Swachh Bharat Abhiyan

Problem Statement

Due to the mixing of all types of wastes at source it is, costly, difficult and inefficient to segregate it at dump yard level. Conventional methods for Source Segregation of waste involves three dustbins- "biodegradable, non-biodegradable, biological" to be used which is not a good option in the emerging and existing cities where many families are living in small apartments. Your objective is to design a low-cost device for Source Segregation of waste at family level which lives in apartment and to suggest the system for waste reduce-reuse-recycle and flow of waste till it leaves the apartment.

1. The device should be framed according to the household needs of a family
2. Your device can either be mechanical or electrical but use of chemicals is restricted
3. Working model or simulation is appreciated but not a judging criterion
4. The durability of the device should be good
5. You need to consider the government rules and regulations of waste management.
6. You have to submit a report of 4-10 pages A4 size in pdf format (font size 12, Font: Arial, Double line spacing)
7. References used (at least 2 - at most 5) should be mentioned

Judging Criteria

- Cost of the device
- Efficiency of the device is awarded, any hazards due to it are penalized
- Size of the device
- User Friendliness
- Durability of the device and materials used in devices

General Rules

1. A maximum of 10 participants is allowed in a team. Team members can be from different years of study but all members should be from the same institute.
2. Penalty for crossing the report limits:
   - If it exceeds less than or equal to one Page then 10% of the report marks will be deducted
   - If it exceeds more than 1 page but less than or equal to 2 pages then 20% of the report marks will be deducted.
   - If it exceeds 2 pages (>2 pages) then 100% marks will be deducted.
3. Teams can be disqualified in case any form of plagiarism is found.

4. Preliminary evaluation will be based only on report A PDF of report maximum 10 pages including the 1st page (Font size - 12, Font – Arial, double spacing) clearly describing approach used by your team for product development. The 1st page of the PDF should contain your team name, institute name, contact no., team members names along with their branch and year of study. Any data used should also be sent in the zip file.

5. You may be asked questions (both technical and non-technical) during the proposal presentation.

6. All software can be used to make the presentation and they have to be installed on a common computer. No laptops allowed for presentation except the common laptop. The CPU of the computer should not be connected to Local Area Network or Wi-Fi or any external network other than already present.

7. Teams have to pre-specify if they need to install some software and install their software in the slot provided.

8. Any pre-existing/patented product is NOT ALLOWED and will be penalized.

9. In case of a claim by any team, that claim will be send to the judges and the judge's discretion will be final, and the organizing team will decide whether the claim should be forwarded to the judge or not.

10. Date of the announcement of competition: January 25th

11. Deadline for the electronic submissions (only reports, no presentation required): February 24th 2018 **March 1st 2018**

12. Dates of Pre-conclave: 23rd to 25th March 2018

13. Deadline for the submissions for finals: will be announced

14. Dates of finals: 10th to 12th August 2018

Note: all deadlines are with respect to Indian Standard Time and 23:59:59 Hrs of the day mentioned