



DigiEduHack Solution
Berlin - DigiEduHack 2020
Challenge: Berlin - Building Bridges -
Digital, International & Sustainable
Challenge 2020

SustainaTool

Digital Bridge - Connecting People, Research and real Actions

Many of us are aware of climate change and the urgent need for sustainable practises. However not everyone knows how to contribute. Our project intends to use digital technologies to build bridges connecting those who want to learn the knowledge they need to transform intentions into daily actions.

Team: SustainaTool

Team members

Alfredo Alfaro, Shani Alaloof, Laurenz Blömer, Sanjeet Raj Pandey, Johannes Vollbehr

Members roles and background

Concept:

Alfredo Alfaro (Environmental Engineering) - **Content**

Shani Alaloof (Innovation Management, Economics and Entrepreneurship) - **Content**

Johannes Vollbehr (Educational Science) - **Content**

Laurenz Blömer (Industrial Economics) - **Design**

Sanjeet Raj (Computer Science) - **Development**

Contact details

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Solution Details

Solution description

The end product of this project is an app that allows people to learn about sustainability by providing them with concrete, research-backed information and actions that they can take in order to reduce the environmental impact of their everyday activities.

This solution will enhance digital education by allowing users to work remotely but together; connecting their individual actions with the community they belong to and learning and teaching from their peers while also having fun.

How does the app work?

- In the first stage, the participants will register as part of a group - according to the university to which they belong.
- The app will feature questions with concrete actions in favor of sustainability and also funny facts to attract attention and create an interest and the participants need to reply. In between, complex questions will appear that will be a challenge for users and attract them to spend more time in the app.
- The app will also have an option to challenge the competing team with real action
- When a certain group answers the question correctly an additional dimension is added to the tree.
- The questions will be customized to the users- and the match will be done based on the level and the experience of the user;
- After answering questions with concrete action the user will be exposed to a short research background behind it as a trigger for motivation to continue with it in the future.

In the second stage of the development of the app, we will provide the option for the user to add a picture for proof action completion. Users have the chance to upload pictures to the social networks such as Instagram. In this case, the group of the user will achieve more points and we will create interest and attract more people to join the app.

The challenge owner could use Sustainatool to add some fun to courses, offer a fun option to learn about sustainability for interested students and connect with the partner universities in Berlin. The challenge owner could host a challenge among the universities in Berlin and display the collective impact on a shared public screen. Also it can be used for a variety of instances and be customized for special requirements or implementation ideas.

Solution context

Climate change and the urgent need for sustainable practises is something many of us are aware about, however, not everyone knows how to contribute. Our project intends to use digital technologies to build bridges connecting those who want to learn with the knowledge they need to transform intentions into daily actions.

Solution target group

As a students at the first step we are going to focus on fixed groups- 3 universities in Berlin: TU, HU, FU and encourage competition between them as well as visualizing the sustainable impact they have together. This will help cooperation in the excellence program. In the first step we will engage people that are already interested in the topic.

Scaling- Once we reach this audience successfully, we plan to cooperate with schools which is the second target audience and suggest competitions within groups on classes then to do it for the whole and further to competition between schools in cities and countries - for this target group the major aim is to "learn sustainability".

At a more advanced stage we believe it will be passed on by word of mouth to parents and will reach families, companies and in the final stage the whole economy.

Solution impact

Even the longest of journeys begins with a single step. Under this philosophy we intend to connect individuals with their communities by encouraging everyone to take simple actions that contribute to sustainability in real life. This idea is all about sharing knowledge, experiences and developing paths that lead to a sustainable lifestyle in order to protect the environment by creating sustainable habits and communities one step at a time.

We are developing an educational software tool which simplifies sustainable lifestyles for kids, students, teachers and families. Measuring the quantifiable parameters of saved CO2, Water, Money and Energy the app visualizes personal impact. The app will build a bridge between scientific research and direct implementation of sustainable actions in everyday life. Gamification plays a key role to keep up motivation and the network empowers people to engage in a great movement.

For Future impact a growing network will connect lifestyle activists and use data analysis for global change.

Solution tweet text

SustainaTool - building bridges between science and everyday life. Experience the new way to learn about sustainability. This digital tool motivates to take sustainable actions in real life and learn the science behind it by gamification.

Solution innovativeness

There's carbon footprint calculators in the market that also use a questionnaire to provide a rough estimate of the environmental impact of their users. However they don't really have an intention to educate and they don't propose everyday actions other than obvious things like "It's good to recycle" or "it's better to use your bike". Others offer a donations program to help plant trees or similar actions.

What makes SustainaTool different is its use of games and challenges that allow the user to have fun while learning about concrete actions and it's potential of building bridges to connect individuals, universities and communities.

Solution transferability

This digital tool can be used in different kinds of context to make learning more natural. It can add some fun to courses, meetings or workshops clothing with a sustainability game every day. The technical infrastructure could as well be used for different topics and increase motivation for learning.

Solution sustainability

Our approach is for the app to create a virtuous cycle in which once it has taken roots in it's birthplace (Berlin) users themselves start to propose teaching and sustainability projects to people in other cities.

In the midterm we intend for universities and schools throughout Germany to have the app so they can challenge each other and track the progress of their own institutions towards the greater goal of sustainability. Berlin has the advantage of having a large share of international students and we intend for these students to learn from it while in Berlin and then take the knowledge and connections offered by our solution to their homes or wherever they are heading next so that they can teach and connect with others so that the app and the sustainability knowledge and actions in it get spread by users themselves.

In the long term Sustainatool will have gathered enough information about the actions and their impact that it's database could be used by AI technologies to extract valuable information useful for decision makers.

Solution team work

First we got to know each other brainstorming on miro and connected our thoughts to a common vision for this hackathon. We motivated each other and worked effectively and everyone contributed to the solution. We come from different places but share the same interests as sustainability, education and innovation and we will be happy to continue sharing ideas and working on the project.