2.4.1 Standard Definition 15](#_Toc78797580)

[2.4.2 Business Process Flow Diagram 16](#_Toc78797581)

[2.4.3 Requirements and Highlights 17](#_Toc78797582)

[2.4.4 Variants 17](#_Toc78797583)

[2.5 Admission Process 18](#_Toc78797584)

[2.5.1 Standard Definition 18](#_Toc78797585)

[2.5.2 Business Process Flow Diagram 19](#_Toc78797586)

[2.5.3 Requirements and Highlights 19](#_Toc78797587)

[2.5.4 Variants 19](#_Toc78797588)

[2.6 Attendance 20](#_Toc78797589)

[2.6.1 Standard Definition 20](#_Toc78797590)

[2.6.2 Business Process Flow Diagram 20](#_Toc78797591)

[2.6.3 Requirements and Highlights 21](#_Toc78797592)

[2.6.4 Variants 21](#_Toc78797593)

[2.7 Tools 22](#_Toc78797594)

[2.7.1 Standard Definition 22](#_Toc78797595)

[2.7.2 Business Process Flow Diagram 22](#_Toc78797596)

[2.7.3 Requirements and Highlights 23](#_Toc78797597)

[2.7.4 Variants 23](#_Toc78797598)

[2.8 Branch Sliding and Student Exchange 24](#_Toc78797599)

[2.8.1 Standard Definition 24](#_Toc78797600)

[2.8.2 Business Process Flow Diagram 24](#_Toc78797601)

[2.8.3 Requirements and Highlights 25](#_Toc78797602)

[2.8.4 Variants 25](#_Toc78797603)

[2.9 Assessment 26](#_Toc78797604)

[2.9.1 Standard Definition 26](#_Toc78797605)

[2.9.2 Business Process Flow Diagram 26](#_Toc78797606)

[2.9.3 Requirements and Highlights 27](#_Toc78797607)

[2.9.4 Variants 27](#_Toc78797608)

[2.10 Examination 28](#_Toc78797609)

[2.10.1 Standard Definition 28](#_Toc78797610)

[2.10.2 Business Process Flow Diagram 28](#_Toc78797611)

[2.10.3 Requirements and Highlights 31](#_Toc78797612)

[2.10.4 Variants 32](#_Toc78797613)

# Introduction

## Project Detail

KITT University is one of the largest private universities in the eastern part of India with 20 lush green Wi-Fi campuses, 23 constituent schools offering 50 programs. Kalinga Institute of Social Sciences (KISS) dedicating it especially for the basic education of the tribal children starting with 125 poorest tribal children. KIIT provided a sustainable financing and technically enabling model for KISS because living on donations, which would come by sporadically, could not have provided a sustainable source of finance and other resources. Since then both the organizations are prospering impressively.

In order to reinforce our image as an emerging quality education provider and to create an advanced centre of professional learning, **SOUL EduLead** has come into being.

There exist multiple standalone legacy systems, manual processing happens in certain areas that lead to duplication of work and there is no centralized data.

The purpose of EduLead is:

1. To provide enterprise-wide solution using new technology.
2. Optimize end-to-end business processes to enable operational efficiencies and lower costs.
3. Improve student support systems, enhance their employability potential.
4. Provide research and publication opportunities for faculty.
5. Be ahead of the other universities in programs and curriculum.
6. Better technology support of business process.
7. Improved real time information enabled decision support.
8. Use of Standard ERP.
   1. Establish ERP Enabled Common Processes across businesses.
   2. Processes as delivered from ERP for Education Industry.
   3. Solution Manager Toolset
9. A stronger and more unified view of the Enterprise
10. Align IT strategy to dynamic business requirements
11. Strengthened Data integrity
12. Strengthened Business Continuity Capabilities.
13. Job roles-based deployment, end user training and documentation

## Implementation Methodology

Project EduLead is being implemented using the Frappe platform based on MariaDB methodology, the latest and proven methodology of ERP. ERP focus methodology ensures optimization of time and effort involved in implementation of ERP solutions. ERP incorporates a step-by-step approach and avoids non -value-added tasks. The major milestones or phases in this project implementation namely,

▪ Project Preparation

▪ Business Blueprint

▪ Realization

▪ Final Preparation

▪ Go-live and support

## Requirement Document

This document forms the business blueprint for the implementation of ERP SLcM Module. The blueprint document explains all the processes with below attributes

**1- General Explanation**

**2- Requirements/ Expectations**

**3- Objective of Implementation**

## SLcM Standard Processes

ERP Student Lifecycle Management system will be implemented and mapped with KIIT specific scenarios to cover the following processes: -

1. Master Data Creation
2. Admission Process
3. Attendance Tool
4. Course Scheduling Tool
5. Academic Calendar
6. Student group creation
7. Branch Sliding
8. Student Exchange Program
9. Examination

# 2. Process Definition, Requirements and Highlights

We will use below methodology to map the KISS requirement with our EduLead ERP solution

1. Overview of the process (SLcM Standard Definition)
2. Business Process Flow Diagram
3. Solution approach
4. Variants (if any schools have variant with harmonized process)

Abbreviations:

1. SLcM – Student Lifecycle Management

## 2.1 Organization Structure

### 2.1.1 Standard Definition

The Organization structure provides a broad overview on complete organization structure and its hierarchy. KISS University is the unit which provides education via different schools in the structure. Relationship and reporting structure can also be seen from the organization chart.

### 2.1.2 Business Process Flow Diagram

NA

### 2.1.3 Requirements and Highlights

NA

### 2.1.4 Variants

NA

## 2.2 Academic Structure

### 2.2.1 Standard Definition

Before going into details, first we need to understand the various objects used in SLcM and its definition relevant to academic structure.

To capture the academic structure details, we have circulated the Module template and Program of study template. Based on the details provided in data template, academic structure will be created in the ERP system.

### 2.2.2 Business Flow Diagram

NA

### 2.2.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| 1 | Academic  structure | Each school will be created as an org unit in the system  School will offer their respective programs under the org unit  Different types of programs available are:   * M.A * M.Com * MSc.   Below components have been identified to complete the academic structure of all schools   * Program of Study * Stage (Semester/Year) * Specialization * Mandatory Modules * Elective Modules * Assessment Information (Internal, External) * Classroom types   Academic calendar will be assigned to the respective schools  Complete curriculum can be viewed from academic structure |

|  |  |  |
| --- | --- | --- |
| **Campus** | **Program Name** | **Program Type** |
| School of Tribal Culture, Philosophy and Eco-spiritualism (STCP) | MA Political Science | PG |
| MA Philosophy | PG |
| MA History | PG |
| School of Tribal Legal Studies and Tribal Rights (STLS) | MA Sociology | PG |
| MA Anthropology | PG |
| MA Social Work | PG |

|  |  |  |
| --- | --- | --- |
| **Campus** | **Program Name** | **Program Type** |
| School of Tribal Heritage and Tribal Indology (STHTI) | MA Education | PG |
| MA Psychology | PG |
| MA Home Science | PG |
| School of Comparative Tribal Language and Literature (SCTLL) | MA Odia | PG |
| MA English | PG |
| MA Sanskrit | PG |
| MA Hindi | PG |
| School of Tribal Resource Management (STRM) | M.Com. | PG |
| MA Economics | PG |
| School of Indigenous Knowledge Science and Technology | M Sc. Physics | PG |
| M Sc. Chemistry | PG |
| M Sc. Mathematics | PG |
| M Sc. Computer Science | PG |
| School of Comparative Indic Studies Tribal Sciences (SCISTS) | M Sc. Botany | PG |
| M Sc. Zoology | PG |

### 2.2.4 Variants

NA

## 2.3 Master Data Creation

### 2.3.1 Standard Definition

Master Data Creation is an activity where various criteria for beginning the admission process are fetched and data acquisition is done accordingly. Below activities are performed during this process:

1- Modules required for master data are created

2- Data for various modules are collected and sorted accordingly

3- Verify module parameters

4- Admission is allotted to student according to its respective criteria

### 2.3.2 Business Process Flow Diagram

### 2.3.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| 1 | Department | * Each school will be created as an org unit in the system. * Academic calendar will be assigned to the respective schools * Complete curriculum can be viewed from academic structure |
| 2 | Program | * Each department/school will offer their respective programs under the department * Different types of programs available are: * M.A * M.Com * MSc |
| 3 | Semesters | * Under each program respective semesters have been identified to complete the process flow * Semesters have to be fetched individually or can be acquired through bulk import. |
| 4 | Courses | * For each semester various courses registered particularly in them have to be identified * Different types of programs available are: * Political Science * Philosophy * History * Sociology * Anthropology * Social Work * Education * Psychology * Home Science * Odia * English * Sanskrit * Hindi |

### 2.3.4 Variants

NA

## 2.4 Admission Masters

### 2.4.1 Standard Definition

Admission Masters in ERP involves the following processes:

1. Types of Documents
2. Document Templates
3. Academic Events
4. Academic Event Template
5. Academic Calendars
6. Eligibility Parameters
7. Absent Student Report
8. Student Batch-Wise Attendance

These master data are required to enable the smooth transition of admission process.

### 2.4.2 Business Process Flow Diagram

### 2.4.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Types of Documents | It lists the various identification documents required while admission processes. | Documents required for verification during admission process:   * Aadhar card * Pan card * Caste certificate * 10th certificate |
| Document Templates | This template clubs the various requirement docs specified for each student category referring the document list from the ‘type of documents’ | Documents for each student category are clubbed together |
| Academic Events | The different types of academic events that takes place in the institution are defined in this section. | Below are some academic:   * Mid semester * End semester * Sports meet * Annual events |
| Academic event/calendar Template | This template maps together the different fields to form the complete plan for any academic period.  For instance-the planning of any semester for program is done through calendar template | Various fields that are mapped together:   * academic year * academic term * program * semesters * academic events |
| Eligibility Parameters | The list of criteria that are considered while taking admission which may be the parameters according to any institution | Parameters considered during admission:   * 10th, +2 cut-off marks * JEE, CAT, NEET cut-off scores |
| Absent Student Report | This report presents with all the information about student attendance data | Individual attendance report for students |
| Student Batch-Wise Attendance | This report presents the student attendance according to their batches. | Attendance report for student who have opted for one particular subject or who are in the same semester for a program. |

### 2.4.4 Variants

NA

## 2.5 Admission Process

### 2.5.1 Standard Definition

Admission process is an activity where selected students are called for admission based on their merit list or test scores. After fetching master data for admission process below activities are performed during admission process-

1- Student applies for particular program enrolment (Student Applicant)

2- Send counselling letter based on the counselling schedule

3- Verify admission checklist (documents, payments etc)

4- Admission is allotted to student (Student Admission)

5- Student is enrolled into the respective program as well as the courses enlisted in the particular program. (Program enrolment- Course enrolment)

### 2.5.2 Business Process Flow Diagram

### 2.5.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| 1. Student Applicant | Update the ERP system after student applies | The counselling process is out of ERP system  The ERP system will get the student applicants after counselling is over |
| 1. Student document verification | Verify the documents | Rejected students will be captured in the ERP system with reasons |
| 1. Student admission |  |  |
| 1. Program enrolment |  |  |
| 1. Course enrolment |  |  |

### 2.5.4 Variants

NA

## 2.6 Attendance

### 2.6.1 Standard Definition

In the ERP, student absence management is used. All students who are absent in the class will be marked in the system by the respective faculty.

Based on the absence recorded different reports can be generated for deans, faculties, mentor and wardens.

The students can also view their attendance record on their respective profiles.

### 2.6.2 Business Process Flow Diagram

### 2.6.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Faculty | Login to the portal and select the date on which absence is to be marked. | * Faculty can see all the classes which he/she is teaching and then they can mark the attendance for a particular day. * Attendance for visiting faculty has to be updated by the coordinator. |
| Mark absence in the system | * Faculty will mark the absence for the students who are not present |
| System | Notify parents and students for absence in the class. | * Once absence is marked then system will notify the parents and students about their absence * If student has taken leave, then notification will not be sent |
| Leave application | Application for leave on ERP system | * Students can apply for leave application with valid reasons |
| Reports | Absence report (Monthly report) | * Faculty can view the report for students and their absence in each class on a monthly basis |
| Absence report (subject wise) | * Faculty can view the absence of the students’ batch wise also. |

### 2.6.4 Variants

* All activities for KISS will be done by the coordinator on behalf of faculties.
* Attendance for visiting faculties will be maintained by the coordinator in each school.

## 2.7 Tools

### 2.7.1 Standard Definition

The specified tools listed in EduLead are to be used for the following purposes:

1. Student attendance tool
2. Student group creation tool
3. Course scheduling tool
4. Course assessment result tool

### 2.7.2 Business Process Flow Diagram

### 2.7.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Student group creation tool | This tool is used to create student group. | Below are some group selection criteria:   * Activity * Batch * Course * Semester |
| Student attendance tool | Instructors/admin can mark attendance of students based on the groups created. | Attendance can be marked student wise as well as according to groups created. |
| Course scheduling tool | This tool is used to create multiple course schedules filtering by the courses taken | Various courses can be listed into different programs |
| Course assessment result tool | Create assessment result based on the groups created. | Faculty/Instructor can create assessment results reports |

### 2.7.4 Variants

NA

## 2.8 Branch Sliding and Student Exchange

### 2.8.1 Standard Definition

The branch sliding enables student applicant to apply for branch or program sliding. The student exchange program helps in applying for other exchanges programs available by the institution.

The processes involved are:

1. Branch sliding declaration (Notice)
2. Branch sliding application
3. Student exchange declaration
4. Student exchange program application

### 2.8.2 Business Process Flow Diagram

### 2.8.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Branch sliding declaration | This template creates the notice for a branch sliding process | Notice for branch sliding includes:   * Current openings in different programs * Branch sliding criteria * Eligibility score * Available seats |
| Branch sliding application | This is the application for the students who will apply through the branch sliding declaration providing with the necessary data that will be used to evaluate the mentioned criteria. | Application received through branch sliding declaration will be scrutinised for verification and further processing. |
| Student exchange declaration | This template is used for a notice creation that serves as a purpose for foreign exchange admission openings into any programs available for the university. | The functionality is similar to ‘new student admission template’.  Necessary criteria need to be accessed for exchange program. |
| Student exchange program application | This is the application for the students outside the institution who have applied for the exchange program. | Necessary data needs to be provided which will be used to evaluate the mentioned criteria and enrol the student.  This functionality is similar to ‘new student applicant template’. |

### 2.8.4 Variants

NA

## 2.9 Assessment

### 2.9.1 Standard Definition

In SLcM, assessment process is captured using various assessment criteria and scales. These are then created and attached with each module to hold assessment information.

Below steps are performed to create and schedule assessment plans for various process:

1. Assessment Group
2. Grading Scale
3. Assessment Criteria
4. Course Assessment Plan
5. Course Assessment Result
6. Assessment Criteria Group

### 2.9.2 Business Process Flow Diagram

### 2.9.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Assessment Group | This tool is used to create groups based on a program which can be assigned to any particular assessments like internal exams, quizzes etc. | Below are the assessment group examples:   * MSc Physics * MA Sociology * MSc Biology |
| Grading Scale | * It is used to create marking schema based on a particular threshold for each grade. * The threshold is the lower limit of that grade. |  |
| Assessment Criteria | This refers to the pre-defined criteria which is set for any course. i.e., theoretical or practical |  |
| Course Assessment Plan | This is the complete timetable which contains all the set of events that is to be defined while declaring an exam paper. | This course assessment plan includes:   * Assessment group details * Schedule * Examiner list * Moderator list * Assessment criteria |
| Course Assessment Result | This tool is used to give a score to student based out on the course assessment plan and declares a grade according to the grading scale defined. |  |

### 2.9.4 Variants

NA

## 2.10 Examination

### 2.10.1 Standard Definition

In Examination, the process is followed through a series of modules which are integrated with other business process to capture examination information.

The following process undergo in the examination module:

1. Exam Declaration
2. Exam Application
3. Exam Paper Setting
4. Student Block Criteria
5. Student Exam Block List
6. Admit Card
7. Post Exam Declaration
8. Photocopy Application
9. Revaluation Application

### 2.10.2 Business Process Flow Diagram

### 2.10.3 Requirements and Highlights

|  |  |  |
| --- | --- | --- |
| **Process Flow No** | **Description** | **Highlights** |
| Exam Declaration | The template is used to declare the exam for a particular program with various eligibility parameters | The faculty or education instructor declares the exam declaration process with the following requirements:   * Exam type * Academic year * Application start/end date * Exams start/end date * Block list display date * Admit card issue date * Exam program * Semester * Academic Term * Minimum Attendance criteria * Exam Fees (If applicable) |
| Exam Application | Template is used by student applicant for applying to a particular exam declaration | The student applies to a particular exam declaration after application start date.  The following parameters are required for exam application:   * Student Name * Exam Declaration |
| Exam Paper Setting | The template is used by examination dept. to set examination paper for particular courses | The template requires the following parameters:   * Examiner * Course * Assessment Plan * Academic Year * Academic Term * Schedule Date/Time * Exam paper attachment * Assessment criteria * Maximum score |
| Student Block Criteria | This template is used to register various criteria for rejecting defaulter students from appearing the examination | Various block criteria are used such as:   * Attendance * Fees due * Minimum marks secured |
| Admit Card | Admit card template allows student to download the admit card for examination on the admit card issue date | Various examination details are provided on the admit card such as:   * Examination date/timings * Courses enlisted for exams |
| Post Exam Declaration | This template is used to for post-examination process. | Faculty issues the post-exam declaration with the following parameters:   * Post exam declaration start/end date * Exam declaration for which it is being issued * Fees (if applicable) |
| Photocopy Application | * The student can apply for photocopy of answer sheet if needed through this template. * The faculty uploads the photocopy of the answer sheet after the student has submitted the application. | The photocopy application requires the following parameters:   * Student ID * Exam declaration * Post exam Declaration * Upload answer sheet photocopy |
| Revaluation Application | The student can apply for revaluation of a particular exam to reassess his/her marks and exam answer sheet. | The revaluation application requires the following parameters:   * Student ID * Exam declaration * Post exam declaration * Fees payable |

### 2.10.4 Variants

NA