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Sharing Interactive Digital Storytelling Technologies

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1   Workshop Objectives

The Interactive Digital Storytelling (IDS) field has produced numerous research prototypes over the last years [1]. These prototypes cover several different technological domains, including: drama management; human computer interaction; language understanding and generation; behavioral modeling; 3D rendering, modeling and animation. Research in the field usually focuses on one specific area. However, it is often the case that other dimensions need to be integrated with one's core contribution to provide the end-user with a whole experience that can be assessed. As a consequence, researchers in IDS tend to become "one-person bands" trying to unite being scientists in multiple fields; engineers in an array of domains; and developers at home with many technologies and processes. Game technologies aim to simplify this challenge by providing, in particular, sophisticated game engines. But since game engines do not cover all IDS needs, important development/integration efforts still remain to be addressed beyond the central scientific investigation itself. This workshop aimed at helping IDS researchers to identify and adopt existing IDS-relevant technologies, for them to be able to deliver prototypes that are more varied - or better tailored to their needs and goals - with less effort.

More precisely, it can be observed that:

- There is very limited reuse of software components between research teams;
- Existing IDS architectures have typically not yet been deployed outside their original research labs;
- There exist some available IDS-related components that would deserve to become better known and utilized across the field.

Extending previous related efforts [2], this workshop aimed at moving the field towards more sharing of technologies, first by increasing the community's awareness of this issue and second, and more importantly, by gathering key players around the table to develop concrete strategies to share their technologies. This has enabled participants to:

- Become aware of existing IDS-related components and middleware available for them;
- Share technologies that have been developed in their research labs or companies;

– Identify key obstacles and discuss the best way to organize the scaffolding for and the actual sharing/integration of IDS technologies within the research community.

2   Workshop Description

Based on the software and conceptual integration effort provided by the IRIS Network of Excellence [3], the workshop was organized around three types of participants' contributions:

- Technology providers, with contributions developed by their research labs or companies available for sharing;
- Software integrators, with visions on how to technically organize the sharing of IDS-related components and with success and flop stories of community processes;
- Users, with needs and intention to use third-party IDS components and middleware within their own scientific, product, and/or artistic development.

The workshop was divided into three phases:

Phase 1: Selected technology providers presented their technologies and availability/integration status (with use cases illustrating their potential; related requirements; and available learning resources);

Phase 2: Selected software integrators presented their approaches in a similar way;

Phase 3: A working session aimed producing a first draft of a sharing policy for the IDS community.

Phase 4: A focused discussion on the next steps for the sharing effort.

Before and during the workshop, the contributions and findings were collected on a website [4] gathering existing technologies from participants and other actors in the IDS community. After the workshop, the website's content has been progressively extended and discussions have been encouraged/animated/moderated by the organizers.

References

1. IDS systems,
   `http://tecfalabs.unige.ch/mediawiki-narrative/index.php/IS_Systems` (last accessed September 2011)
2. Workshop on Integrating Technologies for Interactive Stories, Cancun, MX (January 7, 2008), `http://www.itistory.org/` (last accessed September 2011)
3. IRIS Network of Excellence project, `http://iris.scm.tees.ac.uk/` (last accessed September 2011)
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