

# Developing teacher dashboard for tangible programming

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## MOTIVATION

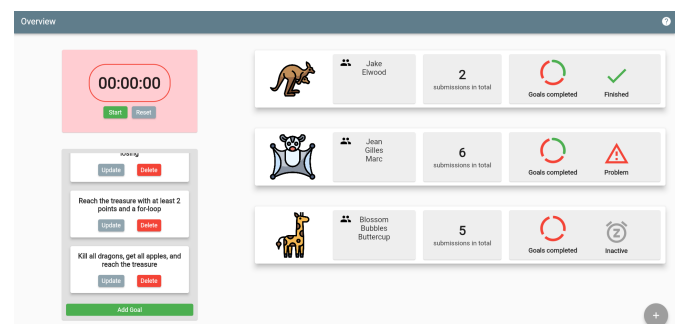
This project aims at completing another one named “Tangible programming using Cellulo”. Tangible programming tries to come up with new and fresh ideas regarding education. It makes the hypothesis that, for young students especially, learning through senses (sight, touch, hearing) may be more interesting than looking at boring and conventional lines of codes. The bet made by my project is the following: by working on smooth and intuitive interfaces for teachers giving tangible programming lessons, we also improve the experience of the students. At the base of this smoothening, a user interface that presents itself as a dashboard.

## METHODOLOGY

During its development, the concerned dashboard underwent three phases. First, a brainstorming and reflection session lead to a base design. Once this design implemented, the dashboard was presented to users that were asked about its strengths and weaknesses. The remarks, observations and questions obtained from this small user study were then used during the third development phase: the problematic or confusing features of the dashboard were reworked to better meet the needs and ideas of the users.

## DASHBOARD

This dashboard’s objectives are multiple. Managing a few numbers of students/groups participating in a tangible programming activity may be doable, however, when this number grows, it can become difficult for a supervisor to understand at any time which groups is having trouble, to keep track of the progression of each particular team since the beginning of the course, and to give relevant objectives to students, challenges meeting their abilities. This interface tries to answer those issues by offering a global and synthetic overview of the class’s whereabouts, by giving a code history and a list of achievements for each group, and by giving detailed information about each submitted code, including simple interactions allowing an easy and fast detection of faulty instructions.



*Dashboard global overview page*