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Project Name:Faculty Time Table Generate if teachers were absent using rule Based Approach

# ...Methodology of Project...

**Approach First**:Understanding About Rule Based System.

Rule based System is a system which is based on If and Then conditions and give desired Output on the behalf of rule we use for a problem.

# IF(Rule antecedant) ------>Then(Output/Rule Consequence) eg.Lets take a simple example to understand the rule based system

|  |  |
| --- | --- |
| Age | Vote |
| 18 | Yes |
| 10 | No |

According to that table we make a simple human behavoir rule: if(Age>=18){

Eligible to Vote//Yes

}

else or then{

Not Eligible to Vote//No

}

# Approach Second:Understanding about Forward and Backward Chaining

**Forward Chaining:Chain or Path to solve a problem by moving ‘Forward toward the Goal’ based on rule of Problem**

**In this Chaining ‘If Rules ‘ are used.**

**Backward Chaining:Chain or Path to solve a problem by moving backward from goal to start of problem.**

**In this Chaining ‘then Rules’ are used.**

**Approach Third:Designing Algorithm of Faculty Time table Step 1st:**Understanding the Desired Inputs.

Taking details of teachers with respect of their subject and working day.

**Step 2nd:**Store the details in data Structure called Lists

**Step 3rd:**Select unique hour for every period Randomly on the behalf of working capacity of teacher by random module,Because it helps to make different result everytime.

**Step 4th:**The result will display in form of table by the help of

# pretty table Module.

**Step 5th:**Now,Second thing we need to take input of absent teachers.

**Step 6th:**

Let assume Teacher 1 is absent and Teacher 2 and Teacher 3 are present at that time.

|  |  |
| --- | --- |
| **Monday** | |
| Teacher | 1 |
| Teacher | 1 |
| Teacher | 1 |
| Teacher | 2 |
| Teacher | 3 |

# Step 7:

**Now,Teacher3andTeacher2 arepresentonMondayand EitherfromTeacher2and Teacher3willtakethe makeupclassofTeacher1**

|  |
| --- |
| **Monday** |
| Teacher 3 |
| Teacher 3 |
| Teacher 3 |
| Teacher 2 |

# Step 8:

**Do this for all the cases Tuesday,Wednesday,Thursday,Friday,Saturday**

**Step 9:If no other teacher will present when any teacher is absent than there is a holiday will given to students.**