



AIR

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introducing...



Fresh Challenges Fresh Air

powered by the **D**inosaurs group



Around **90% of city dwellers** in Europe are exposed to pollutants at **concentrations higher than the air quality levels** deemed harmful to health.

European Environment Agency, 2020



Gamifying Green Challenges

It's not easy being green.

Air Pollution is a crucial problem in our world, fine particles are responsible for thousands of deaths every year and carbon dioxide is the main cause of Global Warming. However, it is also a problem because it does not scale down, air is everywhere and constantly moving, so it is almost impossible to solve it locally, with limited resources, that is why we decided to focus on the people.

It's not easy being green, but maybe we can make it fun.

With **EDN**, users can perform small daily eco-friendly tasks. By completing them they receive points which they can use to collect rewards: discounts in second hand stores and local businesses, memberships in gyms and associations, donations to charities and NGOs...



Overview

On **EDN**, people will be able to open the map, check if there are any challenges in the vicinity and take action. Scoring points will not only earn them rewards but also help them climb the **Leaderboard**, to see who is *the greenest of them all*, both in their **Community** and **Worldwide**.

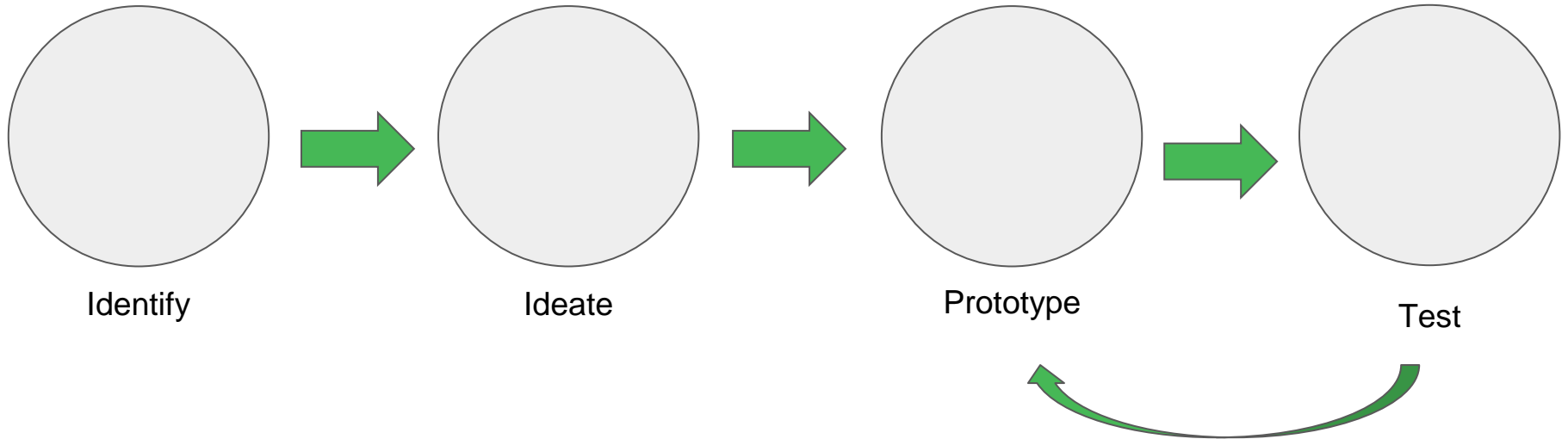
With enough points they will also be able to upgrade their **Level**, from **Bronze** to **Diamond**, and get heftier rewards and more points for their challenges.

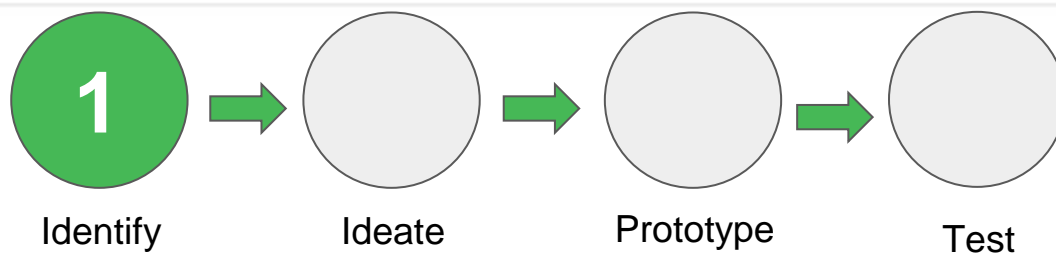
Both the Leaderboard and the Levels will have periodic resets and **Seasonal Events**, like an actual gaming app, to encourage constant activity on the app and in real life.

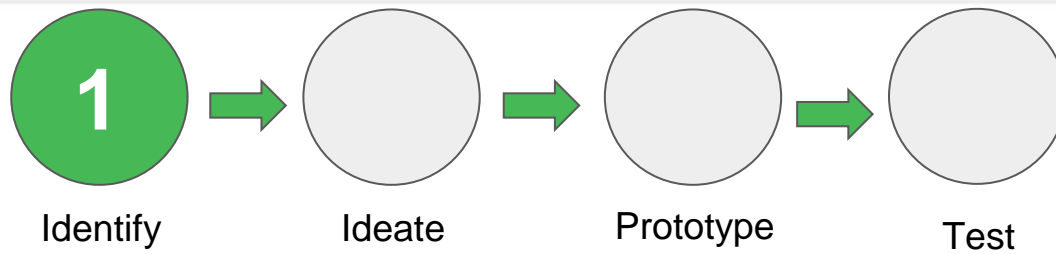
EDN will work hand in hand with **Universities**, **Schools**, **NGOs** and **Associations**. Their employees will be able to put up tasks on the map and make sure the users are not *cheating*.



The process





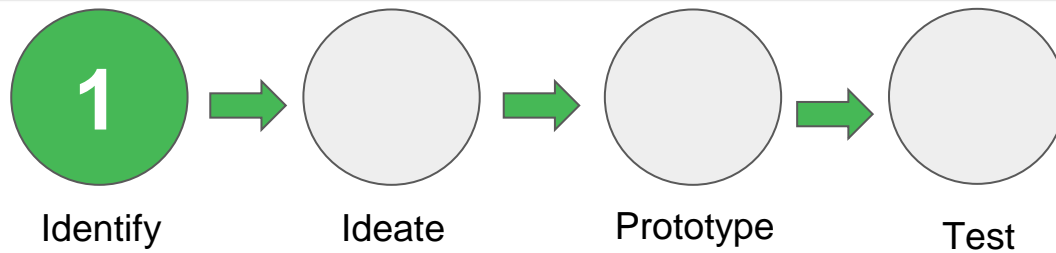


How can air use and campus relationship to air quality affect climate change?



How might we change the campus for students in order to improve local air quality?





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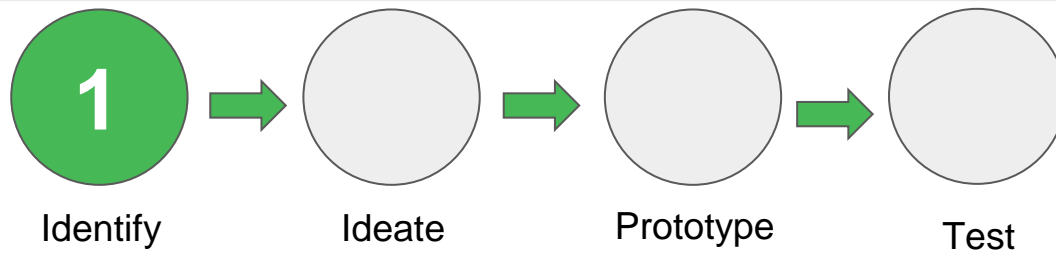
This was the broad question proposed. Through deconstruction of each word and coming together to identify and define what each word of the question means.

We chose the broad problems of bad outdoor and bad indoor air quality as our starting points to understand causes and effects. In hindsight, focusing on smaller problems would have increase your productivity.

Analysing the stakeholders in air quality is difficult, but the users of the campus at WUT, students, staff and scientists were identified as having the highest interest in good air quality, now and in the future. In order to focus on a tangible problem in the field, we came up with many different sentences and ultimately decided to use this one, as it focuses on students and the physical campus and the immediate neighbours.

How might we change the campus for students in order to improve local air quality?

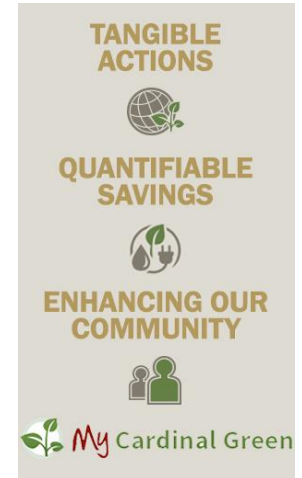


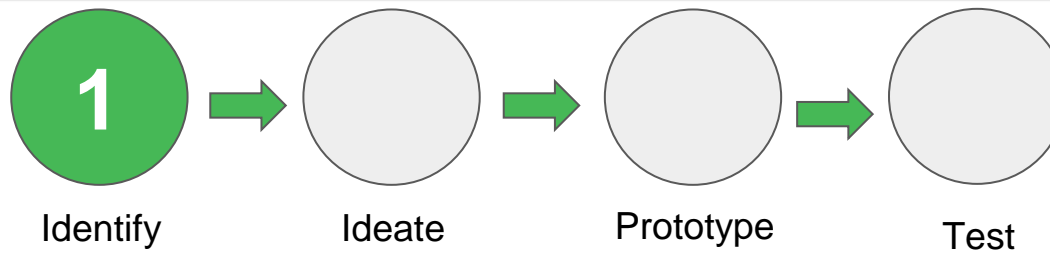


The Research

We found Stanford University program called “My Cardinal Green” which encourage students to take “green” actions on campus to make it more sustainable. Stanford University is one of the most green campus in the USA by STARS ranking which is a framework for colleges and universities to measure their sustainability and actions taken to fight climate change.

Riding a bike, car sharing, waste segregation, switching off electrical devices, making double-sided copies these are some examples of how to participate in their program.





“Standing on the shoulders of giants”

Campus Sustainability Progress

(Baseline year 2000 or peak levels)



Stanford Earns Platinum Ranking

in Sustainability Tracking, Assessment, and Rating System



88%

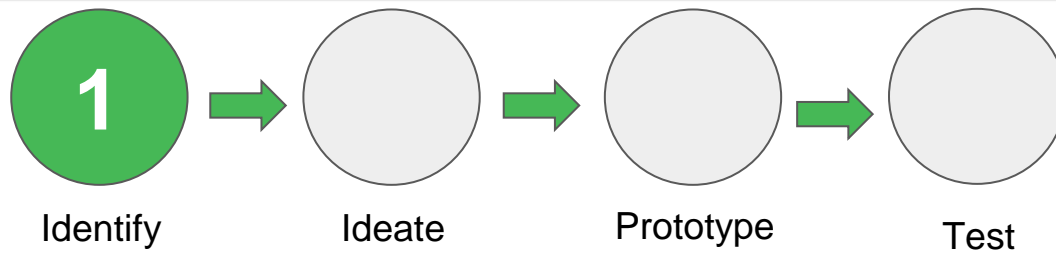
2019 TOP SCORE
OUT OF 800+ INSTITUTIONS



[MORE INFORMATION ABOUT STARS](#) →

source: <https://sustainable.stanford.edu/>





My Cardinal Green Program during pandemic

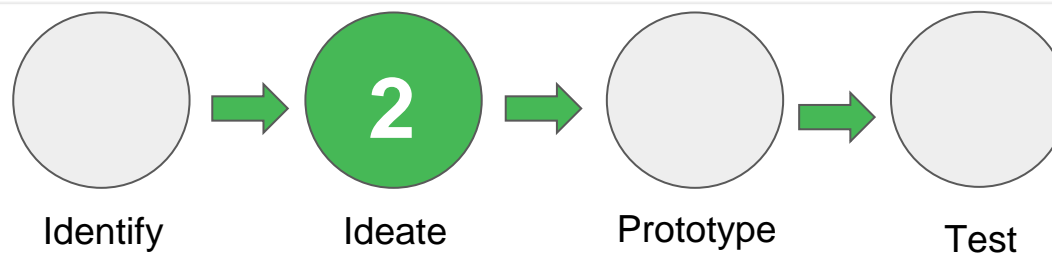
We also researched and found about “Cardinal Green Anywhere Campaign” which was initiated during the covid-19 pandemic. The actions were designed to be initiated at home and their surrounding some were copied from maternal “My Cardinal Green” for the students and staff who have been on the campus.

In numbers: in 2020 students and the staff took nearly 5300 actions, nearly 40% were based on the 32 actions that were designed to be done at home.

For students three actions most commonly done were related to composting food waste and packaging, focusing on sustainability in their curriculum or field of study, and learning about municipal waste system.

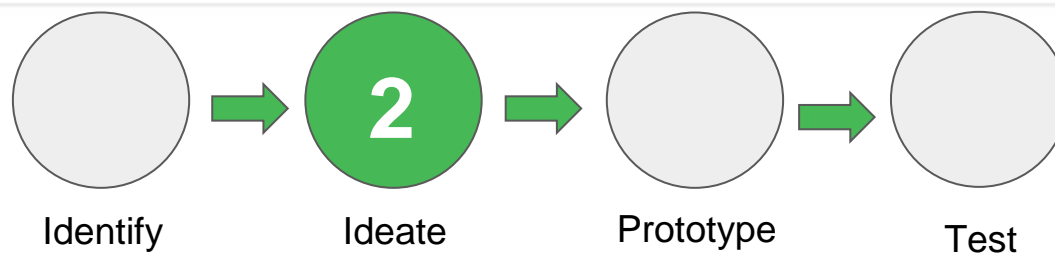
This help us to understand that wherever students might be, they still want to participate in the program and are interested in changing their habits.





A brainstorming process took place where each group member wrote down ideas on post-it notes. The notes were sorted into groups on how to tackle the problem and then the group voted for the solution they liked the most.





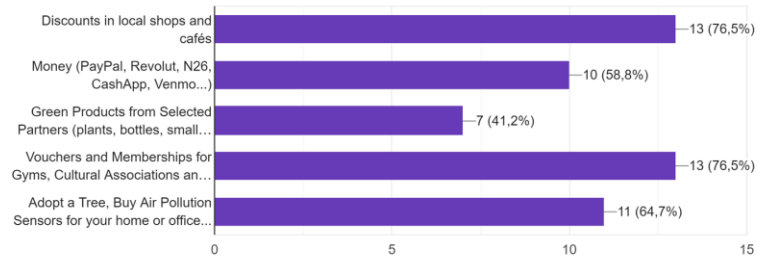
The participants of the summer school were surveyed in order to understand what the target group wants in such an app.

Rewards were mostly related to local activities (local restaurants and cafés, as well as gyms and cultural activities).

Possible tasks were changing the mode of transportation, interacting with the living environment and education on air pollution.

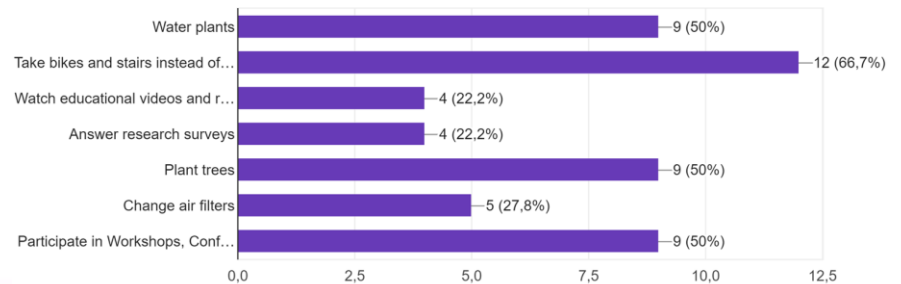
If so, what kind of rewards would you like?

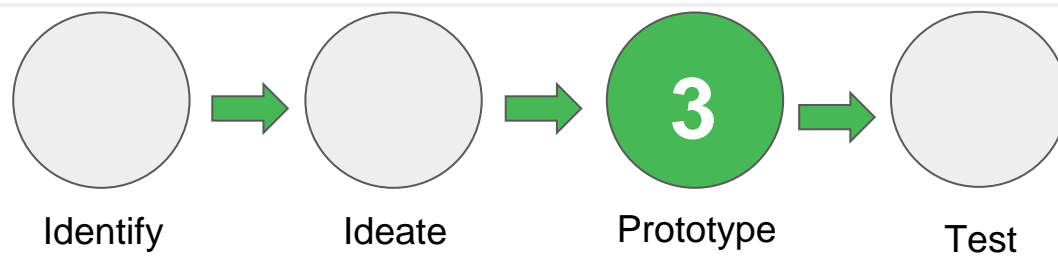
17 risposte



What kind of Green Tasks would you complete?

18 risposte



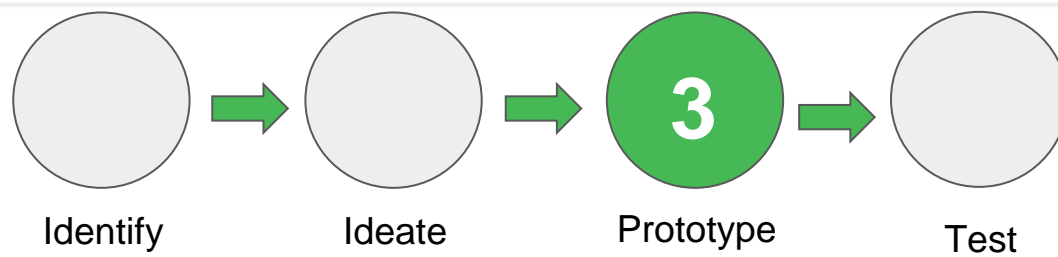


Testing the paper prototype on our peers required skill in providing a good user experience.

Users were often confused because changing the screens and not having all screens ready did not provide a good experience.

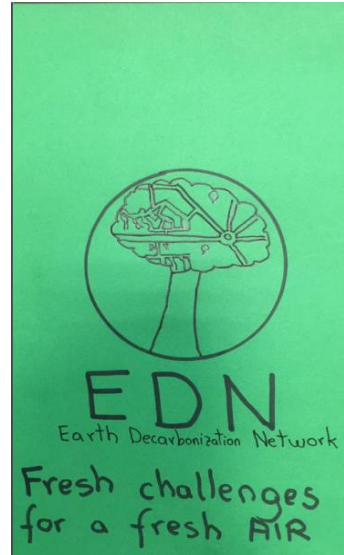
Their feedback outside of that was taken into account to improve the prototype.

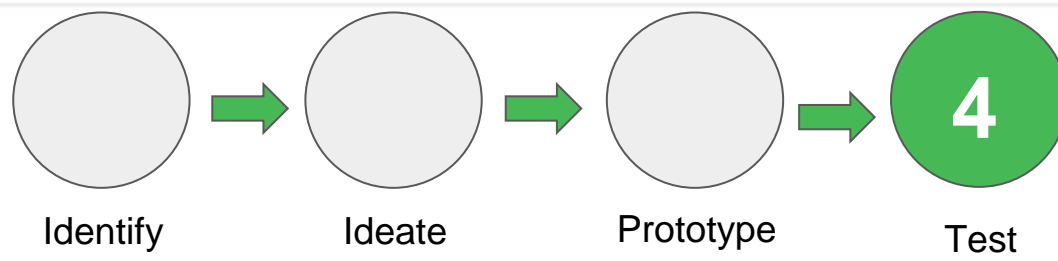




Based on student challenges to improve awareness about air quality.

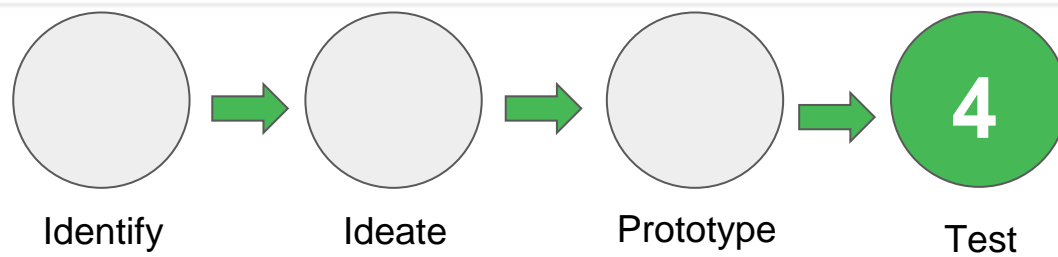
The group created a prototype consisting of drawings of how the app interface would look on a phone.





- Test user friendliness

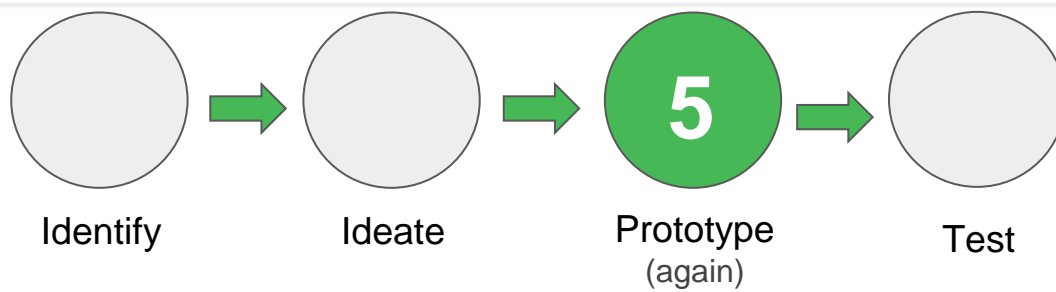




The purpose of the prototype was to see how user friendly the app was and if a user would understand how to use the app. When the user pressed a fake button we swapped out the paper for a new one to show them the next page.

Meanwhile the tester used the app the others were analysing and making notes about things that could improve.

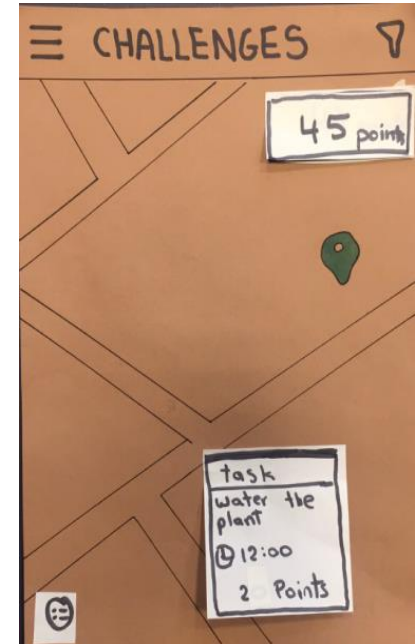
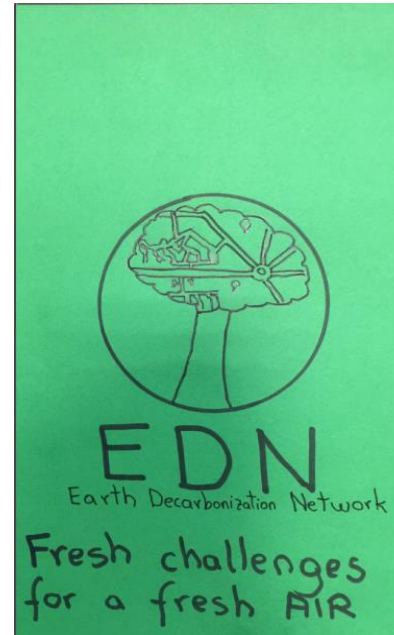


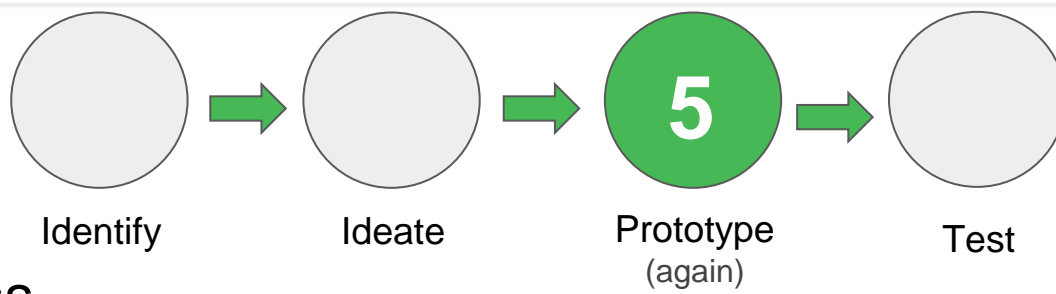


Cover and home page

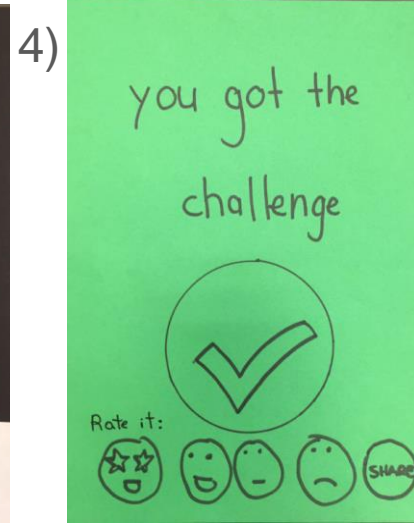
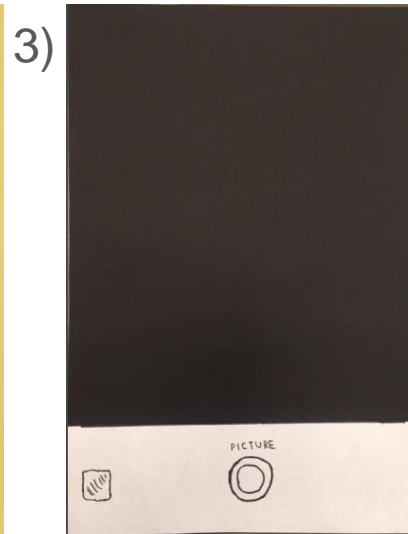
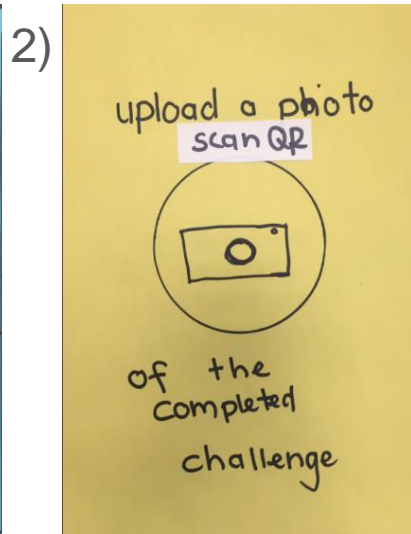
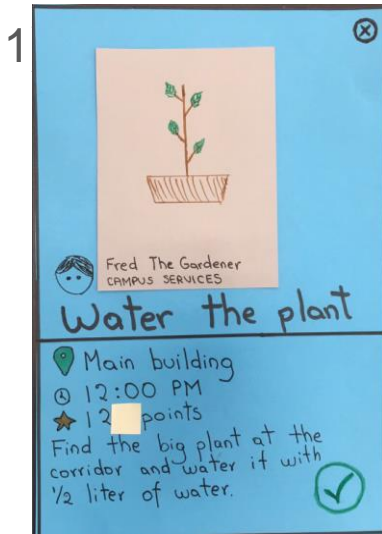
Cover with the app logo and slogan.

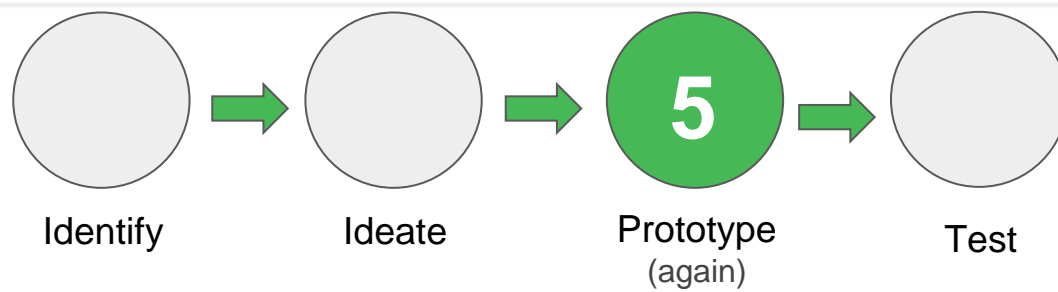
Homepage with a map of your location, showing activities added by the staff. Once you click on them, a menu is displayed with the points you'll get and when the task starts.





Task process

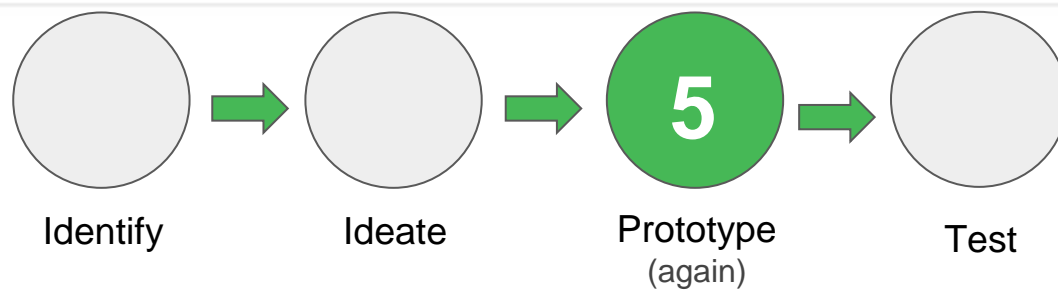




Task process

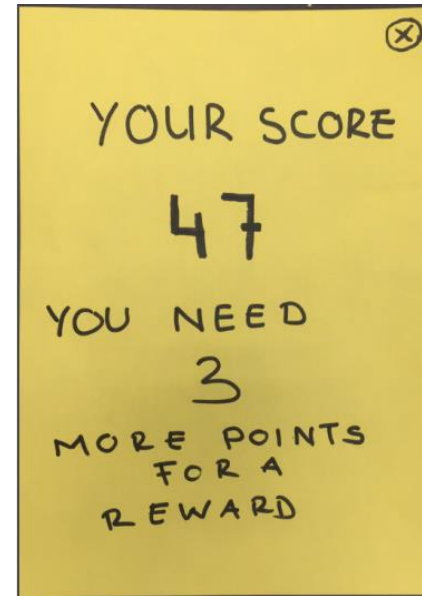
1. Menu with all the information about the task, including location, a detailed description and reward points.
2. After finishing the task, taking a photo or scanning a QR code will be necessary in order to verify that the activity has been done.
3. The camera will be displayed
4. Once the photo is taken or the QR code is scanned, the activity will be verified and there'll be the opportunity of giving feedback of the activity.

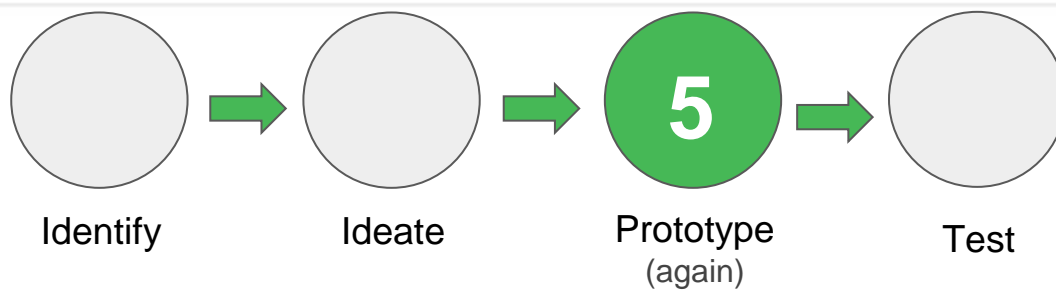




Points

After each activity a menu will be displayed with the amount of points the user has, the amount that the user earned for the activity and a counter with the points needed for a future reward.



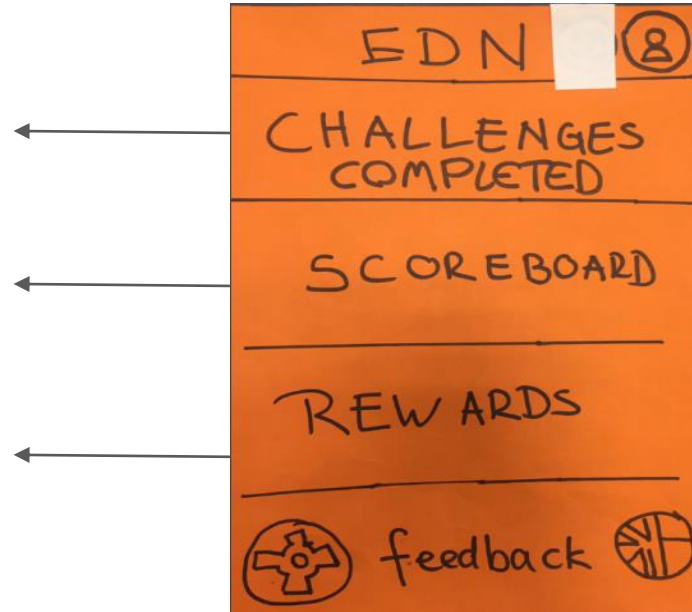


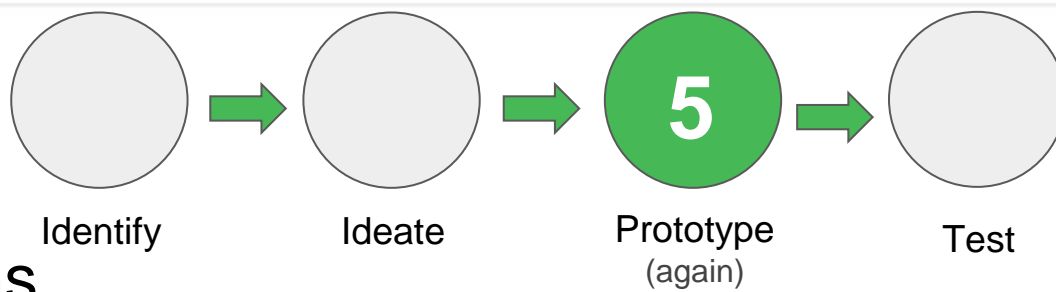
Main menu

1) List of completed challenges and points user received for them

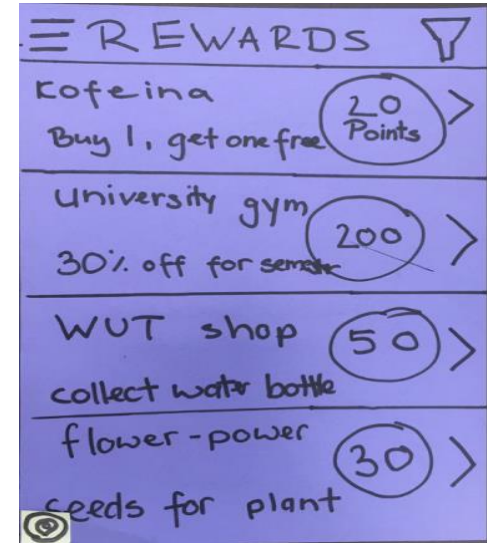
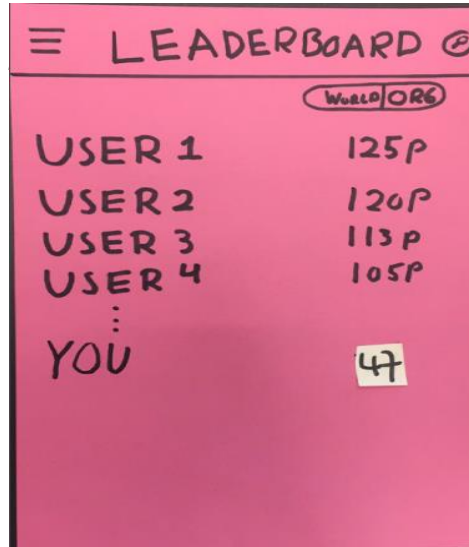
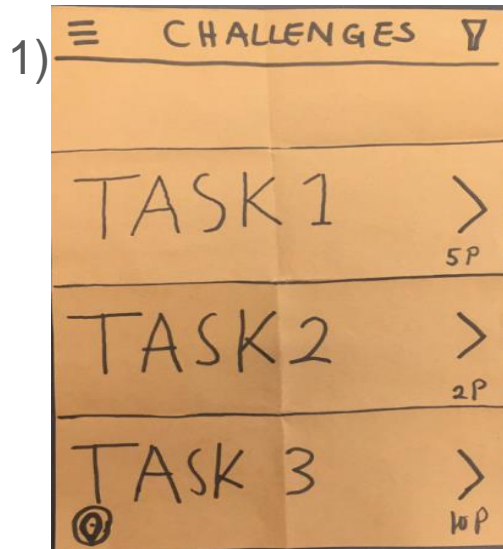
2) Scoreboard and statistics. Your points and user with more points from entire campus or different groups.

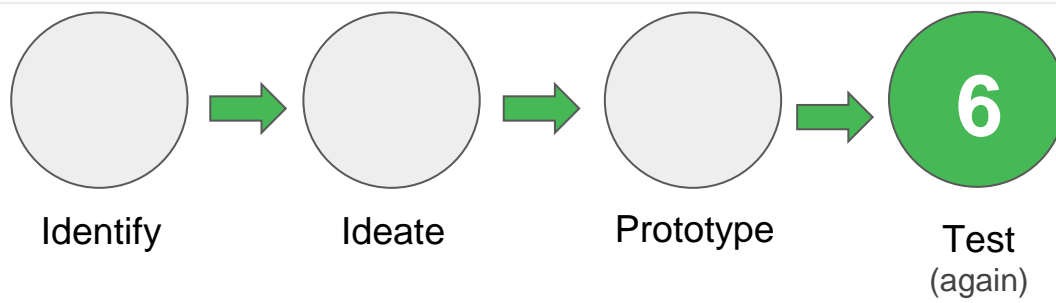
3) Available rewards and necessary points.





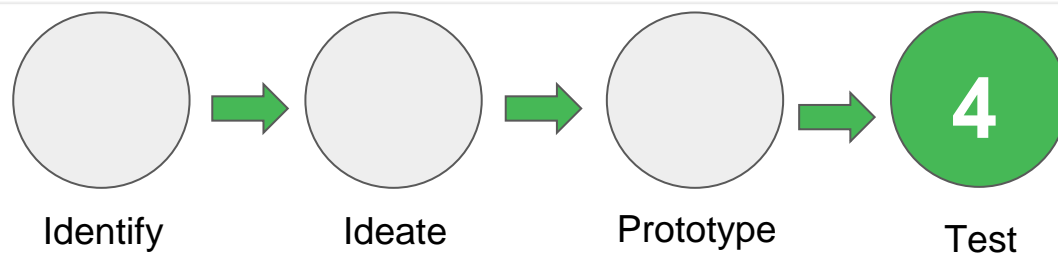
Menu options





People were asked to test the app [here](#) and know more about EDN experience.





Testing results

1. More realistic experience with the app.
1. Need of a more developed app.
1. Students are interested on see this kind of initiatives in their campuses.
1. Students willing to cooperate with the idea.





*THANK YOU for your attention!
Take care of the climate!*



Summer School 2021
'GREEN CAMPUS'
WARSAW 2021



ENHANCE

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Warsaw University
of Technology



With the support of the
Erasmus+ Programme
of the European Union