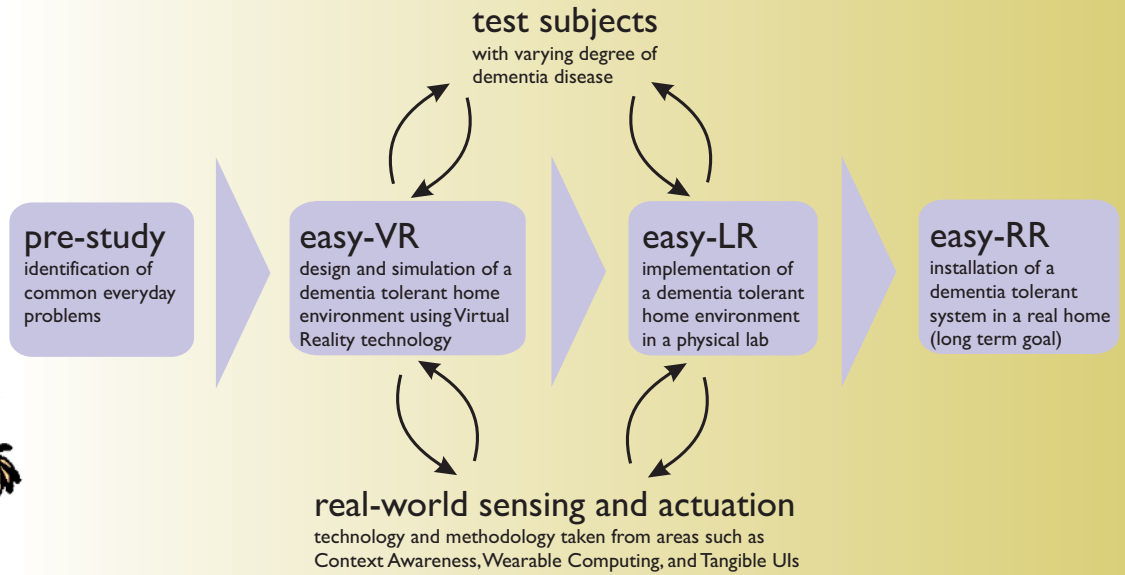
easyADL — Independent life despite dementia



easyADL is a research project investigating new forms of computer technology for facilitating everyday life of individuals suffering dementia disease. With a continuous increase of progressively older citizens, age-related healthcare is becoming a significant problem both from a humane and economical perspective. This burden on both society and individuals such as relatives would be eased if afflicted individuals could live a more independent life, in their own home, since life in an institution is significantly more costly. More importantly, many individuals have a wish to remain living at home. Quality of life for the individual would therefore be maintained for a longer period of time.

easyADL takes a novel design approach towards the goal of "lifelong living" by aiming at deliberately discrete augmentation of existing real-world environments using ubiquitous and wearable computing technology. Many of the designs will be critical to the user's well-being and pose major technological challenges for ensuring near-fool-proof operation, extremely minimalistic user interface (if any), and successful integration with existing healthcare practices.

Medical expertise and healthcare experience from within the Dept. of Geriatrics at the University Hospital of Northern Sweden, ensures a well-grounded understanding of the user group. Prototyping will be speeded up by simulation and testing in immersive virtual reality environments, a design approach VRlab at Umeå University has pioneered in the area of healthcare. The design of suitable wearable and ubiquitous computing solutions draws on a physical-virtual design framework presented in the PhD thesis *Physical-Virtual Artefacts in Mixed Reality Space* (Pederson, 2003).

The two-year project is to start in May 2005 and is a collaboration between:

- Dept. of Geriatrics, at the University Hospital of Northern Sweden
- VRlab, Umeå University
- Dept. of Computing Science, Umeå University

Funded by the EC Target 1 structural fund program for Northern Norrland.

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