Future of Making Things (FOMT)

We have challenged you to show your design skill along with technical skills to serve for the society. This is to judge your skills, how you think, how you approach the problem and how much you are creative. Here we have given the two problem statements out of them you have to choose one as per your willingness. It is advised to go through all the rules and regulation as well as making pattern which has been described below.

Problem statement 1: **Design a Cooking Solution That Does Not Burn Wood**

You are challenged to design a cooking apparatus that can cook food **without** burning wood.  Your goal is to design an apparatus that will cook food cleanly which will help reduce C02 and deforestation caused by charcoal production.

Clean cooking is especially important in countries like Rwanda that host large refugee populations, and in many of the resource-depleted regions of the world. Clean cooking energy comes from many sources, here are a few examples to warm you up!

* Photovoltaic solar cells that can power a heater or split water into hydrogen and oxygen molecules to be combusted later in a stove or oven.
* Human (pedal) power.
* Mirrors or lenses that concentrate solar rays.
* Piezoelectric materials.
* What else can you think of?

A sustainable cooking solution designed for one part of the world might be different from a solution designed for an area with a different climate, etc. Your solution may be intended for anywhere in the world. It is recommended you describe any part of your solution is that region-specific so the judges can better understand how it functions. You may include a YouTube® link in your submission.

* Solutions utilizing renewable energy - must be designed to boil at least half a liter of water in under 1 hour.
* Solutions utilizing traditional (non-wood) fuels like kerosene, propane, etc. must be designed to boil at least 2 liters of water in less than 1 hour.

Problem statement 2: **Design a Sustainable Housing Shelter**

Natural disasters are always be the crucial movement for every nation of the world even we have developed many technologies but we can have any control over it. You are challenged to design a durable shelter for refugee housing areas and survivors of natural disasters such as floods, earthquakes, fires, hurricanes, and typhoons.

Your shelter design should be created with a specific geo-location in mind, and since areas that house refugees are often isolated, or land-locked, you should attempt to design with locally-available materials in mind. You should consider designing it to be built from sustainable materials like earth/clay, steel, aluminum, cement, natural fabrics, natural adhesives, recycled plastics, and [biodegradable plastics](http://www.explainthatstuff.com/bioplastics.html) like [PLA](https://en.wikipedia.org/wiki/Polylactic_acid).

Lastly, consider the effort to deploy your shelter and keep it's theoretical costs low because of the difficulty in justifying using high-cost materials.  A viable shelter should be able to house at least two (2) adults each 185cm tall (~6ft). It should also shelter it's occupants from rain and provide relief from the extreme hot or cold temperatures depending on the region of the world you decide to design for.

Weight of your design should be minimal which can be carried by single men easily in such bad conditions of roads and streets during natural disasters. Keep all the possible resources and situation may be happen in this type of condition. Along having stability, it should be low cost and easily installable in small time of interval. Be sure and describe it.

**Rule and regulations:**

* It is an individual event.
* Basic model of the concept should be prepared on fusion 360 and some of the supporting part those are not the part of basic concept can be imported.
* Any participant can submit his/her entry for one or both the project.
* Best of both of them will be considered and other one will be neglected.
* An individual participant can be chosen as winner once even his concept for both the problems are best from others.
* Both the problems have same weight.
* Submission after the date will not be considered.
* Submission procedure will be posted on Facebook page of **CAM society MNIT** , so keep updated yourself.
* Submission folder should contain f3d file, rendering images, Power point presentation and public link of your model.

**Marking pattern:**

Making will be done based on the Fusion tool used, rendering of the concept model, originality or innovation of the concept and power point presentation of your basic concept out of 10, 10, 20 & 10 marks respectively.

Winner will be decided based on the maximum sum achieved by any participant.