

Promote motivate

Design for social dynamics to promote sustainable behavior in secondary schools

This graduation project explored how to communicate information related to indoor climate and energy to motivate students to save energy through social dynamics. The final concept PROMOTIVATE is an interactive application that motivates secondary school students to act on sustainable actions in the school context. It features group-based competitions, sustainable actions, and information related to indoor climate and energy. The application enables students to take action and contribute to sustainability at school through teamwork in a competitive manner. The design research and practice conducted in this project prove that social dynamics can play a big role in engaging users with the topic of energy conservation. Furthermore, it showed that the information on indoor climate and energy can be used to evoke motivation and confidence.

Introducing PROMOTIVATE

PROMOTIVATE is an interactive digital application intended for the secondary school context. The application runs on a digital device with a touch screen and without any physical buttons, which will be a new touchpoint of the system that also detects indoor climate and energy use in schools.

The interface of the application is designed for students about promoting sustainable behavior in secondary schools. It incorporates group-based competitions combining with sustainable actions as well as indoor climate and energy use related information.

The application enables students to take action and contribute to sustainability at school through teamwork in a competitive manner. And it allows students to be more aware of the indoor climate and energy use around them in their daily school lives. Students can also learn knowledge about the interrelationship between indoor climate, health and sustainability by teamwork and competition.



“How to communicate indoor climate data and energy data with students in a way that is meaningful and takes into account social dynamics in the management of energy use and comfort at secondary schools?”



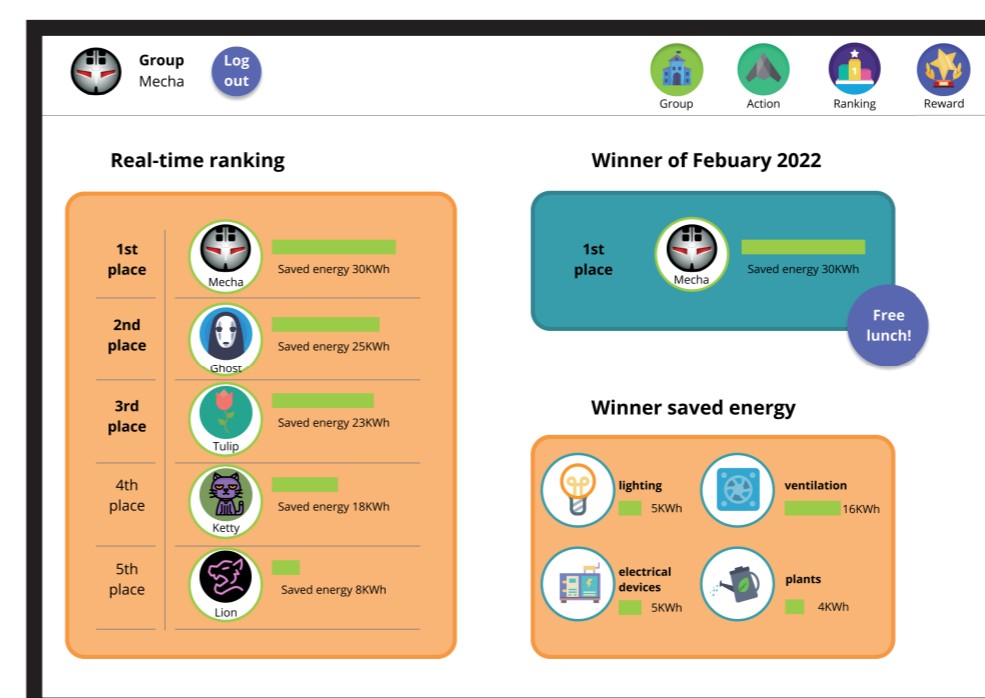
Action



Ranking

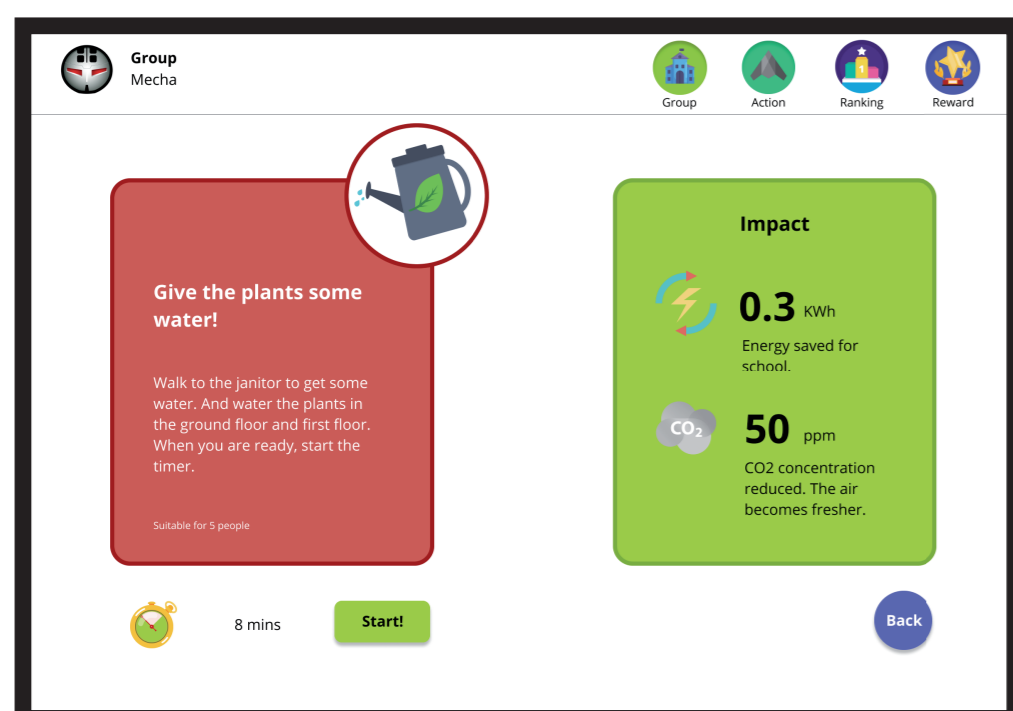
Scenario - A group of students take actions in the break

It's a break in the morning now, a group of students come out of classrooms and gather to take a break. When they are chatting with each other, loud music from PROMOTIVATE goes into their ears. They are attracted and follow the music to a screen on the wall in the hallway. They login to the application as group Mecha that they signed up before. And they go to the Action unit and spin the wheel to see what action they are going to do to save energy.



Scenario - A group won the competition and got the reward

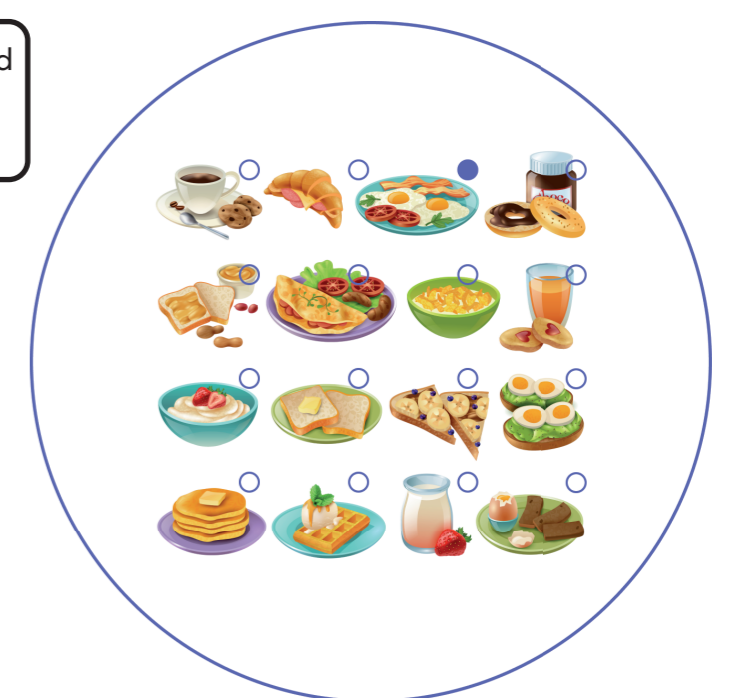
It's lunchtime now and the group just had lunch. Then they want to check out which group is leading the competition and where they are in the ranking. They go to the Ranking unit and find out their group Mecha is now at 1st place in the real-time ranking. They are happy to see that but also realize the group at the 2nd place is quite close to them. They need to keep taking action to win the competition. And they are motivated and confident to do so. It's the last day of this month and the winner will be revealed tomorrow.



The action of watering plants turns out and they enter the action description to see the instruction and the impact it creates. A student motivates others to do it, then another student also hypes each other. They are ready to start the action, so they press the 'start!' button. A timer appears and counts the time when they go to water plants. Several minutes passed, they watered all the plants required. After they press 'Done' on the screen, the impact they created has been recorded to the energy they saved in total, which gives them the confidence to win the competition.

A day passed, it was the day to reveal the winner of the month. It's the group Mecha with no doubt. The group is super happy to see it and their contribution regarding the energy they saved via different sources in the month. Now they can celebrate it and claim their reward, the free lunch. Currently, the reward for winners is free lunch on the first day of the next month. Every member in the winning group can choose their own free lunch from the list. If anyone changes mind, they can change it on the Reward unit before the next day.

I want to have some fried eggs with bacons and tomatoes.



Group (School)

Notifications about indoor climate problems will be distributed to the group if any group members are supposed to be in the situation according to their class schedules. The problem will be explained by showing the data detected by the system. Moreover, the information about the effect of the indoor climate situation on students and the advice to tackle it will be provided as well.



Reward

Once every month, a rewarding event will be held during lunchtime in the canteen by the ENERGE student group or the student council to reward the best group who contributes most to energy conservation in the school. The group will be invited to the stage to receive compliment and reward, which gives them confidence and make them feel proud. And the event will be supported by a large screen showing teams' achievements and rewards.

Tao Chen
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Committee
 Stella Boess
 Marina Wellink
 Lina Li
 Company
 ENERGE

