



INTER IIT TECH MEET 13.0



TEAM 53

Next-Gen Team Builder
with Predicted AI

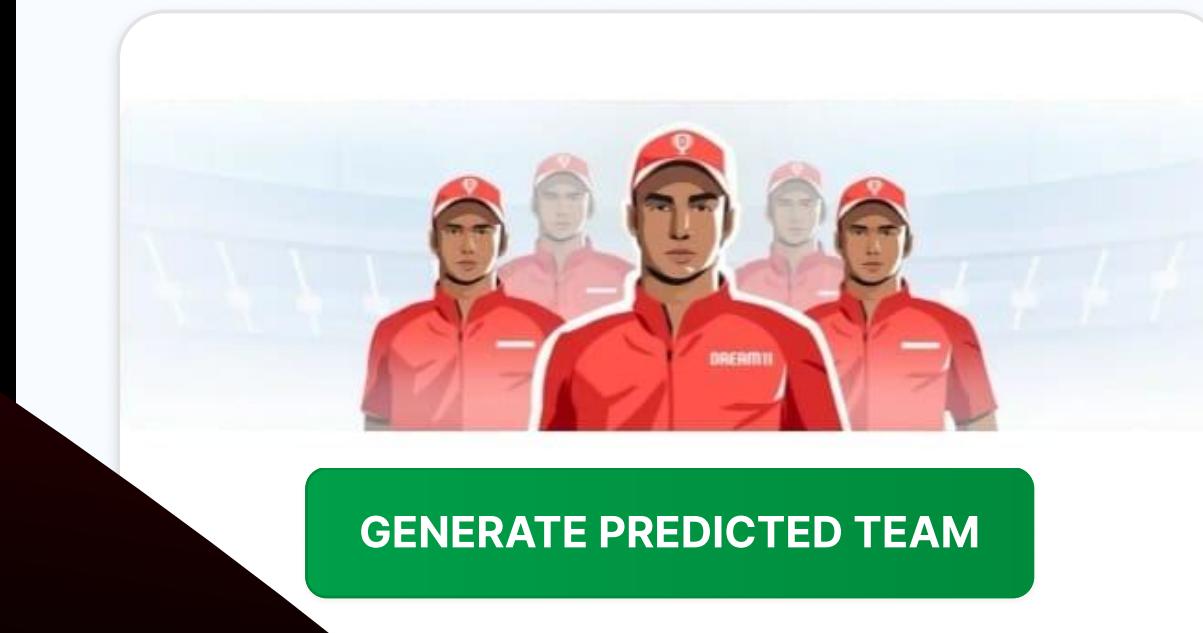


Contests My Contests **Teams** Gurus Stats

You haven't created a team yet!

The first step to winning starts here.

CREATE A TEAM



[View All >](#)



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2 Problem Understanding

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5 Solution Preview-Model Flow

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Introduction



- **Inadequate Predictive Insights**

Current tools lack predictive accuracy, making team selection challenging.

- **Complexity for Non-Experts**

Users with limited knowledge of fantasy sports struggle to understand and use available insights effectively.

- **Limited Engagement Features**

The lack of innovative and interactive UI elements results in reduced user satisfaction and retention.

Existing Issue



- **Empower Data-Driven Team Building**

Provide users with actionable, predictive insights for creating winning teams.

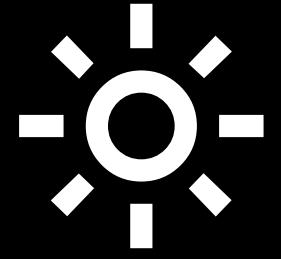
- **Enhance Accessibility**

Develop an intuitive and inclusive interface that caters to both casual and advanced users.

- **Revolutionize Engagement**

Introduce Generative AI features like audio and video guidance to simplify and enrich the user experience.

Our Aim



- **Build an Accurate Predictive Model:**

Develop a robust and explainable ML model that forecasts player performance with high accuracy.

- **Create a User-Centric Interface**

Design a visually appealing, fast, and interactive UI with Generative AI support.

- **Ensure Competitive Differentiation**

Position Dream11 as an innovative leader in the fantasy sports market by integrating cutting-edge features.

Our Goal

Problem Understanding

Dream11 is the world's largest fantasy sports platform, enabling users to create virtual teams composed of real-life players from various sports, such as cricket, football, and basketball. Users earn points based on the on-field performances of the players in their selected teams during live matches. Some of the criterias are:

Batting

- Runs Scored
- Strike Rate
- Boundaries



Bowling

- Wickets
- Maiden overs
- Economy



Fielding

- Catches
- Run-outs
- Stumpings



Bonus Points

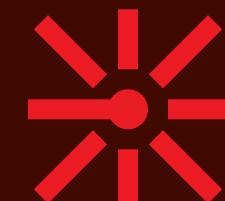
- Runs milestone
- Wickets milestone
- Cap or Vice Cap



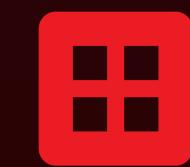
Challenges Faced



Unpredictability
of Player
Performance



Balancing Model
Explainability
and Accuracy



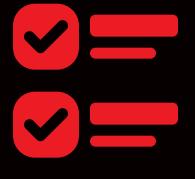
Handling
Large and
Diverse
Datasets



Optimizing
within
Constraints

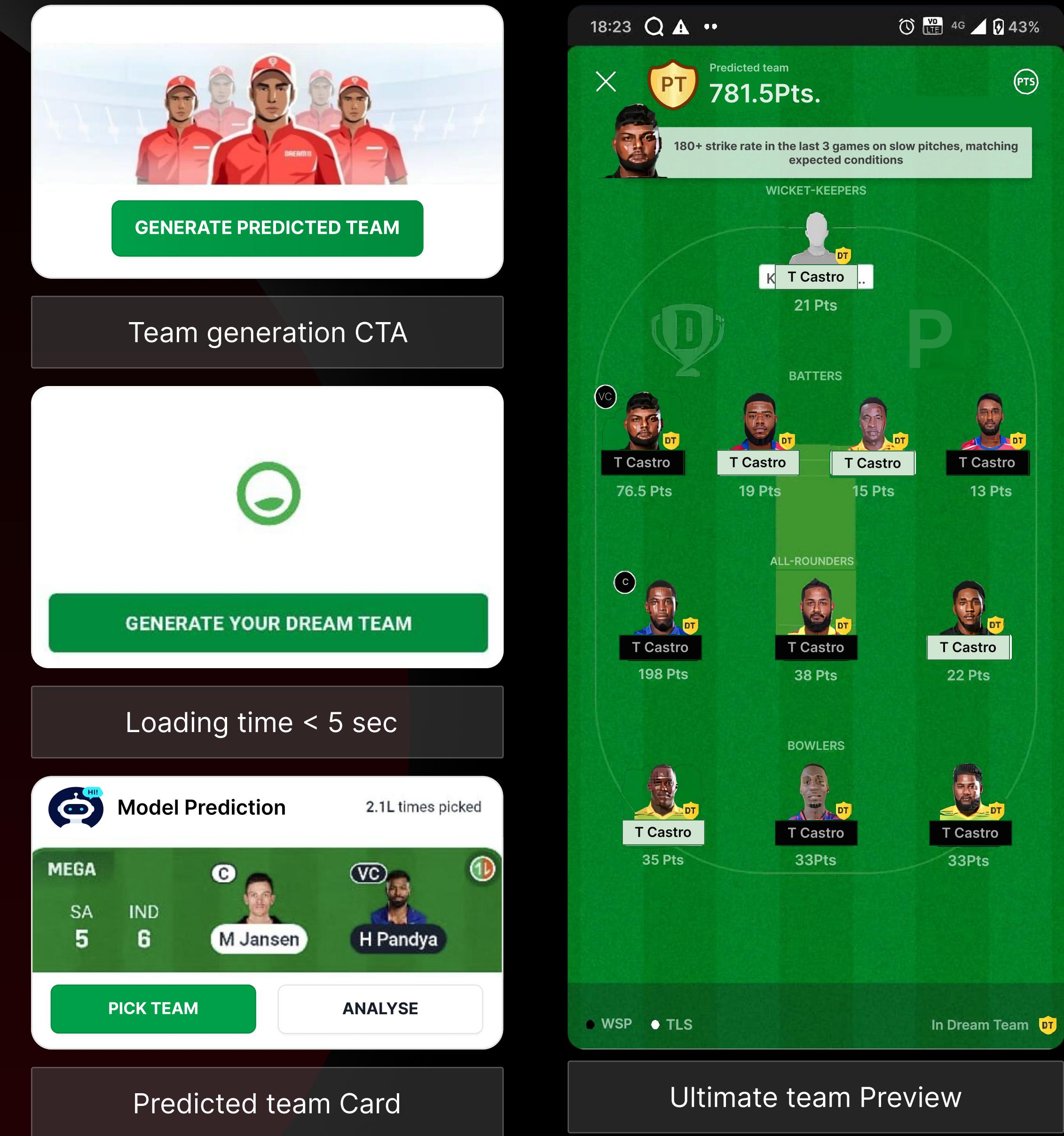
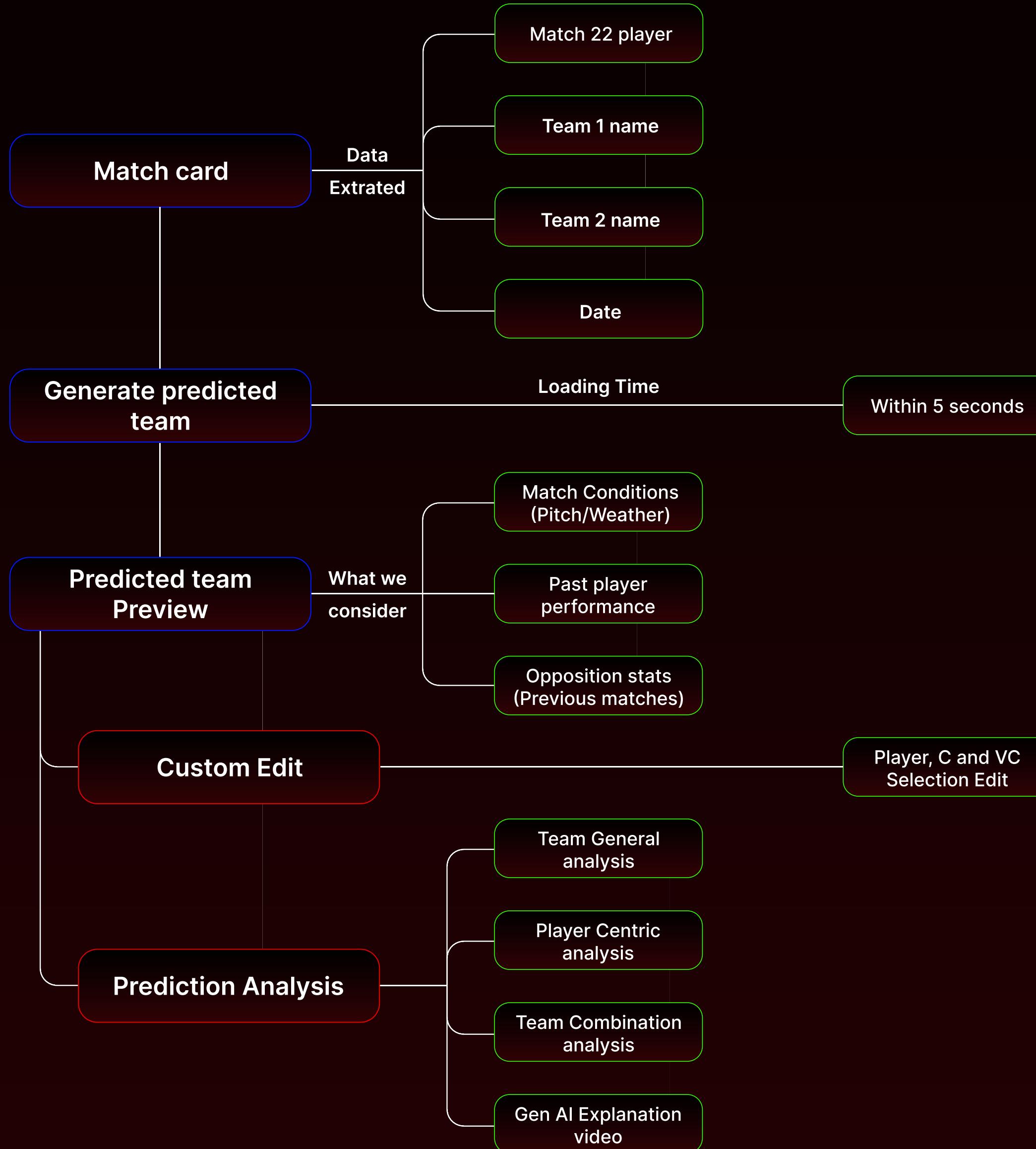


Real Time
Updates

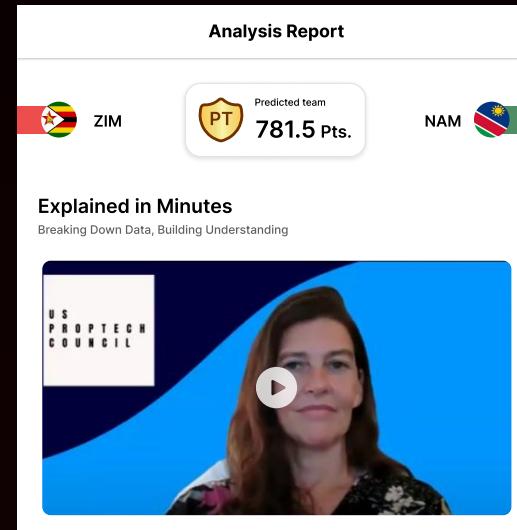


Creating
Intuitive and
Engaging UI/
UX

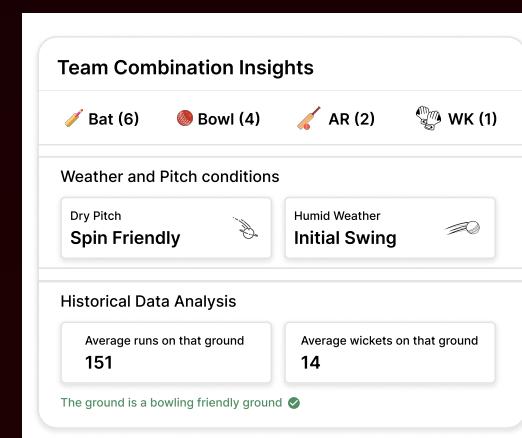
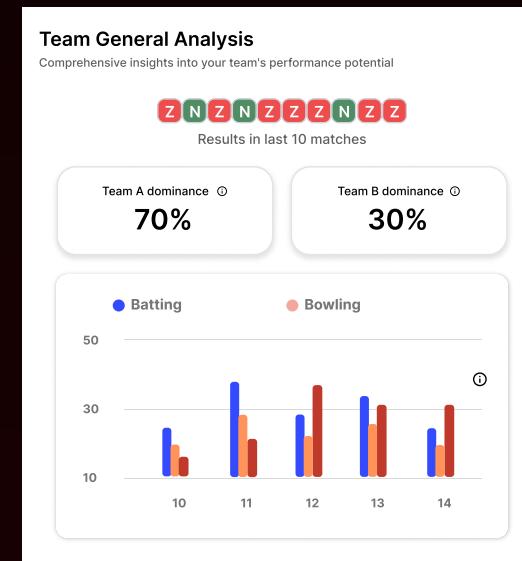
Working Flow - App/Tech



Solution Preview - Product UI

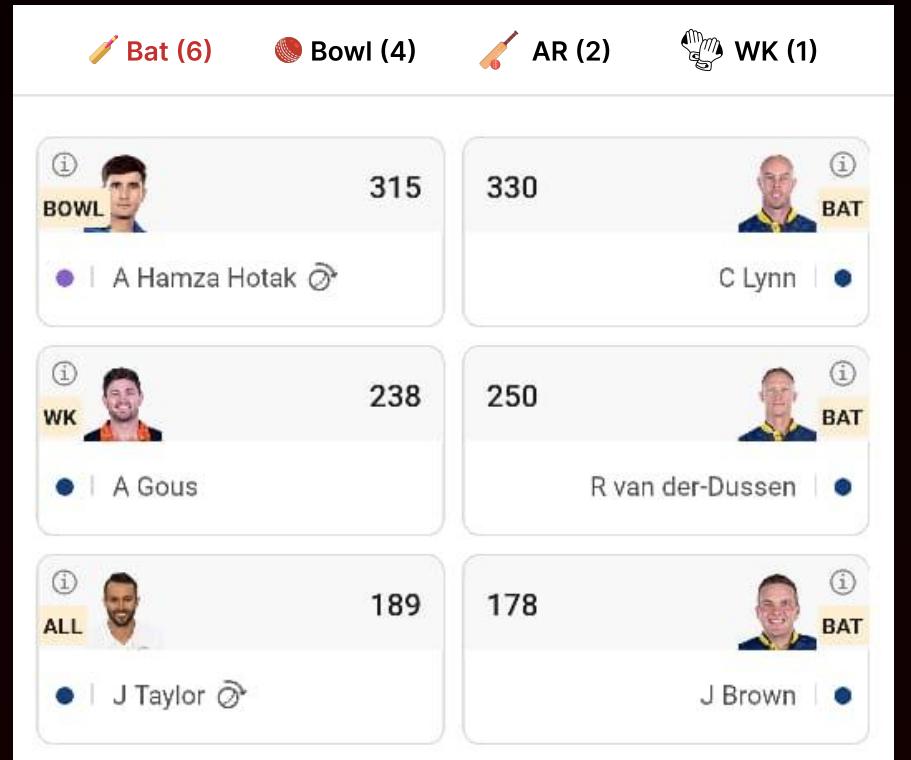


[Video Link](#)



Explained in Minutes

A quick video where our AI avatar explains player picks for the Dream 11 team based on past performance and match conditions.



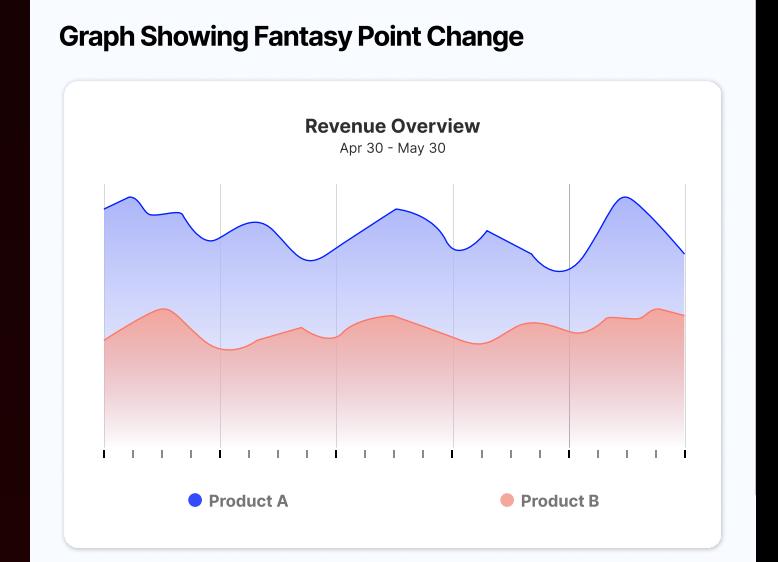
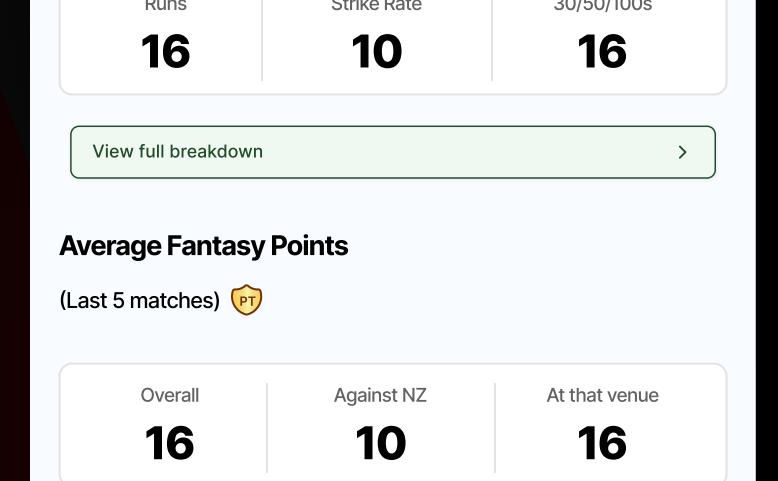
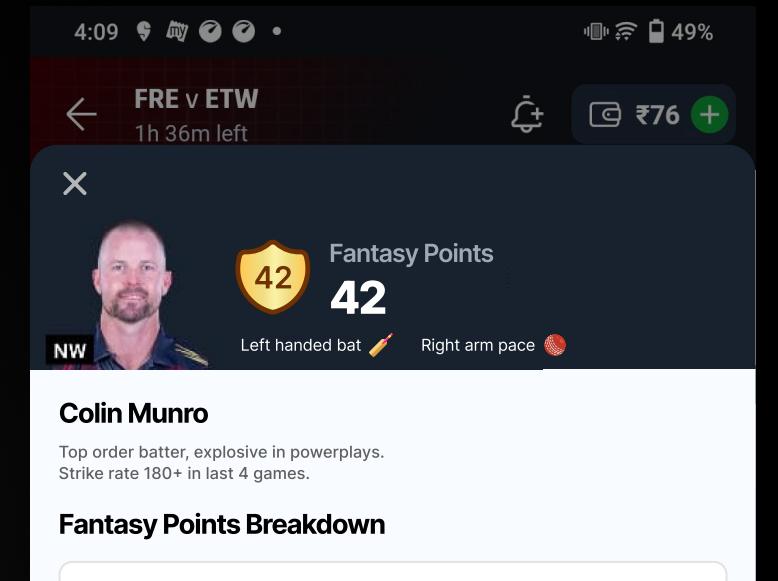
Player Centric

Highlights why a player is crucial for the team, using insights from their past performance and match conditions.

A screenshot of a mobile application interface titled 'Generate Your Dream 11'. It has fields for 'Team 1' and 'Team 2', a 'Select Date' calendar, and a 'Player Details' section with a button to 'Upload Your CSV or Edit the Table'.

Custom team Prediction

Highlights why a player is crucial for the team, using insights from their past performance and match conditions.



Player Overview:
Player points, name, role, and stats.

Points Breakdown:
Categorized points with a full breakdown option.

Average Points:
Last 5-match averages overall, vs. team, and at the venue.

Graph:
Fantasy points trend over time.

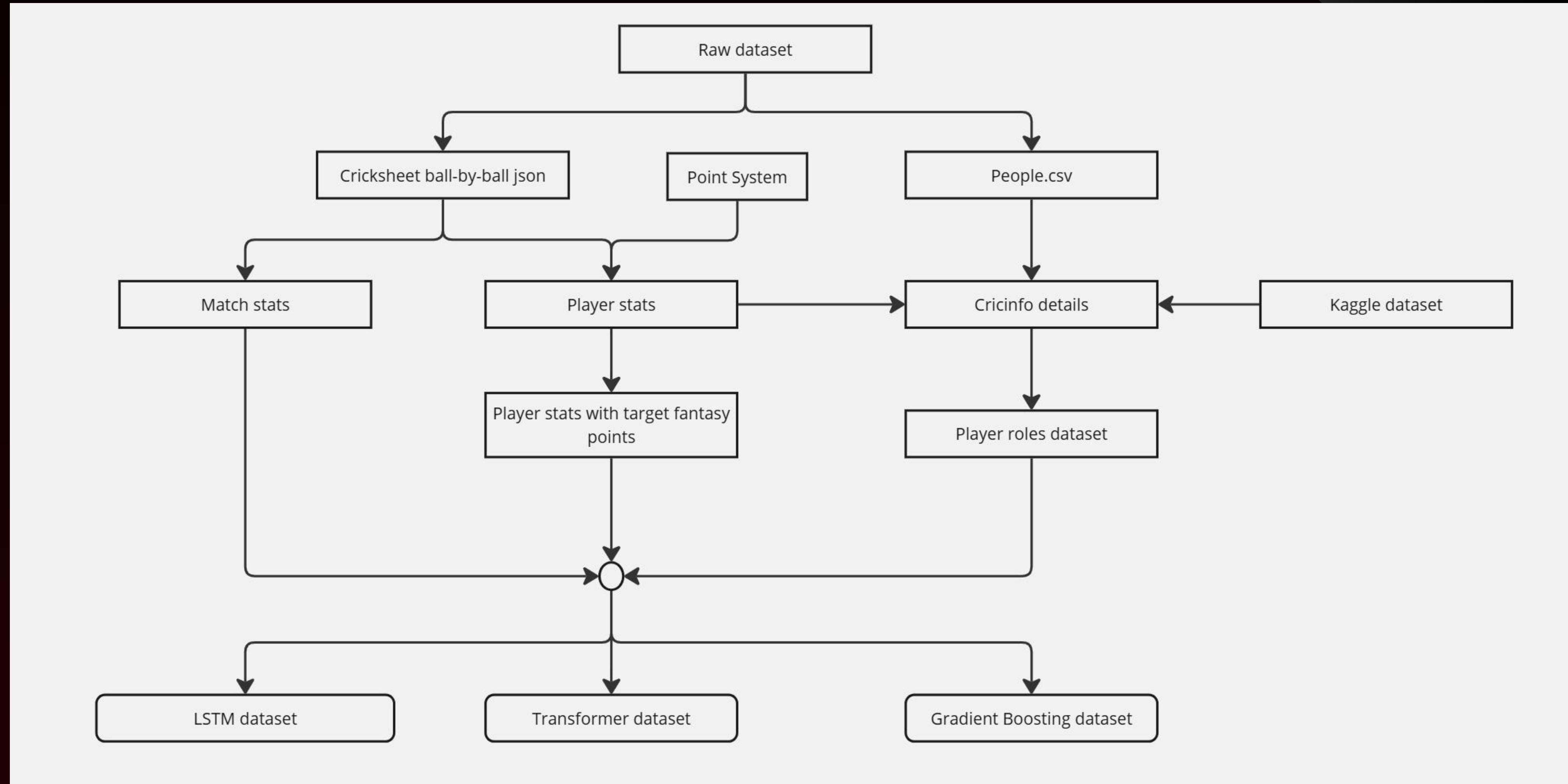
Product UI- Application Demonstration

The image displays four screenshots of the Dream11 mobile application interface:

- Create Team (Left):** Shows the team selection screen for the IND vs SA match. It includes player statistics like % Selected By and Points, and allows users to select 1-8 Batsmen. The total points available are 11.
- My Matches (Second from Left):** Shows completed matches (BAN vs IND) and upcoming matches (New Zealand v/s India ODI Women, West Indies v/s England Test, New Zealand v/s Sri Lanka T20I). It also features a "Generate your best 11" button.
- IND vs SA (Third from Left):** Provides historical data for the last 10 matches, showing IND dominance at 89% and SA dominance at 11%. It includes a bar chart of results by date and "Team Combination Insights".
- IND vs SA (Right):** Shows key performers for both teams. For India, Chintal Varun leads with 357 Pts. For South Africa, Gus Coetzee leads with 34 Pts. It also includes historical data analysis and pitch conditions.

Solution Preview - Model Flow

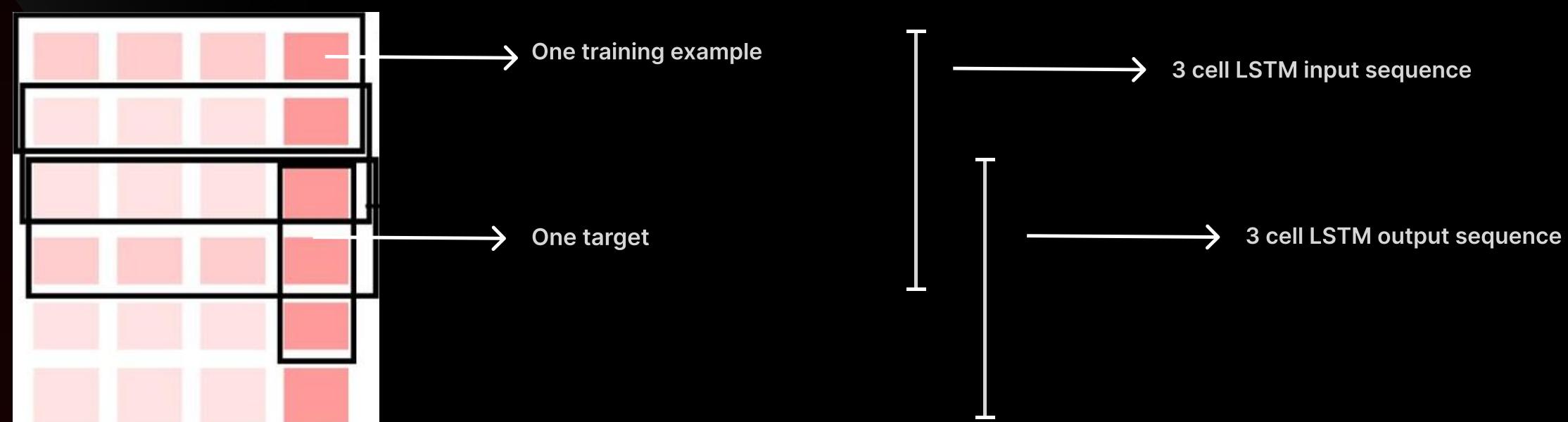
Data Engineering



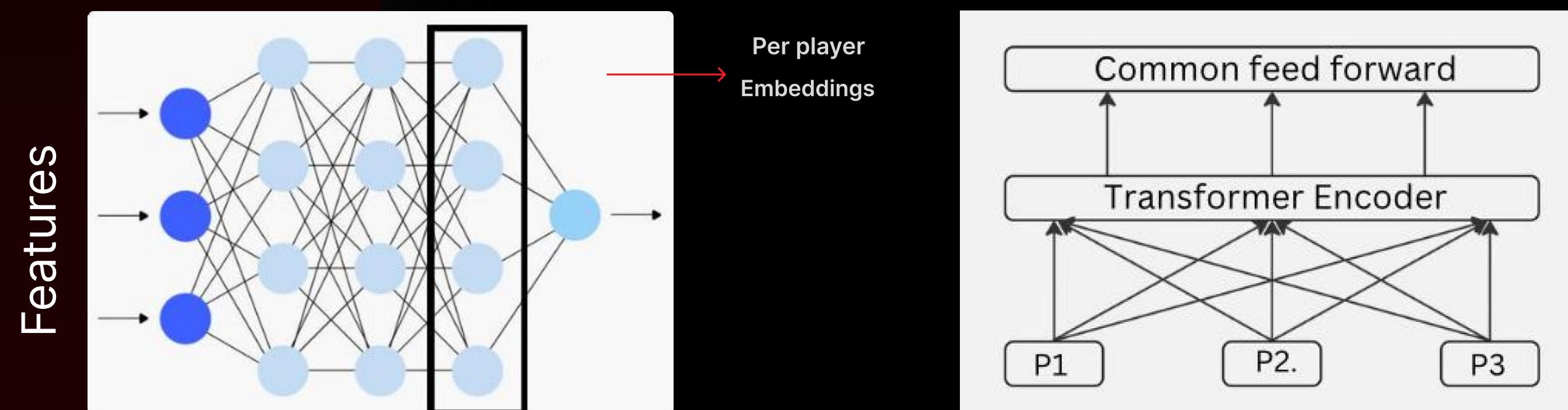
Solution Preview - Model Flow

Model Approaches

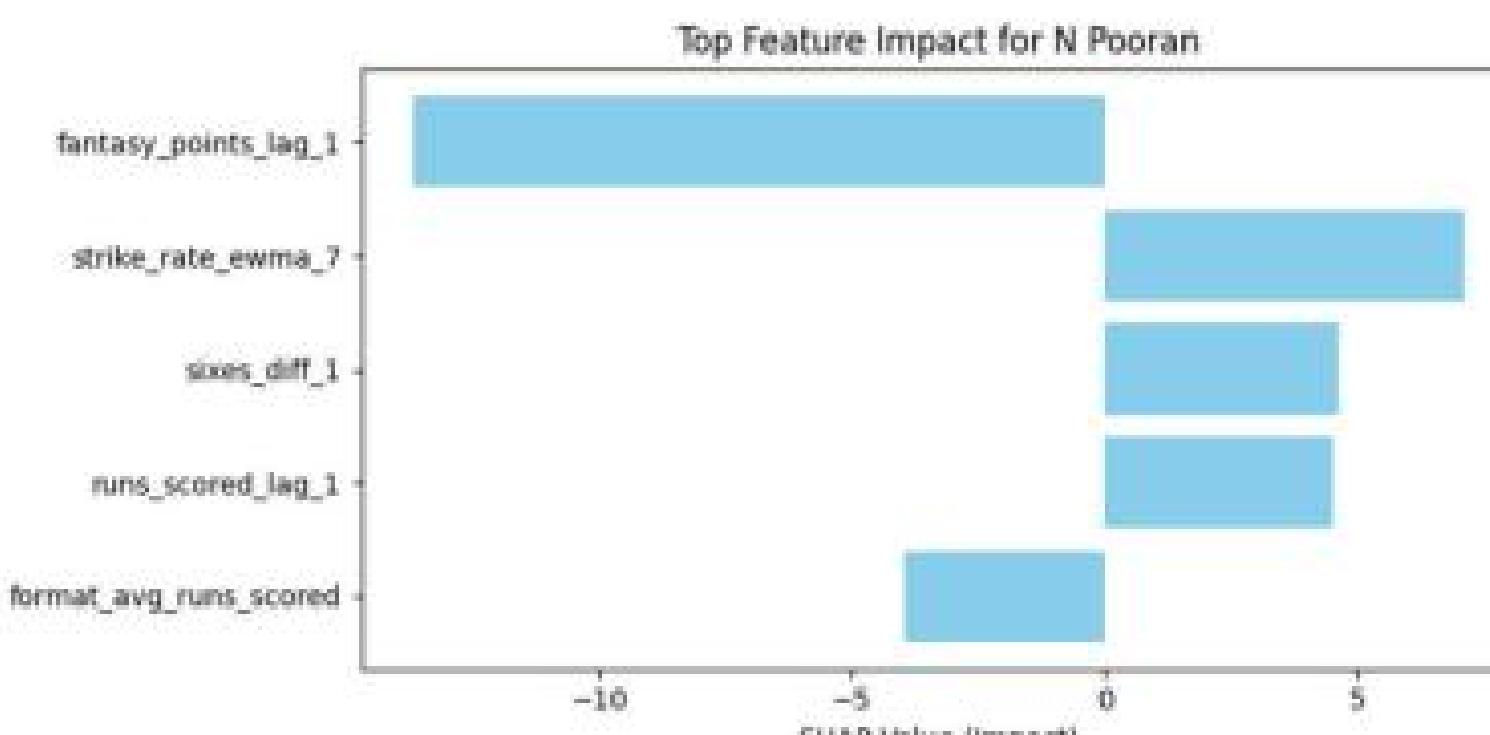
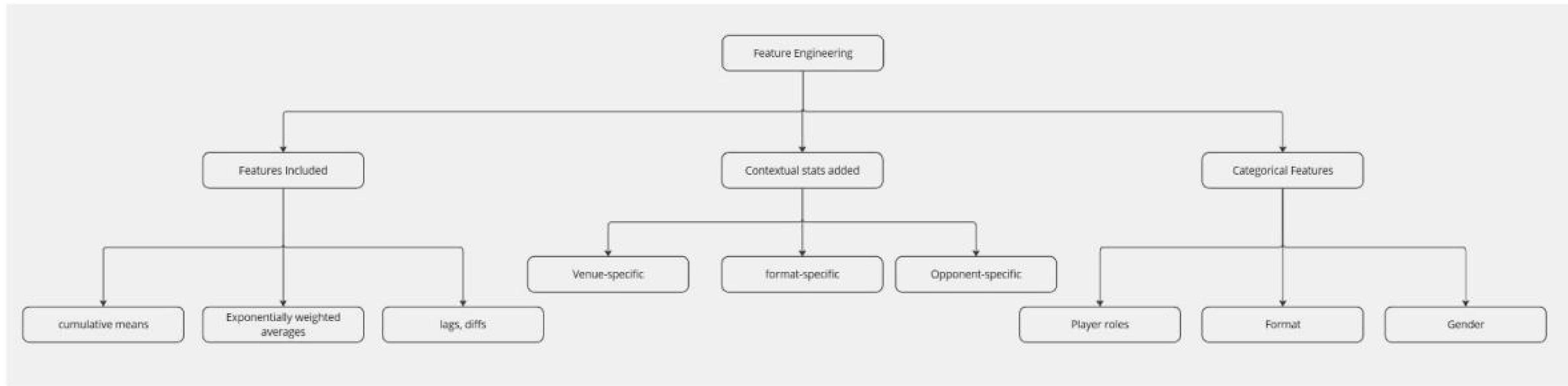
LSTM based Approach



Transformer Encoder based Approach

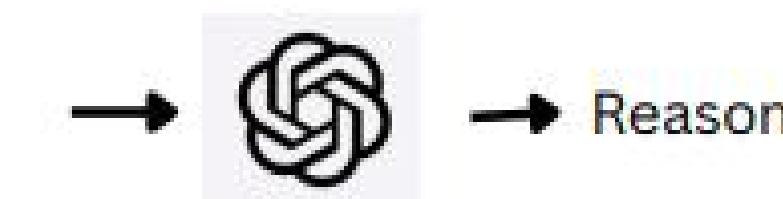


Gradient Boosting Models Approach



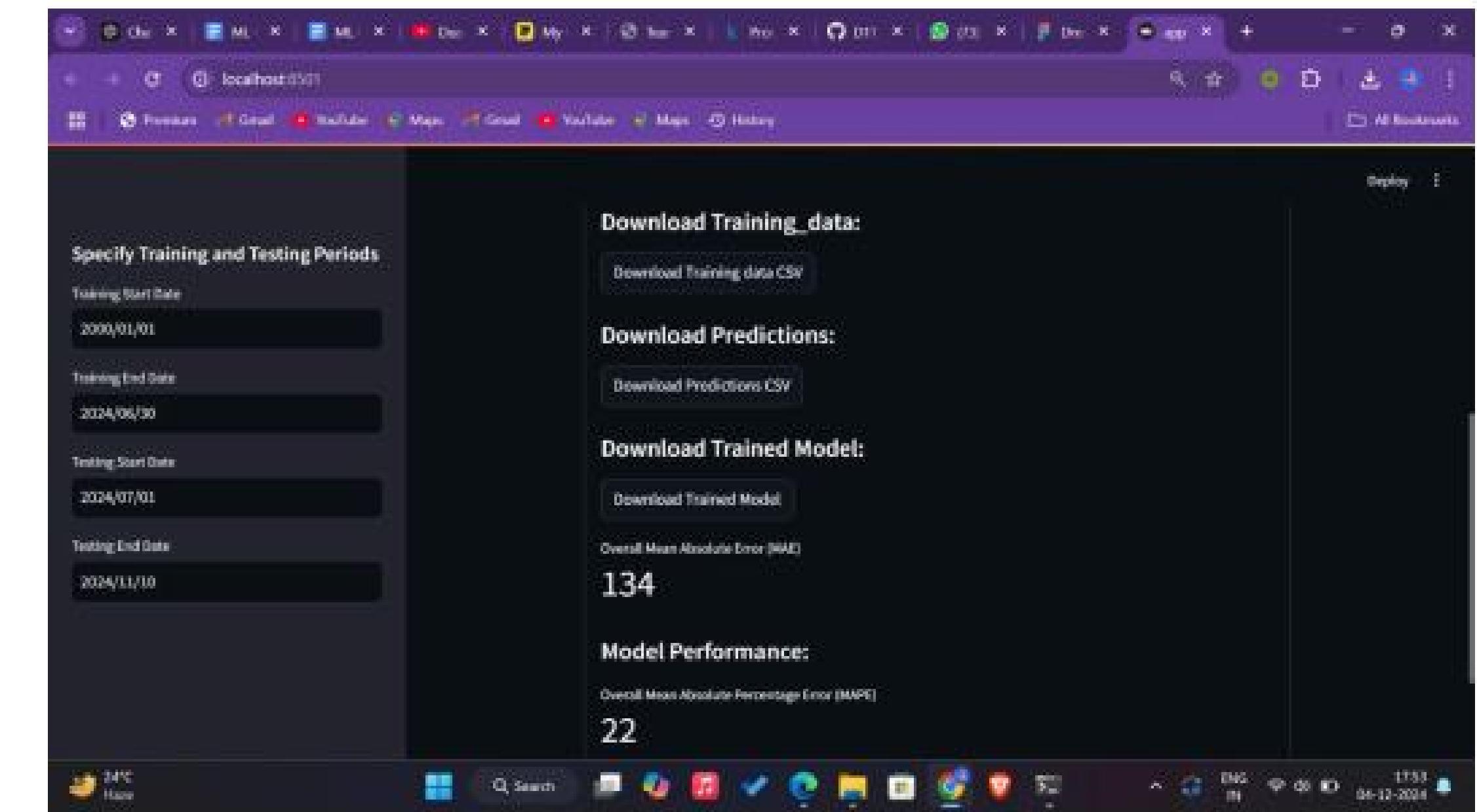
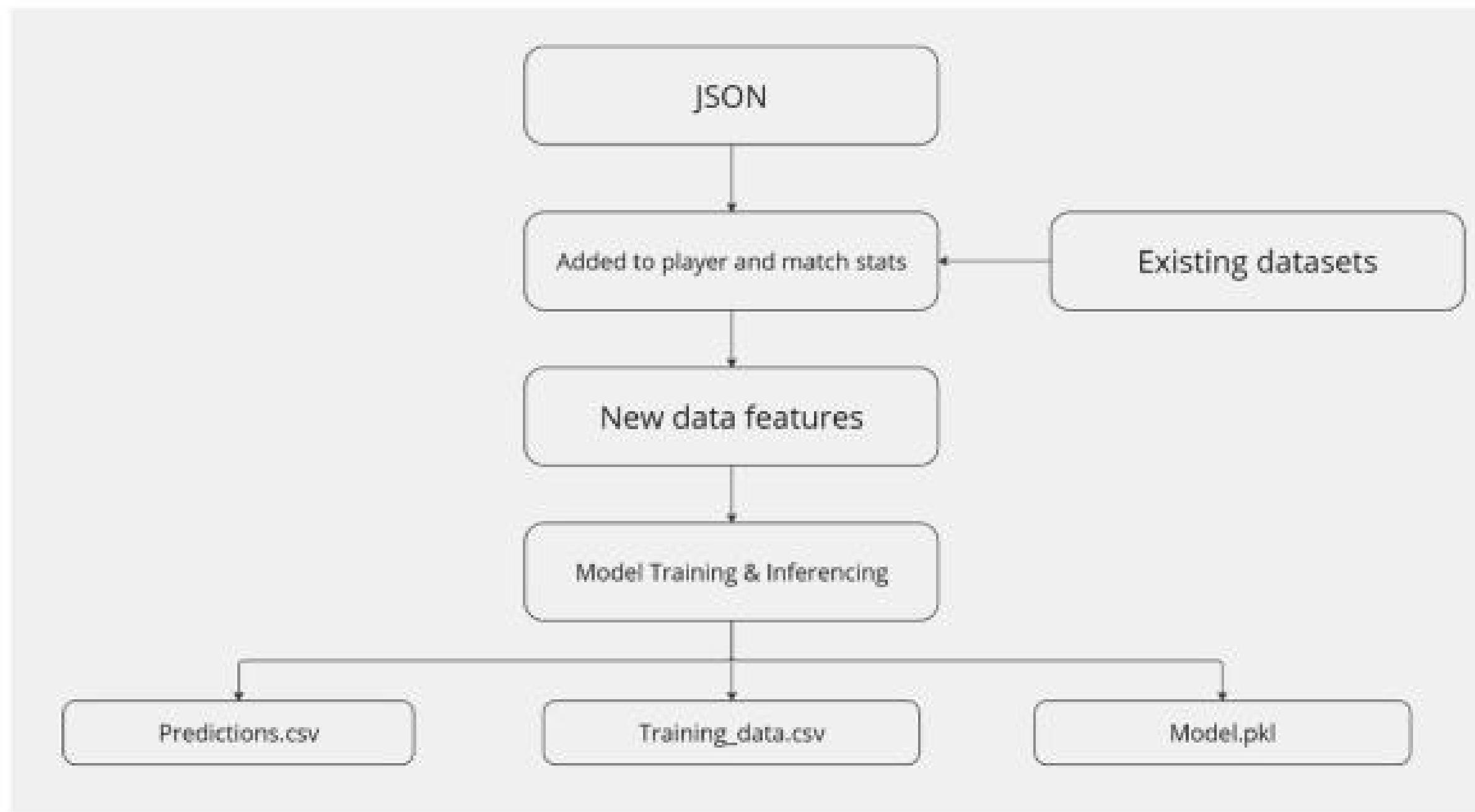
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"fours_cumulative_var", "description": "Cumulative variance of fours scored by
"sixes_lag_1", "description": "Number of sixes scored by the player in the las

Dynamic
Prompt

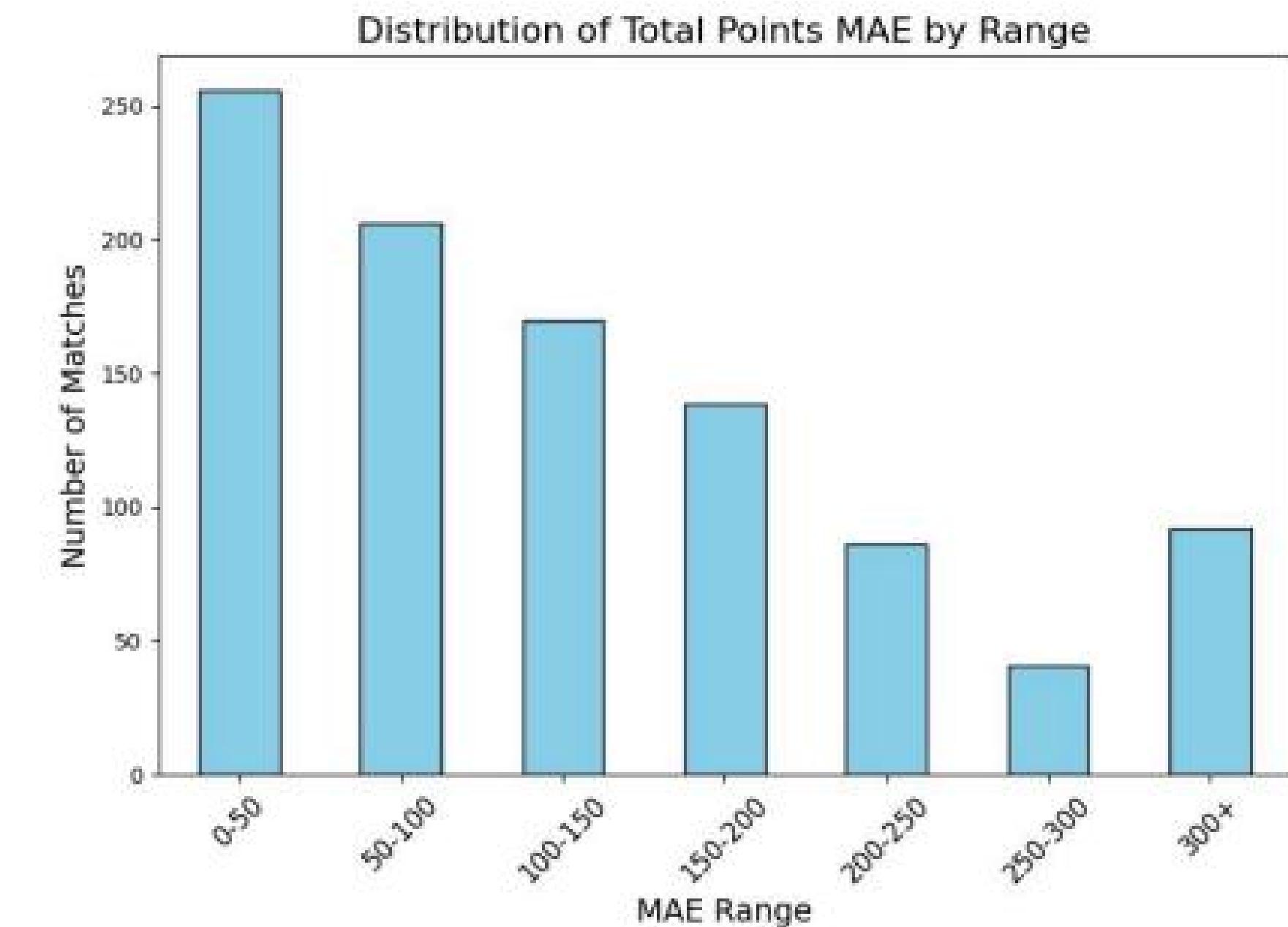


Explainable AI Approach

Model UI



<u>Models</u>	<u>MAE per player</u>
Hybrid model	12
LGBM Regressor	21
XGB Regressor	29
Encoder with embeddings from Neural Network	30
Fully connected Neural Network	31
xLSTM	40
LSTM	42



R.I.C.E Prioritization

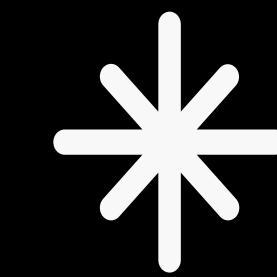
Feature	Reach (Out of 10)	Impact (Out of 3)	Confidence (Out of 100)	Effort (Out of 3)	Score
Preview Screen	9	3	95	1.5	1710
Custom match predict	8	2.5	85	2.5	680
Gen AI Video	✓	2	70	1	840
Player Centric	8	2.5	80	2.5	640
Miscellaneous match conditions	7	2	75	3	350

KPI and Success Metrics



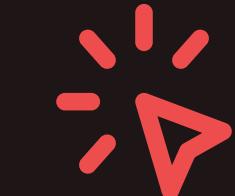
User Engagement

Track new user getting to app after Team Prediction Model integration



Mean Absolute Percentage Error (MAPE)

Measures the average error in predicting total fantasy points for selected dream teams.



Analysis Click Rate

Measures how often users click to view the detailed analysis report after generating the best 11 players.



Competitive Benchmarking

Comparing predicted team with teams created by gurus to stay ahead in market performance



Manual-to-ML Ratio

How many users who used to create teams manually converted to ML team creation users



Retention

How many users repeat the use of ML Team Prediction



ROI Metrics

Track overall revenue growth from events, sponsorships, and content sales.

Future Work

Risk Evaluation Model

- **What to do:** Develop a risk assessment framework to classify generated teams into "Low Risk" (stable scoring) and "High Risk" (high variance).
- **How to do:** Use player consistency metrics, historical performance data, and variance in fantasy points to create risk profiles for team combinations.

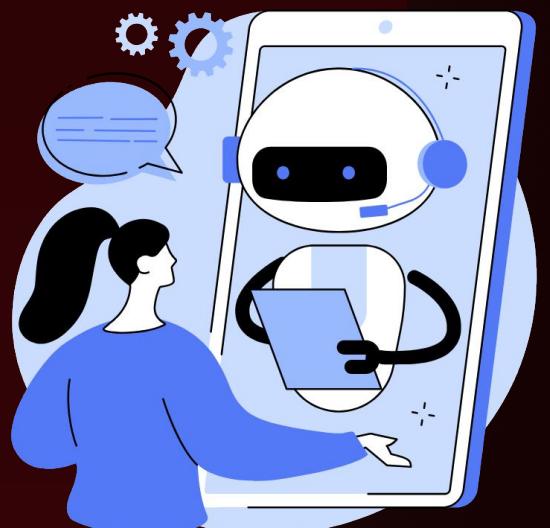


Future Prediction - With no 22 pool

- **What to do:** Predict the best XI for future matches even when the playing squads are not announced.
- **How to do:** Train the model using historical data, team strategies, and player availability trends to predict likely squad members and their expected performance.

Past Match Manual - AI Comparison

- **What to do:** Compare user-created teams with ML-predicted teams for past matches to analyze performance accuracy.
- **How to do:** Use match archives to calculate and display the fantasy point difference between user teams and model teams, highlighting competitive insights.



| Thank You