NEWTON D3.2





Deliverable D3.2 Summary

This document describes the appropriate infrastructure needed to store and manage the relevant multiple sensorial media (mulsemedia) data in respect of deliverable 3.2 of the NEWTON project.

Mulsemedia targets on the addition of media effects such as the senses of smell, touch, and taste into the conventional audio-visual media. In this regard, the sensory effects of the mulsemedia devices need to be programmatically integrated with each other to simulate the multi sensorial nature of real world events thereby enhance quality of perception. Because such integration requires extensive interoperability and technical support, we explored the re-configurability characteristics of a number of mulsemedia devices in terms of availability of driver software, device operating interface, SDK, and vendor (or community) support. Furthermore, descriptions of software component deliverables on annotation mechanism, data access mechanism, and APIs for storage and management for mulsemedia data are provided.

Next, generic design description on the annotation mechanism, data access mechanism; and APIs for storage and management for multiple mulsemedia devices' is provided. The design of these deliverables is based on the client-server architectural setting of the NEWTON platform wherein mulsemedia data integration is needed.

Finally, we provided descriptions of the software components implemented for annotating, managing and accessing mulsemedia data with a focus on olfaction, haptic and wind effects is provided. In addition, technical guide of the deliverable software components including client side installation requirements, and server side integration implications is described.

Accordingly, the document is organized as follows. Section one describes objectives of the deliverable and the test bed; section two presents architecture of the software component; section three provides a technical guide; finally the conclusion is provided in section four.