The FP7 EU-funded project Serenoa is creating a novel open platform for developing context-aware application user interfaces. Such user interfaces are aware of the changes in the context and can properly react to them in a continuous way. This includes adaptation to the user's devices, tasks, preferences and abilities, thereby improving the user's satisfaction and performance compared to traditional approaches to user interface design. An additional benefit is a reduction in the cost and development time for creation and maintenance of user interfaces.

The Serenoa Architecture

Summary

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Goals

- Extend and reuse existing frameworks
- Accelerate design and runtime UI adaptation development
- Fill a gap in the market for developing Context-Aware Apps
- Align R&D work with Business Expectations

Outcomes

- An adaptive application development methodology
- An innovative platform for context-sensitive Apps
- Reusable authoring tools and software components
- Prototypes

Adaptation domains

- Mobile terminals, smartphones and tablets
- Head-mounted devices
- Web apps
- Accessibility

Contexts of Use

- User: profile, preferences, disabilities, language...
- Platform & devices: desktop PCs, smartphone, tablets...
- Modalities: click & point, touch screens, voice, gesture...
- Environment: Location, light, noise, social context...

Benefits

- Better User Experience: increased usability and accessibility
- Cross-platform consistency
- Shorter time-to-market
- Easy-to-use software tools for context-aware Apps

Beneficiaries

- Developers
- End-Users
- Researchers
- CIOs

www.serenoa-fp7.eu