Development of an Android App for Designing Feelings into Products

Background:
An increasing number of customers demand more and more advanced products. Most products are mass produced, which means they basically look the same. However, buying a product is increasingly individual - and hence no rational - decision. The purchase decision is taken to a large extent based on subjective (affective) factors. One example: When you buy a mobile phone there is often the choice between several different models within the same price segment. An IPhone and a well-equipped Galaxy have comparable prices and the choice is often made from "soft factors" such as image value and usage habits. You could say that you buy the product that suits one's lifestyle the best ... the phone that simply "feels best".
For manufacturers, this poses a major problem. How to translate such "soft values" of hard product specifications? A fairly successful method comes from Japan. Kansei Engineering can "measure" the feelings and produce affective profiles for new products. Companies like Mazda, Sony, Toyota and more are using it in their product development.

Figure 1: Products developed with Kansei Engineering.

So, why do not all companies use Kansei Engineering? Well, the method is computationally heavy and not all companies have the resources to do so. For some years we have developed an Expert System "Kansei Expert Software" (KESo) which is freely available online: www.kanseiengineering.net. With this software basically anyone can run Kansei Engineering studies. Companies such as Cloetta, Toyota/ BT, Volvo, Skanska and Electrolux are using it already, and in 2012 a really big company in Europe will to use it too.

The task
As mentioned, there's already an existing software. However, it has a rather disadvantageous appearance and is not always capable of handling the pressure from all users running it. That's why we would like to further develop KESo.
The software will be available as an app on mobile tablets and more powerful mobile phones. Emphasis is placed on appearance, that is, we use some of Kansei Engineering in developing the system. We will provide support of an experienced designer is part of the task.

Acquire knowledge on Kansei Engineering and write a theoretical chapter on how it can be used for software.

The software shall be moved to a virtual server (Presently, it runs on a Windows-based PC).

This is a project developed in the project courses, and the users are not computer literate. Consequently, we have high demands for documentation.

Resources

- There is a software baseline to work from including source code for algorithms and test cases
- The necessary hardware exists or may be purchased during the course of the project
- A designer is available to assist with better appearance of the user interface

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Intellectual property right

KESo is an important tool for us to work together with companies. It is a kind of ambassador for our research area. We hold the legal rights, but take no legal responsibility for accurate calculations. That's why the software is free to use for anyone. It will continue being so.