The Nudge Support Toolset

Michael A. Gohde

December 6, 2016

1 Overview

The task of writing stories for Nudge is inherently difficult. The Nudge Support Toolset exists to alleviate some of this difficulty by providing a large set of utilities designed to compile, validate, and install stories.

This document exists to detail the function and operation of each utility in the Nudge Support Toolset.

2 story2xml.py

story2xml exists to translate well structured, human-readable stories into an intermediate XML format for use by all of the other tools in the set.

2.1 Input file format

```
1 Title: <Insert story title here>
2
3 First story node title:
4    <Insert story node text here>
5
6    Responses:
7        Response 1 text -> prb1% to dst1, prbN% to dstN
8        Response N text -> prb3% to dst3
```

Each story2xml input file must follow a common set of conventions:

1. The story's title must be written on its own line and prefixed with "Title:"

2. Each story "block" or "decision" (hereafter referred to as a "node") must start with a title followed by a colon.

3. The text content in each node (ie. the story text) must not start with a word followed by a colon.

4. All possible user actions are defined in a block prefixed by the keyword "Responses:". This block must be indented more than all of the other text in its node.

2.2 A complete input file example

```
1  Title: Example story
2
3  D1_0:
4      You are confronted with a serious question:
5      To cheese it or not to cheese it?
6
7      Responses:
8          Cheese it! -> 50% to D2_0, 50% to D2_1
9          Don't cheese it! -> 100% to D2_2
10
11 D2_0:
12     Note: This is a comment.
13     Note: All comment text is discarded.
14
15     You were able to cheese it!
16
17     Responses:
18         Proceed -> 100% to D3_0
19
20 D2_1:
21     Comment: This is also a comment.
22     You were unsuccessful at cheesing it!
23
```

```
24      Responses:
25          Proceed -> 100% to D3_0
26
27  D2_2:
28      You proceed not to cheese it.
29
30      Responses:
31          Proceed -> 100% to D3_0
32
33  D3_0:
34      Regardless of whether you cheesed it,
35      something happened.
36
37      Responses:
38          End -> 100% to END
```

2.3 Running story2xml

story2xml accepts one argument on the command line: the name of a text file containing a properly formatted story. Once run, story2xml will print an XML-formatted story to stdout, so it may be useful to redirect its output to a different file.

Example usage:

story2xml mystory.txt >mystory.xml

2.4 Error messages

When compiling a story, story2xml attempts to perform a few tests to ensure that the provided source file is logically sound. If an error is encountered, story2xml will print a message and information that can be used to locate and correct the error.

List of error messages:

Error: for response (response text) on line (line number), destination probabilities exceed 100%

Error: for response (response text) on line (line number), destination probabilities sum to a value below 100%

Warning: for line (line number), unknown token (string)