

**School Of Computer Science  
University Of Petroleum and Energy Studies  
P.O. Bidholi, Via-Prem Nagar DEHRADUN-248007**

<b>Project Title</b>	Student Segmentation using Clustering Algorithms										<b>Mentor Name</b>	Dr. Sujoy Chatterjee																																																																																											
<b>Abstract</b>	As the colleges have been planning to open again after one harsh year we are planning to create a project that helps colleges to get an idea about how many students are fully vaccinated and will be joining the college after this pandemic. We will be creating some random data on which we will be implementing clustering algorithms that will help us get predictions about the current mental state of the students in terms of academic knowledge and how much they were able to learn and understand during this pandemic on the basis of which colleges will be able to predict which student needs how much help and how many extra classes will be required for that student and will be able to group them on the basis of that , thus help them get back on track .																																																																																																						
<b>Objective</b>	1. Clear understanding of Clustering algorithms 2. To create a way for colleges to obtain a better idea about how much help does a student requires after returning to college to improve their academic status . 3. To create clusters of students on the basis of their current academic knowledge .																																																																																																						
<b>Methodology</b>	Predictive analytics is the use of data, statistical algorithms, and machine learning techniques to identify the likelihood of future outcomes based on historical data. It involves certain manipulations on data from existing data sets with the goal of identifying some new trends and patterns. These trends and patterns are then used to predict future outcomes and trends.																																																																																																						
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**Guideline: 1)** A project group can be of maximum 4 members and no alteration in the group member will be entertained later.

**Guideline: 2)** Methodology should have following steps Step1: Literature Review; Step2: Identification Of Requirement (Type Of Data source, Amount Of Data, & Format of Data); Step3: Identification of Algorithm; Step4 : Comparative study; Step5: Design and Development of System/Architecture; Step 6: Implementation; Step7: Results

**Guideline:3)** Student should upload softcopies of all the documents (reports and power point presentations) in "Project Directory", 24 hrs prior to evaluation.

**Guideline:4)** Panel member will give feedback to individual on the scale of 1 to 5 and this scale will change for defaulter i.e. 1 to 3 scale.

1: Poor      2: Average      3: Good      4: Excellent      5: Outstanding