03

Ed-VANTAGE

PROJECT BRIEF

In this project, I undertaked the revising examination system of a school. The current system was time-consuming and prone to errors. My goal was to streamline the process and make it easier for teachers to administer exams and grade papers. The new system would allow teachers to create exams, prepared automatically, identify areas of improvement.

DESIGN STRATEGY

Understand the existing System | **Define the Issues** | **Understand Opportunities** | **Ideate for Optimum Solution** | **Design Prototype**

STAKE AUDIENCE

Delhi Public School, Lucknow WB

Total Boys: 1000 and Teaching Staff Total: 100 (approximately) Lucknow is a city in the Indian state of Uttar Pradesh. It is the capital of Uttar Pradesh and the seat of the Uttar Pradesh Legislative Assembly. Lucknow is known for its rich cultural heritage, including the Bara Imambara and the Chhota Imambara, which are popular tourist attractions. The city is also known for its cuisine, which is a blend of Mughlai and Awadhi flavors, with dishes like kebabs, biryani, and sweets like kulfi and jalebi.

STUDENTS | GUARDIANS | TEACHERS | PRINCIPAL

COURSES OF STUDIES

Pre-Primary School	Primary School	Middle School	High School	Sr. Sec. School
Classes: 0	Classes: 1 - 5	Classes: 6 - 8	Classes: 9 - 10	Classes: 11 & 12

EXAM STRUCTURE

First Term			Second Term			
Class Test	Unit Test	Assessment	Class Test	Unit Test	Assessment	Total
10 x 2	30	100	10 x 2	30	100	300

Methodologies

OBSERVATION

STAKE HOLDER MAP

PERSONA TEACHER

PERSONA ERP OPERATOR

PERSONA PRINCIPAL

AS IS JOURNEY MAP

BUSINESS BENEFITS

Increase in Productivity

Better use of infrastructure resources	Efficient use of Human Resources
Optimum use of Resources	Off schedule Activities to Student Resources

Cost Reduction

Utilizing extra human resources for some usage	Utilizing the extra Activities to Student Resources

Improved services

Performance analysis - Identifying Individuals	Improving performance - Remedial Resources

Concept Ideation

We will be providing Software As A Service (SAAS) on a common digital platform is created with the following modules:

Question Bank	Exam Scheduler	Syllabus	Question Paper
Creating a large pool of questions with different levels of difficulty, topics, and formats. This ensures that the exam questions are randomly selected and prevents students from cheating by memorizing the answers.	Create a exam schedule, set the exam dates and times, and assign rooms and invigilators.	Selection from already existing syllabus or create new syllabus.	Teacher selects questions from the question bank and creates a question paper. The system can then generate unique versions of the question paper with a few clicks to prevent cheating.
SMS Gateway	**Result**	**Performance Analytics**	**Attendance**
The SMS module will be integrated with the school's existing SMS gateway. The system will send SMS notifications to students and parents automatically.	Implement result sheet to generate and send the results to students and parents. The system can also calculate grades and GPA automatically.	Develop advanced Computer Vision algorithms to analyze student performance data, such as exam scores, attendance, and behavioral patterns. The system can then identify areas where students need more support.	Implement a system for tracking and managing student attendance. The system can use various methods, such as biometrics, RFID tags, or manual entry.

Access Control is based on the assignment of roles to different people:

ROLES	Question Bank	Exam Scheduler	Syllabus	Question Paper
Principal	CR	CR & Time	Approve, Edit & View	Approve, Edit & View
Vice Principal	CR	CR & Time	View & Edit	View & Edit
Head of Department	View & Edit	View & Edit	View & Edit	Approve & Edit
Subject Teacher	View & Edit	View Only	View Only	Select Questions

ROLES	SMS Gateway	Result	Performance Analytics	Attendance
Principal	CR	CR & View	View Only - All	CR & View
Vice Principal	CR	CR & View	View Only - All	View & Edit
Head of Department	View	View & Edit	View Only - Subject	View & Edit
Subject Teacher	View	View Only	View Only - Subject	View

TO BE JOURNEY MAP

SWOT ANALYSIS

REVENUE MODEL

SERVICE BLUEPRINT

FEATURES

Modular	Scale-able	Futuristic
Technology Led	Service Oriented	

IMPROVEMENTS IN UX

Eliminating repetitive nature of work	Minimizing manual work	Selection based Interface with Pre-filled information
Reduced Work Load	Faster and Accurate Processes	Conversion of data into easy to understand & useful information

Web Application

INFORMATION ARCHITECTURE

TASK FLOW

PROTOTYPE

FUTURE SCOPE

Backward Integration

- Data Integration with school management software modules for:
  - Admissions Management
  - Fee Collection Management
  - Staff Management
  - Inventory Management
- Enhancement in Administrative Processes
- Student Information Management & Analytics
- School Management Software Integration
- Simple Money Accounting & Record Keeping

Forward Integration

- Exam Conduction
  - Automated exam invigilation Plan
  - Automated Student Seating Plan
- AI Based Center Co-ordinating
  - Student Progress Tracking and Re-Scheduling
  - Capabilities for Remote Monitoring of Exams and Real-time Exam Preparations
- Teachers Performance Tracking for annual appraisal

Thank You for Scrolling...

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