

## Final Project Techmal (Tech-Animal): Construct a Lego animal, real or imaginary.

### Technical specifications:

- Able to move without wheels or alike. The motion could be walking, hopping, jumping, crawling, climbing, protracting, skating, ....
- The move must be initiated by a sensor,
- Able to turn back when hits or is close to an obstacle,
- To get the full credits, the Lego animal must execute a performance, e.g., singing, talking, dancing ...

**Constraints:** Use of parts provided in the Lego Mind-storm set.

### Deliverables: Be creative!

1. A power point preliminary presentation (2 minutes) on **11/13 or 11/15** which must have
  - Description of any research/background work carried out by the team
  - Discussion of alternative designs considered by the team
  - Outline of your preliminary design
  - Each member's assignmentNo final product or written report is needed at this time.
2. A written report is due on the same day of Project Demo, **12/4 or 12/6**. No late report will not be accepted. The report has to address the following questions,
  - Summary of the overall approach taken by the team
  - Rationale for selecting the chosen design
  - Each member's contribution,
  - Relationship between technologies and societies, e.g, impacts of technologies on societies, use or misuse of technologies...
3. An in-class demo of your Techmal on **12/4 or 12/6**

**Return you Lego set immediately.**

[http://www.engineering.uiowa.edu/~eng\\_0055/2022/video/Techdog.wmv](http://www.engineering.uiowa.edu/~eng_0055/2022/video/Techdog.wmv)

[http://www.engineering.uiowa.edu/~eng\\_0055/2022/video/Wall-e.wmv](http://www.engineering.uiowa.edu/~eng_0055/2022/video/Wall-e.wmv)

[http://www.engineering.uiowa.edu/~eng\\_0055/2022/video/Human.mp4](http://www.engineering.uiowa.edu/~eng_0055/2022/video/Human.mp4)

[http://www.engineering.uiowa.edu/~eng\\_0055/2022/video/Fighting.mp4](http://www.engineering.uiowa.edu/~eng_0055/2022/video/Fighting.mp4)

[http://www.engineering.uiowa.edu/~eng\\_0055/2022/video/Fighting1.mp4](http://www.engineering.uiowa.edu/~eng_0055/2022/video/Fighting1.mp4)