DAG explanation

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| **X** | **Y** | **Explanation** |
| Match | Batting Team | The match will dictate who is playing, and who could potentially be the batting team |
| Match | Bowling Team | The match will dictate who is playing, and who could potentially be the bowling team |
| Match | Toss Outcome | The teams playing, will have an effect on the decision the toss winning team might make |
| Toss Outcome | 1st\_innings | Winning or losing the toss will dictate who is doing what in the first innings |
| 1st\_innings | Batting Team | The decision made regarding 1st innings will dictate who is the Batting team in innings 1 and subsequently in in innings 2 |
| 1st\_innings | Bowling Team | The decision made regarding 1st innings will dictate who is the Bowling team in innings 1 and subsequently in in innings 2 |
| Fielding Team | Overs Spin | Each team will have a different make up of bowlers and will change bowling type based on how the game is going |
| Fielding Team | Overs Seam | Each team will have a different make up of bowlers and will change bowling type based on how the game is going |
| Fielding Team | Fielding wickets | Fielding wickets are caused by the fielding team only, and not assigned to a bowler (Run Outs). |
| Fielding Team | Byes | Byes occur when the batter has not hit the ball but ran anyway, these do not go against the bowler but are fielding extras |
| Fielding Team | Leg Byes | Leg byes occur when the batter was playing a shot but the ball hit them instead of the bat but ran anyway, these do not go against the bowler but are fielding extras |
| Overs Seam | Total Wickets Lost | Wickets caused by seam bowling |
| Overs Seam | Maiden Overs | Maiden overs caused by seam bowling |
| Overs Seam | Total Overs Faced | Total overs faced of seam bowling |
| Overs Seam | Byes | Byes occur when the batter has not hit the ball but ran anyway, these do not go against the bowler but are fielding extras. These are still (in part) caused by the way that ball was bowled |
| Overs Seam | Leg Byes | Leg byes occur when the batter was playing a shot but the ball hit them instead of the bat but ran anyway, these do not go against the bowler but are fielding extras. These are still (in part) caused by the way that ball was bowled |
| Overs Seam | Wides | Wides caused by seam bowling |
| Overs Seam | No Balls | No balls caused by seam bowling |
| Overs Seam | 1s | 1s scored off seam bowling |
| Overs Seam | 2s | 2s scored off seam bowling |
| Overs Seam | 4s | 4s scored off seam bowling |
| Overs Seam | 6s | 6s scored off seam bowling |
| Overs Spin | Total Wickets Lost | Wickets caused by spin bowling |
| Overs Spin | Maiden Overs | Maiden overs caused by spin bowling |
| Overs Spin | Total Overs Faced | Total overs faced of spin bowling |
| Overs Spin | Byes | Byes occur when the batter has not hit the ball but ran anyway, these do not go against the bowler but are fielding extras. These are still (in part) caused by the way that ball was bowled |
| Overs Spin | Leg Byes | Leg byes occur when the batter was playing a shot but the ball hit them instead of the bat but ran anyway, these do not go against the bowler but are fielding extras. These are still (in part) caused by the way that ball was bowled |
| Overs Spin | Wides | Wides caused by spin bowling |
| Overs Spin | No Balls | No balls caused by spin bowling |
| Overs Spin | 1s | 1s scored off spin bowling |
| Overs Spin | 2s | 2s scored off spin bowling |
| Overs Spin | 4s | 4s scored off spin bowling |
| Overs Spin | 6s | 6s scored off spin bowling |
| Fielding Wickets | Total Wickets Lost | Fielding wickets contribute to Total Wickets Lost |
| Maiden Overs | Total Overs Faced | Maiden overs are overs where no runs are scored. They contribute to the total overs faced |
| Leg Byes | Total Runs | Leg byes occur when the batter played a shot, missed, but the ball hit the batter and they ran. This contributes to total runs |
| Byes | Total Runs | Byes occur when the ball misses everything, and the batters ran. This contributes to total runs. |
| Wides | Total Wickets Lost | A wicket can be taken off of a wide ball |
| Wides | Total Overs Faced | A wide gets re-bowled, and means that the team faces more balls then expected. |
| Wides | Total Runs | If a wide is bowled, the batting team get 1 run for the extra, but this doesn’t go towards a batter’s score. |
| No Balls | Fielding Wickets | The only way a batter can be out off a No Ball is by being Run out. This type of dismissal is down to the fielder not the bowler. |
| No Balls | Total Overs Faced | A No Ball gets re-bowled, and means that the team faces more balls then expected. |
| No Balls | Total Runs | If a no ball is bowled, the batting team get 1 run for the extra, but this doesn’t go towards a batter’s score. |
| No Balls | 1s | Batters can score runs of a no ball that goes towards their score |
| No Balls | 2s |
| No Balls | 4s |
| No Balls | 6s |
| Batting Team | 1s | 1s scored by the Batting Team |
| Batting Team | 2s | 2s scored by the Batting Team |
| Batting Team | 4s | 4s scored by the Batting Team |
| Batting Team | 6s | 6s scored by the Batting Team |
| Batting Team | Byes | Batters can still choose to run if the ball has missed the bat, the stumps, and the keeper. |
| Batting Team | Leg Byes | If the batter is playing a shot, but the ball hits the pads and the batters run, they can still accumulate Leg Byes |
| Batting Team | Maiden Overs | If batters don’t score any runs off an over, then it is a maiden over. |
| 1s | Total Runs | Runs scored by the batters contributes to the total runs scored during the innings |
| 2s | Total Runs |
| 4s | Total Runs |
| 6s | Total Runs |
| Total wickets lost | Total Overs Faced | Batting orders are made up of better batters at the top, and lesser batters at the bottom. If a team loses 10 wickets the innings stops. Therefore the more wickets in hand, the higher possibility to face more over |
| Total Overs Faced | Total Runs | The more overs faced, the higher possibility to score more runs |
| Total Runs | Win/Lose | The team that scored the most total runs in their innings will decide who won or lost the match. |

DAG code:

dag {

"1st Innings?" [adjusted,pos="-1.518,-0.904"]

"Batting Team" [exposure,pos="-1.296,-1.167"]

"Fielding Team" [pos="-1.556,-0.339"]

"Fielding wickets" [pos="-1.222,0.508"]

"Leg Byes" [pos="0.049,-0.241"]

"No Balls" [pos="0.007,-0.675"]

"Teams?" [pos="-1.571,-1.520"]

"Win/Lose" [pos="1.334,-0.249"]

1s [pos="0.070,-1.213"]

2s [pos="-0.037,-1.485"]

4s [pos="0.549,-1.347"]

6s [pos="0.501,-1.045"]

Byes [pos="-0.109,-0.520"]

Maiden\_Overs [pos="0.082,0.203"]

Match [adjusted,pos="-2.079,-1.371"]

Overs\_Seam [pos="-1.211,0.096"]

Overs\_Spin [pos="-1.123,-0.648"]

Toss\_outcome [pos="-1.781,-1.077"]

Total\_Overs\_Faced [pos="0.972,-0.195"]

Total\_Runs [outcome,pos="0.962,-0.824"]

Total\_Wickets\_Lost [pos="0.991,0.426"]

Wides [pos="0.065,-0.404"]

"1st Innings?" -> "Batting Team"

"1st Innings?" -> "Fielding Team"

"Batting Team" -> "Fielding wickets"

"Batting Team" -> "Leg Byes"

"Batting Team" -> 1s

"Batting Team" -> 2s

"Batting Team" -> 4s

"Batting Team" -> 6s

"Batting Team" -> Byes

"Batting Team" -> Maiden\_Overs

"Batting Team" -> Overs\_Seam

"Batting Team" -> Overs\_Spin

"Fielding Team" -> "Fielding wickets"

"Fielding Team" -> "Leg Byes"

"Fielding Team" -> Byes

"Fielding Team" -> Overs\_Seam

"Fielding Team" -> Overs\_Spin

"Fielding wickets" -> Total\_Wickets\_Lost

"Leg Byes" -> Total\_Runs

"No Balls" -> "Fielding wickets"

"No Balls" -> 1s

"No Balls" -> 2s

"No Balls" -> 4s

"No Balls" -> 6s

"No Balls" -> Total\_Overs\_Faced

"No Balls" -> Total\_Runs

1s -> Total\_Runs

2s -> Total\_Runs

4s -> Total\_Runs

6s -> Total\_Runs

Byes -> Total\_Runs

Maiden\_Overs -> Total\_Overs\_Faced

Match -> "Batting Team"

Match -> "Fielding Team"

Match -> Toss\_outcome

Overs\_Seam -> "Leg Byes"

Overs\_Seam -> "No Balls"

Overs\_Seam -> 1s

Overs\_Seam -> 2s

Overs\_Seam -> 4s

Overs\_Seam -> 6s

Overs\_Seam -> Byes

Overs\_Seam -> Maiden\_Overs

Overs\_Seam -> Total\_Overs\_Faced

Overs\_Seam -> Total\_Wickets\_Lost

Overs\_Seam -> Wides

Overs\_Spin -> "Leg Byes"

Overs\_Spin -> "No Balls"

Overs\_Spin -> 1s

Overs\_Spin -> 2s

Overs\_Spin -> 4s

Overs\_Spin -> 6s

Overs\_Spin -> Byes

Overs\_Spin -> Maiden\_Overs

Overs\_Spin -> Total\_Overs\_Faced

Overs\_Spin -> Total\_Wickets\_Lost

Overs\_Spin -> Wides

Toss\_outcome -> "1st Innings?"

Total\_Overs\_Faced -> Total\_Runs

Total\_Runs -> "Win/Lose"

Total\_Wickets\_Lost -> Total\_Overs\_Faced

Wides -> Total\_Overs\_Faced

Wides -> Total\_Runs

Wides -> Total\_Wickets\_Lost

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