

Claims

1. A system for collecting, evaluating and ranking residential real estate property layout design data for prospective home buyers and tenants, said system comprising:
 - means for defining separate individual spaces and total space of a residential real estate property of a digital floor plan representation;
 - means for extracting a set of empirical data relating to physical attributes of the residential real estate property from the digital floor plan representation and a dimension attribute of the property;
 - means for generating a score for each physical attribute of the residential real estate property by processing its corresponding extracted empirical data;
 - means for generating a subscore for each individual space of the residential real estate property by processing the generated score of physical attributes relevant to the individual space;
 - means for generating an overall score for the property based on the weighted combination of the scores of all the separate individual spaces; and
 - data storage means for storing the extracted empirical data and generated scores, subscores and overall score of the residential real estate property.
2. The system of claim 1 further comprising means for user input of residential real estate property information including its digital floor plan representation and a dimension attribute of the property.
3. The system of claim 2 wherein the dimension attribute of the property is the total area of the property.
4. The system according to any one of the preceding claims wherein the physical attributes of the residential real estate property that are evaluated include the total area of the property, proportion of usable space, the dimension and areas of the master bedroom, bedrooms, dining/kitchen, utility area, external area and circulation.
5. The system according to any one of the preceding claims wherein the means for generating scores of physical attributes and subscores of individual spaces is an algorithm based on

anthropometric studies and data analytics for evaluation and rating of the provision of spaces of residential real estate properties.

6. The system according to any of the preceding claims whereby machine learning is incorporated to the score generating means.
7. The system according to claim 6 whereby the means for generating scores for each physical attribute and individual spaces is refined with machine learning.
8. The system according to any one of the preceding claims whereby the score generating means is adapted to generate adjusted scores based on user input of preference of specific physical spaces of the property.
9. The system according to any one of the preceding claims further comprising means to automatically generate a summary of comments relating to the positive and negative aspects of the unit based on the extracted set of empirical data of the property.
10. The system according to any one of the preceding claims further comprising means for ranking an evaluated property against other evaluated units stored in the data storage means based on the overall score of each residential real estate property.
11. A method of collecting residential real estate property layout design and evaluating residential real estate property layout design, the method including the steps of:

receiving a digital floor plan representation and a dimension attribute of a residential real estate property;

defining separate individual spaces and total space of the residential real estate property in the digital floor plan representation;

extracting a set of empirical data relating to physical attributes of the residential real estate property from the digital floor plan representation and dimension attribute of the property;

generating a score for each physical attribute by processing its corresponding empirical data;

generating a subscore for each individual space in the property by processing the generated score for physical attributes relevant to the individual space; and

generating an overall score for the property based on the weighted combination of the scores of all the individual spaces.

12. The method of collecting residential real estate property layout design and evaluating residential real estate property layout design according to claim 11 wherein the dimension attribute of a residential real estate property is the total area of the property unit.
13. The method of collecting residential real estate property layout design and evaluating residential real estate property layout design according to claim 11 or 12 whereby the scores of each physical attribute and subscores of individual spaces are generated by an algorithm based on anthropometric studies and data analytics for evaluation and rating of the provision of spaces of residential real estate properties.
14. The method of collecting residential real estate property layout design and evaluating residential real estate property layout design according to any one of the preceding claims claim 11-13 wherein machine learning is used to refine the scoring of each physical attribute and individual spaces.
15. The method of collecting residential real estate property layout design and evaluating residential real estate property layout design according to any of the preceding claims 11-14 further including the step of ranking of the evaluated property against other properties that have been evaluated by the same method.
16. The method of collecting residential real estate property layout design and evaluating residential real estate property layout design according to any one of the preceding claims claim 11-15 wherein the separate individual spaces of a residential real estate property unit include master bedroom, bedrooms, dining/kitchen, utility area, external area, circulation space.
17. The method according to any one of the preceding claims 11-16 wherein the physical attributes of the residential real estate property include the total area of the unit, proportion of usable space, the dimension and areas of the master bedroom, bedrooms, dining/kitchen, utility area, external area, circulation areas.