Exercise 3 – Human-Computer-Interaction

(This exercise can be carried out in groups of up to five students. If you want to participate on the contest, please feel free to contact us and discuss your ideas with us.)

Theme: Design of an Audience Voting System for the Olympic Games

(CHI2004 Student Competition – see http://www.chi2004.org/cfp/student.html)

The Design Problem

In an effort to address the contentious issue of judged Olympic events, we would like you to suppose that the Olympic committee has decided to pilot audience participation in scoring the gymnastics and diving competitions in Athens. Your team has been selected to design a system that will allow audience members who are **physically present** at the event to cast their vote in real time. Although the audience votes could theoretically be considered by the judges, it is envisaged that during the pilot phase the audience vote would have **no affect on the athlete's score**. The audience vote will be offered purely as a **form of entertainment**. By showing the differential between the audience score and the judges scores, it is expected that audience engagement will increase. For the pilot phase, the Olympic committee would like your team to focus on demonstrating that it is possible to **design a reliable, flexible, and highly usable system** for collecting spectators' scores.

Your solution should allow spectators in attendance at each event to **easily and quickly indicate their score** following each Olympian's performance. Given that the Olympic committee would prefer to ultimately implement a **single multipurpose system**, your design must be flexible enough to accommodate the needs of both diving and gymnastics competitions. Part of your solution depends on understanding, supporting, and/or inventing the details you require and presenting them in a thoughtful and well-illustrated manner. **Your solution must be cost-efficient, usable, and accessible by an international audience, reliable, and tamper resistant**. It must be original, although previously developed solutions for similar problems may be referenced if appropriate.

Design solutions need to be practical in their selection of technologies and their associated costs. As a general rule, design teams should limit themselves to **technologies that are either available today or anticipated to be readily available in the next couple of years**. With respect to costs, teams are encouraged to **think economically** (thousands of dollars rather than millions of dollars).

Your Task

Make yourself familiar with existing solutions for similar problems.

Imagine a real situation in an Olympic event and describe the scene for which you design your solution, i.e. describe not only the problem but also the context.

Write a short design document (2 pages plus illustrations if needed) with a detailed description of your proposed solution. Make references to design principles and theory where appropriate.

Further information about informative art on http://www.viktoria.se/fal/projects/infoart/

To be handed in by: Jan 12, 2004