DAG explanation

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| **X** | **Y** | **Explanation** |
| Match | Team | The match will dictate who is playing, and who could potentially be the focus team |
| Match | Opposition | The match will dictate who is playing, and who could potentially be the opposing team |
| Team | Toss Outcome | Depending on who wins the coin toss, either the team or the opposition will decide on order of innings. The teams playing, will have an effect on the decision the toss winning team might make |
| Opposition | Toss Outcome |
| Team | Batting | The focus team is batting |
| Toss Outcome | Batting | Depending on the toss outcome, will depend who is batting. |
| Innings | Batting | Depending on the innings number will depend who is batting. |
| Opposition | Spin Delivery | Each team will have a different make up of bowlers and will change bowling type based on how the game is going |
| Opposition | Seam Delivery |
| Opposition | 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 |
| Opposition | 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 |
| Opposition | No Balls | Although no balls go against the bowler, there are occasions where a no ball is caused by the fielding team not following the fielding restrictions. |
| Opposition | Fielding wickets | Fielding wickets are caused by the fielding team only, and not assigned to a bowler (Run Outs). |
| Seam Delivery | Total Wickets Lost | Wickets caused by seam bowling |
| Seam Delivery | Dot Balls | Dot balls caused by seam bowling |
| Seam Delivery | Total Balls Faced | Total balls faced of seam bowling |
| Seam Delivery | 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 |
| Seam Delivery | 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 |
| Seam Delivery | Wides | Wides caused by seam bowling |
| Seam Delivery | No Balls | No balls caused by seam bowling |
| Seam Delivery | 1s | 1s scored off seam bowling |
| Seam Delivery | 2s | 2s scored off seam bowling |
| Seam Delivery | 4s | 4s scored off seam bowling |
| Seam Delivery | 6s | 6s scored off seam bowling |
| Spin Delivery | Total Wickets Lost | Wickets caused by spin bowling |
| Spin Delivery | Dot Balls | Dot balls caused by spin bowling |
| Spin Delivery | Total Balls Faced | Total balls faced of spin bowling |
| Spin Delivery | 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 |
| Spin Delivery | 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 |
| Spin Delivery | Wides | Wides caused by spin bowling |
| Spin Delivery | No Balls | No balls caused by spin bowling |
| Spin Delivery | 1s | 1s scored off spin bowling |
| Spin Delivery | 2s | 2s scored off spin bowling |
| Spin Delivery | 4s | 4s scored off spin bowling |
| Spin Delivery | 6s | 6s scored off spin bowling |
| Fielding Wickets | Total Wickets Lost | Fielding wickets contribute to Total Wickets Lost but are not directly linked to the bowler or the batter. |
| Dot Balls | Total Balls Faced | Dot Balls occur when no runs are scored off of it. They contribute to the total balls 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 a wide ball |
| Wides | Total Overs Faced | A wide gets re-bowled, and means that the team faces more balls than expected. |
| Wides | Total Runs | If a wide is bowled, the batting team get 1 run for the extra, plus potentially any other runs caused by that wide, 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 Balls 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 plus potentially any other runs caused by that ball, 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 | 1s | 1s scored by the Batting Team |
| Batting | 2s | 2s scored by the Batting Team |
| Batting | 4s | 4s scored by the Batting Team |
| Batting | 6s | 6s scored by the Batting Team |
| Batting | Dot Ball | No runs scored by the Batting |
| Batting | Byes | Batters can still choose to run if the ball has missed the bat, the stumps, and the keeper. |
| Batting | 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 If batters don’t score any runs off an over, then it is a maiden over. |
| Batting | Fielding wickets | Batters decision to run or not, would in part cause the possibility of a run out. |
| Batting | Seam Delivery | The team batting, and their preference of bowling type could affect what the fielding team chose to bowl |
| Batting | Spin Delivery |
| 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 balls |
| Total Balls Faced | Total Runs | The more balls 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 {

"Fielding wickets" [pos="-1.298,0.484"]

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

"No Balls" [pos="0.014,-0.680"]

"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"]

Batting [pos="-1.541,-0.865"]

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

Dot\_Ball [pos="0.117,-0.974"]

Innings [pos="-1.558,-1.288"]

Match [pos="-2.255,-0.863"]

Opposition [pos="-1.689,-0.247"]

Seam\_Delivery [pos="-1.062,0.086"]

Spin\_Delivery [pos="-1.209,-0.498"]

Team [pos="-1.880,-1.269"]

Toss\_outcome [pos="-1.921,-0.868"]

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

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

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

Wides [pos="0.065,-0.404"]

"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\_Balls\_Faced

"No Balls" -> Total\_Runs

1s -> Total\_Runs

2s -> Total\_Runs

4s -> Total\_Runs

6s -> Total\_Runs

Batting -> "Fielding wickets"

Batting -> "Leg Byes"

Batting -> 1s

Batting -> 2s

Batting -> 4s

Batting -> 6s

Batting -> Byes

Batting -> Dot\_Ball

Batting -> Seam\_Delivery

Batting -> Spin\_Delivery

Byes -> Total\_Runs

Dot\_Ball -> Total\_Balls\_Faced

Innings -> Batting

Match -> Opposition

Match -> Team

Opposition -> "Fielding wickets"

Opposition -> "Leg Byes"

Opposition -> "No Balls"

Opposition -> Byes

Opposition -> Seam\_Delivery

Opposition -> Spin\_Delivery

Opposition -> Toss\_outcome

Seam\_Delivery -> "Leg Byes"

Seam\_Delivery -> "No Balls"

Seam\_Delivery -> 1s

Seam\_Delivery -> 2s

Seam\_Delivery -> 4s

Seam\_Delivery -> 6s

Seam\_Delivery -> Byes

Seam\_Delivery -> Dot\_Ball

Seam\_Delivery -> Total\_Balls\_Faced

Seam\_Delivery -> Total\_Wickets\_Lost

Seam\_Delivery -> Wides

Spin\_Delivery -> "Leg Byes"

Spin\_Delivery -> "No Balls"

Spin\_Delivery -> 1s

Spin\_Delivery -> 2s

Spin\_Delivery -> 4s

Spin\_Delivery -> 6s

Spin\_Delivery -> Byes

Spin\_Delivery -> Dot\_Ball

Spin\_Delivery -> Total\_Balls\_Faced

Spin\_Delivery -> Total\_Wickets\_Lost

Spin\_Delivery -> Wides

Team -> Batting

Team -> Toss\_outcome

Toss\_outcome -> Batting

Total\_Balls\_Faced -> Total\_Runs

Total\_Runs -> "Win/Lose"

Total\_Wickets\_Lost -> Total\_Balls\_Faced

Wides -> Total\_Balls\_Faced

Wides -> Total\_Runs

Wides -> Total\_Wickets\_Lost

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