Algorithmus zur Aufteilung von Paaren in Gruppen abhängig von veränderbaren Gewichtungen, der Algorithmus zur Einteilung von Teilnehmern in Paare ist ähnlich, muss aber weniger constraints umsetzen:

1. start with list of legal pairs and groupWeights consisting of doubles(distanceWeight,genderWeight, foodPreferenceWeight, ageWeight)
2. sort list of legal pairs by foodtype
3. build best groups with groupWeights:

```
while(list of pairs has at least 9 elements):
        extract first pair from list to a temporary list of matched pairs
        for(8 times):
                for(current size of list of pairs) find and extract best matching pair with score system:
                        if(test for legal group composition(mixed foodPreferences + doubled kitchens))
                                score = (distanceWeight * 1 - (distanceBetweenPairs / maxPosDistance)
                                score += (genderWeight * (1 – genderDifferenceToExtractedPairs ))
                                score += (foodPreferenceWeight * foodPreferenceDeviation)
                                score += (ageWeight * (1 - ageDifference)
                        else reject  illegal pair
                add pair with highest score to list of matched pairs and remove from list of pairs
        if(8 legal pairs found) build groups:
                sort list of matched pairs by distance
                sort list of matched pairs to ensure legality for mixed groups and multiple used kitchens
                build and set 9 groups according to sorting
                add groups to list of groups
        else add first pair to successors and add remaining matched pairs back to list of pairs
add remaining pairs to successors
```

4. return list of groups