Calculations :

1. Calculating average score for each project,

Avg Score = sum(raw\_scores for that particular project) / (no of judges for particular project)

1. Rank: Based avg score, will assign the ranks
2. Calculation Z-score for project,

Example:

If one project has 3 judges,

Z-score for judge 1 = (Raw score of that project by judge - avg of all raw score for that judge) / standard dev( all raw score for that judge)

Z-score for judge 2 = (Raw score of that project by judge - avg of all raw score for that judge) / standard dev( all raw score for that judge)

Z-score for judge 3 = (Raw score of that project by judge - avg of all raw score for that judge) / standard dev( all raw score for that judge)

Z-score = avg(z-score judge1, z score judge 2 , z-score 3)

1. Calculation scaled score,

Scaled score: minimum = minimum of avg score (it should not be null or zero)

Maximum = max of avg score

Rangeval = maximum - minimum

Scaled Score = ((project avg score - minimum)/rangeval)\*25 +25

1. Calculating scaled Z score,

Scaled Z score : minimum = minimum of z- score (it should not be null or zero)

Maximum = max of z- score

Rangeval = maximum - minimum

Scaled Score = ((project z-score - minimum)/rangeval)\*25 +25

1. Calculating Scaled rank,

Example: 3 judges for 1 project

Avg rank judge 1= (count of that judge projects - rank(raw score for that project)/ (count -1)

Avg rank judge 2 = (count of that judge projects - rank(raw score for that project)/ (count -1)

Avg rank judge 3= (count of that judge projects - rank(raw score for that project)/ (count -1)

Avg rank for project = avg (avg rank judge 1 + judge 2+ judge 3)

Range val = max avg rank - min avg rank

Scaled rank = ((avg rank - minimum avg rank )/rangeval)\*25 +25

1. Calculation isef-score,

Isef-score = (scaled score + scaled rank + Scaled Z score) -50

1. Calculating isef-rank,

Isef-rank = based isef-score