Cloud Based Education Management Software Solutions (ERP)

## Centurion University of Technology and Management

1. About iCloud EMS:

☐ Automation of your institute using multi user web-based ERP solution independent manner
☐ 35+ modules to available meet academic, administrative, financial and communication need student enrolling and teaching option choices CloudEMS helps you address you Institute's Critical pain points:
☐ Accurately and timely address academic and financial information scarcity
☐ Appropriate reporting to the principal and management for efficient decision making
☐ Effective utilization of teachers by reducing administrative load

1.1. iCloudEMS Modules : An Overview

1.2. CloudEMS : N-Tier Architecture & Technology

☐ Front End : PHP & J2EE
☐ Database :MySql
☐ Webserver : Apache
☐ Operating System :Linux, Windows, Firefox, Chrome, Internet Explorer
☐ CloudEMS is a open source technology focused product – other options
☐ In addition to the above mentioned can be incorporated, compatible with SOA and various third party solutions
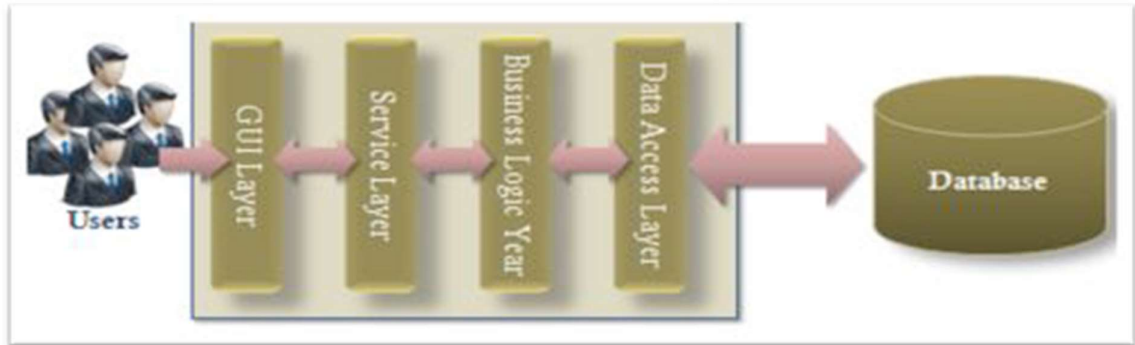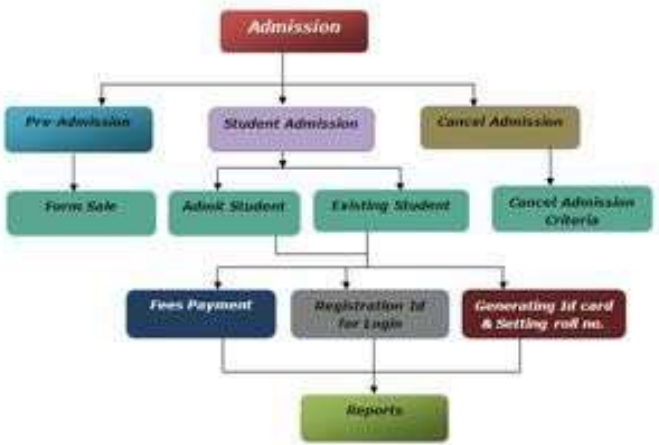
Benefits:

☐ Maintainability, Flexibility, Scalability, Reliability

☐ Performance, Transaction Concurrency, High volume transactions
☐ Handle Concurrent Users/Database Growth, Secured Transactions (Tokenization)
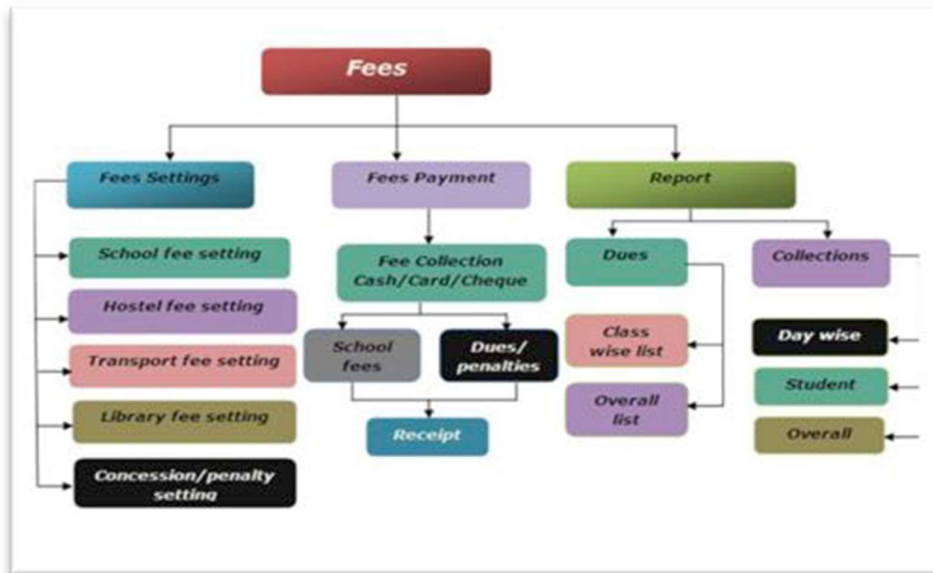☐ Open Source Technology, Better Load Management
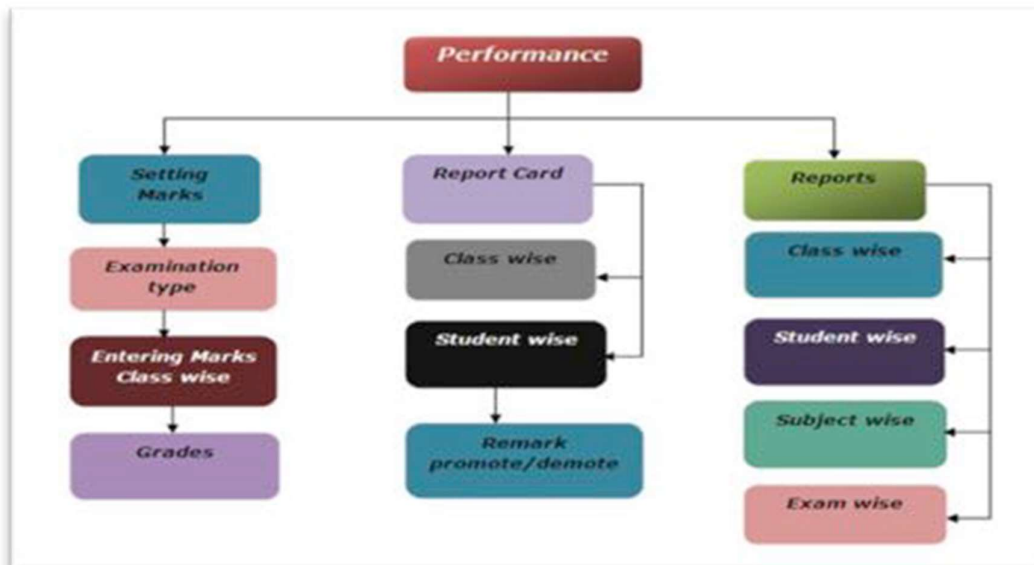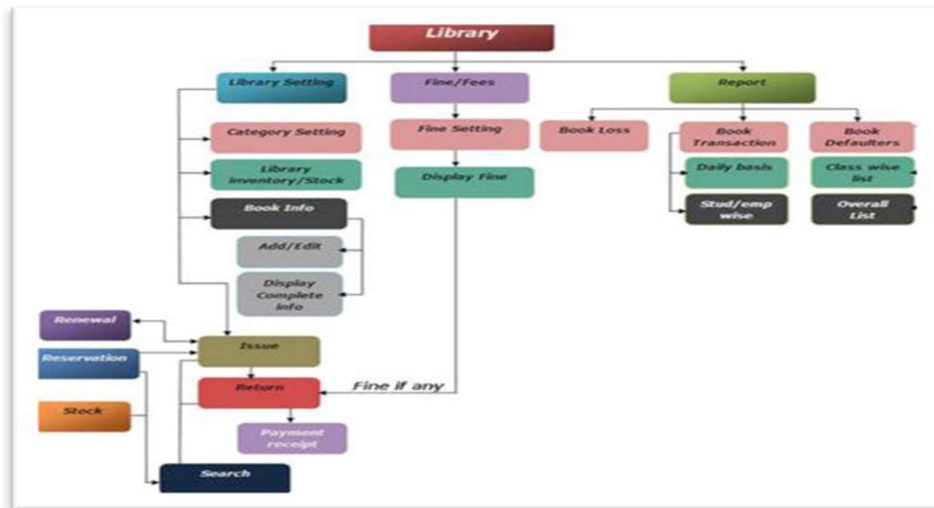
1.3. iCloudEMS : Modules & Workflow

☐ **Admission**
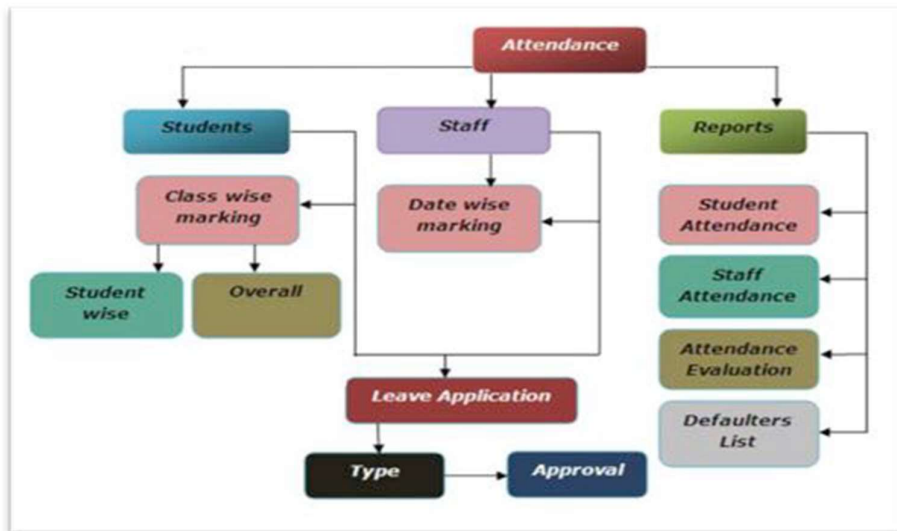
- **Fees**

- **Performance**
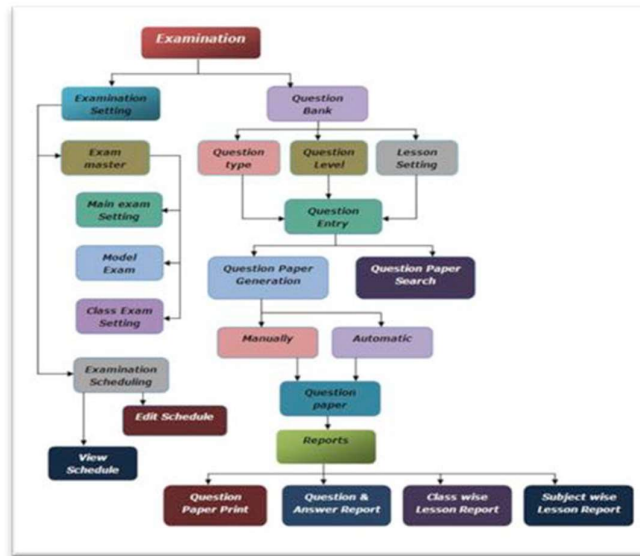
- **Library**

- **Attendance**

- **Examination**

1.4. CloudEMS : Modules & Workflow

2. Detail Scope

The scope of this proposal is to customize and implement Application Software to suit the requirement of the Institute. The scope also includes Reports, Utility and Administration Modules.

The detail scope of the proposal is as follows:

2.1. Student Management

- Add new student details (Unique ID to every newly admitted/existing student).
- Edit student details.
- Batch allotment.
- Batch shifting.
- Add student attendance.
- Personal Tutor allotment.
- Facility to scan and store compulsory documents.
- Photograph can be stored.
- Previous academic record.
- Address details such permanent, correspondence, guardian etc.
- Parent local guardian details.
- Academic fee receivable generation at the time of admission.
- Other fee charges can be made applicable.
- Online Registration/Admission
- Student Time Table.
- Result status can be defined such as Passed, Failed, Resit…etc.
- Award Transfer.
- All Student Scholarship report.
- Keeps track of student's attendance in class. Generates defaulter list as per predefined parameters.
- Accepts fees and generates fee receipts. Maintains individual fee-head ledger. Displays up- to- date fee status.
- Creates useful MIS reports like daily fees received, outstanding amount, defaulter list… etc.

2.2. Employee Management

- Unique ID to every employee with Unique Username and Password for Login facility provided in Software.
- All the transactions are recorded, against the ID only.
- Grade wise, designation wise allocation.

- Working types such as permanent, temporary and part time etc.
- Personal Information.
- Facility to scan and store Compulsory Documents.
- Office information covers department, Job profile, grade, etc.

- Photograph of the employee.
- Complete Qualifications details.
- Previous experience.
- Multiple address details such as permanent, correspondence.
- Family Details.
- Processes salary of employees based on configurable components. Employees can view salary slip.
- Generates the required financial and management Ad-Hoc reports as per predefined format.

2.3. Examinations and Boards

- Generating Students Mark sheets.
- Generating Students' Exam attendance Sheet
- Examination Time Table
- List of Students with Extenuating Circumstances (EC)
- List of Students with Suspected plagiarism (SPL)
- Generating module assessments sheets to be ready for assessment boards
- Generating Students Scripts for Awards boards
- Online results (Conditional to Fee clearance)
- Student Appeal
- Generating Certificates for graduated Students (Bachelor and Diploma)

2.4. Web Portal

- New system should has a Partial Replication component between local Database Server and Web Database Server
- Control panel to manage web portal
- Dynamic news interface
- Student Profile
- Student's modules (integrated with MOODLE)
- Student messages from the tutor
- Student financial status
- Student timetable

- Allowing student to register
- Allowing student to fill any form
- Allowing student to access library database
- Allowing tutor to manage his modules (attendance / marking)
- Integration component with mail server
- FTP access
- Extranet access for Student

2.5. Course Management System

- Create accounts for unlimited faculties
- Create accounts for unlimited modules for each faculty
- Assign more than one teacher for each module
- Assign more than one location for each module (lab/classroom/Hall …)
- Flexibility with marking system
- Ability to export any module configuration to MOODLE
- Ability to enroll bulk student

2.6. Finance Management

- General ledger
- Analytical ledger
- Account receivable
- Account payable
- Fixed asset A/C
- Debit note/ Credit note/ Journal entry
- Bank reconciliation
- Purchase invoices linked to Goods Receipt and Purchase Order
- Purchase orders
- Purchase prices
- Budgets
- Purchase suggestion
- Purchase statistics
- Order statistics
- Student Fees:Full sponsored / Partial sponsored / Self-Paid Students
- Staff salary.

2.7. Attendance

- Lecturer view/Edit for student attendance (daily, weekly, monthly).
- Average Attendance per subject report
- Average Attendance per class report
- Student Attendance chart per subject report
- Student Attendance per day report
- Attendance completion per Teacher report
- Attendance completion per class report
- Absence Summary report
- Issuing warning letters for students as per predefined criteria

2.8. Alumni Students

- Admission details
- Student details
- Facility to scan and store Compulsory Documents such as Address Proof, ID proof etc
- Photograph can be stored
- Previous academic record
- News & notices
- Alumni allocation/availability details
- Alumni current job
- Syllabus
- Alumni update information
- Report of all alumni information

2.9. Library Management

- Book Master Table:Book Unique ID / Book Author Name / Book category / Book sub category / Publisher / Supplier / More book details / Add new books / magazines / Journals / reference books / CD's / DVD's / e-books
- Fine Master:Fine creation according to member types like student, staff, visitor etc
- List of members:Students / Staff / Visitors
- Transaction Master: Issue books / Return books / Fine management / Book submission expiry & renewal reminder

- Reports:Library stock report / Student library report / Category library report / Issued books / Fine collected / Reserved books / Subject-wise / Author-wise / year- wise reports
- Download reports in excel format
- Quick search engine (By different entity details).
- Lost / Stolen book management
- RFID's / Smart Cards integration
- Barcode printing for books (Issue, Return)
- Maintain outstanding Purchase Order
- Receive Stock Against Purchase Orders
- Reports
- RFID Integration for Stock Take and Other
- Mobile App Integration for Renew Request
- Paytm & UPI Integration for Fine and other Amount.
- Periodicals Transactions
- Book Search
- 50+ Reports on Accession Register,Stock Take, Daily Transactions etc.

2.10. Hostel Management

- Dashboard
- Rules
- Maps
- Administrator & Staff Details
- Guests
- Time Table
- Committee Management
- Events Management
- Rooms & Bed Allocation
- Weekly & Daily Menu
- Hostel & Mess Accounts
- Asset Management
- Feedback
- Grievance Module
- Emergency Contact
- Health Records
- Notifications

2.11.　　Cafeteria Management

☐ Complete Mobile Based Cafeteria Ordering
☐ Mobile/Tablet Based Order Processing
☐ Cashless Transactions

2.12.　　Cashless Transaction Across Campus

☐ Cashless Transactions on Fees
☐ Payroll Processing
☐ Supplier Payments
☐ Hostel Transactions
☐ Cafeteria Transactions

2.13.　　eLearning & CMS

☐ Course Creation
☐ Content, Comunication and Collabration
☐ Virtual Classroom
☐ Feeds
☐ Outcome Statements Linking
☐ Assignments
☐ Mobile Apps Integration

2.14.　　Booking Site

☐ Deals
☐ Booking Halls, Events etc.
☐ Feedback
☐ Social Media Integration
☐ Search Facility
☐ Check In, Checkout Facility

3. Implementation Methodology

3.1. Approach

The implementation methodology ensures that the:

☐ The software is put to use quickly, thus allowing the institute to get the expected results faster.
☐ All the users of the system are properly trained in all the aspects of the system.
☐ There is a smooth transition from the old way of working to the new IT enabled working, and the users start using the system independently

Following tasks are involved in the implementation:

- Collection of master data: This involves making decision about various categories of the course, subject etc., and collecting other master information which would be used during the one time master entry that takes place immediately after installation.
- Responsibility matrix: This will define the access to be given to each person in the organization as per his hierarchy in the organization.
- Initial master data entry: This will be carried out by respective users under the guidance of implementation team.
- Data Migration: Some master data from older systems can be transferred to the new system provided it is consistent.
- Initial Transaction Entry: Once the masters are set up and the system is ready to use, student transactions will be started preferably from First semester / year of the courses and a new academic instance on the system with the help from implementation team. Hands on training will be carried out during this exercise.

3.2. BPA/GAP Analysis
Upon getting your order, this is the first step carried out by us.

☐ Our team consisting of senior analysts will study and understand various functions of your Institute, documents and reports.
☐ Software prototype for the relevant modules will be shown to the users.
☐ The (standard formats) reports / forms provided by the system will be matched against the user reports / forms. The standard formats will be shown to the user and his approval for using that format is obtained.
☐ Wherever users are keen on using their custom formats instead of standard system formats, the document / report will be added to customization requirements.

☐ Changes or additional requirements, which are not being met by the present software, will be handled by a separate customization project.

3.3. Installation

☐ The Institute will give an installation clearance after ensuring that the computers are ready in all respects for installation of the software.
☐ Upon receiving such clearance, installation team would install the application software on each of the machine designated by the client. The team will not install any system software, antivirus, MS Office or any other software that is not supplied by CNV.
☐ After completion of installation, the installation team will demonstrate that the software is being executed by clicking on the icon on the desktop, and an installation signoff will be obtained from the customer.

3.4. Training

☐ The training team can provide multiple training sessions at multiple locations.
☐ The Institute should organize computers and audiovisual equipment sufficient to train the number of users attending the training. The training dates would be mutually decided and conveyed to trainees and trainers.
☐ Upon receiving such communication, trainers would conduct the programs as per the schedule. During this program, the trainees would only be trained on Campus application software and not on Windows, MS Office or any other software.
☐ After completion of each training capsule, training sign off would be obtained.

3.5. Implementation

Implementation consultants would conduct a handholding session for each module and for each form, during which sample entries are made and its effect on the overall working are shown.

Implementation will involve consultancy at three levels. Principal consultants will provide business-modeling inputs while the senior consultants will handle the project planning and control. Implementation executives will be responsible for tasks related to installation, training and master data preparation. The estimates of services required and implementation charges will be applicable as per the rates mentioned in the commercial proposal.

3.6. Data Entry

Data entry operators would enter the manual data into the system, or would correct and modify the data received through the data migration activities.

3.7. Data Migration

Consultants for data migration would help the client define the migration strategy and would also write the required routines to transfer the data.

3.8. Customization

Any new software development, additional modules, modification of source code or database structure will be outside the scope of the project and can be carried out by CNV at an extra cost.

4. Infrastructure

We Host our Application on world Class data centers, which are centrally managed for a consistent environment across all our markets. Built to the highest global standards such as TIA 942 Standard at Tier III to deliver a secure, reliable, and resilient infrastructure.

For On Premises Installations, Application will be hosted on Hardware provided by Client.

5. **Service definition and escalation**

In order to provide the timely service to customer, service provider expect to attend the service calls as per definition mentioned below:

Incident Severity	Measurement Response Time (Business Hours)	Identification / Resolution Time (Business Hours)	Target (Green)	(Yellow)	(Red)
Priority 1	2	6	95%	93%	90%
Priority 2	4	10	95%	93%	90%
Priority 3	8	16	96%	90%	85%
Priority 4	24	72	96%	90%	85%

6. **Module List in Details as mentioned below: List of Modules in the Basic Package**

Sr	Module Names
1	Institute Management & Branch Management
2	Pre-Admission/ Enquiry Management
3	Campaign Management
4	Admission Management
5	Student Information Management
6	Fee & Financial Management
7	Program Management
8	Course Management

9	Time Table Management
10	Attendance Management & Monitoring
11	Examination & Mark sheet Management
12	College Calendar Management
13	Assignment & Home Works Management
14	Certificate & Document Module (LC, Bonafied, Experience Certificate and lots more)
15	Resource &Infrastructure Management
16	Course Completion Module
17	SMS, Email, Messaging Engine
18	Student Portal
19	System Admin
20	Dashboard
21	Faculty Portal
22	Reports
23	Integration with Tally
24	Leave Management
25	HR & Payroll
26	Staff Profile
27	Teachers Academic Diary
28	ISO Module
29	Online Examination
30	Training & Placement
31	Library Management
32	Inventory Management
33	Procurement Management
34	Course Outcome/ Program Outcome Reports for NBA & NAAC Accreditation
35	Mid Term/ End Term Analysis Reports

36	Hostel Management
37	Cafeteria Management
38	Cashless Transaction Across Campus
39	eLearning & CMS
40	Booking Site