GAUHATI UNIVERSITY
INSTITUTE OF DISTANCE AND OPEN LEARNING

Detailed requirement of the proposed Examination Result Preparation Software for Gauhati University Institute of Distance and Open Learning.

Technical Requirement

The system should be developed using proper client server architecture. The detailed technical details can be found below,

Server Platform: Linux (preferable RedHat, CentOS)

Back-end: Latest version Mysql Server

Front End: Standard framework with GUI/Web tools like PHP

System Requirement

The Examination system of GU, IDOL is separated in two broad sub-sections 1> Pre-Examination Processing and ii> Post-Examination Processing. The Pre-Examination contains the Admit Preparation, Home Assignment Marks entry and upload and the Post-Examination processing contains the various steps involve in the result and mark-sheet preparation . The detailed requirement for the above can be found below,

1. Pre-Examination Processing

1.1 Admit Generation: The System need to have the capability to generate Admit Card for various Examinations hold by Gauhati University, IDOL. The Admit Cards need to contain the minimum information available in the Current Admit card format of IDOL with the specific time of the examination.

- The student data for admit card preparation need to be taken freshly from IDOL Admission software.
- The System should have the required Graphical Interface for Add/Edit/Delete of Examination Center information
- The System should have the required Graphical Interface for Add/Edit of Examination date and time
- The System should have the required Graphical Interface for mapping Examination Center to a single/all Subject.

- The System should have the required Graphical Interface for Single/Bulk/in Range printing of Admit Card.
- The System should have the required Graphical Interface for Edit/Update/Duplicate printing of Admit Card, taking student roll no as search key.
- The System should have the functionality to generate Admit Generation Report Subject Wise/Center wise in excel format.
- The System should have proper Graphical Interface for the Preparation of Examination Attendance Sheet as per the format provided by IDOL.
- The System should have proper Graphical Interface for the Preparation of Examination Mark-foil Examination wise as per the format provided by IDOL.

1.2 Home Assignment (internal) marks processing

In Gauhati University, IDOL all the course except the IT and Diploma Courses contains 20% of the total marks as Home Assignment (internal mark), therefore to maintain the entire system we need the following facilities in our system,

- The system should have the required Graphical Interface for Uploading the student information to the system (it should be a bulk upload from an excel/csv file).
- The system should have the Required Graphical Interface to entry Semester/Year wise Home Assignment marks in single/bulk (from an excel/csv file)
- The system should have the Required Graphical Interface to Edit/Delete an entry.
- The System should have the facility to generate the required submission and non-submission reports. The System also needs to provide different filters like Course/Session/Study Center/Examination Center for extracting Home Assignment submission and non submission Report
- The System should have the Required Graphical Interface for extracting course wise data in excel or CSV format.

2. Post Examination Processing

The post examination processing system involves lots of sub-processes from examination mark entry to mark-sheet preparation, the required features of the proposed system can be found below:

2.1 Examination Mark Entry:

- The system should have the required Graphical Interface for Uploading the student information to the system (it should be a bulk upload from an excel/csv file). *The input file should contain all the Admit Generated record*. There should be an separate Admin Interface to add custom Roll No.
- The System need to have two different Tabulator interfaces which can be graphically assigned to different sets of user. *One Tabulator interface can be assigned to multiple uses but one user can not be assigned to multiple Tabulator Interfaces*.
- The System should have the facility scrolling the Roll no automatically and one additional interface should be there for a custom entry.
- For a single Tabulator the System should not accept multiple entries from the same user or from different user for a single paper/group/half and should give a proper error message.
- The System need to provide the cross verification facility.

2.2 Mismatch processing & Absentee statement generation:

- The System should have required Graphical Interface for the Examination wise Mismatch Processing from the Tabulator 1 and Tabulator 2 data and need to have the required facility to generate Mismatch Report in Excel format.
- The system need to provide a Graphical Interface Admin interface to update the mismatch entry.

- The System should have a proper archiving and viewing facility of the Mismatch Report.
- The System should have an Admin Graphical Interface for generating Absentee Report after the Mismatch Processing and these reports should be stored as Examination and Course wise.

2.3 Result Processing and Analysis

- The System should have a Graphical Interface for generating Examination wise Merit Register and Result Sheet in the existing format available in IDOL.
- The System should have a Graphical Interface for exporting the entire result in .sql (mysql) format for the result upload in the IDOL website.
- The System should have a Graphical Interface for the printing of Mark-sheet for individual/in lot/in range.
- The System should have a Graphical Interface for editing a record and reprinting of an individual mark-sheet.
- The System should have a Graphical Interface for printing Certificate using available format available in IDOL.
- The System should provide the facility for viewing/editing (for Admin only) the semester/year wise mark for a student including marks of Back/Repeat/Re-evaluation.
- The System should have a Graphical Interface for printing combine mark-sheet.

3. Security

- To make the System secured it should be developed using the following Security policies:
- The System should provide an Admin Interface for creating different user roles for different access cluster.
- The System should provide an Admin Interface for creating/editing/deleting different user accounts and assigning roles to them.

- The System should lock the user log for each set of operation done by a specific user and these log need to be viewable by the Admin user but it should not be delectable even by the Admin.
- For user access the system should maintain different encryption policy like md5.

4. Backup

The System should provide a Graphical Interface for taking full backup of the Database in sql format.

5. Documentation & Source Code:

The provider needs to provide the source code of the system with the detailed documentation of the system staring from database design, data dictionary, installation and codes of the system.

6. Warranty and Service Policy:

The provider needs to provide at least 5 years of warranty on the entire system including the data also. For the first year after deployment of the project the system provider should deploy at least 2 (two) programmers for monitoring the system from starting to the daily backup. These two programmer will monitor the system performance and report accordingly to the Examination in charge at IDOL and also to IDOL Software Cell.

From the second year onwards there should be a programme (deployed by the System Provider) at the IDOL premise for monitoring the system. During this period (5 years of warranty) IDOL authority will hold the right of changing any features of the system without any additional charge.

7. AMC (Annual Maintenance Contract):

The details AMC policy will be fixed by the GU Authority in deu course of time.