Event overview

PROBLEM SET

Problem Description

Since the inception of manufactured plastics, over 6.3 billion metric tons of plastic waste has been produced with only 9% of it having been recycled. Recycling and composting as well as generally minimizing waste can be challenging for both individuals and society as a whole. The impact of landfills and waste byproducts polluting the planet has made waste management a top concern for engineers around the world. Your task is to develop a project that can positively impact environmental sustainability by improving, teaching, and/or promoting waste management.

Examples:
- Waste Tracker App
- Waste Sorting Game
- Can focus on: Recycling, Landfills, Composting, Minimizing Waste, etc

Deliverables
- **Software Solution**
  - Solution must address at least one problem related to waste management
  - Must develop a GitHub repository containing entire submission
  - Must submit GitHub repository link to submission form
    - Do not forget to make your repository public!
    - Submission form: https://forms.gle/L3pVEpsrJiYFcmcp6

- **Presentation**
  - Must develop a 15 minute presentation for the judges and spectators
    - You will be able to connect your laptop to the screen for both the demonstration and powerpoint
  - Must include a working demonstration of your solution
  - Must include powerpoint presentation that discusses the project background, motivation, design/planning process, software architecture, alternative solutions and a design critique
    - See PowerPoint template

DEVELOPMENT OVERVIEW

You have from now until 2pm, Saturday, April 29th to develop your solution and presentation. Considering the effect of the recent pandemic, we have broken the development into two portions to test your abilities both online and in-person

Online (Friday, 6-9pm)

You may begin planning and developing your solution as soon as you receive this document. Mentors and event organizers will be available in the posted Discord channel until 9pm Friday evening to help you get started with your solutions and address any questions or concerns.

In-Person (Saturday, 8am-2pm)

You must arrive at the University of Calgary between 8 and 9am Saturday morning. You will continue developing your solutions in EN G 024 with support from mentors. Solutions must be submitted before 2pm.

COMPETITION RULES

Failing to comply with the competition rules will result in a point deduction, or will disqualify your team from the competition,
- Teams cannot discuss their solutions amongst one another until after the submission deadline
- Teams must develop a unique solution they have not submitted to other competitions
- Presentation order will be chosen randomly at the start of the competition
- Teams are permitted to the following resources:
  - Electronic material stored on CDs, USBs, or other storage devices
  - Textbooks, course notes or other reference material
  - Public software libraries, APIs and data sets
- Failure to site reference code or evidence of plagiarism will disqualify your team from the competition

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WHY DO DEVELOPERS PREFER DARK MODE?
LIGHT ATTRACTS TOO MANY BUGS
HAPPY HACKING!