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UNIVERSITY WITH A PURPOSE

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

Bachelors of Technolgy in Computer Science & Engineering

Issue Date:__________

Minor ✓ | Major ☐

Project Title	Player Selection(IPL Team) using Clustering algorithm	Mentor Name	Project Number Mr. Deepak Kumar Sharma

S.No	Rollnumber	Branh	Name	Role	Signature
1.	R172218064	CSE-BIGDATA	Lakshay Vasuja	Programmer/Developer	Lakshay Vasuja
2.	R172218063	CSE-BIGDATA	Lakshay Sharma	Programmer/Developer	Lakshay Sharma
3.	R172218045	CSE-BIGDATA	Divyansh Chandna	Programmer/Developer	Divyansh Chandna

Project Mentor | **Head Of Department**

Date	Title Approval	Synopsis	Mid-Term	End-Term	Progress Report	Total Marks	Project Status	
							Authenticity	Yes/ No
R.No	Timly Submission	Marks	MARKS	MARKS	MARKS	MARKS	Satisfactory	Yes/ No
							Activity Coordinator	

Synopsis Evaluation

Rollnumber		30 Marks: Reviewer1	Reviewer2	Reviewer3	Reviewer4	Reviewer5		30 Marks: Body Language	Dress Code	Communication Skill	Presentation Skill	Analytical Skill	Team Spirit		40 Marks: PPT	Report
	V I V A						F E E D B A C K	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	D o c u m e n t s		
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

Mid- Term Evaluation

Rollnumber		30 Marks: Reviewer1	Reviewer2	Reviewer3	Reviewer4	Reviewer5		30 Marks: Body Language	Dress Code	Communication Skill	Presentation Skill	Analytical Skill	Team Spirit		40 Marks: PPT	Report
	V I V A						F E E D B A C K	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	D o c u m e n t s		
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

End-Term Evaluation

Rollnumber		30 Marks: Reviewer1	Reviewer2	Reviewer3	Reviewer4	Reviewer5		30 Marks: Body Language	Dress Code	Communication Skill	Presentation Skill	Analytical Skill	Team Spirit		40 Marks: PPT	Report
	V I V A						F E E D B A C K	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	D o c u m e n t s		
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			
								1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5	1 | 2 | 3 | 4 | 5			

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

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Bachelors of Technolgy in Computer Science Engineering **Minor** ☐ **Major** ☐

Project Title	Player Selection(IPL Team) using Clustering algorithm	**Mentor Name**	Mr. Deepak Kumar Sharma

Abstract

This project is mainly designed to analyze and extract some important information from IPL dataset. We will calculate the probability between toss winning and match winning. K-means algorithm will be used to create a cluster of players(batsman and bowlers) depending on various factors like bowling speed, maximum wicket takers ,average score, run rate, away or home games etc. Keeping in mind the result of clusters, the budget of the team and preference of players we can select a really good team at the time of team selection or players auction and hence the results can be improved. The purpose behind analysing all this data is to improve the game, and take it to the next level.

Objective

•To use K-means clustering algorithm to create clusters of players(batsman,bowlers) based on various properties and similarities. If you keep budget and priority of players as a factor then as a result we can select a really good team at the time of team selection or players auction

•To calculate the probability between toss winning and match winning.

Methodology

Predicting the events that may happen in IPL follows the past data. so we will first read the data from CSV file then preprocess it with the desired formats according to the needs. Effective use of File Handling and Array of Structures as the storage options and we will extract the data. Cleaning the data and making it ready for the analysis will be our first priority. Then

Diving deep into the clustering concepts , we use **K-MEANS** Algorithm to create clusters of the players considering both the bowler or batsman and the whole scenario will be based on characteristics such as bowling speed , runs scored and the maximum wickets taken.

Analysing the clusters made we will focus on predicting how the factors will improve the game for players. Prime focus of selecting the cream players from the group's/cluster's will give us our dream team.

Progress 1

Mentor Remark

	Marks	10	10	10	10	10	10	10	10	10	10
	Rollno/Marks(10)	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Synopsis	Mid-term	End-Term
	Date/Mentor Signature										

Progress 2

Mentor Remark

	Marks	10	10	10	10	10	10	10	10	10	10
	Rollno	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Synopsis	Mid-term	End-Term
	Date/Mentor Signature										

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