

Algorithm : Webpages, Scores and Scoring Mechanism

Objectives :

- 1/ Player Stats (static) page must always show the correct value during pre Lockout and Lockout - these do not change during the round
- 2/ LiveScore shown on Summary page to change depending on pre Lockout and Lockout status - and determines the value used for scoring/ranking users
- 3/ All columns can be uploaded simultaneously rather than in separate operations - for Trade, Summary & Player Stats page
- 4/ Counting whether a player gets used in scoring algorithm is determined by TOG rather than what a player actually scores (ie players can get a true zero score)

Colours in table below indicate whether LiveScore or LastScore mechanism is used

| Stage | Lockout is lifted | Lineup pre Lockout | Lockout | Scoring Calculation |
|-------------------------------|--|--|---|--|
| Scoring Mechanism | Uses LastScore Mechanism for most recently completed round | | Uses LiveScore Mechanism for the current round | Requires isPlayed and LiveScore for score calculations |
| Trade Page (Live pre-Lockout) | Enabled | Enabled | Disabled | |
| Summary Page (Live) | Enabled | Enabled | Enabled | |
| Player Stats (static) | Enabled | Enabled | Enabled | |
| Played Column (static) | LastScore Mechanism 0 = player DNP prev round 1 = player played prev round -1 = DNP last match played by team 2 = played last match played by team | 0 = player DNP prev round 1 = player played prev round -1 = DNP last match played by team 2 = played last match played by team | 0 - player DNP prev round 1 - player played prev round -1 - DNP last match played by team 2 - played last match played by team | LastScore Mechanism isPlayed = 1 if Played > 0 isPlayed = 0 if Played <= 0 |
| LastScore Column (static) | score in previous round will always be 0 if Played is not equal to 1 | score in previous round will always be 0 if Played is not equal to 1 | score in previous round will always be 0 if Played is not equal to 1 | |
| SeasAvg Column (static) | season average | season average | season average | |
| Playing Column (live) | 0 = amber lineup has not been announced yet | 1 = green/playing 0 = amber -1 = red/not playing -2 = black/suspended -3 = cross/injured | Lineup is overridden by TOG to account for late ins (1/green) and late outs (-1/red) | LiveScore Mechanism isPlayed = 1 if Playing > 0 isPlayed = 0 if Playing <= 0 |
| LiveScore Column (live) | LastScore Mechanism LiveScore = 0 if Played=-1 LiveScore = 0 if Played = 0 LiveScore = LastScore if Played = 1 LiveScore = SeasonAvg if Played = 2 | LastScore Mechanism LiveScore = 0 if Played=-1 LiveScore = 0 if Played = 0 LiveScore = LastScore if Played = 1 LiveScore = SeasonAvg if Played = 2 | LiveScore Mechanism LiveScore = 0 if Playing = -1 or 0 LiveScore = actual Live Score if Playing = 1 | LiveScore Mechanism & LastScore Mechanism Always use this column to calculate team rank/score |

Scoring Mechanism

For a given player, use their isPlayed and LiveScore values. isPlayed depends on whether we are using LiveScore or LastScore mechanism

The LiveScore Mechanism is used for the current (live) round

The LastScore Mechanism is used for the most recent played round - and is the final ranking for the team for that round

1. Calculate useGroup for each player which is defined by a combination of their position and their allocatedPosition values - this is to determine the number of field players with scores that will count towards the user score
 - useGroup = isPlayed where position=allocatedPosition (Field)
 - useGroup = 0 where allocatedPosition = "Interchange"
 - useGroup = 0 where allocatedPosition = "Utility"
2. Calculate the Sum(isPlayed) for each position where position=allocatedPosition - this is to determine the number of interchange players with scores that will count towards the user score
 - if Sum(isPlayed) for position=allocatedPosition="Defender" < 5, then useGroup=1 for the player with position="Defender" and allocatedPosition="Interchange"
 - if Sum(isPlayed) for position=allocatedPosition="Forward" < 5, then useGroup=1 for the player with position="Forward" and allocatedPosition="Interchange"
 - if Sum(isPlayed) for position=allocatedPosition="Midfielder" < 5, then useGroup=1 for the player with position="Defender" and allocatedPosition="Interchange"
 - if Sum(isPlayed) for position=allocatedPosition="Ruck" < 1, then useGroup=1 for the player with position="Defender" and allocatedPosition="Interchange"
3. Calculate Sum(useGroup) for all the players on the team - this is to determine if we will use the utility player
 - If Sum(useGroup) < 16, then useGroup=1 for the player with allocatedPosition="Utility"
4. Calculate the subScore for each player where SubScore = useGroup * LiveScore
5. Calculate the CaptainScore
 - CaptainScore = isCaptain * LiveScore
 - if CaptainScore = 0, then CaptainScore = isViceCaptain * LiveScore
6. Calculate the TotalScore for the user
 - TotalScore = Sum(SubScore) for all players + CaptainScore

Other Notes

1. SeasonAvg will round down to nearest whole number
2. Scores for cancelled games will use SeasonAverage for all matches due played up until that round (matches played early are not included)