Energy Day "Quest"

Overview

The Consumer Energy Education Foundation (CEEF) has been hosting Energy Day festivals in Denver and Houston. The goal of Energy Day is to get K-12 students excited about STEM and Energy careers. For this year, the organization would like to incorporate an app to add some more fun to the experience for the students who attend, incentivize the attendees to visit many booths, provide information about the exhibitors and sponsors, and help the organizers collect information about the attendees.

Project Goals

The app was started over the summer field session. We would like a team to add to their work and to add Android functionality as well as some more features. These are the features (some are currently functional, and some are not) that the app needs to have:

- Users need to register to use the app – this will allow for CEEF to collect information about who is attending Energy Day. Keep in mind that many of the users are under 13 – this may affect how information can be asked for and collected. If possible, make this fun.
- The information collected needs to be compiled in a way that allows for CEEF staff to use it separately from the app.
- Develop a game that will encourage attendees to visit as many Energy Day booths and competitions as they can and allow for them to somehow track where they have visited. Ideally, they will need to participate somehow in the booths before they get "credit" for being there.
- Provide links to information about the entities and people hosting the Energy Day booths and competitions
- The app must be structured such that the app can be used in subsequent years with different booths. It would be ideal if the necessary changes could be made by "everyday" people.
- The app needs to be designed in a way such that new features can be added in the future.

The project team has the flexibility to decide how to best meet these goals, and some goals may be added or changed as your team works with CEEF.

Student Benefits

Students can take the opportunity to "close the loop" by observing and interacting with people using the app that they have developed at Energy Day Colorado in September, and then improving it for the next year. Also, the students who develop this app have the opportunity to create something that many energy-related companies will see, including those that hire CSM students (renewable, fossil fuel, and other related businesses host booths.) Thousands of K-12 teachers, students, and parents will see/use the app. There is a high likelihood that local news channels will be interested in your work, as well. In addition, this project will allow for the student team to incorporate their own creativity to help CEEF create something that will be fun for others to use for many years.

Project Team Details

Clients: Carrie (Cj) McClelland, CEEF Board & Engineering Design & Society (cmcclell@mines.edu);
Colleen McCauley, CEEF

Number of Team Members: 3-5 students

Location: Work location is flexible. All in-person meetings will take place at Mines. Some meetings may be held via Zoom or Skype to include CEEF staff in Houston. Clients will be available via email and possibly phone.

Resources

Consumer Energy Education Foundation (CEEF) Website: https://ceef.org/

Energy Day Website: https://energydayfestival.org/

Energy Day Colorado Website: https://energydayfestival.org/colorado/

Energy Day Houston Website: https://energydayfestival.org/about-2/energy-day/