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Version: Published Version

Proceedings Paper:

Alzahrani, AAS, Atwell, ES and Bulpitt, AJ (2014) Using a multi-touch table to develop collaborative teaching programming resources in the new computing curriculum. In: UNSPECIFIED SHOWCASE 2014 – The 5th annual University of Leeds Postgraduate Research Conference, 04 Dec 2014, University of Leeds. . (Unpublished)

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Using a Multi-touch Table to Develop Collaborative Teaching Programming Resources in The New Computing Curriculum

Ahmad Alzahrani, Eric Atwell, Andy Bulpitt
{scaaal, e.s.atwell, a.j.bulpitt}@leeds.ac.uk

UNIVERSITY OF LEEDS

Project Aim:

The project aims to develop a new resource to enhance collaborative teaching programming in UK schools for pupils at key Stage 3 level, i.e., 11-14 year old. The proposed resource software will improve quality of education within the curriculum of schools systems, also it can be beneficial when used for collaborative learning and pair programming for many reasons such as it leads to a better product with time-effective, more enjoyable for developers, increases work satisfaction, promotes students learning.

FTIR Multi-touch table Frustrated Total Internal Refraction concept diagram.
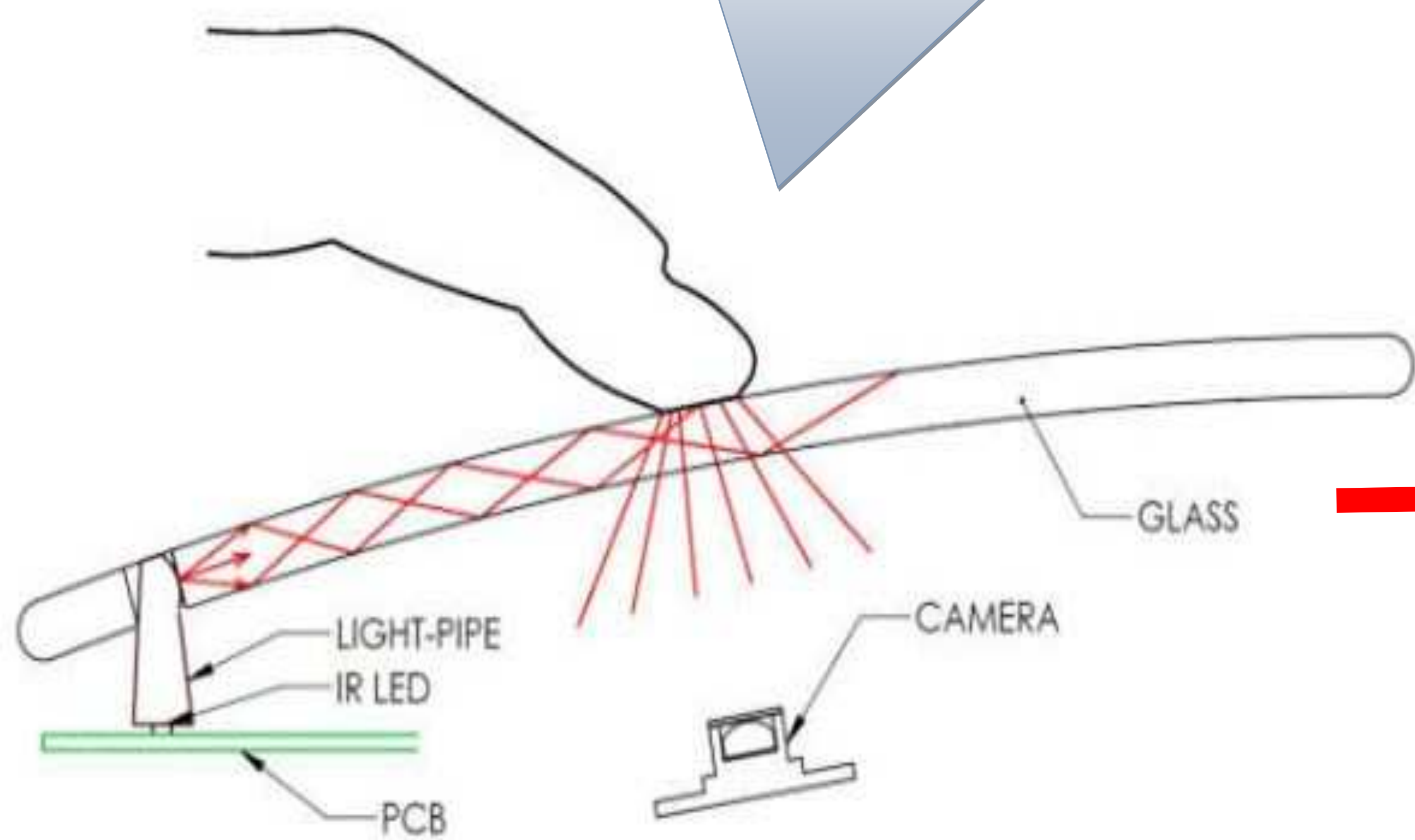
How the MTT Surface works behind the Scenes?
(1) Screen (2) Infrared (3) CPU (4) Projector.
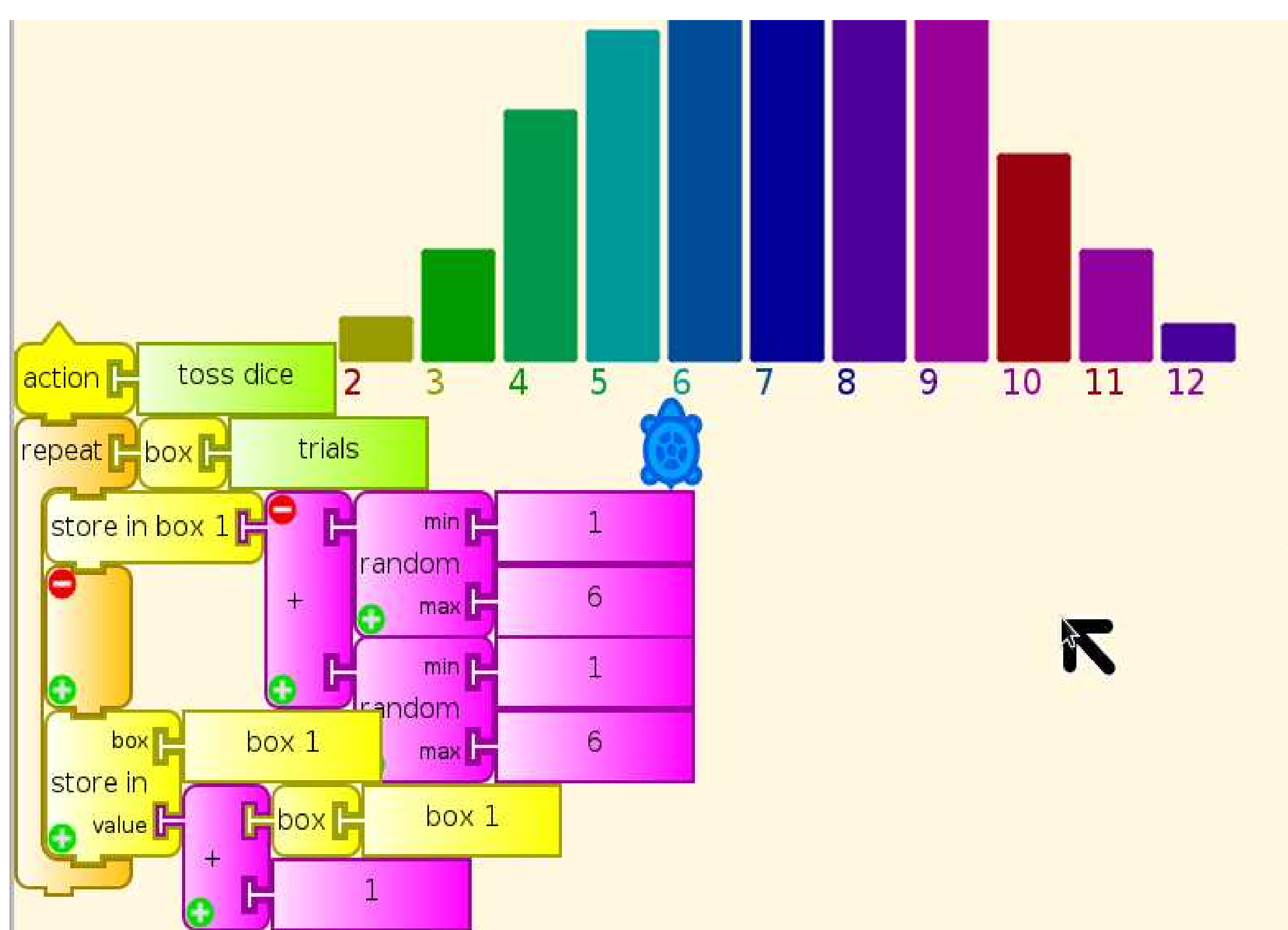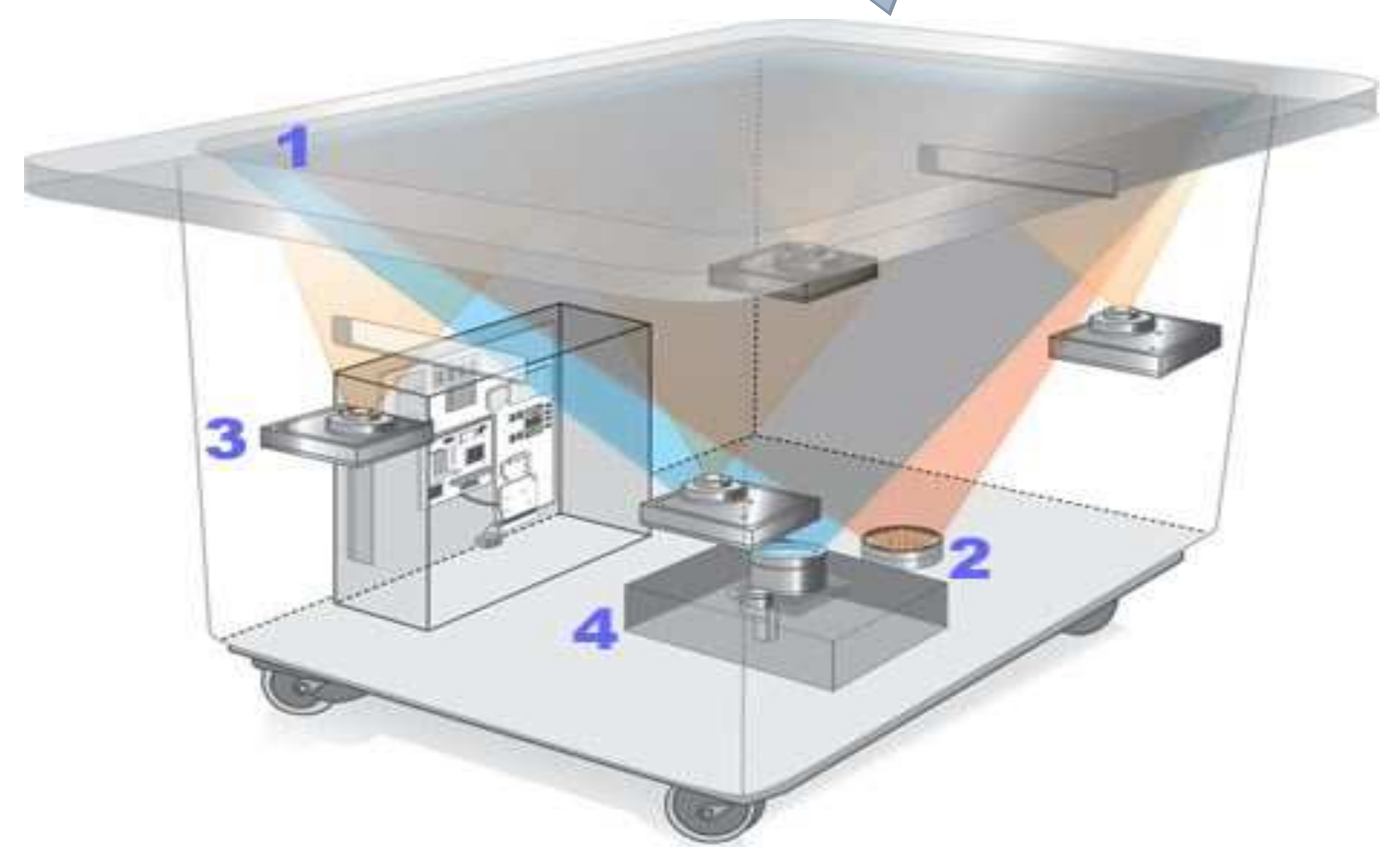
Pair Programming project on the Multi-Touch table using Turtle Art. The software designed to be fun educational, and easy to learn. It has the tools for creating interactive art software, This method of programming (building code with blocks) is referred to as "drag-and-drop programming".

The next step is to use the Multi-touch table in the classroom.
The picture illustrates how the student work around the Multi-touch table in the classroom.