Floor Mapping using AutoCAD [20 Points] {Team Event}

PROBLEM STATEMENT

Construct a 2D model of a multi-story house, showing a detailed plan of each floor, using AutoCAD

- **Event Structure**
    1. Round 1: Teams have to submit an abstract before 12:00 am 7th September,2018.
    2. Round 2: Designing of CAD models in the stipulated time and subsequent examination by the judges.

- **Team Structure**

  It will be a Team Event. At most five teams can participate from each pool. The event is for First year students only.

  A Team can contain at most Three Students. The team will have to come and design the AutoCAD model within given time at the given venue (to be informed later).

- **Constraints**

  The abstract must contain a handmade rough sketch of various floors in the house, it does not carry any marks and will be used as a guide for the final submissions by the pools. The CAD model must satisfy the following constraints:

  a) Each floor must have a separate CAD drawing.
  b) Only 3 hours will be given to all the teams to design the CAD model.
  c) Students can borrow laptops from their seniors with AutoCad17 installed.
  d) Dimensions must be specified along with the model (outer dimensions only).
  e) CAD model must have as many Common Rooms (that usually are in a house) as possible.
  f) Specify the Name and Area taken by each room.
  g) Use different colours/shades to indicate rooms as well as objects.
  h) Usage of relevant objects in respective rooms will be appreciated e.g. Dining Table, Sofas, Bathtub, Beds etc.

- **Scoring**

Following points will be examined in CAD model:

1) Number of floors for which the submission is done.
2) Innovation in design
3) Accuracy and realism in designing floor elements and objects placed in respective rooms.
4) Use of relevant objects in respective rooms.
5) Dimensions and Area acquired by each room must be stated correctly.
6) Use of colour/shade to differentiate between objects.

The team submitting the maximum number of floors will be awarded 30 points and the minimum number will get 10 points. All other submissions will be linearly interpolated between the two.

Innovation in design carries 30 points. The team with the most innovative design will get 30 points and the team with least innovative design gets 15 points. All others will be ranked and linearly interpolated between the two.

Use of relevant objects (as well as their number) carries 25 points. The number of relevant objects (in each room) will be added (for the whole house) and the team with the maximum number of relevant objects will be awarded 25 points. The team with minimum number will get 5 points. All other teams will be linearly interpolated between the two.

Use of contrasting and eye-pleasing colour scheme and/or shade carries 15 points. The team which does not employ colour gets 0 in this section. The team with the best colour scheme and/or shade gets 15 points and the team with least attractive colour scheme and/or shade gets 5 points. All others will be linearly interpolated between the two.

In case of Dimensional inaccuracies or wrong area being mentioned, a penalty of 10% of the achieved score will be imposed on the defaulter team.

In case of any discrepancies, the decision taken by the judges and the council will be the final verdict.

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