Narrative is an important component of modern digital games. As computer graphics have become more sophisticated and realistic, it has become increasingly necessary for game designers to develop new techniques to capture the attention of their audience. One such technique is the introduction of a narrative element as an integral part of the game experience [1]. The ability to effectively tell a story, or allow the user to be immersed and interact with a story thus becomes an important asset in the toolkit of game designers. However, Narrative generation and editing can be very time consuming and effort intensive processes. Moreover, the implementation of a quest or an adventure in a game environment may often result in several months of effort that translate into just a few hours of game play once the game goes live [2]. Factors like these can have a very significant impact on a developer's ability to deliver a game on time, or deliver it at all. It is in this inherent difficulty presented by the creative process where I find the motivation for an Intelligent User Interface (IUI) that reduces the complexity and effort needed to develop narrative for digital game environments.

The main objective of the proposed IUI would be to provide game designers and content developers with a user interface that takes full advantage of the computational power provided by modern Artificial Intelligence planners—in particular their application as story-generation systems—while insulating the user from the complexities involved in the operation of a planner. It should be our goal to facilitate a process where users do not require any expertise in AI planning (or in AI for that matter) in order to be able to create stories for a digital game environment.

These ideas have theoretical foundation on two areas of Computer Science that have been the focus of much research in digital games and artificial intelligence. The areas are Interactive Narrative and Collaborative Problem Solving. Interactive Narrative focuses on the development of computational models that support algorithms and processes leading to the implementation of systems that can generate stories in a procedural manner. Collaboration can be defined as mutual engagement among participants in a coordinated effort to solve a problem together [3, 4].

The interface should be designed with an emphasis on ease of use and above all with the core objective of insulating the user from the complexity introduced by the planner. Being able to provide an abstraction that hides the details of the planner functionality is paramount. My working hypothesis is that game developers can best benefit from the use of planner technology if they are able to do so without having to master plan description languages or AI concepts. The solution I propose would use a plan-based approach to story generation that enables users to create short narratives without the need to write complete scripts and detailed character actions. The design guidelines of such software could be based on the theories of collaboration...
previously mentioned and on mixed-initiative techniques that rely on a well-defined collaborative interaction between a human operating the software and an intelligent agent that is tasked with providing assistance.


