# Glossary

#### ΑI

Artificial Intelligence. The term is generally used to refer to machines acting autonomously in some way, but the range and detail of what is considered 'intelligence' varies greatly in different disciplines, studies and time periods. Julian Togelius' blog offers some examples.

### Array

A data structure containing several pieces of information (e.g. multiple variables) of the same type (e.g. <u>strings</u>).

### **Boolean Variables**

Variables which may be set as 'true' or 'false'.

### Branching (Narrative)/ Branches

A type of non-linear narrative where the story 'branches' into two or more possible outcomes when the reader-player makes a choice. For more on the basics of branching structures, see <a href="Paul Nelson's guide">Paul Nelson's guide</a>.

### Chatbot

An AI agent specifically designed for conversation and entertainment which converses with users via text or voice interface.

# Commenting (code)

Adding text comments to code which will not affect the program when it is run and will not appear in any player-facing outputs.

#### Constraints

A method of designing which helps give focus and direction to the project. Pamela Stokes (2006, p. 8) suggests goal, subject and task (method) constraints, while <a href="Emily Short"><u>Emily Short</u></a> describes them in terms of goals, and advocates setting goals for narrative, genre, pacing, technology (tools) and, if necessary, commerce.

# Creativity Amplifier

A technology or process which extends a writer or artist's creative capabilities (e.g. PhotoShop; Index Cards; AI)



### **Emergent Narrative**

Narrative which arises simply through the player's interactions or behaviours rather than due to any pre-authored plot (for example, events in *The Sims* may be considered emergent narrative).

### Gating

Withholding access to content until particular conditions are met, such as certain player input or updates to the knowledge model or world state.

## Grammar (Text Generation)

A grammar is a series of named <u>arrays</u> which contain <u>strings</u>. When run, an array will display one string at random. The arrays can be combined to produce new sentences and phrases.

### Knowledge Model

A representation of the information available to an AI and the relationships between pieces of information. (e.g. One knowledge model category could be 'Characters' and contain information such as 'Age', 'Description', 'Friend', with these sub categories containing <a href="mailto:numeric">numeric</a>, <a href="mailto:string">string</a> and <a href="mailto:Boolean">Boolean</a> data respectively).

#### Modular Stories

A form of narrative where modules consist of linear story segments which may have conditions attached in order to access, but will not necessarily result in narrative world state changes after deployment. They are similar to <u>storylets</u>, but more self-contained, although they may create the illusion of greater choice and variation as players may have multiple modules running simultaneously throughout a larger narrative.

# Nesting (Text Generation)

Placing generators or grammars inside one to expand the generative possibilities.

# Numeric Variable/Value

A variable expressed as a number.

### Persona

In relation to AI, a persona is usually the 'personality' of the AI agent, and may include sample responses to key user questions. It is used to aid design and give character to the agent.

# Storylets

Sections of narrative content (dialogue, scenes, descriptions etc) which are presented to the reader based on particular conditions in the narrative (gating), and which result in changes to the narrative world state after they have been deployed. See Emily Short's summary for more details.



### String Variables/Strings

Variables which contain information stored as text (e.g. player name).

#### TI DR

Acronym for "Too Long Didn't Read" sometimes posted on the internet to request a shortened version of a long post, or simply to indicate displeasure at the level of detail provided.

#### Visual Rhetoric

Ian Bogost coined the term 'procedural rhetoric' (p. 3, 2007), which refers to "the practice of persuading through processes in general and computational processes in particular." While Bogost is specifically interested in persuasiveness of a particular viewpoint or concept expressed through game mechanics, games display other kinds of rhetoric. For example, the ways in which games encourage players to learn how to play and continue playing through interactions and rules which are not always explicitly explained, such as those presented visually (e.g. flashing objects, health bars, traversal routes indicated with lighting or colour).

#### World State

Sharing many similarities with the <u>Knowledge Model</u>, this is the state of the game world as expressed through variables, which may be persistent or changeable (e.g. persistent information such as a dead character, or changeable information such as current weather), or other recorded information such as locations visited or player-created content.

