

# **Department of Information Technology**

## **NBA Accredited**

A.P. Shah Institute of Technology

— G.B.Road, Kasarvadavli, Thane(W), Mumbai-400615

UNIVERSITY OF MUMBAI

Academic Year 2021-2022

A Project Presentation on

# **CRICKET SCORE PREDICTION**

Submitted in partial fulfilment of the degree of  
Bachelor of Engineering(Sem-8)

in  
**INFORMATION TECHNOLOGY**

By

**Pratik Dhumal – 19104031**

**Kushal Todi – 19104047**

**Ruchita Raut – 19104033**

---

Under the Guidance of  
Prof. Geetanjali Kalme

# 1. Project Conception and Initiation

---

# 1.1 Introduction

- Cricket score prediction is an area where the first innings score of a cricket match is predicted using some techniques.
- We will be predicting the score of an match by considering various factors like runs scored, overs bowled, wickets taken, etc. The reason behind selecting these features is that we need to build a model that can understand the dynamicity of the cricket game. Therefore we are considering the factors which will be focusing on the dynamic nature of the cricket game.
- Lots of people like watching cricket and they also like to predict the final score. Our Project focuses on an accurate prediction of cricket scores for matches considering the previous dataset available and also considers the various factors that play an important role in the score prediction.

# 1.2 Objectives

- 1.To improve the efficiency of players by analyzing the data the predict the future outcomes, which will help in effective strategic planning.
- 2.We can get all the latest news related to cricket.
3. The main aim is to predict the match outcomes using various parameters, the performance of each player based on the historical data.
4. In order to achieve reliable accuracy, we need to analyze a large amount of data.

# 1.4 Problem Definition

There is the need for a system that provides for an estimation or prediction of total runs which can be made using the current match statistics, for example, overs done, wickets gone or runs made in last 5 overs.

# 1.5 Scope

1. Can be applied in national and district level cricket leagues.
2. Can be applied in strategy planning of the team.
3. Can be used for formulating teams for specific matches.
4. Can used to provide hidden insights, such as batting partnerships and who is the best batting partner.

# 1.6 Technology stack

## ➤Frontend :

- HTML
- CSS
- REACT

## ➤Backend :

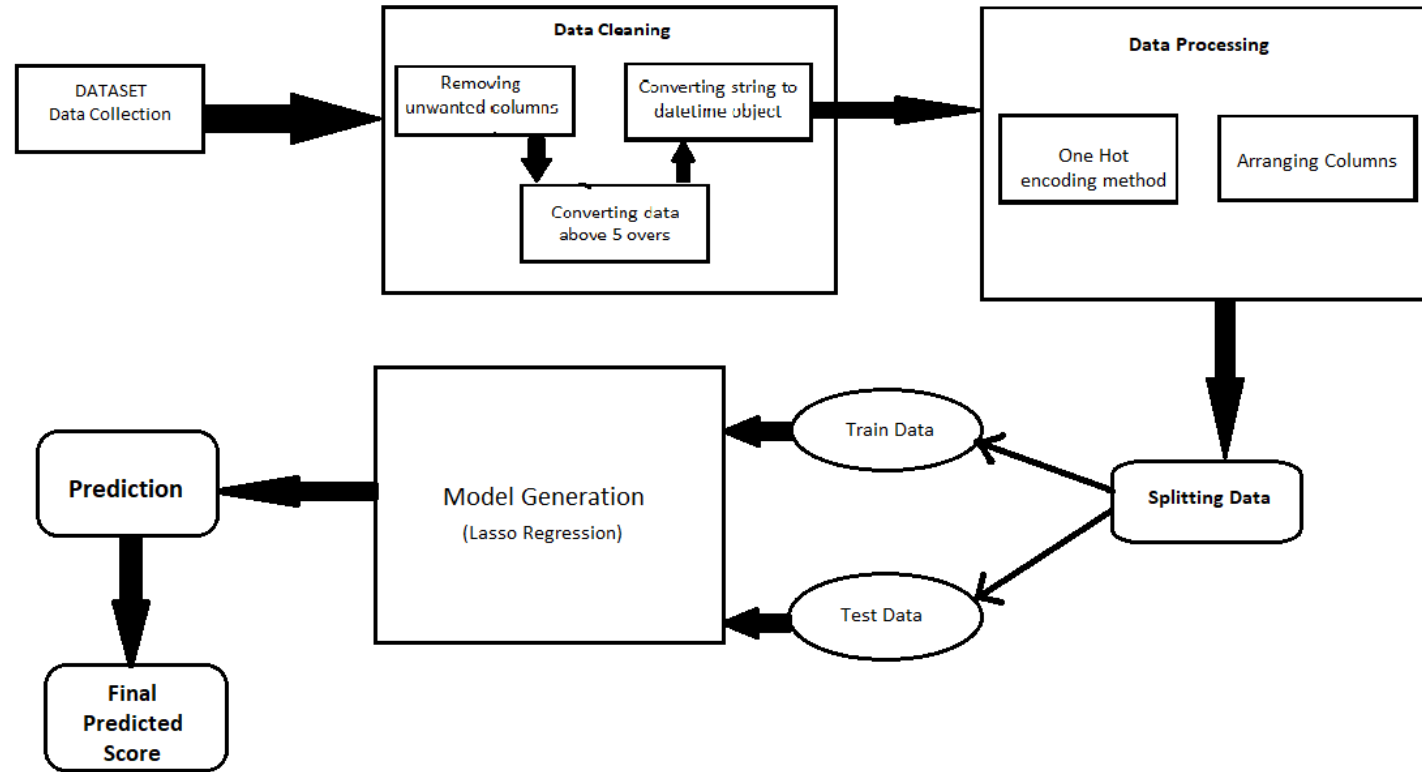
- Python
- Machine Learning Algorithm
- Flask



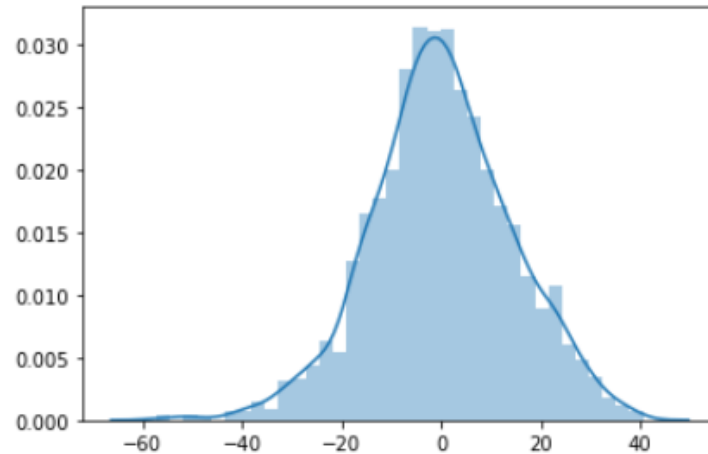
## 2. Project Design

---

## 2.1 Proposed System



1. **Lasso Regression:** Lasso regression is a regularization technique. It is used over regression methods for a more accurate prediction. This model uses shrinkage. Shrinkage is where data values are shrunk towards a central point as the mean. The lasso procedure encourages simple, sparse models .



MAE: 11.119955248920911  
MSE: 203.82449147580922  
RMSE: 14.276711507760085

## 2.2 Design

### **1. Login /Register :**

The User has to enter the credentials to get signed in, to the website, or else register to get the access.

### **2. Home page:**

On this page the user will get to see the news related to all the matches.

There will be the prediction button, by clicking on it the user will be redirected to the score prediction tab.

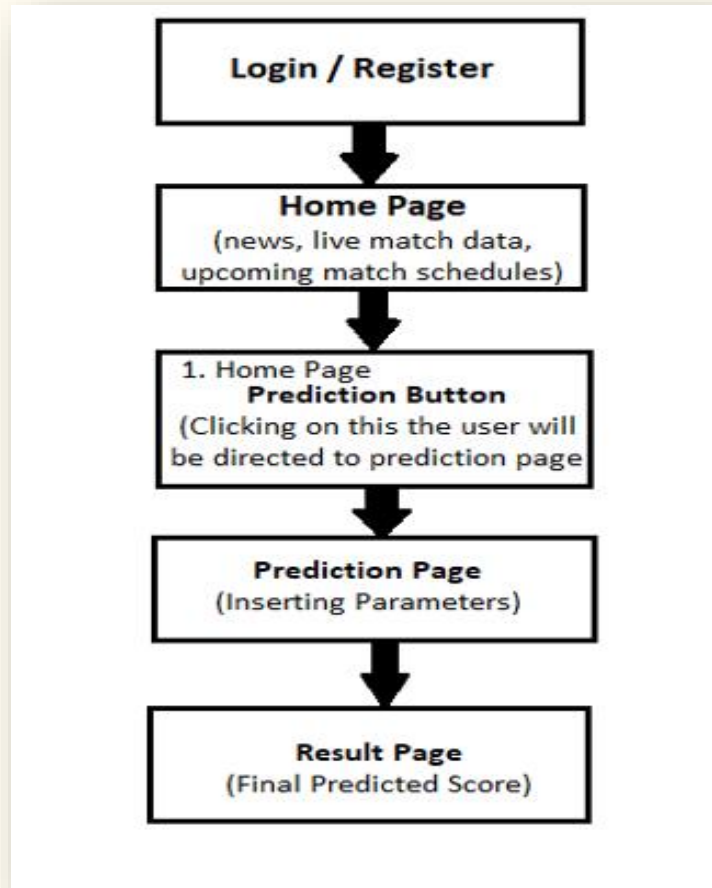
### **3. Prediction Module :**

This page is the main motto of our project cricket score prediction. In this the user has to input various parameters like teams name, overs bowled, the input of how many runs have been scored till now, and wickets fell.

### **4. Prediction Result Page:**

After clicking on predict button the predicted score range (result) will be shown on this page.

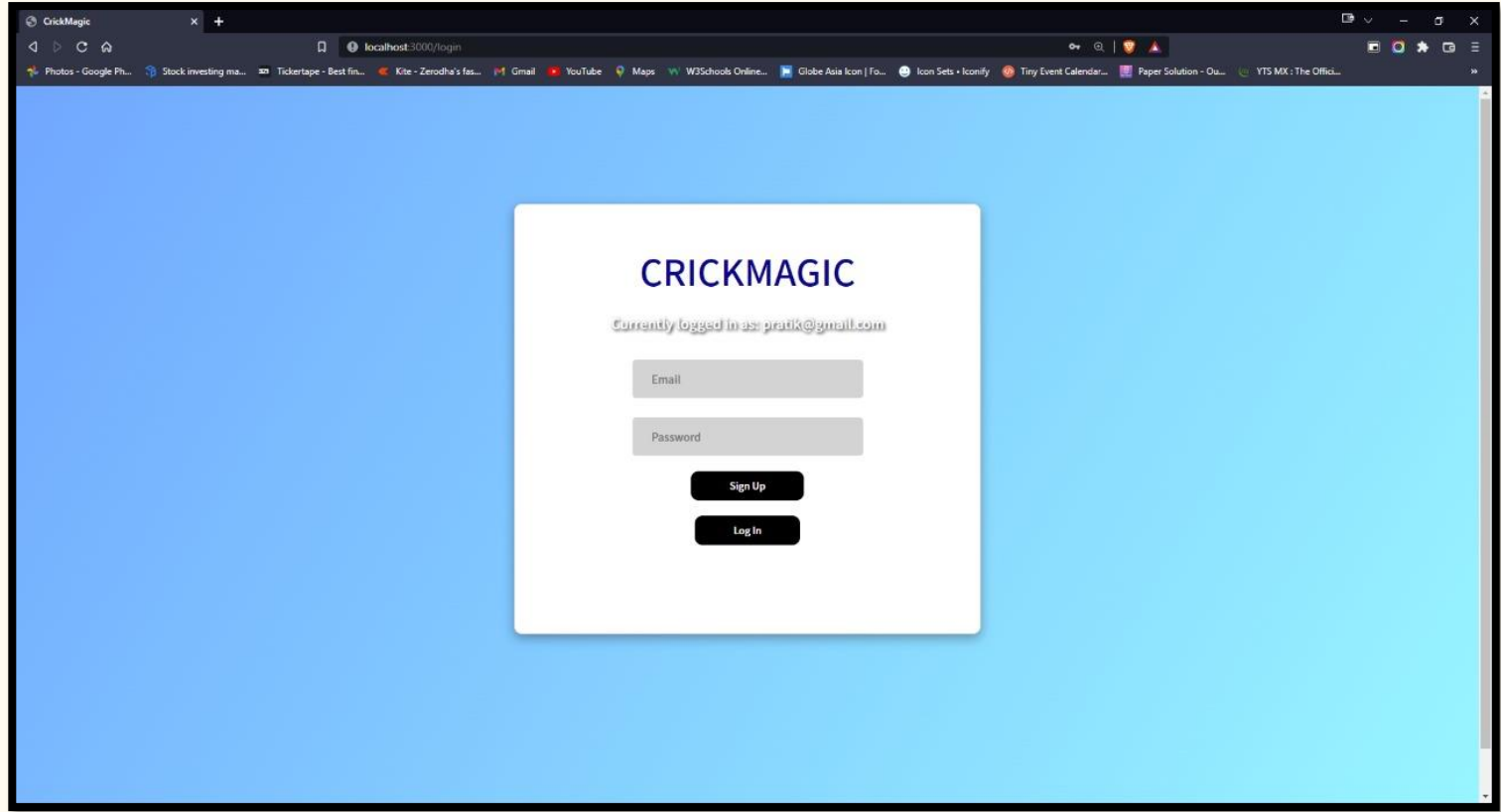
## 2.3 Design (Flow of Modules)



# 3. Implementation

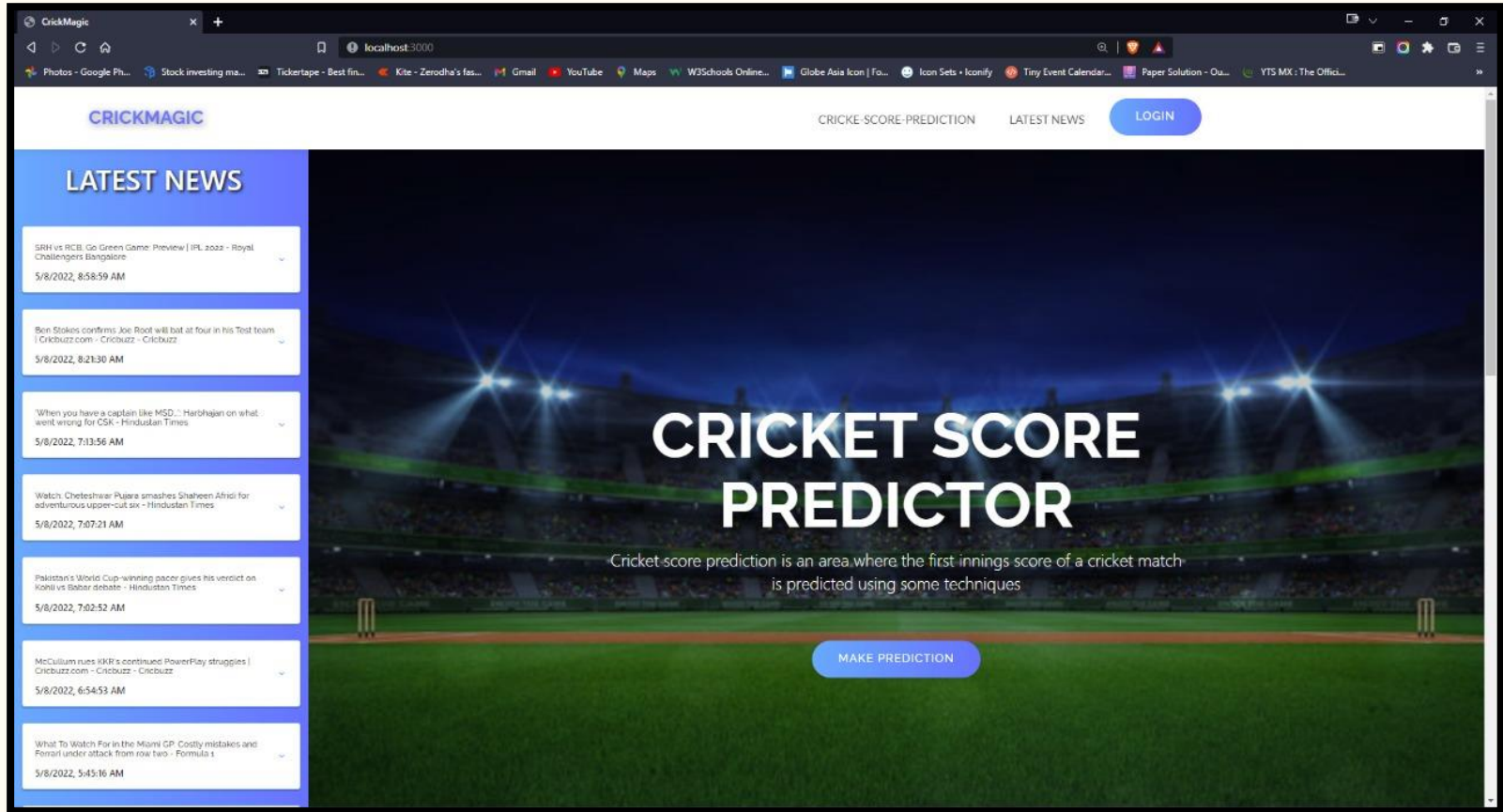
---

# 1. Login Page:

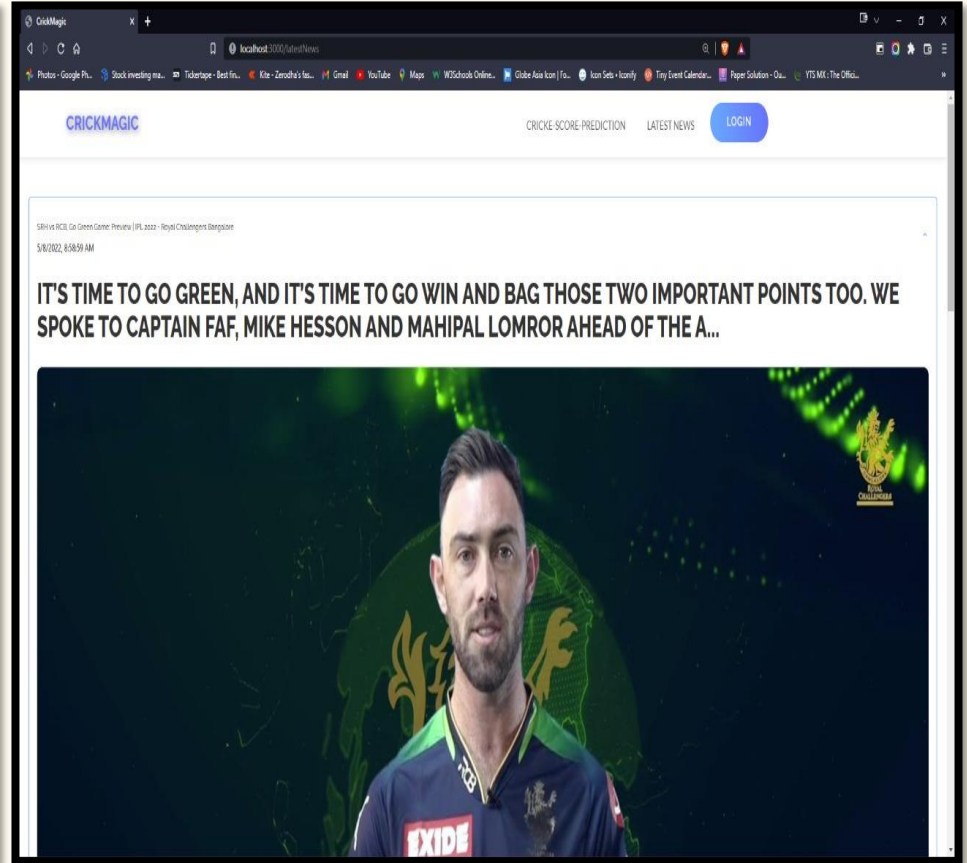
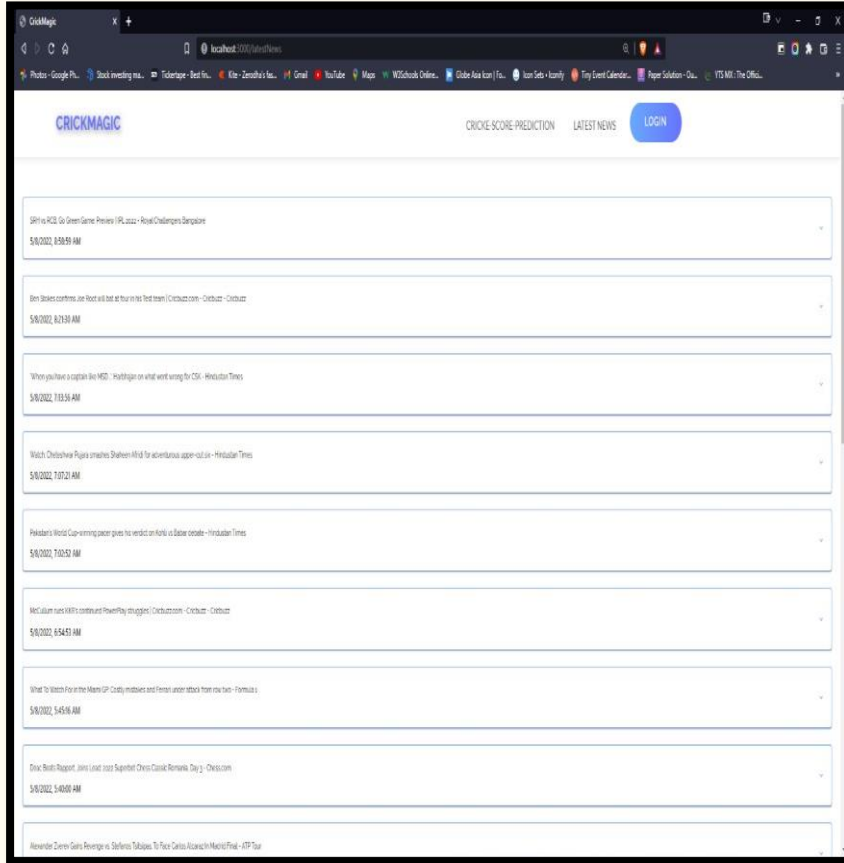




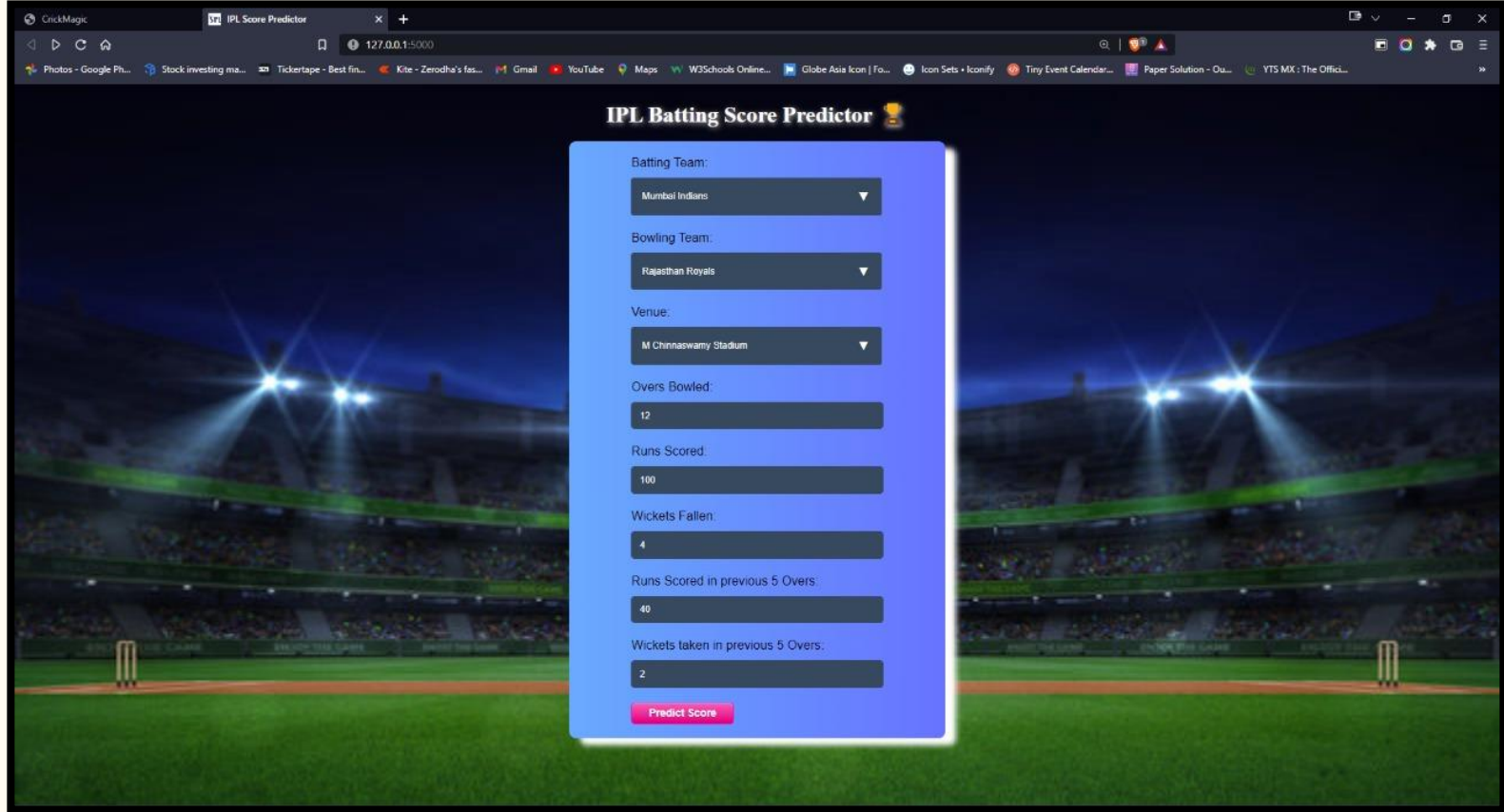
## 2. Home Page:



### 3. Latest News Section :



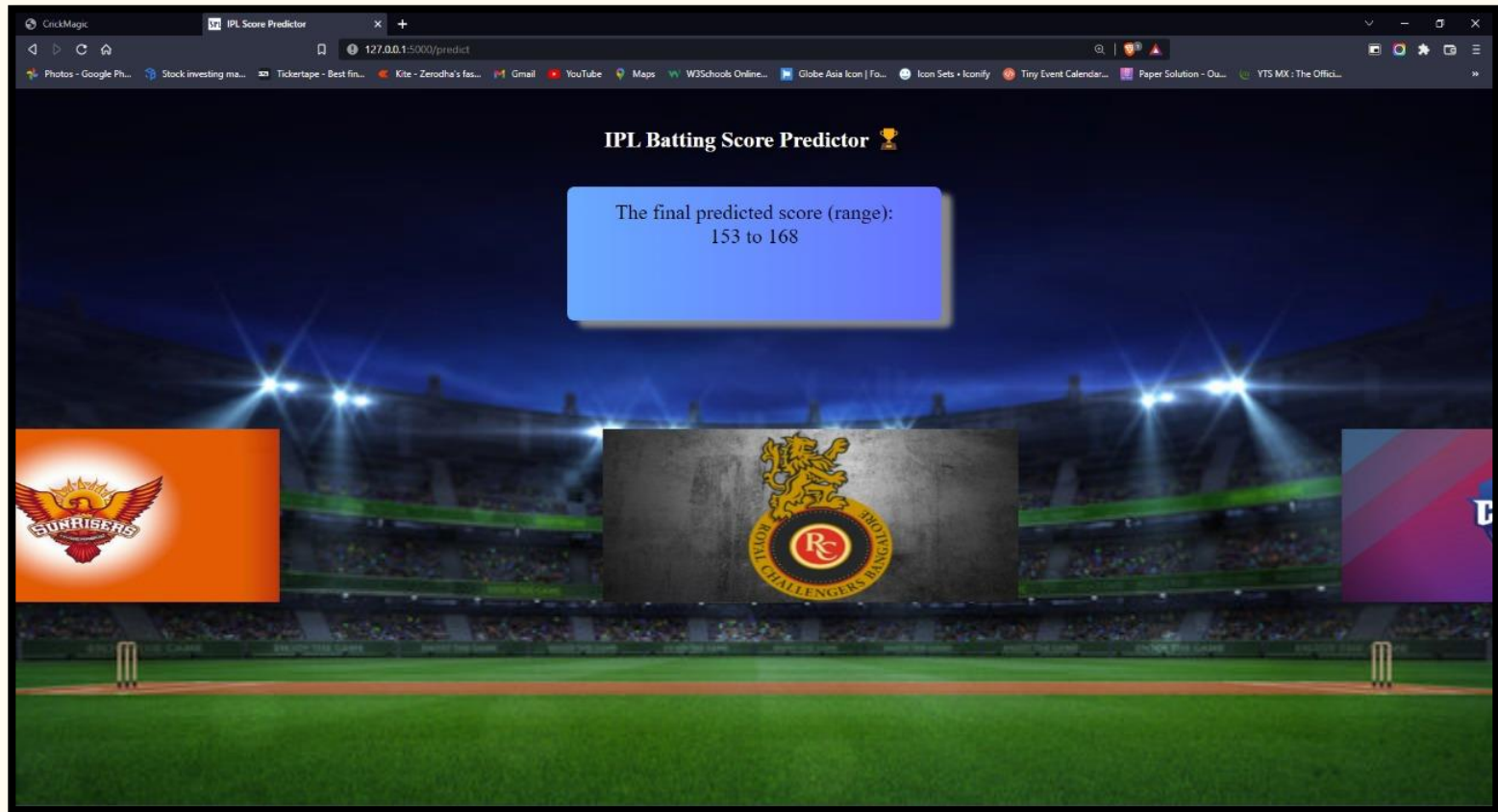
## 4. Prediction page :



The screenshot shows a web browser window with the title "IPL Score Predictor". The background is a night-time image of a cricket stadium with bright floodlights. In the center, there is a light blue rectangular form titled "IPL Batting Score Predictor" with a trophy icon. The form contains several input fields and a button:

- Batting Team:** A dropdown menu with "Mumbai Indians" selected.
- Bowling Team:** A dropdown menu with "Rajasthan Royals" selected.
- Venue:** A dropdown menu with "M Chinnaswamy Stadium" selected.
- Overs Bowled:** A text input field containing the number "12".
- Runs Scored:** A text input field containing the number "100".
- Wickets Fallen:** A text input field containing the number "4".
- Runs Scored in previous 5 Overs:** A text input field containing the number "40".
- Wickets taken in previous 5 Overs:** A text input field containing the number "2".
- Predict Score:** A red button at the bottom of the form.

## 5. Prediction Result page :



## 4. Conclusion

---

# Conclusion

From the results, we can conclude that the Lasso Regression algorithm has the highest accuracy of the prediction. So, we are using the Lasso Regression model for the prediction purpose.

In the future, we can implement a model for predicting the chasing probability. We can work on improving the accuracy of the model used in this project. Factors like venue, pitch, and the opponent team can be considered for the prediction.

# References

1. Dhonge, Nikhil, et al. "IPL CRICKET SCORE AND WINNING PREDICTION USING MACHINE LEARNING TECHNIQUES."
2. Patil, Nandkishor, and Dilip Dalgade. "CRICKET PREDICTION USING RANDOM FOREST REGRESSION."
3. <https://www.geeksforgeeks.org/implementation-of-lasso-regression-from-scratch-using-python/>
4. <https://www.geeksforgeeks.org/implementation-of-lasso-regression-from-scratch-using-python/>
5. <https://towardsdatascience.com/which-evaluation-metric-should-you-use-in-machine-learning-regression-problems-20cdaef258e>

**Thank You**

