



# Web Portal Development Platform

The FORTH-ICS portal development platform is the outcome of an evolutionally process followed the past five years by the Human Computer Interaction Lab (HCI) aiming to provide the means for the development of inclusive Web-based interfaces that are capable to adapt to multiple and significantly different user profiles (using the Unified Web Interfaces (UWIs) method that builds on well-established Design for All principles and on the Unified User Interfaces methodology). Therefore the aforementioned platform can address the needs of the widest possible end user population, such as non-expert IT users, the very young and the elderly, people with disability, users on the move.

Web Applications developed by means of this platform provide:

- Conformance to W3C-WAI accessibility guidelines
- Adaptations based on profile information:
  - user specific parameters
    - Language
    - Disability (e.g. *Blind, Low vision, Colour Blind*)
    - Web familiarity
  - context specific parameters.
    - Device (e.g. *PDA, Tablet PC*)
    - Display resolution (e.g. *1024x768, 320x240 mobile*)
    - Assistive technology (e.g. *screen reader, screen magnifier*)
    - Input device (e.g. *switches, game pad*)
- Adaptations to:
  - **the interaction modalities, metaphors and user interface elements**
    - navigation alternatives
    - tab – fieldset – button – link presentation
    - search variations
  - etc
  - user preferences
    - file and image displaying – uploading
    - paging styles
    - function styles
    - skins
  - etc
  - user accessibility requirements
    - template – table linearization
    - font size and family
    - text entry method
    - charts presentation
    - colour settings
  - etc

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The INTUITION Portal to Guidance and Standards for VR  
http://hci-web.ics.forth.gr/INTUITION



Portal for the International Cooperation Activities in Future and Emerging ICTs  
http://interlink.ics.forth.gr

**HUMAN COMPUTER INTERACTION  
LABORATORY (HCI)**

*The Human Computer Interaction Laboratory of FORTH-ICS (<http://www.ics.forth.gr/hci/>), established in 1989, is an internationally recognised centre of excellence, with accumulated experience in user interface software technologies, design methodologies, and software tools. The Laboratory carries out leading research activities focused on developing user interfaces for interactive applications and services that are accessible, usable, and ultimately acceptable for all users in the Information Society, while, at the same time, providing an appropriate framework and tools for reducing development time and cost. The research activities of the Laboratory, rooted in the principles of Universal Access and Design for All, address the development of interactive applications and services for various platforms, such as personal computers, handheld computers, mobile phones, smart appliances, and other computational devices distributed in the environment. Research results include infrastructures, methods, prototypes, architectures, tools, and programming languages, as well as methodologies for maintenance, reuse, modification and extension of the developed systems. Systematic testing, evaluation, validation and integration of the above results are achieved in practice through the development of advanced applications and services, such as mobile information systems, ambient intelligence environments, accessible web portals, entertainment applications (e.g., games), and educational software (e.g., eBooks).*

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