

Authoring Personalized Interactive Museum Stories

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Abstract. CHESS is a research prototype system aimed at enriching museum visits through personalized interactive storytelling. Aspiring to replace traditional exhibit-centric descriptions by story-centric cohesive narrations with carefully-designed references to the exhibits, CHESS follows a plot-based approach, where the story authors create stories around pre-selected museum themes. In this paper we place the CHESS system within the Interactive Digital Narrative field, describing the main objectives and requirements addressed. We present the system's architecture and outline its overall functionality. We describe the underlying storytelling model using examples from the stories authored using the CHESS Authoring Tool. Finally, we report key results focusing on the authors' perspective for the creation of personalized stories.

Keywords: Interactive digital storytelling, personalization, authoring tools

1 Introduction

The CHESS System is a research prototype that has been developed in the context of the CHESS (Cultural Heritage Experiences through Socio-personal interactions and Storytelling) project¹. It aims to enrich museum visits through personalized interactive *storytelling*, by (re-)injecting the sense of discovery and wonder in the visitors' experience. It uses personalized information to create customized stories that guide visitors through a museum and employs mixed reality and pervasive games techniques, ranging from narrations to Augmented Reality (AR) on mobile devices [1,2].

CHESS targets two "types" of users; visitors, who "consume" CHESS stories through their devices, and story authors, who design the experiences. Aspiring to

¹ <http://www.chessexperience.eu/>