



## DigiEduHack Solution Colombo - Making Learning Efficient Challenge: Peer learning in a global context

### GadgetHub : Build tomorrow today

**A smart learning platform to inspire inventors of the next gen.**

**GadgetHub** is a platform that lets a student enter the gadgets and equipment they have on hand, and see what is possible to be created with those equipment. The website allows users to create articles about their projects, so that the other students can follow them.

#### Team: Bit-ter

##### Members roles and background

Bihan Viranga - Backend developer, part-time teacher, IoT enthusiast, Undergraduate

Hiran Hasanka - Backend developer, AI enthusiast, Undergraduate

Mohan Rajapaksha - Frontend developer, Undergraduate, Cricketer

Lakshan Dinesh - Frontend developer, Undergraduate, Athlete

Mindula Perera - Backend developer, Singer, Musician, Undergraduate

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### Solution Details

#### Solution description

**GadgetHub** is a platform that lets a student enter the gadgets and equipment they have on hand, and see what is possible to be created with those equipment. The website allows users to create articles about their projects, so that the other students can follow them. It also allows students to enter how much money they are willing to spend, in addition to the equipment they already have.

This shows the students what they can purchase additionally to make more gadgets.

The objective is to inspire students to work with hardware and IoT devices again. We intend to do this by giving them the knowledge, the equipment, and where to buy them.

The reasoning behind this objective is that while smart devices and IoT and being more and more integrated into our daily lives, exploration of those technologies are not a major part of any school curriculum. We believe that planting the inventing, creating, tinkering mindset in students can give birth to a new generation of inventors, and if we don't, the amount of innovation we see will drastically reduce.

## **Solution context**

The world is made a much wonderful place to live in by the new inventors and innovators. It goes without saying that we must groom our next generations to be involved in new inventions too. But formal education systems barely give any priority to IoT and hardware innovations. Therefore we are trying to create a hub for young aspiring inventors from all over the world to share their inventions and learn from each other, enabling peer learning in a global context.

## **Solution target group**

Main target group of GadgetHub is school children who are interested in doing hands-on electronic projects. GadgetHub helps enthusiasts to find and do electronic based projects on their own and improve their knowledge by using the gadgets that are already available to them, keeping them more interested in the subject.

## **Solution impact**

GadgetHub provides a platform to anyone who's interested in electronics to find and do electronic projects by themselves using specific collections of gadgets that are available to them. The impact can be measured by the amount of active frequent users of the site and the amount of articles posted by users.

## **Solution tweet text**

A smart solution that will get electronic enthusiasts more interested in the subject by letting them share their projects and do projects on their own using gadgets that are already available to them.

## **Solution innovativeness**

GadgetHub lets its users to search for projects that can be done using the gadgets that are available to them and also lets them share their projects with the world, exposing them to insights and criticisms of other enthusiasts, making them better learners in the field. It also provides gadget suggestions to the user to buy so that the user can combine them with the ones that are already available to him/her and get the most out of them. There are no similar solutions to be found on the market in the moment.

## **Solution transferability**

GadgetHub can be used by teachers to assign students science assignments by simply creating an article and make students follow it and work on the project themselves. Also it can be an entertaining way to conduct science experiments as all the articles are fun-filled experiments!

## **Solution sustainability**

The team will be developing GadgetHub as an in-house developed web solution and will be posting articles as blueprints so that the users will get an idea about the structure and with the time, users will start posting articles about the projects they're doing. Then the team will let the community to take charge of the articles that are being posted to the website. The revenue model would be to display advertisements from different electronic item vendors and to earn commission from vendors by suggesting their products to the user. The platform is to be performed well in terms of mid and long term in the event of a successful implementation as there won't be a shortage of people who are enthusiastic of science projects in any times!

## **Solution team work**

As the team is a group of undergraduates from the same university and therefore has worked together for two years, every single member of the team understands the rest of the team and it has been easier for the team to work together because of the communication and understanding among the group members. Apart from that, the team contains a set of state-of-art developer individuals so that there won't be any major problems arisen in either implement or maintenance stages of the development.