CRICKET RESULT PREDICTION USING MACHINE LEARNING

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project/internship titled **"Cricket Result Prediction Using Machine Learning"**, submitted by **Bivas Saha,** ID No: **191-15-12427, Sakibur Rahman** ID No: **191-15-12717** to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on *02/02/2023*.

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DECLARATION

We hereby declare that this project has been done by us under the supervision of **Tanzina Afroz Rimi,** Lecturer and Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

Most people on earth watch cricket, one of the most widely-watched sports in the world. Two teams of eleven players each compete in the game. Predicting a game's outcome has become a fundamental concern with the introduction of statistical modeling in sports. One of the most widely played team sports worldwide is cricket. Test matches, One Day Internationals, and Twenty20 Internationals are the three forms used to play cricket. The most often played version of the game, T20, is the focus of our study. In this post, we'll make an effort to forecast the outcomes of cricket games in the Indian Premier League (IPL). 8 to 10 teams can participate in an IPL season, with each team playing the other teams at least twice. Host matches at different locations. The outcome of the match is primarily determined by the outcome of the coin toss. The team winning the coin toss can elect to field or bat. The batting team will try to establish the target by scoring as many runs as possible in their allotted 20 overs.

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

As cricket evolved, it became a popular subject for sports experts. Many studies have been done on crickets, but they have not been able due to complex and conflicting data collection to make a breakthrough in accurately predicting match score [1]. Many techniques, such as Linear Regression, have been used to predict match scores, but none have been successful. It used various statistical approaches to create the dataset and experimented with different classification methods to predict the outcome of T20 cricket matches' score result. With 0.62% accuracy, we have predicted the score result. Predicted Twentieth International match results using statistics from the ICC match rating system, ICC ranking points for bowlers and batsmen, home factor, ICC rating differences and match ground effects. And cricket score prediction is a field in which the first innings score of a cricket match is predicted using certain techniques. And various systems and prediction methods are used to judge the outcomes of cricket games with 20 overs. Cricket is a game that is popular. Cricket has seen a remarkable increase in popularity and coverage over the past 20 years. The whole market needs to be ready for prospective increase in the future.According to study by both the County Cricket Council, there are around one billion fans of cricket worldwide, and that number has room to increase dramatically. The most watched cricket events worldwide are T20 international games. The future matches and competitions are keenly anticipated by each of these cricket aficionados.They are curious about the prospects for their favorite team's future.

1.2 DESCRIPTION

Sports have long employed statistical modeling, which has significantly increased on-field success. The game was strongly encouraged to be modeled from several angles due to the variety of natural forces affecting it, considerable media coverage and a large betting market. However, its intricate rules among the sport, the skill as well as the achievment the on any given day,the players and other natural factors affect how a

cricket match turns out. Because of this, it is quite challenging to accurately determine the game outcomes.We suggest a way to estimate both the bowling and batting probabilities of 22 players taking part in T20 cricket matches utilizing information regarding occupations and active participation in recent games.

1.3 OBJECTIVES

To score as many runs against the opposition as you can is the primary goal in cricket. The captains of both teams will toss a coin before the game begins, and whoever wins gets to choose which team gets to bat and play first in the field. Additionally, we are aware that every cricket match is made up of intervals known as innings, and the number of innings for each team is set prior to the competition, typically one or two. While the opposite side tries to field the ball, one team bats the ball during an inning. Batting and fielding turns are exchanged by both sides.

1.4 MOTIVATION

The key to self-motivation in cricket is to avoid being over-challenged (burnout) or under-challenged, over-skilled or under-skilled.

- Adapt the level of difficulty to the skill set. All participants are faced with challenges, yet they can also succeed.
- Include a wide range of activities to add variation.
- Keep everyone moving by avoiding lengthy conversations and creating waiting lines for turns.
- Don't be afraid to occasionally just play. Not all training needs to be strict and methodical.
- Selection of the best playing XI.
- To know which position is the best for a player.
- To know the expected total score.
- All good things are difficult to achieve and bad things are very easy to get.
- Play with positive intent.

We are using Machine Learning, Random Forest, Decision Tree, Linear Regression, KNN model. At last we used Software Weka and Google Colab.

1.5 RATIONALE OF THE STUDY

We continually consider the future when we think and make decisions, attempting to choose the best course of action to accomplish our objectives and minimize any potential unpleasantness. We will be successful in accomplishing our aims and objectives if we can accurately foresee the future. Study is required for this.

1.6 RESEARCH QUESTION

Want to look into the idea of cricket players serving as role models and see how influential they are. The following research inquiries will be addressed by my study:

- How is cricket now faring in Bangladesh?
- What is the general public's opinion on cricket in this area?
- Does cricket always have a positive influence on everyone?
- Do they believe that cricket players have influence?
- How does cricket affect our daily lives?
- What is a cricket player's social contribution role?
- Future developments will include Test matches that will follow T20 in one day. Can you foresee the outcome that will win?
- How is an over declared when no runs are scored?
- Which variation of cricket has a 20-over limit?
- What can we foresee?
- What is the long-term strategy?

1.7 EXPECTED OUTPUT

The outcomes that we received came after providing the inputs for the dataset that we used. It was quite simple for us to foresee. We can observe that our accuracy is improving after making a prediction. When one side scores more runs than the other side and all of the innings for the team with less runs have been played, the outcome of the game is a

"Runs," "Overs," or "Wickets." The game is "won" by the team scoring more runs, and "Prediction Total Score" by the team scoring fewer runs.

1.8 REPORT LAYOUT

Here is what we have discussed:

Table 1.8.1: Report Layout

Chapter 1	Introduction
Chapter 2	Background
Chapter 3	Research Methodology
Chapter 4	Experimental Results and Discussion
Chapter 5	Impact On Society and Environment and Sustainability.
Chapter 6	Summary, conclusion, Recommendation and Implication for Future.

CHAPTER 2
BACKGROUND

2.1 TERMINOLOGIES

- All-rounder: A batter who can bowl and play both positions at the plate is an all-rounder. Can also refer to a wicketkeeper or batsman.
- Around-the-wicket: when the wicket is on the opposite side of the body from the bowling arm.
- All Out: also known as the conclusion of the inning, refers to the situation when a batting side has no other players to bat.
- Arm Bowling: An off-style spinner of bowling with little or no spin. When delivered by a leg-spinner, such a bowl is known as a "footer."
- Bowler: A player that attempts to remove the batter from the game by tossing the red, leather ball his way.
- Blooded: Batting with all of one's physical might.
- Boundary: The perimeter of a playing place, such as a soccer field or bowing ring.
- Cover-Drive: A batting motion toward the cover area is called a "cover drive."
- Full toss: A bowler's ball that reaches the batsman without hitting the pitch.
- Good Length: This bowling delivery pitches at a length that makes it difficult for a
- Stroke play batter .He typically plays on defense.

2.2 RELATED WORK

Cricket has evolved, and it has become a very popular subject among sports experts. In various papers, scholars have adopted various strategies to find out the exact dimensions, exact output of cricket. As we can see here Kampakis and Thomas in this paper English Twenty over domestic cricket cup estimate using ML. The primary motivation beyond them can give some good predictions using Multi-step procedure. Additional features like strike rate, overs, runs, wickets and total score are calculated for prediction [2]. Kalpdrum Passi predicts results

based on performance For this author uses machine learning with more accuracy Team performance of individual teams is considered Member based on runs and wickets of each batsman taken by a bowler. The authors make predictions using a sample By Various classifiers such as Decision Tree Algorithm, Naive Bayes, Random Forest, Multiclass SVM. It is shown how many runs they have done[3].Bandulsiri, Duckworth Lewis Strategy Effects, Rabindra Lamsal's Seven Factor Theory, Bailey and Clarke Study and other studies explore the use of machine learning in sports, especially cricket. Similarly, numerous algorithms such as Naive Bayesian model and Artificial Neural Network model have been used by researchers to demonstrate their results. These studies have demonstrated the importance of identifying critical attributes to increase the likelihood of victory.[4]In the next paper, they used Ridge regression, Lasso regression, Classification, Decision tree, Random forest, SVM and brought their Output, Accuracy [5].In this paper the authors propose a paper on predictions Results of an IPL match, where they obtained datasets available for eleven seasons of the IPL archive. Using information from the player points section of the official IPL website,a team strength was calculated multivariate linear regression concept.To predict the latter, scholars used different classifications called Support Vector Machine, Logistic Regression, Naive Bayes, Random Forest,Extreme Gradient Boosting & Multilayer Perceptron [6].This paper, they brought the outputs through data collection and exploration, data preprocessing, data cleaning, data visualization, train and test splitting[6].Naive Bayes, Random Forest, K-Nearest Neighbor, and Tree Algorithm used in this study by Kamas Kapadia et al. To predict the winner of IPL T20 tournament. Notable features available. Using feature selection methods such as correlation, information gain, relief, and wrapping, data are obtained. Method The best accuracy of Naive Bayes in the home-based feature model is 57%. KNN formula. The toss-based model had the best accuracy of 62% [7]. This paper shows Sonu Kumar presenting a model for classifying players and predicting scores using various machine learning methods. This model foresaw the outcome of the innings immediately following the first five overs. The choice of players is crucial to a team's success, but this choice is influenced by a number of variables, including the team's present form, its history against the opposition, the venue, the weather, and the pitch conditions. Linear Regression was one of the classifiers

utilized for prediction. MLP Regress or and for classification Classifiers include KNN, SVM, Naive Bayes, and MLP regress or and for classification. This model categorized the player based on their statistics and historical data regarding who should play.Other formats and obtained 66% accuracy [8]. This paper discusses 198 teams batting first and how 197 have the best scoring strategies. This will help in formulating a policy. Resetting a goal during an interruption is governed by Rule 199.200 The annual IPL, sometimes known as the Indian Premier League, actually takes place in April and May. The tournament, where 203 players will compete and win money, is quite expensive [9]. In their successful prediction approach for the ninth season of the IPL, Deep C Prakash, C Patwardhan and associates model the season's inception, cumulative batting, and player strength to predict bowling scores [10].In this paper Stylianos Kampakis predicts T20 cricket results the author's matches created a model to maximize teams here he used Naïve Bayes algorithm among the various for this model machine learning techniques were employed. Here their accuracy is 64.9% [11]. In This paper Preeti, et al. 2016 developed a system that can predict scores of players in T20 cricket who use the k-means clustering algorithms[12].

2.3 COMPARATIVE ANALYSIS AND SUMMARY

The results of the study show that there is no significant difference between cricket players and non-players competitive anxiety and excitement in sports, there is a significant difference between cricket players and spectators self-confidence. Unlike most coaching elements, both batsmen often perform a back lift towards the gully or point position, also known as the stroke rotation method. To properly comprehend the kinetics and kinematics connected with Steven Smith's batting style, future studies would need to conduct objective measurements on him. It is important to take note of how performance averages differ between different forms (one-day internationals and 20-20 cricket).

Customer attrition is a challenge for Fantasy Cricket over the long term. This study uses a quantitative methodology and content analysis of images from newspapers and other sources. Consequently, it seeks to maximize the benefits of quantitative approaches while minimizing their drawbacks.

2.4 SCOPE OF THE PROBLEM

- Similar Player Behavior Problems.
- Different Reactions.
- Standardization of cricket pitches.
- Resulting in a lot of predictable outcomes.
- Performance Disparity Level.
- Making Decision, the foundation of international cricket, is suffering from a lack of clarity.
- Awareness of Mental Illness.
- A spot fix.

2.5 CHALLENGE

Cricket lasts forever. It may relate to any generation, remain current, and maintain its traditional value as its core. Because of the popularity of the T10s and hundreds, there are rumors that traditional cricket formats could soon be extinct. Then there are the DRS-related technology controversies, which I think will eventually be resolved. I'm certain that the game can recover on its own, and I'm not here to discuss these problems.

- Teams that are losing their charm.
- The Toss Advantages.
- The Dew Factor.
- The Rain Factor.
- Teams will bowl first.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 RESEARCH SUBJECT AND INSTRUMENT

Using Ml in Python Language

Using Data Visualization

Using Weka Format

Using Software (Colab, Weka)

3.2 DATA COLLECTION PROCEDURE

- Cricket Result T-Twenty(20)
- GitHub
- Google Scholar
- Columns 15 and Row 19968

3.3 DATA PREPROCESSING

Our data set name is t20.csv.Here we have taken some Columns, some Rows from our dataset. Some rows have been omitted, some columns have been omitted. Then we take some Columns in the feature of X axis, we take some Rows in the feature of Y axis. This is how we preprocessed our dataset.

df

	mid	date	venue	bat_team	bowl_team	batsman	bowler	runs	wickets	overs	runs_last_5	wickets
0	1.0	6/13/2005	The Rose Bowl	England	Australia	ME Trescothick	B Lee	0.0	0.0	0.1	0.0	
1	1.0	6/13/2005	The Rose Bowl	England	Australia	ME Trescothick	B Lee	1.0	0.0	0.2	1.0	
2	1.0	6/13/2005	The Rose Bowl	England	Australia	GO Jones	B Lee	1.0	0.0	0.3	1.0	
3	1.0	6/13/2005	The Rose Bowl	England	Australia	GO Jones	B Lee	1.0	0.0	0.4	1.0	
4	1.0	6/13/2005	The Rose Bowl	England	Australia	GO Jones	B Lee	1.0	0.0	0.5	1.0	

Figure 3.3.1: Data preprocessing

3.4 STATISTICAL ANALYSIS

In other words, it indicates the percentages of the data set that we are using that are maintained for training, testing, and validation. It essentially means what proportion we are using. The outcomes of one-day international (T-20) cricket matches could vary depending on the relative powers of the two teams. Although some of these elements have been thoroughly examined and recorded in the literature, others have not yet been looked into. This paper explores the statistical significance of variables in situations that can explain results of a 20 over cricket match. Its main focus will be on home winning feature advantage, playing technology using toss video, Type of match (day or night) and implications of the Duckworth-Lewis method for rain-shortened matches.

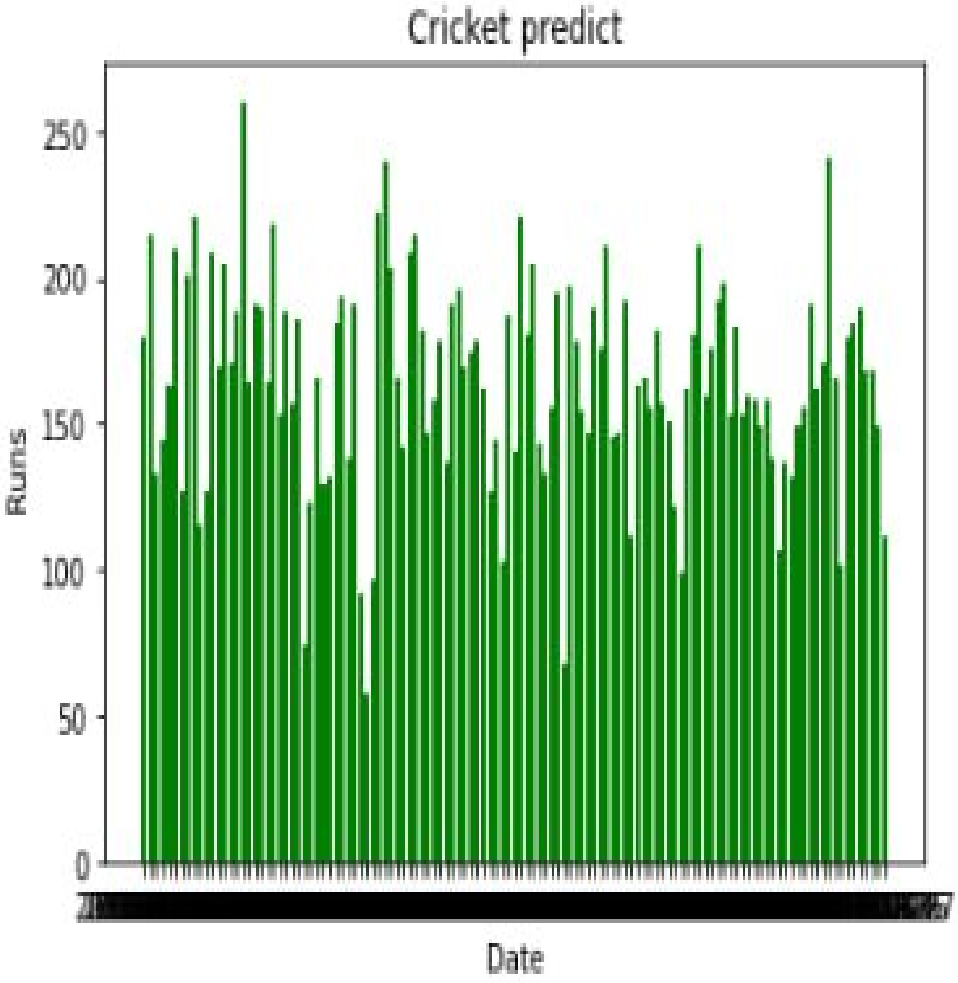

Figure 3.4.1: Date vs Run

3.5 PROPOSED METHODOLOGY

There are just a few of the algorithms whose results we have brought here using machine learning and the Python programming language:

- Linear regression
- Random forest
- Decision tree
- KNN

And the best accuracy of KNN model. This model's accuracy is 62%.

KNN:

The first step is to select the k-number of neighbors. In the second step find the Euclidean distance between K neighbors.

Step 3: Based on the determined Euclidean distance, select K nearest neighbors.

Step 4: Count the number of data points in each category among these k neighbors.

The additional data points are then assigned to the category with the most neighbors in the fifth phase.

Sixth step: The model is finished.

```
plt.legend()
plt.xlabel('n_neighbors')
plt.ylabel('Accuracy')
plt.show()
```

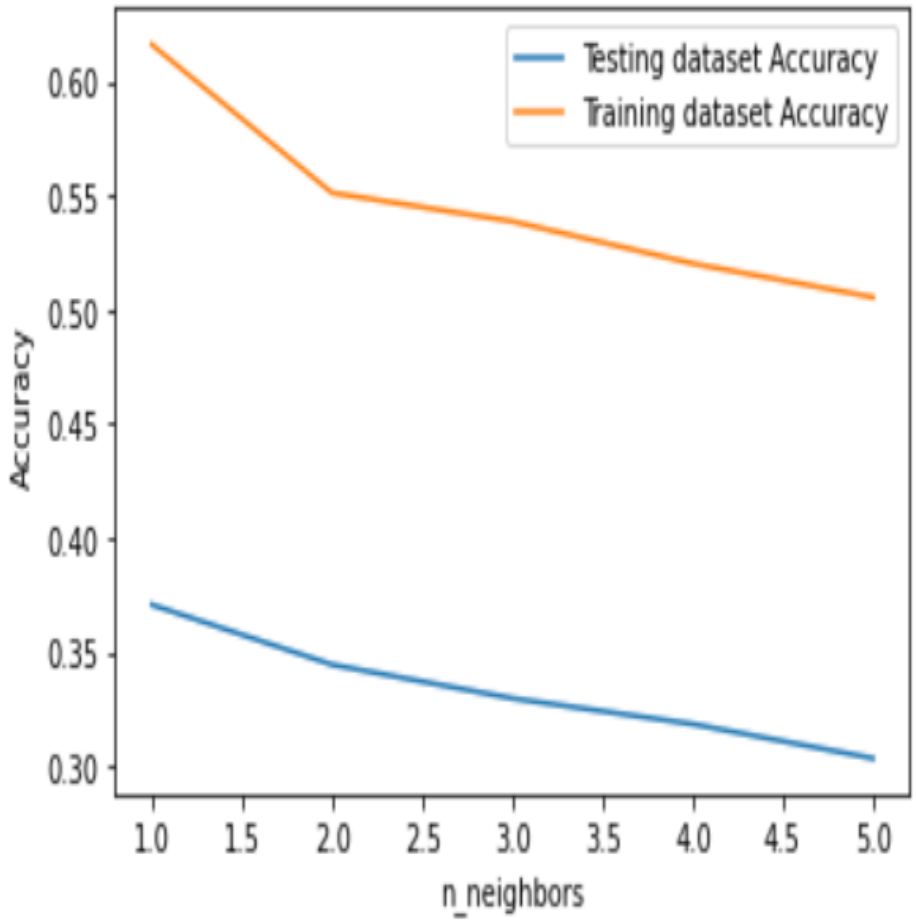

Figure 3.5.1: Training and Testing accuracy in KNN Model.

Linear Regression:

A machine learning algorithm built on supervised learning is linear regression. It executes a regression operation. A desired prediction value depending on the independent variable of the regression model. Finding the connections between variables and predictors is its main application. Linear Regression is the process of finding a line that best fits the data points available on the plot, so that we can use it to predict output values for inputs that are not present in the data set we have, with the belief that those outputs would fall on the line. More precisely, linear regression is used to determine the character and strength of the association between a dependent variable and a series of other independent variables. It helps create models to make predictions. And linear regression is one of the easiest and most popular Machine Learning algorithms. It is a statistical method that is used for predictive analysis. Linear Regression makes predictions for continuous or numeric variables.

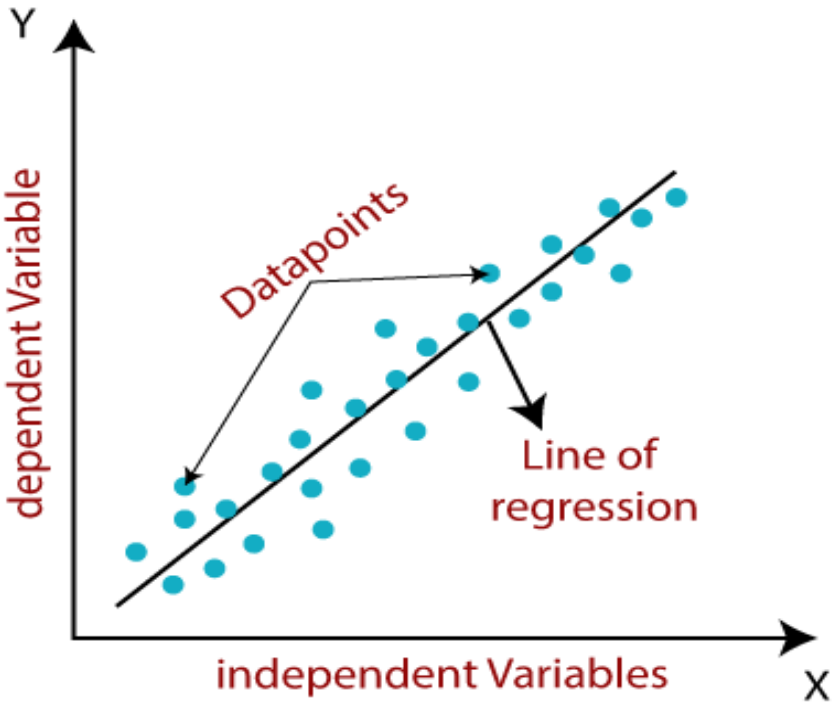

Figure 3.5.2: Understanding Linear Regression

Random Forest:

A flexible, user-friendly machine learning approach called Random Forest frequently yields great results without the need for hyper-parameter customization. Because of its simplicity and adaptability, it is one of the most commonly used algorithms. Both classification and regression tasks can be accomplished with it. A classification system called Random Forest uses several decision trees. It attempts to generate an uncorrelated forest of trees whose forecast by committee is more accurate than that of any individual tree by using bagging and using randomization when building each individual tree. Additionally, it is a form of supervised learning system that uses ensemble techniques to address classification and regression issues. The method works by building a large number of decision trees during training.

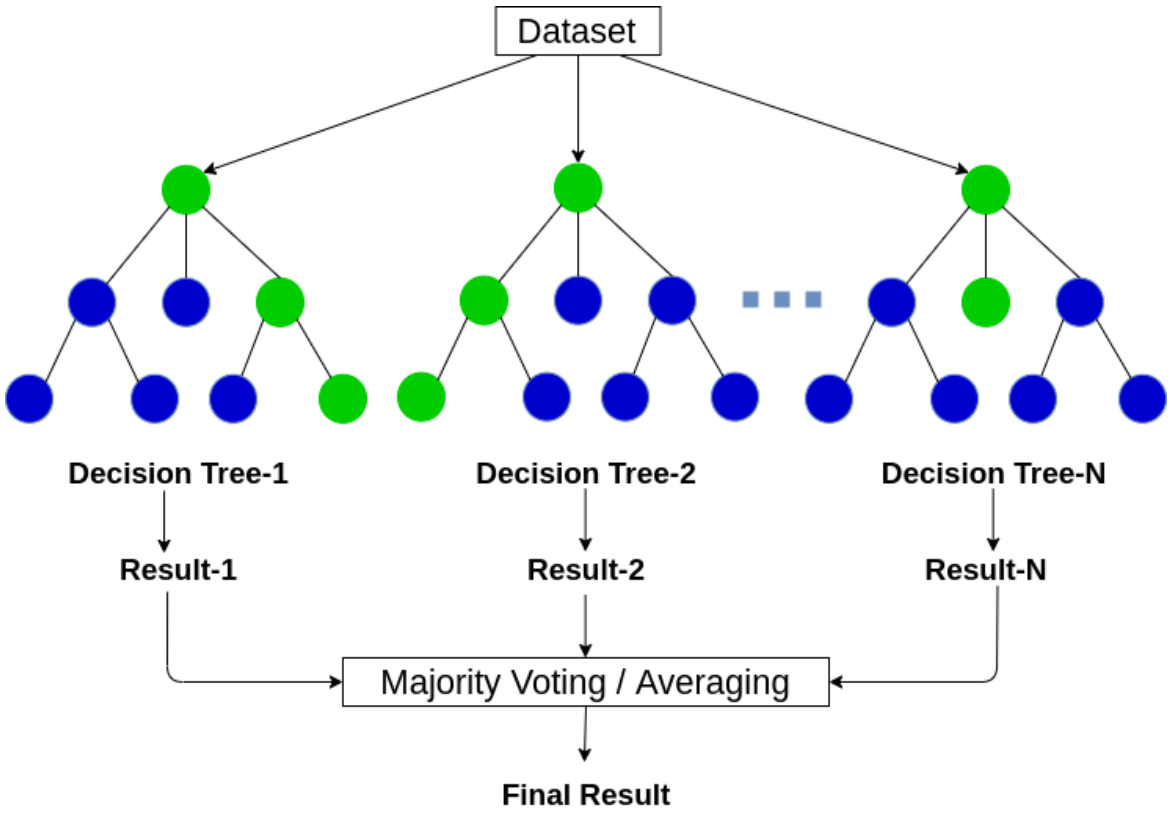

Figure 3.5.3: Understanding Random Forest

Decision Tree:

One of the supervised machine learning algorithms is the decision tree. Both classification and regression issues can be solved with this approach. However, classification issues are its primary usage. To show data and categorize it in accordance with the condition, a decision tree uses a series of -if else conditions. We are aware that this type of machine learning is supervised because the training data explicitly states what the input is and what the related output is. where a particular parameter is continuously used to divide the data. Decision nodes and leaves are the two components that can be used to explain the tree. The objective is to learn straightforward decision rules derived from the data features in order to build a model that predicts the value of a target variable. A decision tree is a graphical depiction of every potential outcome of a choice made in response to certain circumstances. We attempt to build a condition on the features for each step or node of a classification decision tree in order to fully separate all of the labels or classes present in the dataset.

Why is the accuracy of ml less?

If accuracy decreases as training continues, you're too quickly, the model is learning. Due to the quick rate of learning our model weights are constantly changing and moving away from the neighborhood minimum, where our accuracy would have been the highest. Consider reducing the instruction rate and see the results.

One method is to add additional evidence samples. Only when you collect adequate data can you tell a story from it.

Method 2: Reframe your perspective on the problem.

Method 3: Put some context around your data.

Adjust your hyper parameters in method four.

Method 5: You should train your algorithm using cross-validation.

Six methods are practiced with a fuzzy inference method. We have studied that accuracy comes less.

3.6 IMPLEMENTATION REQUIREMENTS:

Here we are using Google Colab. And we are using Weka software. Its version 3.9.5 & ram of our laptops device was 8 GB.

CHAPTER 4

EXPERIMENTAL RESULT AND DISCUSSION

4.1 EXPERIMENTAL SETUP:

Here we are using Google colab. Ram of our Laptops device was 8 GB. And we are using Weka software. Its version 3.9.5 & both of our laptop devices ram was 8 GB.

4.2 EXPERIMENTAL RESULT AND ANALYSIS

More than a century after it was created, cricket, a rare game played in three different styles, is continually changing. It continues to experiment with rules, game lengths, tools, and a little bit of technology as it looks for its place in the modern world. Thanks to Twenty20 cricket's increasing popularity and the proliferation of T20 leagues around the world over the past ten years, Test cricket has faced a significant challenge: how to compete in a world that is constantly clamoring for more entertainment, glitz, glamor, and adrenaline while still holding its own.

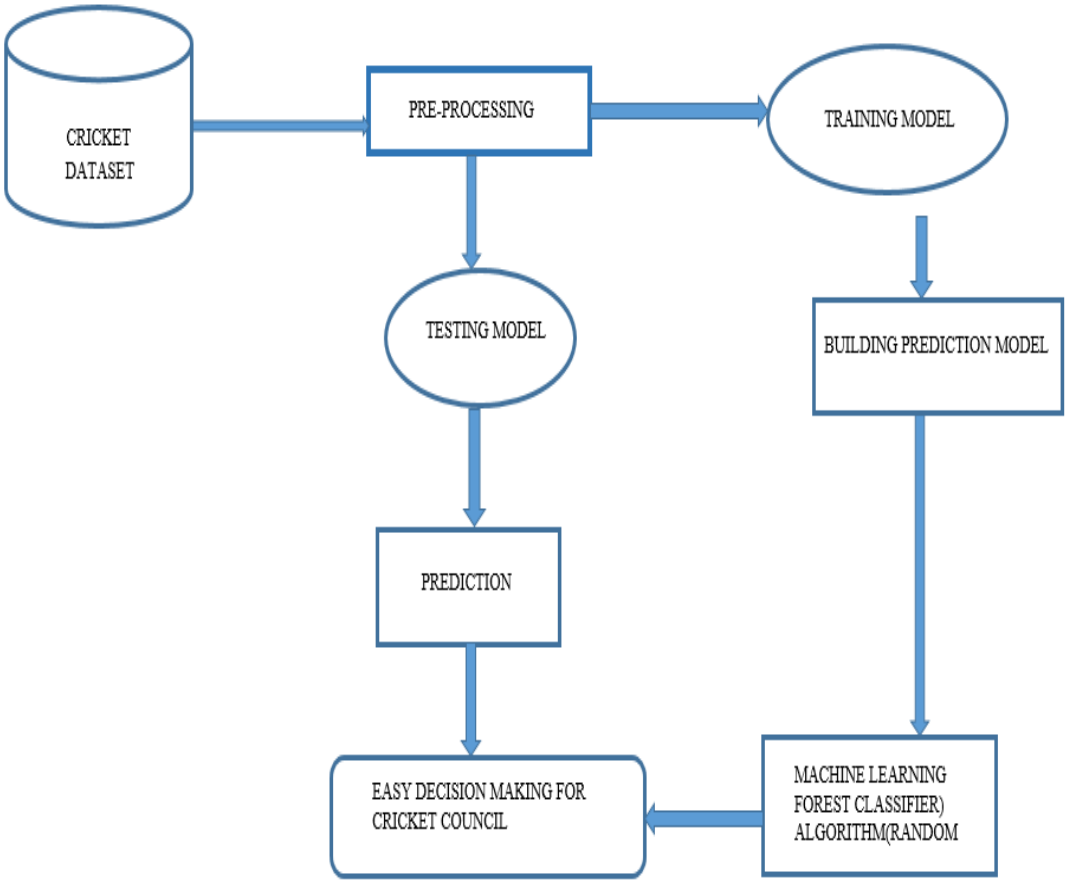

Figure 4.2.1: Classification Step

4.3 DATA VISUALIZATION OF WEKA AND GOOGLE COLAB RESULT:

Visualization on runs, wickets, over, runs_last_5 (num), Wickets_last_5 (num), Striker num, Non –Striker Number, Total Numbers.

Runs:

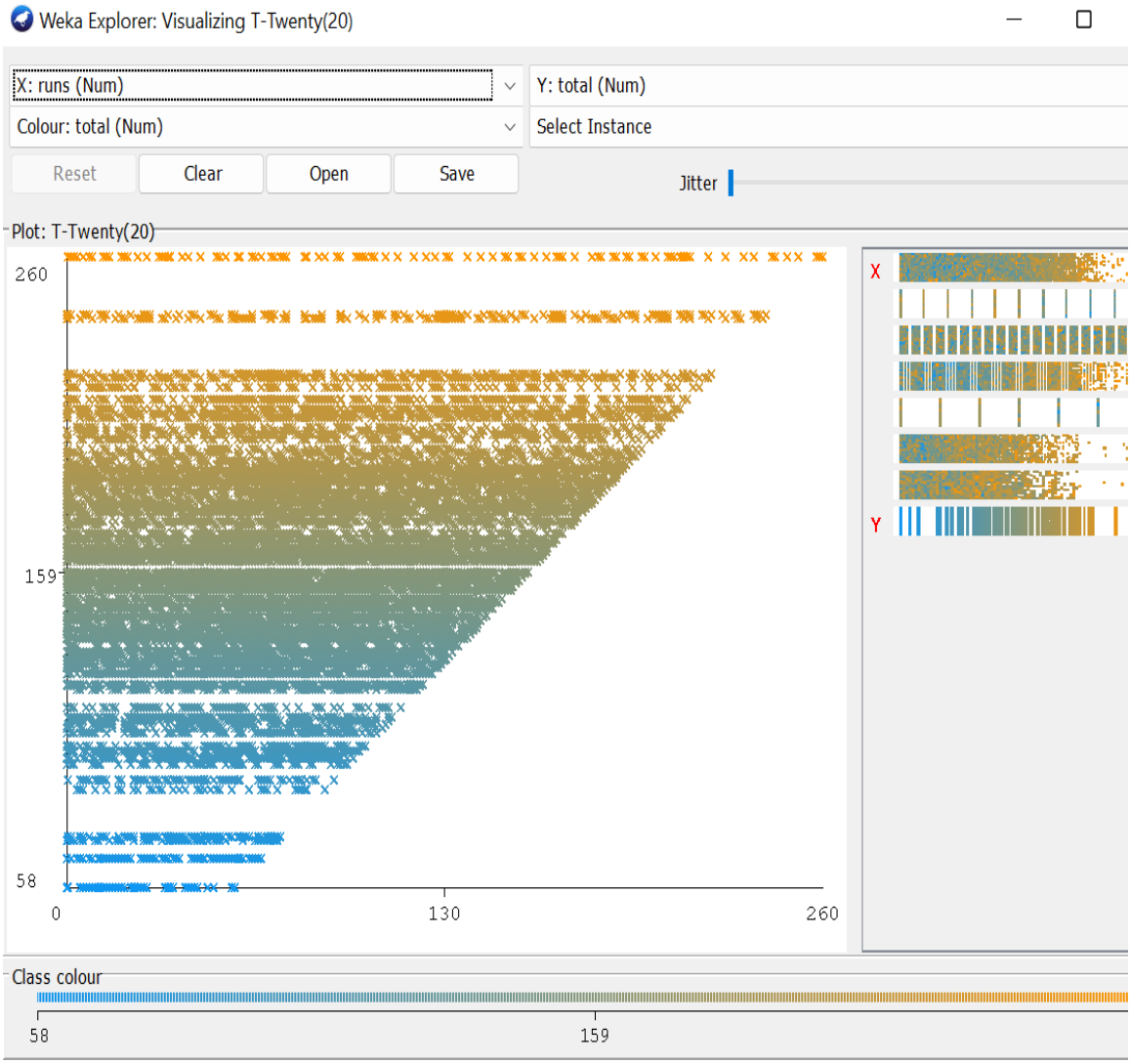

Figure 4.3.1: Relation between Runs and Total

Wickets:

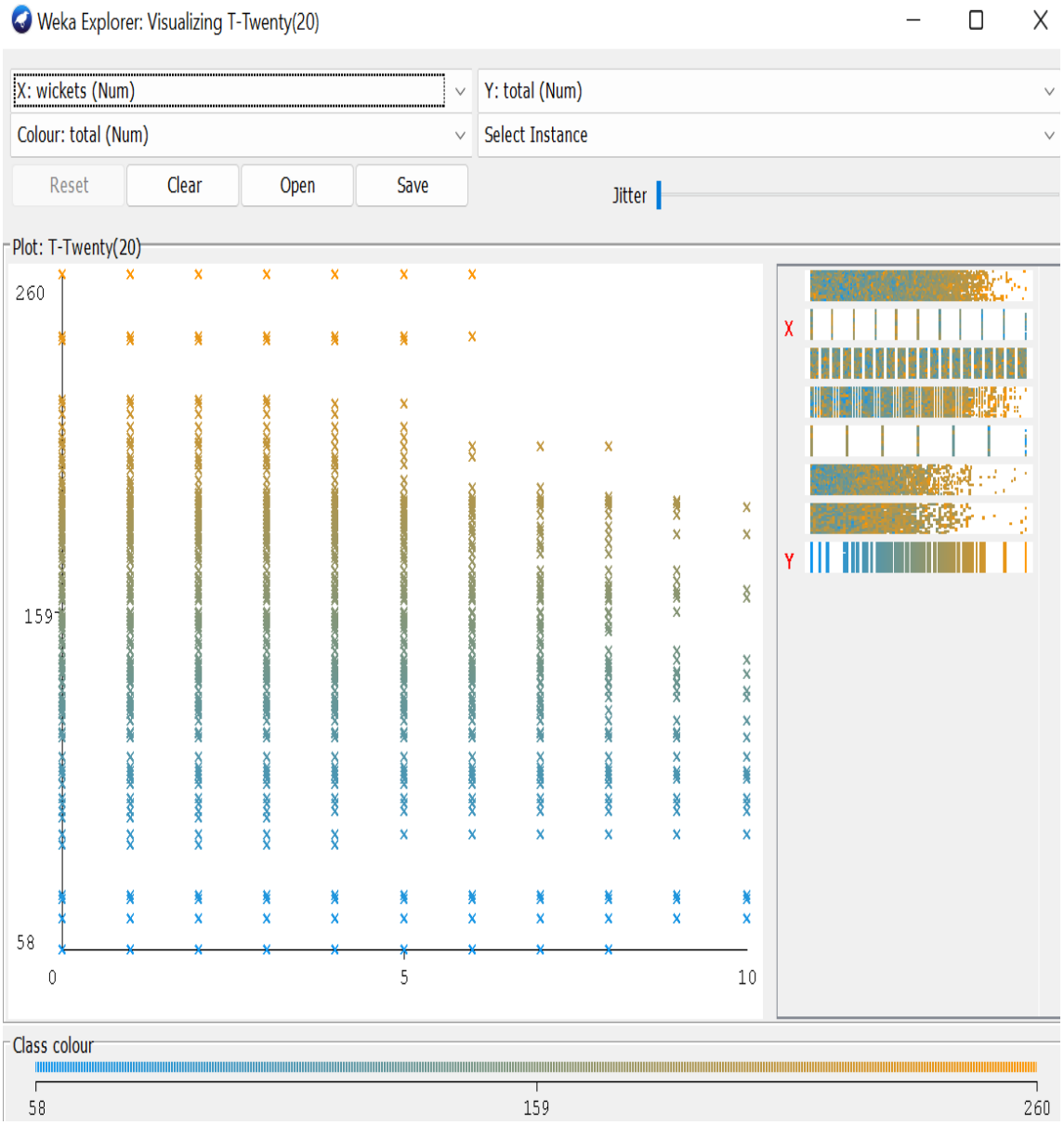

Figure 4.3.2: Relation between Wickets and Total

Overs:

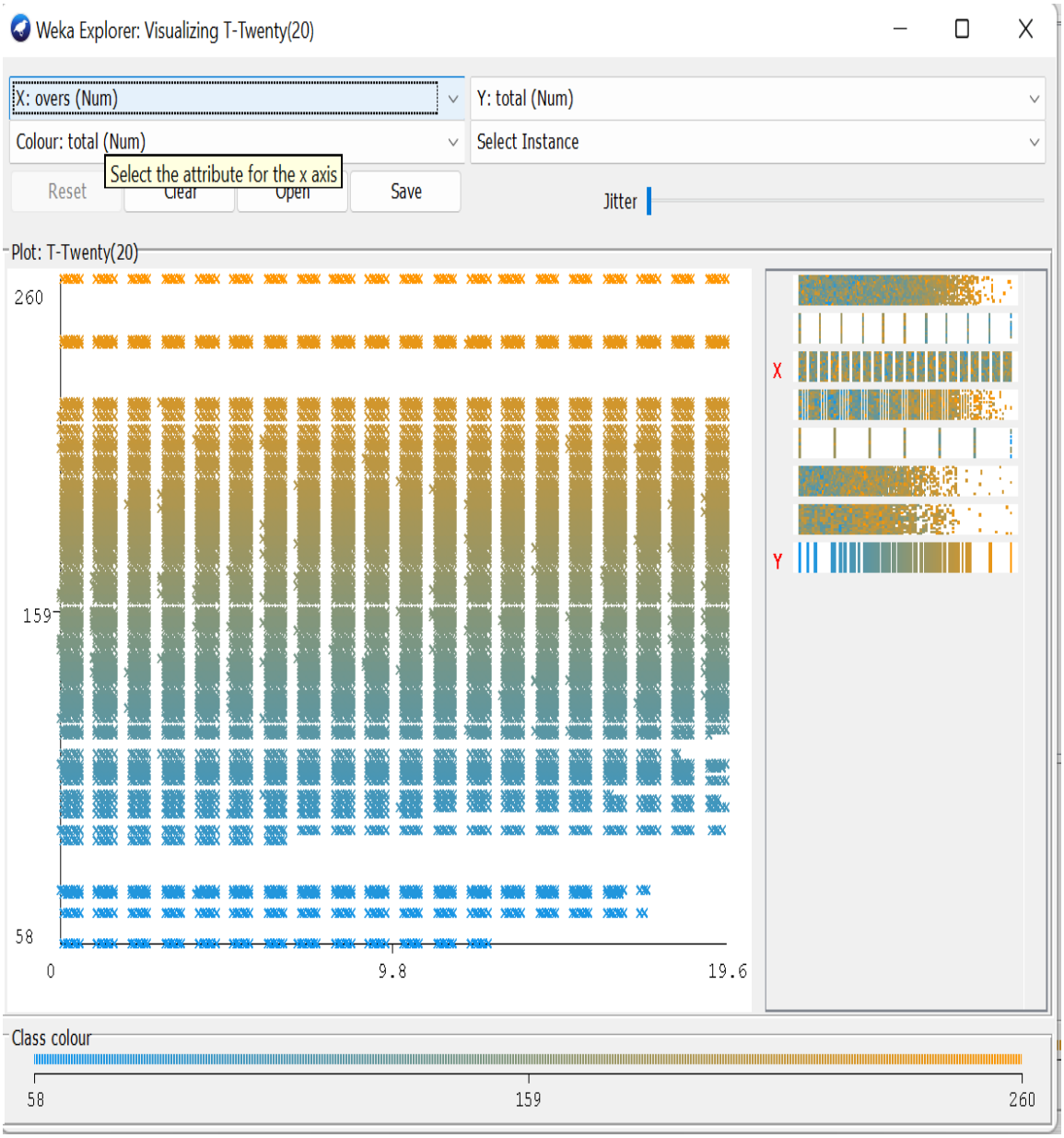

Figure 4.3.3: Relation between Over and Total

runs_last_5 (num)

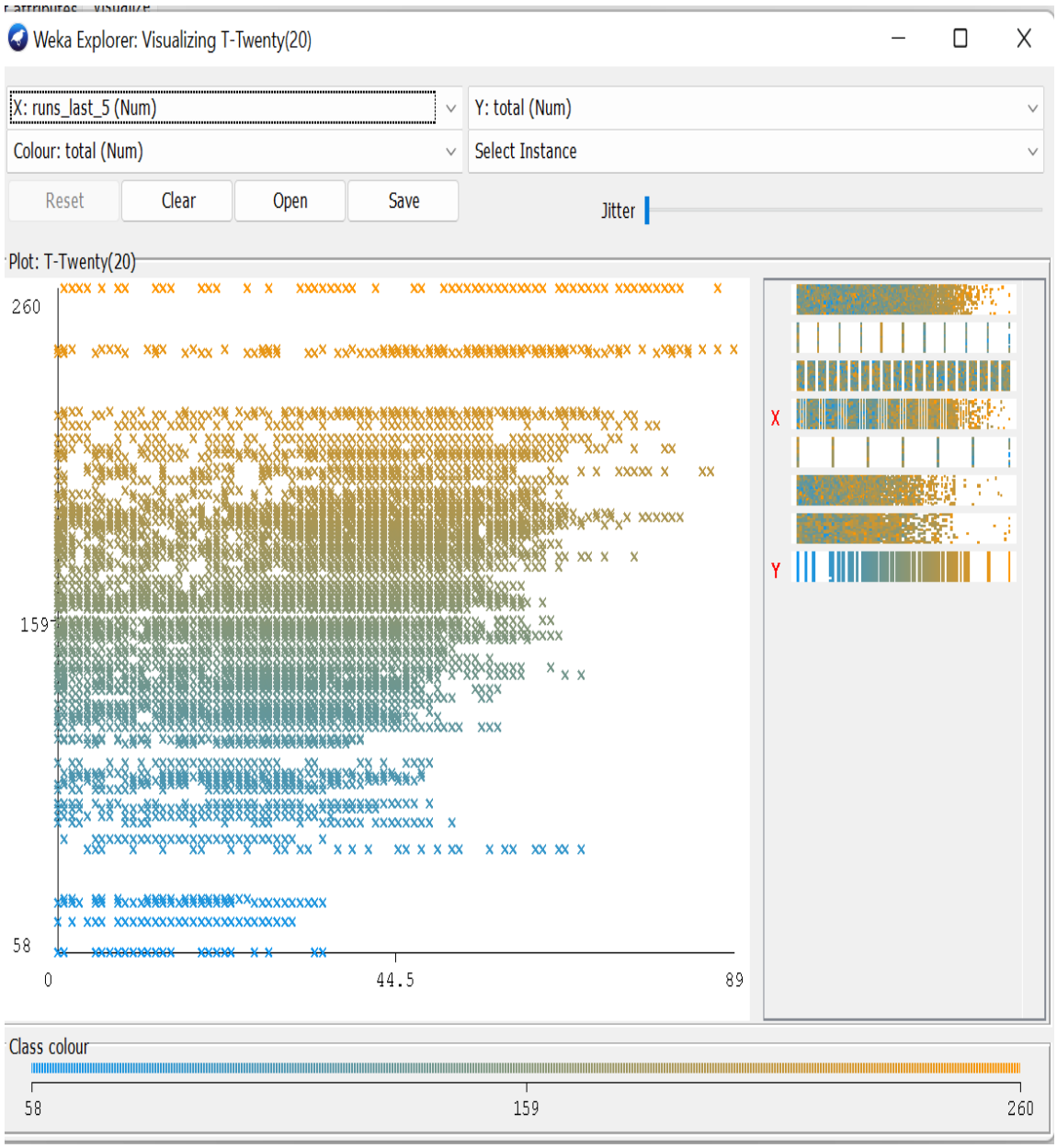

Figure 4.3.4: Relation between Run_ last _ 5(num) and Total

Wickets_last_5 (num)

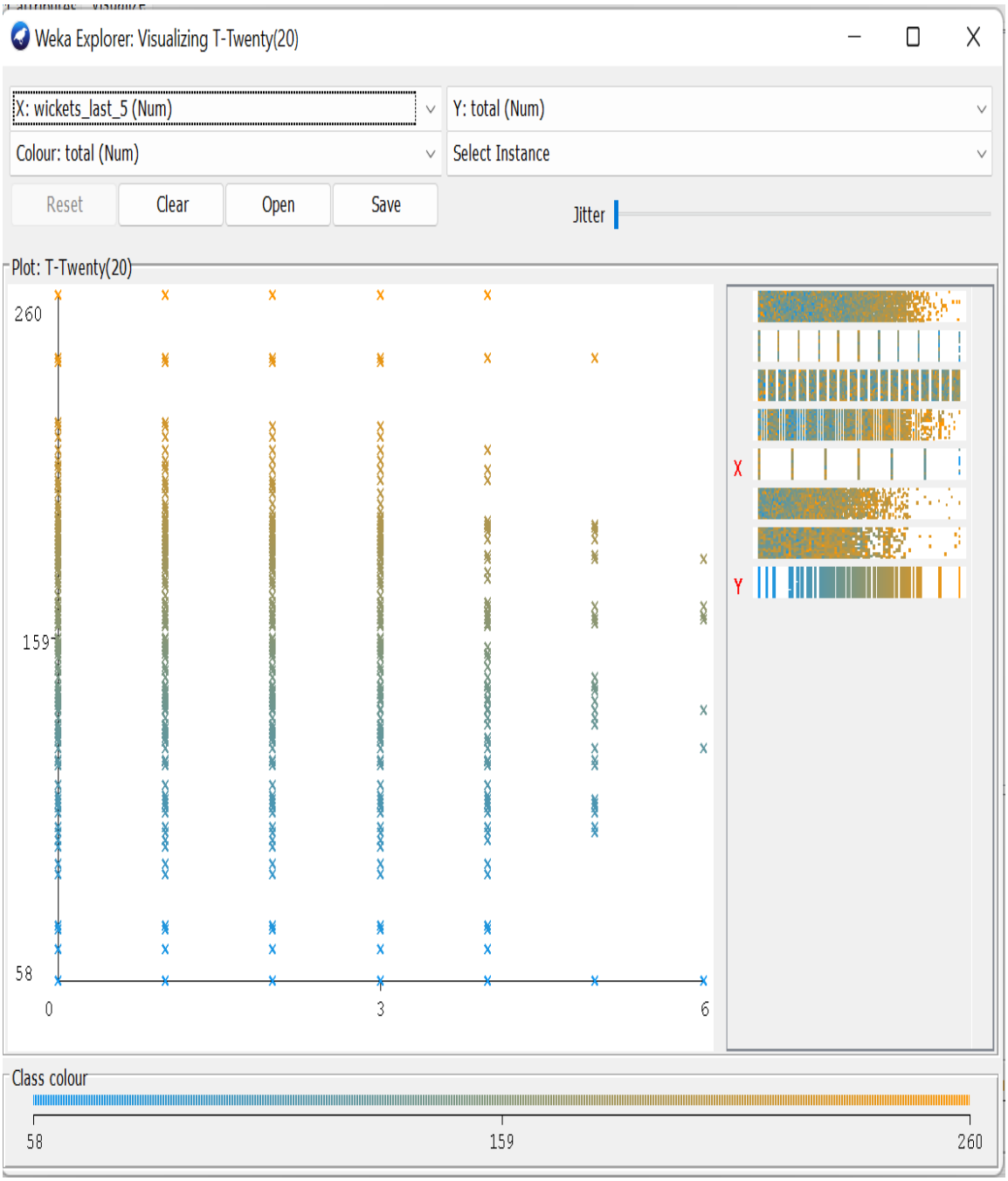

Figure 4.3.5: Relation between Wickets last 5 (num) and Total

Striker (num)

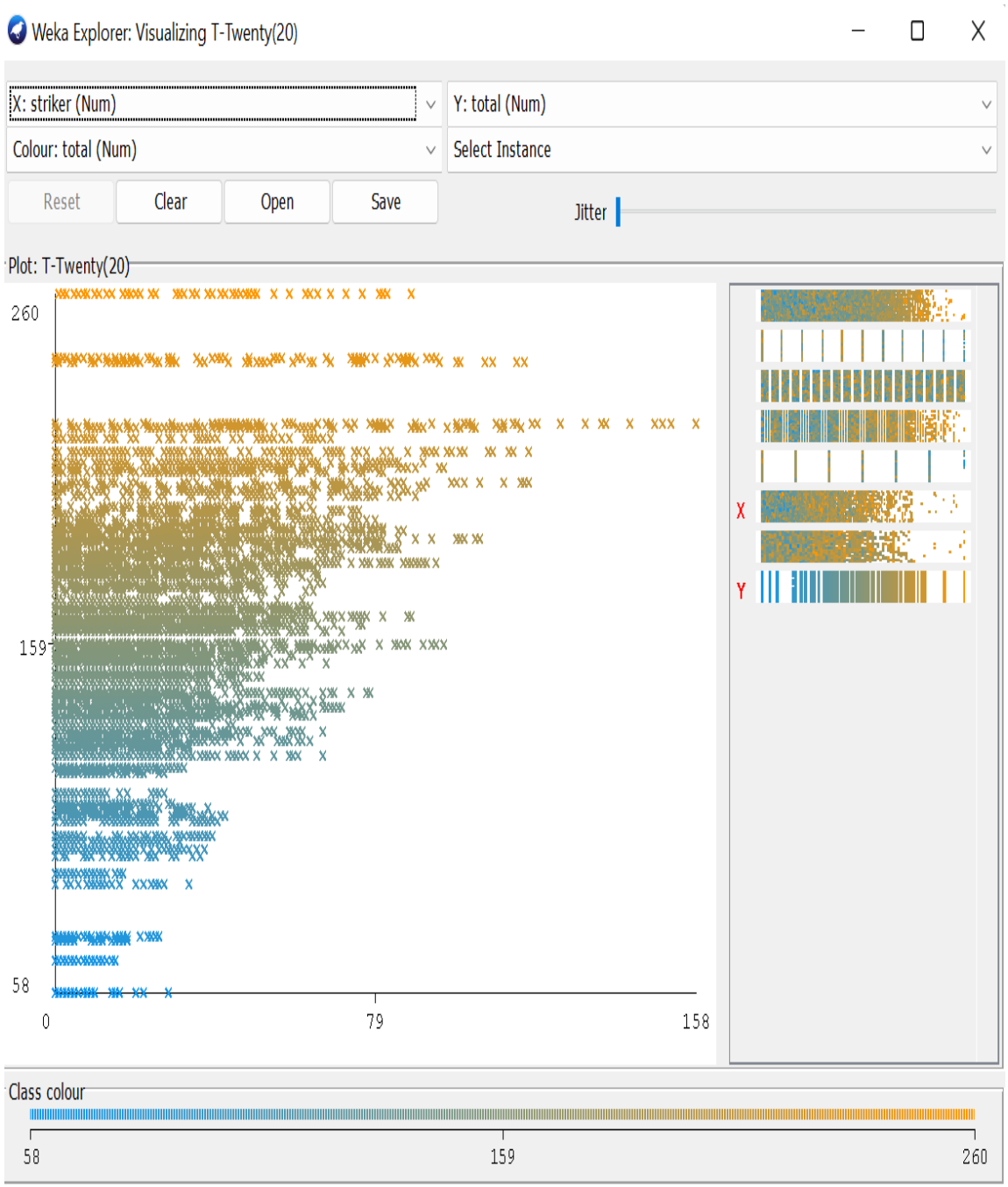

Figure 4.3.6: Relation between Striker and Total

Non_ Striker (Num)

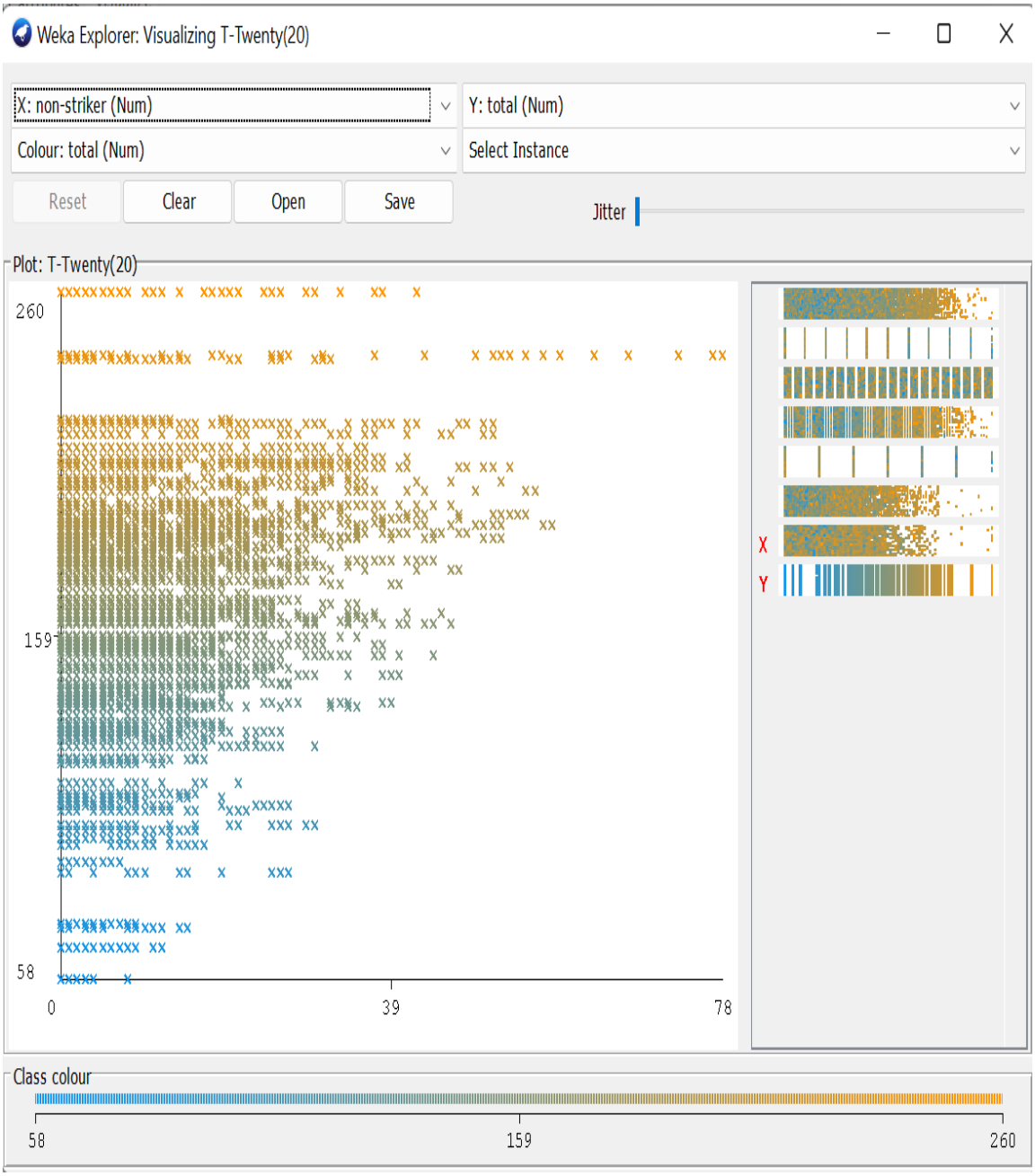

Figure 4.3.7: Relation between Non Striker and Total

Google colab Results:

Using Google Colab Results wickets vs Runs and Overs.

	Wickets_last_5	Total
0	0	179
1	0	179
2	0	214
3	2	214
4	2	214
5	2	214
6	3	214

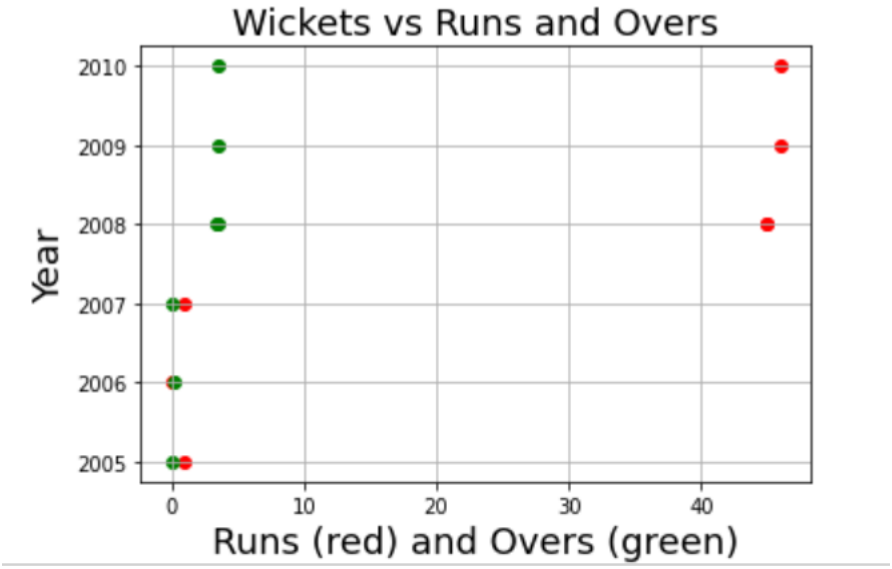

Figure 4.3.8: Relation between Wickets vs Runs and over

4.5 DISCUSSION

Winning is the ultimate goal in every game. We will discuss in this paper the criteria for winning T20 (20) cricket matches. Cricket Twenty20 (2020) matches are decided by some scoring-related factors as well as the physicality of the two teams. Although several factors have been discussed in the literature, their analysis needs further investigation, especially when predicting victory. Home field advantage, day/night effect, winning the toss and batting first are all interesting variables. To predict how these factors affect the outcome of a T20 cricket match, we have applied supervised learning methods including machine learning linear regression, random forest, decision tree and KNN.

CHAPTER 5

IMPACT ON SOCIETY, ENVIRONMENT & SUSTAINABILITY

5.1 IMPACT ON SOCIETY

Particularly in a nation like India where we see it as a religion, cricket is an incredible sport and has a significant impact on our daily lives. The advantages of cricket, in my opinion, can be:

- Generating employment opportunities.
- Economic development.
- Nationwide unification.
- Creates inspirational role models for people to look up to.
- Exposure on a global scale.
- It motivates people to have healthier, more active lives.

5.2 IMPACT ON ENVIRONMENT

Cricket is a game where the playing surface is greatly influenced by natural systems (sunlight, temperature, rainfall, soil and the game's balance can change depending on the day's weather. While gloomy, humid circumstances may be more beneficial to a skilled bowler, sunny, dry conditions may favor batting.

5.3 ETHICAL ASPECTS

The primary goals of the Code of Ethics are to strengthen the ICC's authority to combat corruption, to improve the organization's reputation, and to increase public confidence in the ICC's governance and administration of cricket worldwide.

5.4 SUSTAINABILITY PLAN

Our goal is for the Seat Unique Stadium to become the nation's most eco-friendly and sustainably built cricket stadium.The section on planning and sustainability will offer assistance to your club as it grows and prospers and ensures a promising long-term future.

The seven tenets of environmentally friendly building:

- Durability
- Sustainable design
- Reduced waste,
- Improved indoor air quality,
- Water conservation,
- Environmentally friendly building materials.

5.5 STRATEGIC PLAN PRIORITIES PLAN

- Create amazing digital and live experiences for our clients.
- Promote the T-Twenty as a summertime family entertainment and sports option.
- Recruit children (ages 5 to 12) and families from various socioeconomic groups to foster a lifetime passion for cricket.
- Quicken the pace to make women's and girls' sports the most popular
- Improve our premier domestic and worldwide contests, systems, and programs that produce great players, coaches, and referees
- Foster a closer relationship with the cricketers who have inspired our country through their achievements and tales in the past and present.
- Integrate a company strategy that is cost-effective, diversified, and always inventive.
- Encourage investment in locations and facilities that improve encounters and improve communities.

CHAPTER 6

SUMMARY, CONCLUSION, RECOMMENDATION AND IMPLICATION FOR FUTURE RESEARCH

6.1 SUMMARY OF THE STUDY

Cricket has been the subject of extensive research, but due to complex and conflicting data sets we have been able to accurately predict match winners. Some tricks such as Linear Regression, have been used to predict match score's result, but none have been successful. It charts the evolution of cricket using various statistical methods which is a hot topic among sports cricket match analysts. Try datasets and different classification techniques to predict T20 cricket matches. With a 0.62% accuracy, we predict the score and 11 players participate in the team game of cricket, which is played with bat and ball. To score more runs (points) than the target per objective. A match is divided into innings with one team batting, batting at a time and the other team bowling. Our motivation is to keep everyone moving by avoiding lengthy conversation and creating waiting lines for turns don't be afraid to occasionally just be strict and methodical . The results of the study showed that Cricket players and non-players had significantly different levels of confidence, although there were no clear differences between them in terms of relative anxiety, excitement or sportsmanship. As cricket has evolved over time, it has become a particularly popular topic among sports analysts. Despite extensive research on cricket, anomalies and digital data sets allow precise predictions of match outcomes.Our challenges are Teams that are losing their charm. The Toss Advantages. The Dew Factor. The Rain Factor. Teams will bowl first. This paper is used in Linear regression ,Random forest ,Decision tree, KNN , Algorithm and uses software Google Colab, Weka.

6.2 IMPLICATION FOR FURTHER STUDY

Future projects will involve a greater dataset and increase the level of accuracy to reduce the accuracy rate of cricket score result prediction in the future. So that many people will be able to give good output in the next generation and many people will show interest in

playing the game in the future. At present, many people are addicted to playing cricket in Bangladesh. The main reason is that the popularity of cricket is increasing and many people are connected with cricket clubs and earning money from various clubs. As a result, the young generation is rushing towards it. And our main goal is to get good accuracy with a big dataset.

6.3 CONCLUSION

Our major goal is not to help the gambling industry, which highlights the inherent risk in the game. Instead, we want to leverage our research to reveal some important information.In this study, historical data from actual 20-over cricket matches was gathered, and after preprocessing the data, valuable features were retrieved. Additionally, appropriate data is numeric zed and scaled on the three criteria of overs, wickets, and tie. Using the R Tool, three classifiers Random forest, Decision tree, and are trained and used to categorize this data. With a 62% total accuracy, the Random tree classifier has produced excellent results.Given that our method accurately forecasts the t-20 in the current scenario using historical data, it can be expanded. There have been able to find out its dimensions by using different algorithms, and in the future many people will be able to work well with them. Seeing the results of the cricket game, many people can expect something good from here. Linear regression, KNN, Decision tree and Random forest accuracy test find out the output.Cricket makes it extremely difficult to accurately predict the outcome of the game. We propose a method for predicting the Estimation of the batting and bowling probabilities of the 22 participating players in T20 cricket matches using career statistics and active engagement in recent games.

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