Website Modeling and Website Generation

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Website Specification

Websites become more often based on data warehouse architectures. Our group uses the website modeling language SiteLang [TD01]. This language has reached a maturity that allows simple application and goes far beyond what other approaches can handle: It is powerful, consistent, has a well-developed theory fundament [Tha00a,Tha00b], does not allow to create confusing specifications, uses a powerful methodology [ST00,Tha03] applied in three dozen projects, and has a playout and layout specification supporting database-backed generation of websites.

Application in Projects Resulting in Installation of Large or Huge Websites

The approach presented in this paper is based on the experience the Cottbus Information Services team gained during successful development of 36 large or huge websites (partially with more than 15.000 pages), e.g., 17 large municipality websites (information and community sites), 5 service sites, 2 large learning sites, 4 group and community sites, 1 e-government sites, 1 huge B2B site, and 1 cable-net backed, set-top-box based TV-internet platform.

Automatic Generation, Orchestration, and Maintenance of Websites

The SiteLang specification can be developed by an editor that has been developed for support of our website projects and is applied for generation of websites. The storyboard editor uses a four window representation representing scenarios, dialogs and dialog steps, database and content base, and story properties. The website developer uses the editor backed by a database that contains the website structure and functionality. The editor supports integration of content obtained from other content systems and databases. This information is used for automatic generation of the website whenever content, structuring, and functionality are changed. Website developers do no longer develop XML document hills. Instead, the XML documents are generated by the system.

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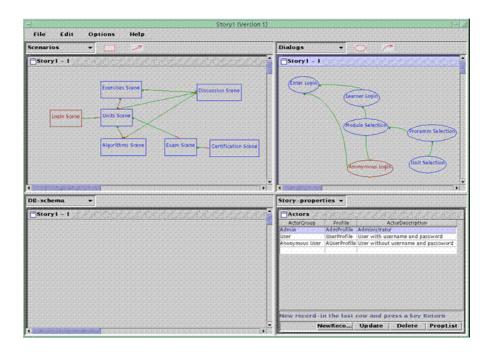


Fig. 1. A Screeenshot from the Storyboard Editor

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