

e-Utilities 1.0 @NIT Raipur

e-Utilities 1.0 is a part of e-Abhiyaan where students can directly contribute. The major objectives of eUtilities are to develop the web based utilities for NIT Raipur, which can be used by students and staffs of NIT Raipur and to create a digital environment (paperless environment) of working at NIT Raipur.

The proposed e-Utilities will be developed by students of NIT Raipur for NIT Raipur, so it's a NIT community platform where students can presents their technical skills to make the functioning of NIT Raipur more digital and more efficient.

In the first phase of e-Utilities following five utilities are identified:

1. Leave Management System (LMS)
2. Meeting Management System (MMS)
3. Booking Module – 1. Vehicle 2. Venue (E-classroom/D2) 3. Guest House
4. Cumulative Professional Development Allowance (CPDA)

Student can understand details of the above utilities by contacting mentor as given in table 1 below.

In order to implement the above four basic web based utilities proposals are invited from the students of NIT Raipur with a team size of maximum 04 (Four) students.

Important Dates:

Proposal invitation deadline	22-01-2018
One day evaluation for PPT presentation for 10 mins	05-Feb-2018
Completion date and submission	30-Mar-2018
Selection of best utilities	1 st week of April 2018
Testing, Deployment and Hosting	2 nd week of April 2018

A proposal and work initiating presentation is scheduled on 05-Feb-2018 where each group has to submit the overview of technologies and understanding of module they have selected to implement. Some of the groups can be eliminated after this presentation, if there understanding and approach is not up to the standards.

In case of multiple proposal submissions for a single activity, a PPT (Power Point Presentation) will be carried to shortlist suitable team for the utilities (After the completion). Each group of the students will be assigned mentor faculty members (as per Table-I) for smooth conduction of the implementation.

Faculty-Mentors

The coordination committee for e-Utilities 1.0 is

Overall Coordinator – Dr. Shrish Verma
Project Coordinator – Dr. N. K. Nagwani
Technical Coordinator – Mr. Ravindra Chauhan

Each utility will be mentors by a team of faculty members as given below:

Table I: Mentors for the Modules

S.No.	Module	Mentor Faculty	Designation
1	Leave Management System (LMS)	Dr. M. Atulkar	Asso. Prof., MCA
		Dr. Mitul Ahirwal	Asst Prof., MCA
		Shri Liju Mathew	Assistant Registrar
2	Meeting Management System (MMS)	Mr. Rakesh Tripathi	Asst Prof., IT
		Dr. (Mrs.) Kesri Verma	Asst Prof., MCA
		Shri Ravikant Verma	Assistant Registrar
3	Booking Module	Dr. N. Vishwakarma	Asst Prof., App. Geology
		Mr. T. P. Sahu	Asst Prof., IT
		Shri Sudarshan Bhadra	Assistant Registrar
4	Cumulative Professional Development Allowance (CPDA)	Prof. A. P. Rajimwale	Dean (FW)
		Dr. Sarsij Tripathi	Asst Prof., CSE
		Shri Mani Shanker Singh	DR (F&A)

Brief overview of Utilities

All the utilities will be having two major modules – Administrator and User module. An administrator can modify some the functions including the major settings for example in Booking module system another facility can be added at a later stage.

All the utilities will be designed using Role Based Access (RBAC) model.

1. Leave Management System (LMS)

LMS will be utilized for faculty members and staff of the institute in the first phase. Existing leave types are CL (Casual Leave – 08 numbers of days in a year), RH (Restricted Holiday – 02 days in a year from the list of RH of the year), EL (Earned Leaves – Depending upon the leave balances of the employee), ML (Medical Leaves - Depending upon the leave balances of the employee) and SCL (Special Casual Leave – 15 numbers of days in a year for attending conferences etc). For yearly leaves the duration from 1st Jan to 31st of Dec is counted.

It's a role based system where a faculty/staff can apply for a particular leave which has to be first approved by the Head of the department followed by the Director NIT Raipur except the CL.

A good report generation module is also required to get reports like CL's/SCL's/ML/EL taken in a year etc.

2. Meeting Management System (MMS)

Using the MMS utility the users can do the following major activities:

- ✓ Meeting Generation and Invitation to stack holders
- ✓ Agenda Circulation
- ✓ Adding Minutes of Meetings
- ✓ Report generation module for generating meeting histories and minutes.

3. Booking Module – 1. Vehicle 2. Venue (E-classroom/D2) 3. Guest House

There are few common facilities available in the institute presently like Vehicles for official transportations, seminar halls like E-classroom and Virtual classroom (D2) and for guest's accommodation Guest house facilities with limited rooms etc. A facility booking module is required where booking of such facilities can be made online and in a standard calendar format availability of such facilities can be visible clearly.

Presently, following forms are available at the institute website to book these facilities for which complete paperless web based automation is required.

Guest house booking form (according to guest type) is available at –

<http://www.nitr.ac.in/downloads/guest%20house/guestrequisition.pdf>

Vehicle booking form is available at -

<http://nitr.ac.in/downloads/forms/admin/Requisition%20for%20Vehicle.jpg>

Using Admin module another facility can be added in future. Report generation module is also required for printing the usage reports of the available facilities.

4. Cumulative Professional Development Allowance (CPDA)

CPDA is the professional development allowance given to the faculty members of the institute to attend conferences, buy books, take professional memberships etc. Present two standard formats are available in the institute web site for CPDA request. In each head of the CPDA there is some financial limit in a year (which is indicated in the forms).

CPDA Format for Reimbursement	http://nitr.ac.in/downloads/cpda-formats/Application%20for%20approval%20reimbursement%20under%20CPDA.doc
CPDA Format for Attending Conference etc.	http://nitr.ac.in/downloads/cpda-formats/Application%20form%20for%20CPDA%20for%20attending%20event_conference.pdf

Users can fill the forms online and keep track of their CPDA applications status. Using Admin module financial limits and components of the CPDA can be modified at the later stages if required. Using report generation module various reports can be generated like – How many employees in a particular year attended the conference through CPDA.

Best team for each utility will be awarded cash prize (as per the Table-II) and certificate. Runner up team will be awarded certificate.

Table II: Cash Prize for the Modules

S.No.	Module	Cash Prize (in INR)
1	Leave Management System (LMS)	10,000/-
2	Meeting Management System (MMS)	5,000/-
3	Booking Module	5,000/-
4	Cumulative Professional Development Allowance (CPDA)	10,000/-

If utility is implemented, names of developers will be mentioned at suitable place in the module.

Send the proposals along with a brief power point presentation and clearly specify the group name and email address of contact person of the group (as all of the correspondence will be made with email only at the email address eUtilities@nitrr.ac.in) latest by 22nd January 2018. Hard copies should also be submitted at the faculty room (Room No. F-43 B) of Prof. N. K. Nagwani, Department of CSE by the same deadline i.e. 22nd January 2018.


Director
NIT Raipur

e-Utilities 1.0 (Participation Form)

Group Name:_____ **Contact Person Email:**_____

Select the Utility (One Only)

- ☐ Leave Management System (LMS)
- ☐ Meeting Management System (MMS)
- ☐ Booking Module – 1. Vehicle 2. Venue (E-classroom/D2) 3. Guest House
- ☐ Cumulative Professional Development Allowance (CPDA)

Proposed Technology:

Proposed Team (Max 4)

No.	Name	Roll No.	Branch	Sem
1				
2				
3				
4				

Tentative Plan in Brief (*)

We hereby declare that we will not compromise with my regular academics routines including our classes while participating in the e-Utilities development activities.

Member-I
Signature

Member-II
Signature

Member-III
Signature

Member-IV
Signature

Forwarded By
Head of the Department

- Last date for submission of form is **22nd January 2018**.
- Soft copy of the form can be sent to eUtilities@nitrr.ac.in.
- Hard copy of the form should also be submitted at the faculty room (Room No. F-43B) of Prof. N.K. Nagwani, Department of Computer Science and Engineering by the same deadline i.e. **22nd January 2018**.