

# Appendix C

## Final Complete Set of Usability Guidelines

This appendix presents the full list of the distilled and additional usability guidelines. The italic items below represent the additional guidelines.

### C.1 Consistency

- C1 Ensure that things that look the same act the same and things that look different act different.
- C2 Be consistent with any interface standards (either explicit or implicit) for the domain/environment.

### C.2 Errors

- E1 Assist the user to prevent errors (through feedback, constrained interface, use of redundancy).
- E2 Be tolerant of Errors.
- E3 Provide understandable, polite meaningful, informative error messages.
- E4 Provide a strategy to recover from errors.
- E5 Permit reversal of actions/ability to restart.
- E6 Allow the user to finish their entry/action before requiring errors to be fixed. Do not interrupt the task being completed.
- E7 *Automate error-prone tasks/sub-tasks.*

### C.3 Information Processing

- IP1 Assist the user to understand the system.

IP2 Minimise memorisation (i.e. reduce short-term memory load), through selection rather than entry, names and not numbers, predictable behaviour and access to required data at decision points.

IP3 Make commands and system responses self-explanatory.

IP4 Use abstraction or layered approaches to assist understanding.

IP5 Provide help and documentation, including tutorials and diagnostic tools

IP6 *Assist the user to maintain a mental model of the structure of the application system/data/task.*

IP7 *Maximise the user's understanding of the application system/data/task at the required levels of detail.*

## C.4 User Experience

UE1 Make interfaces minimal, simple to understand, organised, without redundancy, socially relevant (especially for communication) and aesthetically pleasing.

UE2 Provide the information, or access to the information needed for a decision when/where the decision is needed.

UE3 Use the fewest number of steps/screens/actions to achieve the user's goal.

## C.5 Design for the User

DU1 Define the user and match the system to the user.

DU2 Use the user's mental model and language (avoid codes).

DU3 *Automate mundane/computable tasks/sub-tasks.*

## C.6 User Control

UC1 Adapt to the user's ability, allow experienced users to use shortcuts/personalise the system, and use multiple entry formats or styles.

UC2 Put the user in control of the system, ensure that they feel in control and can achieve what they want to achieve. Allow users to control level of detail, error messages and the choice of system style.

## C.7 Goal Assessment

GA1 Ensure the user always know what is happening. Respond quickly, meaningfully, informatively, consistently and cleanly to user requests and actions.

GA2 Make it easy for the user to find out what to do next.

GA3 Make clean the cause of every system action or response.

GA4 Provide an action/response for every possible type of user input/action.

GA5 *Provide feedback/assessment/diagnostics to allow the user to evaluate the application system/data/tasks.*

## **C.8 Ease of Use**

EU1 Make the system flexible.

EU2 Make the system easy to use.

EU3 Make the system efficient to use.

EU4 Make the system enjoyable to use.

EU5 *Automate tedious/repetitive/time-consuming tasks/sub-tasks.*