Dynamic story creation across game platforms using the narrative language ink

Note to Conference Organizers

This abstract is for a synchronous, web-based virtual workshop. Based on status as contingent faculty, neither organizer can attend in-person based on limited or no travel funding. We believe this workshop could provide great value to people attending or presenting remotely as part of other talks and panels.

We have previously given a shorter version of this workshop and plan to extend material to multiple hours to account for multiple game engines not previously covered. For the past version, we created an online companion website where participants could follow the material and potentially try code examples in a web browser. We will include a new, custom version of the same resource for all DiGRA 2024 attendees.

Objectives and Outcomes

Narrative design is a vital aspect of many video game productions. Many large games include multiple endings, and even experimental projects contain branching paths. With this inclusion in many games, knowledge of common structures and patterns can help game developers implement their own plans and provide an insight to researchers investigating how concepts are used. This workshop focuses on the narrative scripting language ink used to create thousands of projects and award-winning games. As a language designed exclusively for narrative design, it allows for creating branching, looping, and dialogue structures for use across many video game genres.

Beginning with presenting a collection of options, what ink names ‘weaves,’ this workshop moves from how to create simple branching structures into more advanced modular patterns. The language ink supports breaking a larger story into smaller parts and then moving between them. Through these multiple parts, looping patterns and use of dynamic sorting can be implemented, opening the ability to create many endings and simple story sorting to choose the best story section based on certain conditions.

Using the tool Inky, a compiled form of ink can be used on multiple platforms. In this workshop, we will demonstrate how to create a web-based experience using ink and then expand to how plugins for the game engines Unity and Unreal can provide support across single and multi-story design patterns for advanced story sorting and seasonal content patterns.

As this is a workshop designed for all audiences, our desired outcomes are to empower those interested in creating game narratives with ink and to help all those interested in learning to use

the authoring tool Inky more effectively. In addition, we will provide everyone in the workshop with materials for making stories beyond the workshop using free and open resources for creating works with ink and Inky: specifically, we will give participants access to a GitHub repository with interactive examples as well as links to resources we discuss. Attendees will leave the workshop equipped with an introductory understanding of the language and how to potentially use it across web, Unity, or Unreal projects for choice-based games.

Justification

This workshop builds upon scholarship from previous DiGRA and sister conferences addressing platforms and narrative design tools aimed at creating interactive digital narratives (Friedhoff, 2014). Previous workshops have addressed the intersection between literature and games, a tradition that this workshop would continue (Rughiniș and Ștefania, 2016). We also build on calls from Koenitz and Eladhari (2019), Green et al. (2018), and Shibolet et al. (2018) for greater investigation of authoring tools, languages used with them, and artifacts produced with them.

Format and Activities

This workshop will be held virtually as three one-hour segments. In the first, concepts in the language will be introduced, beginning from language patterns in a single file to larger, multi-file stories. Next, the workshop will focus on the user experience of the language patterns, moving between how options can be presented to players and how they appear in ink itself. Finally, the workshop will end with an introduction to creating web-based, Unity, and Unreal projects. In both game engines, because of the plugins used, multi-story projects are possible, allowing for advanced story sorting and seasonal content patterns. The final hour of the workshop will also include time for discussion.

Participants will be provided with access to a GitHub repository containing learning resources and interactive examples. Participants will also be encouraged to download the Inky editor before the workshop begins to allow for quickly loading interactive examples and following how patterns are written in the language.

Zoom is the preferred platform, but it can be adjusted for others.

Background

Dr. Kenton Taylor Howard (he/him) is a Lecturer in the Games and Interactive Media program at the University of Central Florida in Orlando, Florida, where he primarily teaches games-related courses. He has used ink in the classroom at both the undergraduate and graduate level and created a web-based ink game, *Retelling the Tell-Tale Heart*, to introduce ink to students in the classroom. He has given several conference presentations and workshops related to ink and co-authored the Unofficial ink Cookbook alongside this workshop's co-organizer. He also created a game prototype in ink called *Life in the Megapocalypse* as part of his PhD dissertation project, *Critical Modding: A Design Framework for Exploring Representation in Games* (2021).

Dr. Daniel Cox (he/they) is a Post-Doctoral Scholar in the Text and Technology program at the University of Central Florida. They have over a decade experience teaching tools like Twine, ink, and Bitsy. They served as the primary contributor and editor for the online resource, *Twine Cookbook* and wrote the first textbook on ink, *Dynamic Story Scripting with the ink Scripting Language* (2021), based on the experiences creating the Unofficial ink Cookbook.

Participants and Selection Process

Due to its virtual format, the only limitation is the number of participants. If hosted using Zoom, 50 participants would need to be set as a maximum to avoid communication issues. Other hosting platforms often provide the same limitations.

References

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