BETiC Medical Innovation Challenge

7th Inter IIT Tech Meet, IIT Bombay

Preamble

Disabled patients are highly dependent on crutches or other similar aids for stability and mobility. Traditional crutches are incapable to evenly disperse the load on the body, resulting in huge strain being placed on the shoulder, neck and back. Their continuous long term use can sometimes lead to a condition known as crutch paralysis, or crutch palsy, which arises from the pressure put on nerves in the armpit, or axilla. Also, there is difficulty in carrying crutches for disabled patients. Current crutches are heavy and bulky to carry.

Problem Statement

Ergonomic Crutches - The teams are supposed to build a simple, light weight, easy to use, patient friendly device that can bear patient's load and assist walking/activities.

Judging Criteria

- Final decision will be taken after mid-term and final evaluation.
- For mid-term evaluation, teams are required to send the pdf containing the following information about their proposed solution:
 - o Previous literature or work already done.
 - o Methodology of work.
 - o Components/ Elements of the system.
 - Work done towards the aim till date.
- For final evaluation, teams will need to do a presentation explaining their proposed solution in detail and present the demo of the working of their solution.
 - o Each team will get 10 minutes (max) to present, followed by 5-10 minutes of Q&A.
- The criteria will be:
 - o NOVELTY: How innovative is the proposed concept / idea
 - o EFFORT: Quality of the proof-of-concept and its presentation
 - VALUE: Commercial potential (worth developing further)

Rules and Regulations

- Team size ~ 4 to 5 members.
- The decision of the judges will be final.

FAQs