# Workshop : A lamp for collecting emotions through tangible gestures

The aim of this one day workshop is briefly presenting the TGIF Framework (see Research document) and applying it to the design of a tangible interface. In order to work on a common theme I would ask to the workshop participants to develop a lamp that is able to collect emotions through particular tangible gestures, for example caresses, strokes, hugs, etc, By designing these tangible gestures, the participants will explores different aspects of my model, on both the syntax (move, hold and touch), the semantics and the technologies. In particular students have to decide how to convey interaction modalities, i.e., recognizable tangible gestures, to the user, whether through affordances in the object, based on common metaphors and experiences in everyday life, or by arbitrarily designing gestures and explicitly communicating them to the user.

The design and the development could be conducted in groups or alone and will follow a design thinking approach. The system will be based on Arduino and the following input and output modality will be provided:

Input: touch sensors, conductive ink, pressure sensors, accelerometer, (eventually luminosity and temperature sensors)

Output: RGB LED, vibration motors, eventually audio

All the materials and tutorials on how to use these components will be provided to the students in order to speed up the development. The aim of the workshop is thus reflecting on tangible gestures by exploring them with tangible prototypes and with gestures that are able to convey emotions.

Proposed development of the workshop:

1. Overview of the workshop
2. Theoretical introduction, presentation of the TGIF model
3. Presentation of the material and of the proposed prototype to develop and test
4. Group brainstorming and sketches
5. Sharing of ideas
6. DIY development
7. Tests, possibly with users that are not aware of the lamp functions, in order to test if gestures that rely on affordances are easily understood by the user
8. Final discussion and collect of feedback on the model