

An Implementation of an Online Registration System in J&K State Board of Technical Education for Polytechnics

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ABSTRACT

Enrolling students into the Polytechnic Sector in J&K State is a very cumbersome, hectic but an important process. Students are required to qualify an entrance test which is conducted by J&K Board of Professional Entrance Examinations and successful candidates are granted admissions in the various polytechnics of the state and then the role of J&K State Board of Technical Education comes into picture with registration of the students before they can appear in any of the exams. The project work aimed at reducing the time for the process of registration besides making the system efficient by giving the data entry operations to the individual students.

Keywords: The Jammu and Kashmir State Board of Technical Education (JKSBOTE); Software Engineering; Web Development; Online Registration.

I. INTRODUCTION

For any school, college or other educational institutes like Polytechnic Colleges of J&K India, students are an important asset to produce skilled human resource out of these with great quality who excel in academics, practical knowledge, self-development and innovative thinking. To achieve this, it becomes essential for every college, school or any other educational institute to analyze the performance of students. Academic performance can be measured by conducting various examinations, assessments and other form of measurements and it is where the role of a centralized examination board comes into picture to properly analyze academic performance which may vary from student to student as each student has different level of performance. The academic performance of student is usually stored in various formats like files, documents, records etc. For maintaining a large set of data regarding the students, it is important to develop an automated mechanism for registration of these students for assessing the

performance of the candidate during his/her stay in the polytechnic as a student. The Proposed system eliminated all the errors and discrepancies that would otherwise result because of a centralized system of data entry while as the new system gives the student himself/herself the option to enter the data which pertains to him/her. The Institutes would then verify the records on the portal followed by a verification process in board and then accordingly all the verified students would be assigned a unique registration number.

Implementation

The Online Registration System has been developed on the basis of 3-tier architecture; where in the three tiers are the user interface, the web server and the database server.

User Interface

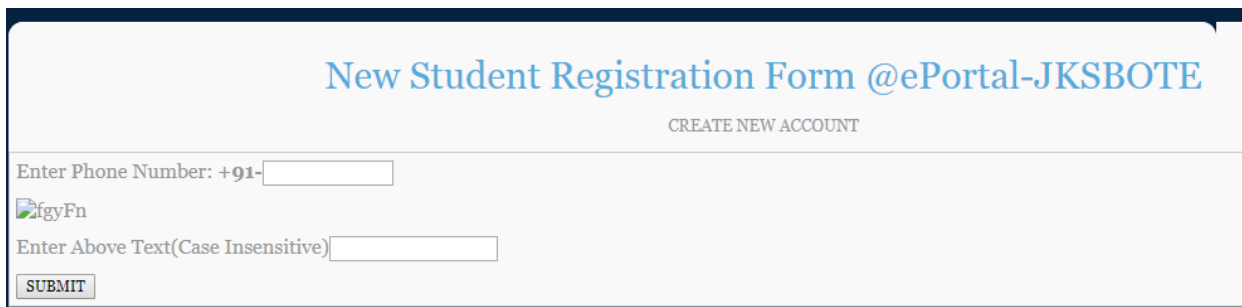
All the user interfaces have been developed in html and for styling and front end scripting, CSS and JavaScript have been extensively used, besides many

Ajax Queries have been used at many places for making the system dynamic.

Students are asked to visit the registration portal of JKSBOTE (<http://registration.jkbsotelive.com>) which is hosted on a cloud server. The first thing that the students have to do is to create an account linked to a

phone number. A message containing one time password is triggered to the phone number so provided to authenticate the credentials of the student. The various interfaces that have been provided are as:

1. New User Interface



The screenshot shows a web form titled "New Student Registration Form @ePortal-JKSBOTE". Below the title is a link that says "CREATE NEW ACCOUNT". The form contains two input fields: "Enter Phone Number: +91-" followed by a text box, and "Enter Above Text(Case Insensitive)" followed by another text box. At the bottom left of the form is a "SUBMIT" button.

Figure 1. New User Interface for student registration

2. Interface Before Photograph Updation



The screenshot shows the "NEW REGISTRATION Form@ePortal-JKSBOTE" with the user's "UserName/PhoneNumber: +91-9697053325" displayed. Below this is the "Upload Photo" section, which includes a "Choose File" button, a "Click To Upload" button, and a note: "Photograph Size should be between 100KB and 100KB".

Figure 2. Photograph Updation Screen

3. Interface after Photograph Updation



The screenshot shows the "NEW REGISTRATION Form@ePortal-JKSBOTE" with the user's "UserName/PhoneNumber: +91-9697053325" displayed. Below this is a photograph of a man with glasses. Below the photograph is a blue button that says "ENTER DETAILS".

Figure 3. Screen Showing Updated Photograph

4. Interface for Data Entry

The screenshot shows a web browser window with the URL registration.jksbte.wa.com/new-student.php. The form is titled "NEW REGISTRATION Form@ePortal-JKSBOTE" and is divided into several sections:

- GENERAL (OPEN MERIT)**: Selection Category (dropdown menu).
- ACADEMIC DETAILS**:
 - 17. Marks Obtained in 10th or Equivalent:
 - 18. Maximum Marks in 10th or Equivalent:
 - 19. Board from which passed 10th or Equivalent:
 - 20. Year of Passing of 10th or Equivalent:
- PERSONAL AND FAMILY DETAILS**:
 - 21. Secondary Phone Number: +91-
 - 22. Aadhar Number:
 - 23. Email-ID:
 - 24. Father's Qualification:
 - 25. Father's Occupation:
 - 26. Father's Phone Number: +91-
 - 27. Mother's Qualification:
 - 28. Mother's Occupation:
 - 29. Family Annual Income:
 - 30. Is Father the Guardian: YES NO
 - 31. Guardian Name:
 - 32. Guardian Relation:
 - 33. Guardian Occupation:
 - 34. Guardian Phone Number: +91-

A "SUBMIT" button is located at the bottom right of the form.

Figure 4. Interface for basic data entry

5. Interface after form submission

The screenshot shows the "NEW REGISTRATION Form@ePortal-JKSBOTE" interface after form submission. The page header reads "JAMMU AND KASHMIR STATE BOARD OF TECHNICAL EDUCATION *****". The main content area displays the following information:

- NEW REGISTRATION Form@ePortal-JKSBOTE
- UserName/PhoneNumber: +91-9697053325
- A profile picture of a young man with glasses.
- REGISTRATION FORM APPLICATION NUMBER: NR16038910
- PRINT REGISTRATION FORM
- PRINT BANK CHALLAN

At the bottom of the page, there is a footer with the text: "Copyright © 2018 JKSBOTE | ICAJ-DIT | Designed, Developed and Maintained by IT Cell JKSBOTE".

Figure 5. Interface for Printing Registration Form/Bank Challan

Database Server:

For Managing the data in the database in the database, the relational database management system has been used for the implementation and the database language used is MSSQL. The ER Model of the system that has been used for the implementation is as shown below.

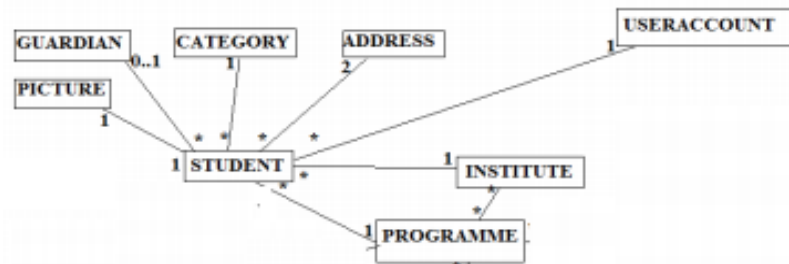


Figure 9. ER model of online registration system

II. CONCLUSION

Time is an asset, saving time is equivalent to gaining time. The time consumed in the manual system of registration in JKOTE has been drastically reduced in online registration system. Thus making the system more effective and efficient.

III. REFERENCES

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