masterclass creative technology – what are (y)our dreams?

This fragment presents a few ideas on how to set up a masterclass for potential Creative Technology students, including students with M-profile, which deviates from earlier proposals by a strong focus on content and communication context, nevertheless allowing for experiments with media content production, sensors and smart technology setup(s). The underlying idea is, in summary, to let the students create an interactive space for storytelling. And to emphasize, it should be their space, and their (personal) narrative(s).

A. Eliëns, 10/9/08

communication(s) - what are (y)our dreams?

The masterclass should be presented as an **experiment in communication**, using a variety of technical means. The setting might be a group set out to help in a case of disaster, or to set-up a project of social renovation(s) in an urban area.

You are send out on a mission, say by the UN, and put together in a group, to improve the living conditions in some area, somewhere in the world. Questions come up: Who are we, what do we want to accomplish, and what are our aspirations and dreams.

As a group you get the **assignment** to present your background, aspirations and dreams as **media fragments** on a big **screen** using text, images and (interactive) video, in a more or less structured way, allowing for interaction with a range of devices, including a variety of sensors, thus creating a truly **interactive space**, to communicate information, ideas and (ultimately) your dream(s).

Many variations are possible, for example the focus might be on creating a plan and communicate this to the world, or simply a process of group dynamics, to get to know eachother. The realism of the scenario may differ, according to facilities and the composition of the group of students.

structure(s) & organisation(s) – getting to work

Obviously, some introduction is needed to create the right atmosphere and make the setting somehow believable, not in the least to justify the use of the technologies offered and the actual assignment(s) given.

- **presentation(s)** introducing context and communication goal(s)
- practical work creating content & configuration(s)
- evaluation(s) & deployment experiments with setup(s) & exposure

Accomodating the variety of interest(s) of the students participating in the masterclass is of crucial importance. The should be able to select the assignments that they consider most valuable, whether is is technological, practical content development, or even more artistic, figuring out deployment scerario(s).

context(s) & scenario(s) – communicating personal narrative(s)

The assignment(s) should include a description of what types of **media content** are expected and what facilities are available for creating an **interactive space**, using any of the technologies that are (currently) available, including sensors and other interaction devices.

- media content development storyboard & scenario(s)
- **social network(s)** establishing connection(s)
- (multi)media displays time-based presentation(s)

The scenario(s) must sufficiently motivate the various technologies with which the students are set to work. There must be a sense of an obvious need for **creative engineering** to realize the **communication goals** and get the **message**, whatever it is, across.

assignment(s) & task(s) - multimedia in context

The actual task of creating such a (interacive/communication) system is rather complex, and involves many tasks, including content development, programming, and technology configuration(s).

- content text, image(s) & video(s)
- **programming** (XML) configuration, scripting
- **technology** screens, sensor network(s), robot(s)?

Apart from **content creation**, which can be done using standard tools, the actual tasks must be limited to the adaptation of (XML) configuration files, and possibly some simple scripting, in all cases preferably by modifying (simple) examples.

theme(s) & variation(s) – designing your own gaming interface

Edwin Derien indicated a range of possibilities, among which the intersting notion of designing alternative (personal) interfaces for gaming or interaction. These ideas could well be applied in the **interactive storytelling space**, using for example sensors to select and steer the presentation(s).

- **robot(s)** programmed (artistic) drawings
- (wii) interaction device(s) manipulation of content
- sensor(s) temperature, acceleration, position, conductivity

Alternative means, such as robots and the wii interaction device can be used to create additional content, including machine-generated drawing(s) or interactive graffiti. Ultimately, the usefulness of such features depends on the availability of **easy-to-use components**.

assignment(s) & task(s)

The masterclass will be set up as a sequence of (increasingly) complex assignments, all consisting of **technical** as well as **content development** tasks:

- 1. (interactive) image viewer phidget(s) + flex component(s) + image(s)
- 2. (interactive) video player phidgets) + flex component(s) + video(s)
- 3. (interactive) media presenter phidget(s) + flex component(s) + media asset(s)

For each of the assignments, a **skeleton application** must be developed, that may serve as an example and starting point for the masterclass students' work.

Note: in the **online resource**(\mathbf{s})¹, both **phidget**² and **flex/as3**³ components are available that provide a basic implementation of the various elements.

resource(s) – custom & open source

No doubt, many technologies are (in principle) available at EWI, but the success of the **masterclass creative technology**, as sketched, depends on the availability of a basic realization of such as system. The assignment(s) and tasks(s) of the students should be limited to **content development** and **reconfiguration** using XML files and/or scripts.

- media content flex/as3, ximpel.org
- service & data networks www.themidnightcoders.com/weborb
- sensor networks gsn.sourceforge.net
- custom sensor(s) Edwin's USB devive

Apart from the availability of expertise and software, effort should be invested to create a **functional system** with sufficient complexity to offer the (masterclass) students, as a starting point for their **creative endeavor(s)**.

reference(s)

Engineering E.E. Jewis, Masterworks of Technology – The Story of Creative Engineering, Architecture and Design, Prometheus Books, 2004

 $^{^{1}}www.cs.vu.nl/{\sim}eliens/create/resource-masterclass.html$

²www.phidgets.com

 $^{^3}$ www.adobe.com/products/flex