

DIGITAL GATEWAY

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Abstract — An Engineering College is a combination of many complex problems. Without an automation portal, there will be a lot of manual work that takes a lot of effort, time and massive calculations. The proposed system would reduce all the manual work in outcome-based education.

Key Words — Automation, Diet Newsletters, Grievance, Training and Placement, Fee module, College Administrative System

I. INTRODUCTION

College Administrative System [1] is an essential component of outcome-based education. With the help of digital gateway, we can provide an interface for students to submit their newsletters/article to the respective department coordinator through our college portal (web portal [2] [3] [4]), we can collect different types of grievances such as anti ragging, women welfare, and general grievances from the students, we can provide an interface for the students and TNP cell members to communicate about the placement details through mails, and we can create pages to generate reports of fee automatically, scholarship id's entry etc. The major modules are:

- Diet Newsletters
- Grievance module
- TNP module
- Fee module

II. EXISTING SYSTEM

- Students or faculty are submitting the newsletters to the respective department DNL coordinators which is a time consuming and paper-based process.
- Students are complaining about different types of grievances like anti-ragging, women welfare, general grievances to the management in letter formats.
- TNP cell members are communicating with the students by meeting them in classrooms.
- The fee is being maintained in the College Automation Portal but the reports are done manually as there is no feature for the generation of reports.

III. PROPOSED SYSTEM

To overcome these problems, we have developed the Digital Payment Gateway (DPG) and grievance module, where all the work has been made easier.

DNL module allows students to send their newsletters/articles via mail. DNL coordinator will accept/reject/publish/suggest changes for the received newsletter/article.

The grievance module allows students to give complaints about different committees anonymously via mail. The committee coordinator will accept/reject the complaint based on the seriousness of the issue. A meeting will be set by the HOD/principal for the accepted complaints. Actions about the complaint will be taken and resolutions will be entered into the college database.

Students get registered in the TNP cell. TNP cell members will communicate about the information like placement registration links, higher studies, government jobs, training classes schedule via mail. TNP cell members will generate the student's lists who have matched the company's criteria automatically by giving the input like batch, branch, backlogs count, and percentage details.

The scholarship id's excel which contains the scholarship id's and roll numbers of student is directly uploaded and with a single click, all the id's will be uploaded directly into the college database and wherever it is needed to view the scholarship id's, admin can view them by giving input like academic year, branch, batch, year of study.

IV. DIET NEWSLETTERS

Diet newsletters play an essential part in co-curricular activities of the student. The orders of activities of this module are as follows:

- **Sending user newsletters to DNL coordinator:** All the students will send the newsletters to their respective department coordinator through college portal via mail.
- **Accepting the newsletter:** Based on the content and topic of the newsletter, the coordinator will either accept or reject or publish or suggest changes to the news letter. The action regarding the newsletter will be mailed to the student automatically.
- **Reports:** In this module all the reports like view all newsletters, view submitted newsletters, view latest newsletters will be generated.

V. GRIEVANCE MODULE

Grievances play a crucial part in the college. This system provides a way of communication between students and staff through college portal.

Students send their grievances to staff either with their details or anonymously through college portal. This communication is done through mails.

Based on the seriousness of the issue, the staff will accept those grievances in their respective logins.

For all the accepted grievances, a meeting will be scheduled by the principal/HOD to discuss about the action of grievance and resolution of grievances.

VI. TNP MODULE

Training and placement cell places a key role in the career of the student. So this module helps the students to know the details of all the activities that are held in TNP cell.

First student will register in TNP cell from their respective CAS logins. They can view and update the details whenever they want. The communication between TNP cell and student will be through the mail they given in the TNP registration process.

TNP cell members will generate the reports like CGPA wise report, backlogs report etc based on the company criteria the eligible students will receive the details of the company through mails.

VII. FEE MODULE

The fee module forms the most crucial part as it is related to the administration of the institute. The fee is maintained manually by the administration office which involves a lot of paperwork. Speaking of fee, there can be a lot of types of fee such as exam fee, tuition fee, other fees, hostel fee, transportation fee, etc., But here let's consider fee as two types:

- Examination fee
- College Fee.

VIII. RESULTS

DNL RESULTS

The screenshot shows the DHANEKULA NEWS portal. At the top, it says "DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY (Approved by AICTE, Affiliated to JNTU, Kakinada)". Below that is "DHANEKULA NEWS". The main content is a form for a student named "BHOHADULA LAKSHMI SOWJANYA". The form fields are: Roll No: 17RT1A0507, Name: BHOHADULA LAKSHMI SO, Branch: CSE, Year: 4, Academic Year: 2021-2022, Title of Article: mind tree, Article Description: Choose File | Mindtree Of... Details.pdf. There is a "SUBMIT" button at the bottom. A footer indicates "No. of visitors : 524".

This screenshot shows four sections of the grievance module: "PUBLISHED ARTICLES" (no articles published), "ACCEPTED ARTICLES" (no articles accepted), "ARTICLES TO BE CHANGED" (one article by Bhogadula Lakshmi Sowjanya), and "PENDING ARTICLES" (a list of 16 articles with columns for Roll Number, Name, Branch, Year, Academic Year, Title of Article, Description, Date Time, and Status).

This screenshot shows the "CSE DNL" form. It includes fields for Name (CSE DNL), Academic Year (2021-2022), Academic Branch (Computer Science & Engin...), Subject (mail about latest news), and Message (Go through it...). There is a "SUBMIT" button at the bottom. A footer indicates "No. of visitors : 535".

This screenshot shows a table of results for the CSE DNL. The table has columns for S.No, Roll No, Mail Id, Subject, Message, and Sent Time. It lists 12 entries, all with the subject "mail about latest news" and the message "Go through it...". A footer indicates "No. of visitors : 535".

GRIEVANCE RESULTS

This screenshot shows the "ONLINE GRIEVANCE CELL" interface. It includes a dropdown for "Computer Science & Engineering", a "Method of Grievance" section with "Anonymous" selected, and a "Choose your Grievance Cell Members" section with several names and roles listed. At the bottom, there is a "SUBMIT" button and a footer indicating "No. of visitors : 421639".

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ANTI RAGGING CELL RESOLUTIONS

Enter ID number of complainant:

ID NUMBER	BRANCH	TYPE OF GRIEVANCE	MEETING DATE	ACTION DATE	ACTION	RESOLUTIONS
2	EEE	Transfers	16-06-2021	18-06-2021	action taken	transfers are being issued

Export DATA to excel

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S.No	Roll No	Branch	Mail Id	Subject Manager	Sent Time
1	17RT1A007	CSE	jackyjaneybhogadula199@gmail.com	infocare TNP	Jun 21 22:51:13 IST 2021
2	17RT1A047	ECE	sonjyga.bhogadula191@gmail.com	new infocare TNP	Jun 21 22:51:13 IST 2021
3	17RT1A007	CSE	sonjyga.bhogadula191@gmail.com	new infocare TNP	Jun 21 22:51:13 IST 2021

Export DATA to excel

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SCHEDULE MEETING

MEETING COMMITTEE: Anti Ragging

DATE AND TIME: 20-06-2021 14:00

VENUE: conference hall

SCHEDULE

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Students registered in TNP

S.No	Branch	Name	Student Mobile	Student Mail Id	Registered in TNP
1	CSE	17RT1A002 BANAJI GOWRI PRITANKA	805982136	gowripri@banajigowri@gmail.com	NO
2	CSE	17RT1A006 BETHAPUDI VILASA LAKSHMI	827760499	vilasabethapudil@gmail.com	NO
3	CSE	17RT1A007 BHOGADULA LAKSHMI SOWJANYA	866890459	sonjyga.bhogadula192@gmail.com	YES
4	CSE	17RT1A006 BODDA NAGA SAI PRAVEEN	802944444	saipraveen700@gmail.com	NO
5	CSE	17RT1A002 ELLE RHEMANTH CHOWDARY	795857000	hemantur@gmail.com	NO
6	CSE	17RT1A007 GULPALLI PRADEEP KUMAR	965283922	pradeepkumarjgullipalli@gmail.com	NO
7	CSE	17RT1A002 HANTANA KESHTH POONNA	806819520	keshthpoo@hantana@gmail.com	NO
8	CSE	17RT1A002 HEMANTH KUMARA SHAMY	949457779	hemant.hemant17@gmail.com	NO
9	CSE	17RT1A007 KANAKAMALLA METHA	963006096	metha.kanakamall@gmail.com	NO
10	CSE	17RT1A006 MOTHARI GOPI HANSHI	737376256	hanishi92@gmail.com	NO
11	CSE	17RT1A005 SHIMABE SHIVA KUMAR	953344811	shivakumar864@gmail.com	NO
12	CSE	17RT1A006 SHIRANJANU DHANANJAY RAJU	995199794	hanjorprathameshshiranj@gmail.com	NO

Export DATA to excel

Total number of Students registered = 1

Total number Students not registered = 11

TNP RESULTS

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Fill the Following Details

Name of the Student : BHOGADULA LAKSHMI SOWJANYA

Roll Number : 17RT1A007

Category : OC

Branch : CSE

Batch : 2017

Student Mobile Number : 868890459

Alternate Mobile Number : 944088220

Student Mail : sonjyga.bhogadula192@gmail.com

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CGPA WISE REPORT

S.No	Branch	Name	CGPA	Student Mobile	Student Mail Id	Registered in TNP
1	CSE	17RT1A002 BANAJI GOWRI PRITANKA	4.97	805982136	gowripri@banajigowri@gmail.com	NO
2	CSE	17RT1A006 BETHAPUDI VILASA LAKSHMI	NA	827760499	vilasabethapudil@gmail.com	NO
3	CSE	17RT1A007 BHOGADULA LAKSHMI SOWJANYA	8.23	866890459	sonjyga.bhogadula192@gmail.com	YES
4	CSE	17RT1A006 BODDA NAGA SAI PRAVEEN	1.65	802944444	saipraveen700@gmail.com	NO
5	CSE	17RT1A002 ELLE RHEMANTH CHOWDARY	NA	795857000	hemantur@gmail.com	NO
6	CSE	17RT1A007 GULPALLI PRADEEP KUMAR	7.72	965283922	pradeepkumarjgullipalli@gmail.com	NO
7	CSE	17RT1A002 HANTANA KESHTH POONNA	2.18	806819520	keshthpoo@hantana@gmail.com	NO
8	CSE	17RT1A002 HEMANTH KUMARA SHAMY	1.11	949457779	hemant.hemant17@gmail.com	NO
9	CSE	17RT1A007 KANAKAMALLA METHA	NA	963006096	metha.kanakamall@gmail.com	NO
10	CSE	17RT1A006 MOTHARI GOPI HANSHI	4.14	737376256	hanishi92@gmail.com	NO
11	CSE	17RT1A005 SHIMABE SHIVA KUMAR	7.47	953344811	shivakumar864@gmail.com	NO
12	CSE	17RT1A006 SHIRANJANU DHANANJAY RAJU	4.80	995199794	hanjorprathameshshiranj@gmail.com	NO

Export DATA to excel

Total number of Students registered = 1

Total number Students not registered = 11

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TNP Registered Details

Name of the Student : BHOGADULA LAKSHMI SOWJANYA

Roll Number : 17RT1A007

Category : OC

Branch : CSE

Batch : 2017

Student Mobile Number : 868890459

Alternate Mobile Number : 944088220

Student Mail : sonjyga.bhogadula192@gmail.com

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SET FEE FOR THE COURSE batch OF ACADEMIC YEAR 2019-2020 OF BATCH 2017

FEE NAME	ENTER FEES
ADMISSION FEE	
ATTENDANCE FEE	
BOOKS FEE	
CONDONATION	
EXAM FEE	
EXAM FINE	
HOSTEL FEE	
LATE FEE	
LIBRARY FEE	
PC CHAM APPLICATION FEE	
PROJECT FEE	
REGION FEE	
REVALUATION FEE	
TRANSPORT FEE	
TUTION FEE	
TUTION FEE CON	
UNIVERSITY FEE	

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Fill Details to Send Information

Name : TRAINING & PLACEMENT C

Academic Year : 2021-2022

Academic Batch : 2017

Branch : ALL

Subject : new info

From TNP

Message

SEND

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SET DUE DATE

COURSE : CSE

Academic Year : 2019-2021

BATCH : 2017

YEAR : 4th year

SEAT TYPE : CONVERTER PAYMENT

DUED DATE : 30-06-2021

EXPORT DATA TO EXCEL

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SL NO	NAME	BOLL NO	SCHOOLS/SEIP ID	ACADEMIC YEAR	BRANCH	AADHAR NO	CATEGORY	TOTAL FEES	EXCEPTIONS	PAYABLE	ADMISSION TYPE	SEAT TYPE	
1	ALLADA BHANUPRAKASH	18ST1A0201	789154455	2019-2020	3	EEE	19625873784	BC-A	63800	30000	33800	LE	CONVENTOR
2	VALLURU RAJAKISHOR	18ST1A0202	888888888	2019-2020	3	EEE	42992052343	SC	63800	63800	7000	LE	CONVENTOR
3	BANDAVARI NAGA SANDHYA	18ST1A0203	9999999999999999	2019-2020	3	EEE	62301052309	BC-A	63800	30000	33800	LE	CONVENTOR
4	ROKA KIRAN	18ST1A0204	777777777	2019-2020	3	EEE	73968278057	BC-B	63800	30000	33800	LE	CONVENTOR
5	BUDHAWARU VENKATESH	18ST1A0205	9999999999999999	2019-2020	3	EEE	51827019434	BC-A	63800	30000	33800	LE	CONVENTOR
6	CHANDANA NIKHIL KUMAR	18ST1A0207	777777777	2019-2020	3	EEE	73391875141	BC-D	63800	30000	33800	LE	CONVENTOR
7	SABARI RAMESH	18ST1A0208	9999999999999999	2019-2020	3	EEE	34781522386	BC-D	63800	30000	33800	LE	CONVENTOR
8	SHRIPRUDH RAJENDRA KUMAR	18ST1A0209	777777777	2019-2020	3	EEE	26221321201	BC-A	63800	30000	33800	LE	CONVENTOR
9	EMPILA JOHN WELLY	18ST1A0211	464444444	2019-2020	3	EEE	80278454499	SC	63800	63800	7000	LE	CONVENTOR
10	KOKKERA RAMENI	18ST1A0212	888888888	2019-2020	3	EEE	80284992035	OC	63800	30000	33800	LE	CONVENTOR
11	MADHU VEERA NAGESHRA BABU	18ST1A0214	33333333333	2019-2020	3	EEE	45643051433	OC	63800	63800	7000	LE	CONVENTOR
12	MARUDU PRADIP REDDY	18ST1A0215	111111111	2019-2020	3	EEE	47548999484	OC	63800	30000	33800	LE	CONVENTOR
13	MATHANI CHANDRASEKHAR	18ST1A0216	888888888	2019-2020	3	EEE	89993524266	SC	63800	63800	7000	LE	CONVENTOR
14	MIDASALA VIJAY	18ST1A0217	888888888	2019-2020	3	EEE	57799211544	SC	63800	63800	7000	LE	CONVENTOR
15	MOHAMMED LATIF	18ST1A0218	99999999999	2019-2020	3	EEE	50099221271	BC-A	63800	30000	33800	LE	CONVENTOR
16	MAKHA PADMANAGA SRI	18ST1A0219	464444444	2019-2020	3	EEE	70682227030	SC	63800	63800	7000	LE	CONVENTOR
17	PATNALLA SANTOSH KUMAR	18ST1A0221	555555555	2019-2020	3	EEE	94682647709	BC-B	63800	30000	33800	LE	CONVENTOR
18	PITTI NIRESH	18ST1A0223	111111111	2019-2020	3	EEE	47474484640	BC-D	63800	30000	33800	LE	CONVENTOR
19	SHAK SRIJALODH	18ST1A0224	99999999999	2019-2020	3	EEE	45322324749	BC-E	63800	30000	33800	LE	CONVENTOR
20	SHIVANATH VEERABABU	18ST1A0225	464444444	2019-2020	3	EEE	42643052774	BC-B	63800	30000	33800	LE	CONVENTOR

Month	ACADEMIC YEAR	SEAT TYPE	FEE NAME	FEE AMOUNT	FEE AMOUNT PAYABLE	FEE REVERSED AMOUNT			
Month	2017-2018	2017	1	LE	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	2	LE	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	2	REG	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	3	LE	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	3	REG	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	4	LE	CONVENTOR	fee-con068000	0.0	self	0.0
Month	2017-2018	2017	4	REG	CONVENTOR	fee-con068000	0.0	self	0.0

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REGISTRATION | ROLL LISTS | ADMISSIONS | LIST OF STUDENTS | STUDENTS | TIME TABLES | FEES

Import the EXCEL sheets

COURSE: B.TECH
Academic Year: 2020-2021
Select the Formatted data Excel File: Choose File We file chosen
Upload the Data

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IX. CONCLUSION

This paper assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the manpower required and provides accurate information. Malpractice can be reduced. All years together gathered information can be saved and can be accessed at any time. Therefore, the data stored in the repository helps in taking decision by management. So, it is better to have a Web Based system. All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges and universities.

X. REFERENCES

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XI. AUTHORS DETAILS



R. Phani Kishore, completed Mtech from jntuk. Having good knowledge in artificial intelligence and deep learning for over 10 years.



Bhogadula Lakshmi Sowjanya, pursuing B.Tech final year at Dhanekula Institute of Engineering and Technology, member of research and development cell at Dhanekula Institute of Engineering and Technology, won 2nd prize in Tech Trix at Dhanekula college fest.



Eluri Hemanth, pursuing B.Tech final year at Dhanekula Institute of Engineering and Technology.



Kunaparaju Dhanunjay Raju, pursuing B.Tech final year at Dhanekula Institute of Engineering and Technology, member of IFERP.



Avirneni Mahesh, pursuing B.Tech final year at Dhanekula Institute of Engineering and Technology.