

Text Generation Case Studies

Case Study 1: Trice (Twine Sugarcube)

Example: The Zoo of Unnamed

Creatures

Overview

A short demo illustrating potential usage of [Trice](#). (For a brief overview of the demo's content, see the Writing with Text Generators Toolkit, Section 2.1.4. For more information on Grammars in general and Tracery, in particular, see Section 2.3).

Strengths

- Easy to generate large volumes of text with just a few grammars
- Nesting grammars (placing one inside another) allows for even greater variation
- Automatically handles grammar rules such as plurals, capitalisation etc
- Having Tracery within Twine makes it easier to integrate text generation into other kinds of narrative

Challenges

- Only available for Twine Sugarcube rather than the more beginner-friendly Harlowe.
- Storing generated results to variables can prone to being accidentally overwritten due to the looping nature of the tool.
- Obviously this is only a demo piece, but the story is very simple: adding complexity dramatically increases the difficulty of using the tool with minimal code

Design Constraints

The initial aim was to create a generator using only Trice's main features:

Grammars and Rules, and Twine's main feature, **branching**. A second experiment was added to explore the use of **variables** and attempt to create a **narrative frame** to the generated content.

Experiments

A [Creative Prompt Generator](#) was created followed by a [Eurovision Song Contest Generator](#).

Evaluation

As observed in the demo piece, Trice allows rapid generation of large volumes of text. Grammars are easy to expand, with little to no risk of breaking systems elsewhere, even when one grammar is re-used in multiple places. The key issue with the *Creative Prompt Generator* was that attempting to bring the disparate generated results together in one grammar resulted in tense inconsistencies and incoherent textual mash-ups.

However, this could be addressed either by adjusting the JSON code used in Tricery to create new rules, using Twine variables (e.g. setting a variable to maintain coherence) or simply by taking more care in the structuring of the fragments (e.g. ensuring the same tense is already used throughout).

The *Eurovision Song Contest Generator* was an attempt to add a framing narrative around the generated text. This was done via a narrator voice which maintained consistent tone even where the text itself varied.

Case Study 2: Bitsy

Example: Subject and Subjectivity

Overview

While not made with Bitsy, [Subject and Subjectivity](#) is one of the few examples found containing the desired functionality: simple, varied dialogue with limited gameplay.

The player joins a tea party with three debutants who discuss a variety of potential suitors at random. The player can change the conversational topic, or the speaker, by clicking environmental elements.

Strengths

- Characters **respond to context** of conversation
- Different settings allow for varying levels of **gameplay & randomisation**
- Characters can continue with or without player input

Challenges

- **Complexity, speed and randomness** of conversation can make it difficult to know when (and if) to intervene)
- **Abstract nature of interface** means controls aren't intuitive (although instructions are provided prior to beginning)
- **Characters lack distinctive 'voice'** (presumably because they are sharing some grammars)

Design Constraints

The complexity of *Subject and Subjectivity* could not be recreated in Bitsy without additional code. However, the key elements drawn on were the creation of a world where **narrative exploration** is the key mode of interaction, there's **no win state** (the experience ends when the

player has had enough), experimentation with **degrees of randomisation** and **use of Bitsy's dialogue shuffle feature**.

Experiment

[Bake Off Eternal](#), a short Bitsy narrative with generated elements was created.



Figure 1: Example of dialogue shuffler in Bitsy

Evaluation

Bitsy's simple colour palettes mean that games created with the tool typically display a kind of **visual rhetoric**, with players naturally encouraged to attempt to interact with items which stand out from the rest of the environment, and/or have animations applied to them.

The techniques learned while creating grammars with Tracery (e.g. '**nesting**') were useful here, since the 'shuffle' function works in much the same way as a grammar. Similarly, this piece built on the techniques of the *Eurovision Song Contest Generator*, using the expectations and conventions within an existing IP to aid with a framing device for the randomised content. While obviously this would not be possible in a commercial game, grounding the randomised content within a familiar framework (as in *Subject and Subjectivity*'s use of the debutant ball) may help readers better make sense of otherwise inconsequential dialogue.

Case Study 3: Twine (Harlowe Storylets)

Example: The Master of the Land

Overview

A woman with an anxiety disorder must navigate social, cultural and physical landscapes.

Time moves on around the player-character, Irene, and **this causes changes to the location and behaviour of other characters, the weather, the party's events** etc. For a full analysis of [The Master of the Land](#), see section 2.1.2 of the *Writing With Text Generators Toolkit*.

Strengths

- Feels like a **living world**
- **Highly replayable** – it's impossible to see everything in a single playthrough
- The movement of time gives a **sense of urgency** to your actions

Challenges

- The rapid movement of time and characters can also feel frustrating at times – it's entirely **possible to miss important events**
- Because the characters move around a lot and the player-character already knows them, it can be **difficult to make sense of the relationships between characters** and/or develop those relationships

Design Constraints

The system must result in a **living eco system** of some kind, with a **light narrative** and some **persistent story elements**. The **main features of Twine's Storylet system**: opening and closing storylets, setting urgency and exclusivity.

Experiment

There was some initial brainstorming on a Google jam board, although very little of this made it through to the final work ([Woodland Wanderings](#)) beyond the overall concept – a **text-based narrative taking the reader-player on a walk through a woodland that changes with the seasons**.

Evaluation

The storylet system was unfortunately somewhat unintuitive to use, and limited by the fact that Twine converts passage names into links to show storylet content to the user, which telegraphs to the reader-player when they are returning to the same passages, even if other methods are being used to vary content within the passages themselves (such as the 'either' command). Because the passage names are called from an array, the way they display is also somewhat limited. A workaround is possible to rename passages on the fly, but this is a little convoluted (see the section named 'Storylets_Sequences' either in the Twine html file [above](#), or in the [code provided below](#).) It was also necessary to find workarounds to vary the links shown when more than one link is available (default behaviour seems to be to always show the same two links – you can see the workarounds in the passages named Spring, Summer, Autumn and Winter). However, it is worth noting that this was the first piece created with a storylet system, and therefore some of the issues may have been simply due to a lack of familiarity.

Case Study 4 – Twine (Generation & Narrative)

Example: Persona 5

Overview

A teenager must keep up the pretence of school and social life while acting as a vigilante superhero.

The narrative is **modular** (another form of storylet-based storytelling), with the reader-player able to pursue friendships with characters, each with their own individual storylines, alongside the main plot. For more on the narrative design of the Persona games, see [this article](#) by Todd Harper.

Strengths

- Creates a sense of **a living world** as characters move between locations and send text messages
- Movement of time creates a **sense of urgency and a need for time management**
- Linear sections between generated and/or player-selected sections make **relationships between characters clear and appealing**

Challenges

- **Possible to miss events** due to lack of time management or understanding of characters' movement schedule
- **Limited randomisation** reduces sense of a living world in subsequent playthroughs

Design Constraints

The aim was to create something where **randomisation supported the narrative** without directing it entirely. It was decided there should be **player choice**, but **narrative should be central**. The

techniques of randomisation and generation used should exemplify the themes of the plot.

Experiment

The story and generated functions were fully plotted via a [Google Jam board \(PDF version below\)](#). The **work was made in Twine with a mixture of randomly generated phrases, branching choices and conditional storylets within a linear narrative frame**. The techniques used represented the random, surprising and changeable nature of grief, with **different generative methods serving different purposes**.

Evaluation

Using different types of generation for different purposes to simulate grief, both from the perspective of someone grieving and someone attempting to support the bereaved. For example, the Uncle's behaviours ([activity](#)) cover a range of potential expressions of grief, from mindlessly trying to pass time, to organisational tasks associated with a loved one's death, to trying to find reminders of the deceased. Using 'display' rather than 'shuffle' or a variable means they can be reused, and that the system does not record which actions have already been displayed. This means the Uncle may repeat behaviours, behave logically one day and strangely the next, and vice versa. The TV programmes and radio shows the player may choose to encounter are similarly randomised to create a sense of a world continuing around them, which may at times seem nonsensical. When combined with choices (and the withholding of choices) these methods help the reader to experience the bizarre and unsettling nature of supporting someone who is grieving.

Case Study 5 – Ink (Generation Only)

Example: Poem Generator

Overview

Using a pre-defined framework, the user may choose keywords to [generate a poem](#), or use random generation.

Strengths

- Very quick and easy to use
- No poetic ability is required
- Variety of generators can produce different types of poems

Challenges

- The framework of the love poem in particular means that the poems become very repetitive very quickly
- Often the descriptions are so random they make very little sense

Design Constraints

The central constraint here was to **test the affordances of Ink as a generator**. However, based on the learning from the poem generator and previous experiments, it was decided that a **non-rhyming, abstract poetic form would give the greatest freedom** for creating interesting content. As with all the generators created, it needed to be **easily expandable**.

Experiment

A very short [poetry generator](#) was created that used Ink's shuffle feature alongside [nesting](#) and diverts (having some random options divert to particular endings or other randomised sequences).

Evaluation

I personally found Ink to be more straightforward for generation than Twine's storylet system, as it allows a greater amount of authorial control (although accept that this may be off-putting for new users).

As I'm not a poet and have minimal knowledge of poetry, sticking to one kind of very short, minimalist poetry with no set rhyme scheme seemed like the most sensible approach. While I would never argue that the poems generated could be considered 'good' by any normal critical metric, I would suggest that they offer more variety of form and invite interpretation more readily from the reader than the poems from the example generator.

The main issue here was that in allowing the poems greater variation and ambiguity, many veered away from love and potentially towards horror, as in the example given below!

I stand.

*Blood freezes beneath
my fingernails.*

*My fear is a beating
drum and you are its
door.*

*Poem generated with A
Weird Randomised Love (?)
Poem, Clark (2021)*

Case Study 6 – Ink (Generation with Narrative)

Example: Watch_Dogs Legion

Overview:

The player commands a team of hackers who undertake covert operations.

Every character in the game is

procedurally generated, and many can be recruited. They have friends and likes and dislikes which are updated dynamically according to player actions (for example, if a character is largely virtuous and they witness the player character committing a crime, their opinion of the player character will decline).

Strengths

- While many character traits (of both personality and appearance) are randomised, this is within a strict rule set to prevent any completely outlandish match ups (for example, a punk who works at the Bank of England)
- Replaying will always have the same basic storyline, but might have a different feel due to the team recruited and their individual traits
- Varied voices and ways of speaking helps create realistic characters

Challenges

- Procedurally generated missions become quite repetitive quite quickly
- An enormous amount of work (both writing and systems design) has gone into this narrative, which is completely out of reach for most creators

Design Constraints

Building on lessons learned from both *Woodland Wanderings* and *Uncle*, the basic concept of *Woodland Wanderings* should be **rebuilt in Ink**. However, the work should contain **more story**, with a **sense of continuity** between locations and seasons. Generation should be a **mixture of procedural and randomisation**.

Experiment

The ink version of *Woodland Wanderings*, [Getting Back Out There](#), uses the same basic framework, but animals are introduced which the player may see repeatedly. Choices are also consistent (the player can visit the same location each time) although the locations still change with the seasons and some elements are randomised.

Due to the complexity of the system being created, Excel was used as the initial planning document, in order to create an ecosystem of animals and environments, plus some additional narrative moments.

Evaluation

In order to create something with a story such as Uncle and the more complex system of generation behind it, it would likely be necessary to use both a detailed narrative plan and a system plan. However, as the story for Getting Back Out There, while more developed than *Woodland Wanderings*, remained relatively simple, the spreadsheet was sufficient for this particular project.

Obviously Ubisoft levels of content variation aren't possible, but the level of control over recorded variables and player selections offered by Ink makes it very easy to present content according to specific rules and conditions to aid both cohesion and variation.

Supporting Documents

Case Studies 1, 2 & 3: Information

Html files which can be opened in Twine can be downloaded by visiting the relevant game page and using the right-click->save as menu options. This can also be done with Bitsy games. The html files can then be played and inspected from the relevant editing tools. For an alternative example of how to structure narratives built out of textual fragments, look at the supporting documents for Case Studies 2&3 in the AI-Powered Case Studies document.

Case Study 3: Storylet Code Print Out for Twine Harlowe

You can also play a draft version [here](#) and save out the Twine html using the method [described above](#).

Woodland Wanderings

Init

```
{(set: $season to  
  (random: 1,4))(set:  
    $season_counter to 0)  
  (set: $current_season  
    to "") (set:  
    $colourfulthing to  
    "") (set:  
    $pond_visited to  
    false)  
  
  }[[Woodland Wanderings|Begin]]
```

by Lynda Clark

Summer

```
{(storylet: when $season is 2 and (history:) does not  
  contain "Summer"))(set: $current_season to "summer")}
```

```
(set: $season to it +1)

(set: $season_counter to it +1)

}(display: "Overhead") (display: (either: "Summer Sky Things", "Spring
SkyThings")) against a (display: "Sky Description") blue sky.

(link-storylet: (either: 1, 2))
(link-storylet: (either: 3, 4))
```

Spring

```
{(storylet: when $season is 1 and (history:) does not
contain "Spring")(set: $current_season to "spring")
}In the distance, you hear (display: "Spring Sounds"). (display:
"Overhead")(display: "Spring Sky Things"). You (display: "Action").{
(set: $season to it +1)
(set: $season_counter to it +1)
(link-storylet: (either: 1, 2))
(link-storylet: (either: 3, 4))
```

Begin

```
Your (display: "NounVerb") into the (display: "Adjective") (display:
"Forest")begins in (link-storylet: 1).
```

Autumn

```
{(storylet: when $season is 3 and (history:) does not
contain "Autumn")(set: $current_season to "autumn")
(set: $season to it +1)
(set: $season_counter to it +1)
}The leaves are turning (display: "Autumn Leaves") now, falling from
the trees tocarpet the (display: "Autumn Temp") paths.

(link-storylet: (either: 1, 2))
(link-storylet: (either: 3, 4))
```

Winter

```
((storylet: when $season is 4 and (history:) does not
contain "Winter")(set: $current_season to "winter")
(set: $season to 1)
(set: $season_counter to it +1)

}You can see (display: "Winter Sights"). The (display: "Forest")'s
(display: "Winter Weather") at this time of year, but that doesn't make
it any less (display:"Adjective"). You are glad you're wearing your
(display: "Winter Clothing"), though.

(link-storylet: (either: 1, 2))
(link-storylet: (either: 3, 4))
```

Year Over

```
((storylet: when $season_counter is 4 and $current_season is
"")(urgency: 3)
(exclusivity: 1)

}The year is over.
```

```
[[Leave the forest|Leave]]
```

Storylets_Seasons

```
(for: each _passage, ... (open-storylets:))[(link-goto: (either: "a new
season begins...", "another rotation of the Earth occurs...", "the months
pass...", "timemoves on...", "nothing lasts forever", "time makes fools
of us all"), _passage's name)]
```

Seasonal Styling

```
(unless: (passage:)'s tags contains "no-footer")[(if: $current_season
is "spring")[<script>$('tw-
story').addClass('spring');</script><script>$('tw-
```

```
link').addClass('spring');
```

```
(else-if: $current_season is "summer")[$('tw-story').addClass('summer'));
```

```
</script><script>$('tw-link').addClass('summer');
```

```
(else-if: $current_season is "autumn")[$('tw-story').addClass('autumn'));
```

```
</script><script>$('tw-link').addClass('autumn');
```

```
(else-if: $current_season is "winter")[$('tw-story').addClass('winter'));
```

```
</script><script>$('tw-link').addClass('winter');
```

```
]
```

Wander beneath the dripping boughs

```
{(storylet: when $current_season  
is "spring")(urgency: 1)  
(set: $current_season to "")}  
  
(display: "Spring Weather") but (display: "Mood").
```

You (display: "Reluctance") but (display: "Storylets_Seasons").

Leave

This year was, like many before it, full of change you could not stand against, but hopefully you found some stillness in amongst all that movement. Who knows what next year will bring?

Another year.

```
(click: "Another year")[(restart:)]
```

NounVerb

```
(either: "adventure", "forray", "journey", "wander", "stroll", "amble")
```

Adjective

```
(either: "beautiful", "enchanting", "peaceful", "restful", "lush",
```

```
"charming", "wonderful")
```

Forest

```
(either: "forest", "woodland", "thicket", "grove", "glade")
```

Take the sun-dappled path

```
{(storylet: when $current_season  
is "spring")(urgency: 1)  
(set: $current_season to "")  
  
}(display: "Overhead") (display: "Spring Sky Thing") and (display:  
"Beneath")(display: "Spring Ground Things").
```

```
As much as you (display: "Reluctance") you know (display:  
"Storylets_Seasons")
```

Follow the daffodil-lined track

```
{(storylet: when $current_season  
is "spring")(urgency: 1)  
(set: $current_season to "")  
(set: $colourfulthing to (either: "butterflies", "birds", "flowers"))
```

```
}Either side of the track, (display: "Spring Ground Things"). You're  
{(display: "Feelings") all the colours of the $colourfulthing  
(unless: $colourfulthing is "flowers") [darting  
overhead] (else:) [sprouting from the undergrowth]. (if:  
$colourfulthing is "birds") [Flashes of yellow from goldcrests and  
goldfinches, thegreens and reds of woodpeckers, the pink blush of  
woodpigeons.] (elseif:  
$colourfulthing is "butterflies") [Bright yellow brimstones, the blinking  
eyes of peacock wings, the glowing oranges of red admirals and commas and  
orange tips.] (else:) [Purple and yellow crocuses, bluebells and
```

```
harebells, white cowslips and golden cow parsley, blushing pink dog roses  
and vibrant violets.]}
```

```
You (display: "Action") and (display:  
"Reluctance"). Yet (display:  
"Storylets_Seasons").
```

Brush past the drooping branches

```
{(storylet: when $current_season  
is "spring")(urgency: 1)  
(set: $current_season to "")}
```

```
} You duck low and emerge in a clearing. The (display: "Animal") is  
just as surprised to see you are you are to see it and it flees into  
the (display: "Plants"). You feel (display: "Feelings") this (display:  
"Adjective") chanceencounter and (display: "Reluctance").
```

But still (display: "Storylets_Seasons").

Spring Sounds

```
(either: (either: "lambs", "goat kids") + (either: " bleating", "  
crying for theirmothers"), "the dawn chorus", "woodpeckers drilling  
into tree trunks")
```

Overhead

```
(either: "Overhead", "Above", "On high", "High in the  
heavens", "Over thetreetops")
```

Spring Sky Things

```
(either: "bees buzz", "a light breeze stirs the leaves", "peacock
```

```
butterfliesflutter", )
```

Action

```
(either: "breathe deeply", "feel totally relaxed", "are enjoying  
stretching your legs", "have missed this", "want to take in every detail",  
"feel elated")
```

Spring Weather

```
(either: "A light rain is falling", "The breeze is growing stronger",  
"The rain is falling more heavily now")
```

Mood

```
(either: "you don't mind", "nothing can shake your good mood", "it just  
makes you feel even more invigorated", "you welcome it", "it feels  
pleasant where it touches your skin")
```

Reluctance

```
(either: "wish you could stay forever", "are reluctant to leave",  
"linger for as long as you can", "while away the hours", "would like to  
preserve this moment under glass")
```

Beneath

```
(either: "under foot", "beneath your feet", "below")
```

Spring Ground Things

```
(either: "crocus bulbs burst into bloom", "primroses peep between  
lush green leaves", "iridescent black beetles scurry")
```

Feelings

```
(either: "overwhelmed by", "in love with", "enchanted by", "captivated  
by", "enthralled by")
```

Animal

```
(either: "hare", "toad", "hedgehog", "stoat", "deer", "fox", "rabbit"){\  
<!-- change to an array that binds the results for the final<br/>version, and then refer back to this animal each season -->}
```

Summer Sky Things

```
(either: (either: "swifts", "house martins", "peregrine falcons") +  
(either: "swoop and dive", "soar and call"), (either: "painted ladies",  
"meadow browns", "gatekeepers", "common blues") + (either: "flutter", "zig  
zag"))
```

Head for the shady avenue

```
{(storylet: when $current_season  
is "summer")(urgency: 1)  
(set: $current_season to "")  
} The air is cooler here, and between the (display: "Summer Plants"),  
a (display: "Animal") stirs the (display: "Plants").
```

You wish you could follow it, but (display: "Storylets_Seasons").

Sky Description

```
(either: "brilliant", "cloudless", "luminous", "darkening")
```

Summer Plants

```
(either: "bright yellow agrimonies", "clustered purple betonies",  
"goldentrefoils", "vibrant purple knapweeds", "vivid red poppies")
```

Plants

```
(either: "undergrowth", "foliage", "leaves", "vegetation")
```

Enjoy the sunshine

```
{(storylet: when $current_season  
is "summer")(urgency: 1)  
(set: $current_season to "")  
} You idly wish you were solar powered. You suppose the (display:  
"Summer Plants")in the (display: "Plants") are.
```

Although you (display: "Reluctance"), (display: "Feelings") the sun's
(display: "Summer Sun"), (display: "Storylets_Seasons").

Summer Sun

```
(either: "warmth", "heat", "comforting rays", "gentle touch", "blazing  
intensity")
```

Part the lush-leaved branches

```
{(storylet: when $current_season  
is "summer")(urgency: 1)  
(set:  
$current_season  
to "")(set:  
$pond_visited to  
true)  
} You happen across a pond, its water-level lowered by the (display:  
"Summer Sun")of the Summer sun. A (display: "Animal") lounges by the  
water's edge, no doubt attempting to keep cool.
```

You are careful not to disturb it, but (display: "Action").

Regardless of whateither of you feel, (display:
"Storylets_Seasons").

Follow the sun-baked track

```
{(storylet: when $current_season  
is "summer")(urgency: 1)  
(set: $current_season to "")  
}  
As you walk, the ground (display: "Beneath") rings hollow, dried to a  
hard crust by the sun's (display: "Summer Sun"). Either side of the  
track (display: "Summer Plants") wilt.
```

There's no need to worry, though: (display: "Storylets_Seasons").

Autumn Leaves

```
(either: "red and gold", "brown and orange", "brittle and crisp")
```

Autumn Temp

```
(either: "misty", "chill", "cooling", "darkening")
```

Collect conkers

```
{(storylet: when $current_season  
is "autumn")(urgency: 1)  
(set: $current_season to "")  
}  
your treasure, and (display: "Reluctance"). But the (display: "Autumn  
Temp") (display: "Autumn Weather") is closing in, and you know (display:  
"Storylets_Seasons").
```

Scuff through the fallen leaves

```
{(storylet: when $current_season  
is "autumn")(urgency: 1)  
(set: $current_season to "")  
}  
Your shuffling feet uncover a (display: (either: "Animal",
```

"Conker"). You (display: "Action") but are also more mindful of where you tread from now on. However, (display: "Mood") - the slower pace helps your visit to the (display: "Forest") feel even more special.

...(display: "Storylets_Seasons")

Search for wild fruits and berries

```
{(storylet: when $current_season  
is "autumn")(urgency: 1)  
(set: $current_season to "")  
}You can barely believe your luck - (display: "Fruits")! You gather  
enough to takehome and make a delicious (display: "Food"), but not so  
many that the (display: "Birds") will go hungry.
```

Before you know it (display: "Storylets_Seasons").

Admire the evergreens

```
{(storylet: when $current_season  
is "autumn")(urgency: 1)  
(set: $current_season to "")  
}The (display: "Autumn Temp") (display: "Autumn Weather") rolls in and  
you watch (display: "Birds") flit from (display: "Evergreen") to  
(display: "Evergreen"). You feel (display: "Feelings") their (display:  
"Adjective") song.
```

You listen so long, (display: "Storylets_Seasons").

Conker

```
(either: "green spiked horse chestnut case", "large conker,  
shiny as patent leather", "tiny conker, round and matte brown
```

like a wooden marble")

Autumn Weather

(either: "fog", "wind", "sky")

Fruits

(either: "a hedgerow heavy with enormous wild plums", "fleshy red rosehips, bright against the bare brown twigs", "plump sloes peeping between wicked sharp thorns", "gleaming blackberries, dark and shiny as jewels")

Food

(either: "jam", "jelly", "crumble", "pie", "tart", "gin")

Birds

(either: "robins", "thrushes", "blackbirds", "sparrows", "chaffinches", "goldfinches")

Evergreen

(either: "cedar", "holly tree", "leylandii", "pine", "cotoneaster")

Winter Sights

(either: "your breath hanging in the air", (either: "the barely visible prints of a", "the crisp, fresh footprints of a ") +(either: "rabbit", "roe deer", "blackbird") +" in the snow")

Duck under the snow-laden branches

{(storylet: when \$current_season is "winter" and (history:) contains

```
"Summer") (urgency: 2)

(set: $current_season to "")

}The (display: "Evergreen")s are now (display: "Winter Decoration"), the
(display: "Plants") sparse and skeletal. For a moment, you miss the
(display: (either: "Summer Plants", "Summer Sun")) of Summer. But then you
remember (display: "Storylets_Seasons").
```

Follow the animal footprints through the snow

```
{(storylet: when $current_season
is "winter") (urgency: 1)

(set: $current_season to "")

}To your surprise, at the end of the trail of prints, you find a
(display: "Animal"). It blinks slowly at you, breath steaming, then
turns and disappears into the nearby (display: "Plants"). You feel
(display: "Feelings") all the life still being lived in this (display:
"Adjective") (display: "Forest").

...(display: "Storylets_Seasons")
```

Make your way towards the frozen pond

```
{(storylet: when $current_season
is "winter") (urgency: 1)

(set:
$current_season
to "") (set:
$pond_visited to
true)

}A lone (display: "Water Bird") stands on one leg in the centre of
the pond. The pond is (display: "Winter Decoration"), its surface
thick with ice.
```

```
...(display: "Storylets_Seasons")
```

Build a snowman

```
{(storylet: when $current_season  
is "winter")(urgency: 1)  
(set: $current_season to "")  
}You remove your (display: "Winter Clothing") to add to the snowman.  
The whole (display: "Forest") is (display: "Winter Weather") as another  
blizzard takes hold, but (display: "Mood"). You add the finishing touch  
- a long, curving (display: "Evergreen") twig for a mouth - and think  
about giving him a name, but then you remember: (display:  
"Storylets_Seasons").
```

Winter Decoration

```
(either: "dusted with a fine sprinkling of snowflakes", "heavily laden  
with thicksnow", "glittering under a heavy frost", "frozen solid")
```

Winter Weather

```
(either: "freezing", "chill", "cold", "empty", "silent")
```

Water Bird

```
(either: "duck", "heron", "swan", "moorhen")
```

Winter Clothing

```
(either: "bobble hat", "thick woollen scarf", "heavy wool mittens",  
"fluffy earmuffs")
```

Return to the pond

```
{(storylet: when $current_season is "spring" and
```

```
$pond_visited is true)(urgency: 2)
(set: $current_season to "")
}

The pond is as you left it, although the water level is higher.
(display: "SpringWeather") which stirs the water, sending the
(display: "Water Bird")s skimming across the surface to their nests.
```

Soon they will have their young, and the numbers on the pond will double, as surely as (display: "Storylets_Seasons")

Revisit the pond

```
{(storylet: when $current_season is "summer" and
$pond_visited is true)(urgency: 2)
(set: $current_season to "")
}
```

The baby (display: "Water Bird")s are now almost indistinguishable from their parents. You wonder (either: "where they will go now", "whether you are now indistinguishable from your parents", "if the pond seems smaller to them, or if they don't have such concerns").

Head for the pond

```
{(storylet: when $current_season is "autumn" and
$pond_visited is true)(urgency: 2)
(set: $current_season to "")

}The (display: "Autumn Leaves") leaves (either: "float", "drift",
"swirl lazily") on the pond's surface. A (display: (either: "Animal",
"Water Bird")) crouches in amongst the sparse (display: "Plants"),
clearly trying to become invisible, so you avert your eyes to watch the
(display: "Birds") just visible in the (display: "Autumn Temp") sky
above.
```

Which reminds you, (display: "Storylets_Seasons").

Look up at the icicle bedecked branches

```
{(storylet: when $current_season  
is "winter")(urgency: 1)  
(set: $current_season to "")  
}The (display:"Evergreen")s are (display: "Winter Decoration") and a pair  
of (display:"Birds") hop between the (display: "Winter Weather")  
branches. All is(display: "Winter Weather") save for (display: "Winter  
Sights"). You turn and (display: "Storylets_Seasons").
```

Case Study 4: Google Jam Board Planning for Uncle

You have an Uncle.

His name is

[Input Name]

He's

[Cycling Link]

not your 'real'
uncle, your
dad's brother,
your mum's
brother (bind
choice)

And yet, here you are, the one who has to go round and take care of him.

You're out of work, so you don't have an excuse.

Monday

You arrive at Uncle \$name's house to find him
"What are you doing?" You ask.

"I need to." He tells you. "It helps me think."

[activity]

a tea towel; 'Doring' -
over a catalogue
which contains
nothing but different
types of gravel',
'pairing socks,
holding them to the
light to ensure that
they're exactly the
same shade of black',
'jangling the change
in his pockets like it's

May also need DM's
to contain info for
later regarding
specifics of the
items.

**Help
him**

**Set: Help
Counter
to 1.**

It's what (if: cycling
link is Mum's
brother) Mum sent
you here to do (if:
cycling link is Dad's
brother) Dad sent
you here to do
(else:) you came
here to do afterall.

**Turn
on his
TV**

**Set: No
Help
Counter
to 1**

Changed name of
counter in-game to
reflect end of story
message.

[Professions]

**[Doing
a
Thing]**

(either:) "doctors",
"soldiers",
"superheroes",
"chefs", "married
couples",
"weightlifters"

(either:) "fighting an
endless war", "lost on
a battlefield",
"cooking for the
Queen", "trying to
solve a murder",
"falling in love", "stuck
in a timeloop", "who
should probably
retire, but refuse"

Tuesday

The next day you visit again. Pressure from

If Mum's
brother:
"Mum", Else:
"Dad"

\$uncle
is busy

[Activity]

(Display:)

over a catalogue
which contains
nothing but different
types of gravel".
"pairing socks,
holding them to the
light to ensure that
they're exactly the
same shade of black",
"jangling the change
in his pockets like it's
a tambourine".

He doesn't look up as you come in.

**Join
him**

Set Help
Counter
to it +1

**Turn
on his
radio.**

Set No
Help
Counter
to it +1



It's tuned to a station where

[Professions]

are talking
about

**[Doing
a
Thing]**

Wednesday

Your

If Mum's
brother:
"Mum", Else:
"Dad"

filled a tupperware with

(either): "homemade spaghetti", "red velvet cupcakes", "chocolate and hazelnut cookies", "ham and pickle sandwiches", "pork pies"

because apparently that's \$name's favourite.

If Help Counter is at least 2

Else

\$reaction

[Activity]

"You want some?" He asks \$mood.

Set: _temp variables to \$reaction "He perks up at the sight of the food container and stops" \$mood "cheerfully".

set _temp variables to \$reaction "He remains focussed on" \$mood "despondently".

"Sure."

"No thanks, but you go ahead!"

Set Help Counter to it +1

You're getting used to hanging out here. It's not so bad.

"Nah,
I'm
good."

Set No Help Counter to it +1

You've delivered the food, you've done your part. Being here just brings you down.

Thursday



The morning is \$weather, so the walk over \$effect.

If
\$weather
is sunny

Uncle \$name stops

[Activity]

"You look cheerful," he observes.

"Sorry."

"It's a
lovely day
out."

Else

Uncle \$name doesn't stop

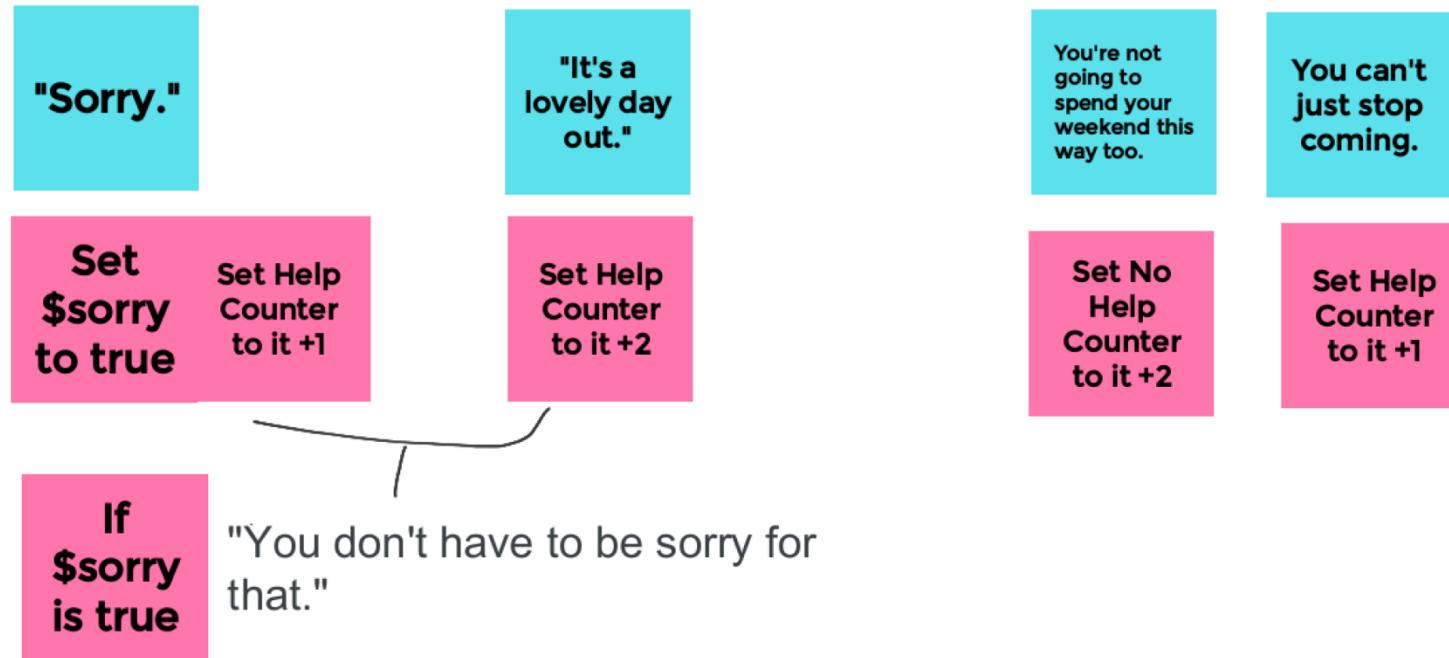
[Activity]

He doesn't notice
you peeling off
your sopping wet
coat and hanging
it on the radiator
either.

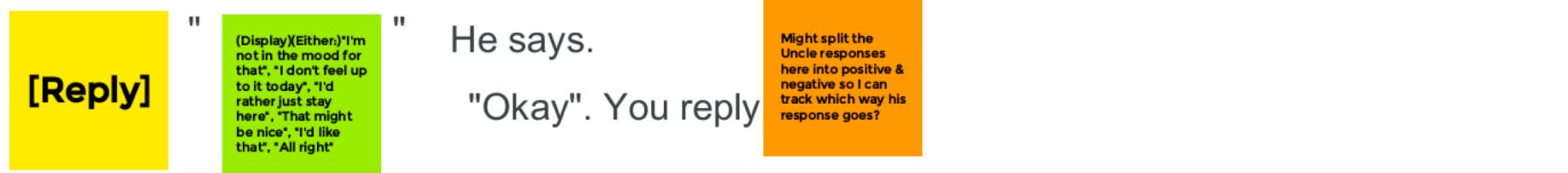
You're not
going to
spend your
weekend this
way too.

You can't
just stop
coming.

Thursday cont



"We could go out for a walk?" You say quickly, feeling awkward.



Friday

If
\$walk
is true

Set
\$help
to it + 1

It was good to

(either:) "feel the sun on your hair", "get a lungful or two of fresh air", "go somewhere other than the linear route between your house and \$uncle's", "stretch your legs"

yesterday and you think

(either:) "it did \$uncle a world of good", "\$uncle enjoyed it too", "it lifted \$uncle's spirits a little"

Today he is

[Activity]

If chose "Not doing this at weekend" OR Not Help Counter is >= 4

Set Not Help to it +1

You let him get on with it. Tonight, you're

[Cycling link]

washing your hair, out on the lash, playing videogames

and tomorrow is your own.

[Skip to Sunday]

Else

Tomorrow's probably going to be tough on both of you, so you

Help him

Turn on the radio for some background noise

Friday continued

If Help counter
=> 5

"Lilies were her favourite", he's muttering to himself as he works on his task.

If Help counter
=> 4

You notice the photo of Aunt Caroline is gone from its usual place on the

(either)
"mantelpiece",
"coffee table"
"window sill"
"corner table" "living room wall"

If Help counter
=> 3

You notice how dusty it is in here.

But you
don't say
anything.

You
grab a
duster.

It's a small thing, but small things
can help, sometimes.

Saturday

You stop at the supermarket on the way to the cemetery. You used to and so the older lady behind the counter smiles at you as she puts the

(either) "work here as a teenager", "shop in here with your mum/dad as a kid", "come in and see Aunt Caroline when she was working her Friday shift")

[Cycling link]

(bind to \$flowers either) "daffodils", "tulips", "roses", "lilies", "sunflowers"

through the till.

(either): "You find yourself strangely tightlipped, unable to do anything other than give a curt nod". "You thank her, glad Uncle isn't with you", "You realise tears are welling in your eyes, throw the money onto the counter and flee."

"So sorry about Caroline," she says.

The

Walk

to the cemetery is

(either)
"brisk",
"short", "long",
"quick"
"dawdling"

and

(either) "maudlin",
"beautiful",
"sun-dappled",
"windswept", "filled
with bird song"

Saturday cont

You meet \$uncle by Caroline's grave. He's holding a bunch of lilies.

if \$flowers
is "lilies"

Set help
counter to
it +1

"Snap", you say and he does his best
to smile.

Else

You add your \$flowers to the pile.

You both stand for a moment, taking in the bunches of

the wreaths twined with

(either) "lilac",
"freesias",
"eucalyptus",
"asters",
"ferns"

and

(either) "gerberas",
"daisies", "poppies",
"snapdragons",
"carnations"

and

(either) "gerberas",
"daisies", "poppies",
"snapdragons",
"carnations"

and

(either) "violets",
"pansies",
"forget-me-nots",
"primroses",
"petunias"

the pots of

(either) "violets",
"pansies",
"forget-me-nots",
"primroses",
"petunias"

'you feel oddly
ashamed, like your
sadness isn't big or
beautiful enough',
'your head swims and
you feel dizzy', 'the
scents and the shapes
of the bloom are too
much stimulus and
you feel like your
knees might buckle'.

You hug
your
uncle.

You let
yourself
cry.

You hold
in the
tears.

You listen to
the sounds of
the cemetery

You remember the
time Aunt Caroline
told you never to cut
your fringe yourself.

Sat cont

There is no wrong way to be at a time like this.

You are already by your Uncle's side, let that be enough.

Sunday

\$Mum/Dad is making Sunday dinner. The house is filled with the smell of

and

```
cycling: bind to  
$main: "sausage  
casserole", "roast  
chicken", "white  
bean stew",  
"lasagne",  
"honey-glazed  
salmon"
```

\$Uncle was invited but

If array sets to
"accepted"

If array
sets to
declined

```
(cycling: bind to  
$side) "three cheese  
sauce", "steamed  
spinach", "herby  
potatoes", "creamy  
polenta", "pigs in  
blankets"
```

Do this as a Sunday
Dinner dm with
slots for main, sides
and descriptions of
each.

Create a shuffled
array. The higher
the help counter,
the more likely it is
he accepted.

he's not here yet.

he said he couldn't make it.

If array is
declined

You feel

```
Cycling: "kind of  
glad.", "sad he's not  
coming.",  
"indifferent's the  
wrong word. Numb?"
```

You help
\$Mum/dad set
the table.

Retreat to
your
childhood
bedroom until
dinner is
ready.

Sunday cont

When it's time to eat

(if:
accepted)

\$uncle comes rushing in,
smelling faintly of

(either:
"lilies",
"outdoors",
"last night's
beers"

(else)

\$Mum/Dad finally moves away
\$uncle's empty seat.

and takes his seat.

Everyone starts passing the \$sidesdesc around the table, and helping themselves to \$maindesc .

Cycling: "You find yourself suddenly without an appetite." "You fill your plate." "You feel guilty to feel so hungry, so normal." "You know this was Caroline's favourite."

Cycling: "Everybody is silent", "Everybody makes light-hearted chitchat about nothing" "Everyone shares their stories about Caroline and what she would have done and said if she was here."

Cycling: "You wish it would stop", "You want to scream" "You want to leave the table" "You find it comforting", "You're glad to just be sitting here"

"You wonder how \$uncle's feeling right now" "You wonder if you should tell them to stop" "You wonder if Caroline would hate this" "You wonder if your family will ever be okay again" "You wonder if you'll ever be okay again"

"You think about smashing a plate", "You think about running out the front door", "You think about Caroline", "You think about \$uncle" "You think about how you hate all of this" "You think about how you love all of them".

Eventually,
the meal is
over.

Sunday cont

You go upstairs.

You open the bathroom door.

I'm already in there .

I forgot to lock it.

How embarrassing.

Apologise.

Back away.

It's okay.

I need to say this to you.

To myself.

Whatever you experienced this week, with your Uncle

You may have felt like you made mistakes

Like you said or did the wrong thing

if declined

Else

Like he might have come to dinner if you did things differently.

Well

End

It's true that
Uncle may be
struggling.

**But so
are
you.**

**And so
am I.**

We can
only ever
do our
best.

**We will
try
again.**

Make
different
choices.

The
outcome
may be
the same.

But we
will be
different.

Case Study 4: Code for Uncle

Uncle

Titles

```
#///'Uncle'//  
  
//A story by Lynda Clark//  
  
<center></centering>  
  
//[ [About|About]]//  
  
//[ [Begin|Uncle]]//  
  
//[ [Content Advisory|Advisory]]//  
  
//[ [Credits|Credits]]//  
  
{(set: $name to "Bob") <!-- Variable containing Uncle's name  
--> (set: $dmrelation to  
      (datamap:  
        "relation", "none",  
        "relationship", "no relation",  
        "relative", "Dad",  
      ) <!-- Datamap containing variables which record how the Uncle  
is related to the player -->  
(set: $helpcounter to 0) <!-- Variable showing the number of times the  
player chose to help Uncle -->  
(set: $selfhelpcounter to 0) <!-- Variable showing the number of times  
the player chose a solitary activity -->  
(set: $sorry to false) <!-- Variable tracking whether player has  
apologised to Uncle -->  
(set: $reply to "") <!-- Variable that records Uncle's reply if the  
player asks him to go for a walk -->  
(set: $stop to false)<!-- Variable that records whether the player has  
decided to stop visiting their Uncle -->  
(set: $dmdinner to  
      (datamap:  
        "side", "two veg",  
        "main", "meat",  
        "sidedesc", "peas and carrots",  
        "maindesc", "British beef",
```

```
))<!-- Datamap containing variables which record what the player chooses for Sunday dinner. These should be overwritten in the course of the narrative, but contain values nevertheless in case the player finds an unexpected route through the narrative. -->
```

```
}
```

Mon1

```
You arrive at Uncle $name's house to find him (display: "activity").
```

```
"What are you doing?" You ask.
```

```
"I need to." He tells you. "It helps me think."
```

```
[[Join him|MonJoin]]
```

```
[[Turn on his
```

```
TV|MonTV]]
```

Uncle

```
You have an uncle.
```

```
His name is (input-box:2bind $name,"=XX=",1,"What's his name?")
```

```
He's // (cycling-link: bind $dmrelation's relation, "not your 'real' uncle",  
"your mum's brother", "your dad's brother") //
```

```
And yet, here you are, the one expected to go round and check on him.
```

```
It's hard to find an excuse and so [[around you go|Monday]].
```

Credits

```
(link:"Font - Antonio by Vernon Adams") [(open-url:  
'https://fonts.google.com/specimen/Antonio#about')], used under the Open Font License.
```

```
Lily image by (link:"Tanalee Youngblood") [(open-  
url:'https://unsplash.com/@theheartdept')] on (link:"Unsplash") [(open-  
url:'https://unsplash.com/photos/kkJuQhp9Kw0')].
```

```
Story by (link:"Lynda Clark") [(open-url:
```

```
'https://www.innovationforgames.com/about-ingame/#team')]
```

```
Styling would not have been possible without Grim Baccaris' (link:"Twine  
Grimoire") [(open-url:'https://grimoirtua.itch.io/grimoire-one')]
```

Monday

```
(colour: "#1e7603")+(hover-style:(color:  
#f2bcf0)) [(align:="=><=") [#//'"Monday'//]]
```

```
(click: "Monday") [(go-to: "Mon1")]
```

```
{(if: $dmrelation's relation is "your mum's brother") [(set:  
$dmrelation's relationship to "your mum's brother") (set: $dmrelation's  
relative to "Mum")] (if: $dmrelation's relation is "your dad's  
brother") [(set: $dmrelation's relationship to "your dad's brother")]}
```

activity

```
(either: "sorting a bag of Bombay Mix into its constituent parts",  
"writing his name in blocky capitals, over and over on the back of an envelope",  
"shaking a tin of mints like it's a castanet", "trying to prise the back  
off his phone with a screwdriver", "ironing the notes from his wallet  
under a tea towel", "poring over a catalogue which contains nothing but  
different types of gravel", "pairing socks, holding them to the light to  
ensure that they're exactly the same shade of black", "jangling the  
change in his pockets like it's a tambourine", "waiting on the phone to  
the insurance company again, humming along to the hold music he's  
become so familiar with", "folding his t-shirts in three different ways  
and comparing the results", "rotating the contents of his fridge to move  
the most seriously expired items to the front", "taking cashmere sweaters  
out of bin bags and sorting them into different bin bags", "spritzing  
perfume into the air and walking through the fragrant cloud again and  
again")
```

MonJoin

```
{(set: $helpcounter to it +1)  
}{ It's what (if: $dmrelation's relation is "none") [you came here to do]  
(else:) [(print: $dmrelation's relative) sent you here to do] after all.  
}
```

```
[[However weird it may seem.|Tuesday]]
```

MonTV

```
{(set: $selfhelpcounter to it + 1)  
}It's an old programme about (display: "professions") (display: "doing a  
thing").
```

```
[[You lose yourself in it.|Tuesday]]
```

Tuesday

```
(colour: "#1e7603")+(hover-style:(color: #f2bcf0)) [(align:="=><=")  
[#//''Tuesday''//]]
```

```
(click: "Tuesday") [(go-to: "Tue1")]
```

Tue1

```
The next day you visit again. (Pressure from (print: $dmrelation's  
relative)).
```

Uncle \$name is (display: "activity").

He doesn't look up as you come in.

```
[[Join in| TueJoin]]  
[[Turn on his radio| TueRadio]]
```

professions

```
(either: "doctors", "soldiers", "superheroes", "chefs", "married couples",  
"weightlifters")
```

doing a thing

```
(either: "fighting an endless war", "lost on a battlefield", "cooking  
for the Queen", "trying to solve a murder", "falling in love", "stuck  
in a timeloop", "who should probably retire, but refuse")
```

TueJoin

```
{(set: $helpcounter to it +1)  
}It's what (print: $dmrelation's relative) wants you to do, so you'll do it.
```

[[Even if you don't get it.|Wednesday]]

TueRadio

```
{(set: $selfhelpcounter to it +1)  
}It's tuned to a station where there's a discussion about (display: "professions") (display: "doing a thing").
```

[[You let the words wash over you.|Wednesday]]

Wednesday

```
(colour: "#1e7603")+(hover-style:(color: #f2bcf0)) [(align:">=<")  
[#//'''Wednesday''//]]  
  
(click: "Wednesday") [(go-to: "Wed1")]
```

Wed1

```
{(set: _reaction to "")  
(set: _mood to "")  
}Your (print: $dmrelation's relative) has filled a tupperware with  
(display: "snacks") because apparently that's Uncle $name's favourite.  
  
{(if:$helpcounter > 1)[(set: _reaction to "He perks up at the sight of the food  
container and stops") (set: _mood to "cheerfully")]  
(else:)[(set: _reaction to "He remains focussed on") (set: _mood to  
"despondently")]  
} _reaction (display: "activity"). "You want some?" He asks _mood.  
  
[["Sure!"|WedJoin]]  
[["No thanks, but you go ahead!"|WedJoin]]  
[["Nah, I'm good."|WedSelf]]
```

snacks

```
(either: "homemade spaghetti", "red velvet cupcakes", "chocolate and hazelnut  
cookies", "ham and pickle sandwiches", "pork pies")
```

WedJoin

```
{(set: $helpcounter to it +1)  
}You're getting used to hanging out here.
```

```
[[It's not so bad.|Thursday]]
```

WedSelf

```
{(set: $selfhelpcounter to it +1)  
}(colour: "#1e7603") [You've delivered the food.]  
  
(colour: "#1e7603") [(click: "You've delivered the food.") [You've done your  
part.]]  
  
(click: "You've done your part.") [[Being here just brings you  
down.|Thursday]]
```

Thursday

```
(colour: "#1e7603")+(hover-style:(color: #f2bcf0)) [(align:">=<")  
[#//''Thursday''//]]  
  
(click: "Thursday") [(go-to: "Thurl1")]
```

Thurl1

```
{(set: _weather to "")  
(set: _effect to "")  
(if:$helpcounter > 2) [(set: _weather to "bright and sunny") (set: _effect  
to "was beautiful - full of warmth and birdsong")]  
(else:) [(set: _weather to "dull and wet") (set: _effect to "got you  
soaked to the skin")]  
}The morning is _weather, so the walk over _effect.  
  
{(if: _weather is "bright and sunny") [Uncle $name stops (display:  
"activity").  
<br>"You look cheerful," he observes.</br>
```

```
<br>(colour: "#1e7603") ["(link: "Sorry.") [(set: $helpcounter to it +1) (set:  
$sorry to true) (goto: "ThurLovely")]"]</br>  
<br>(colour: "#1e7603") ["(link: "It's a lovely day out.") [(set: $helpcounter  
to it  
+2) (goto: "ThurLovely")]"]  
] </br>  
(else:) [  
Uncle $name doesn't stop (display: "activity").  
  
<br>He doesn't notice you peeling off your sopping wet coat and  
hanging it on the radiator either.</br>  
  
<br>[[You're not going to spend your weekend this way too.|StopThur]]</br>  
<br>[[You can't just stop coming.|ContinueThur]] }
```

ThurLovely

```
((if: $sorry is true) ["You don't have to be sorry for that," says Uncle  
$name.<br>  
</br>])  
"We could go out for a walk?" You say quickly, feeling awkward.  
  
(display: "reply") "$reply." He says.  
  
"Okay", you reply.
```

```
[[You just want him to be happy.|Friday]]
```

StopThur

```
{(set: $stop to true)  
} [[No matter what (print: $dmrelation's relative) says.|Friday]]
```

ContinueThur

```
Although whether that's down to a sense of guilt or empathy, you can't  
tell.
```

```
[[What's the difference?|Friday]]
```

```
reply
{ (set: $replyarray to (shuffled: "I'm not in the mood for that", "I
don't feel up to it today", "I'd rather just stay here", "That might
be nice", "I'd like that", "It'd be good to get out of the house",
"All right"))

(set: $reply to $replyarray's 1st)

(if: $reply is "I'm not in the mood for that") [(set: $walk to
false)] (elseif: $reply is "I don't feel up to it today") [(set:
$walk to false)] (elseif: $reply is "I'd rather just stay
here") [(set: $walk to false)] (else:) [(set: $walk to true)] }
```

Friday

```
{(if: $reply is "") [(set: $walk to false)]
}(colour: "#1e7603")+(hover-style:(color: #f2bcf0)) [(align:="=><=")
[#//'''Friday''//]]]

(click: "Friday") [(go-to: "Fri1")]
```

Fri1

```
{(if: $walk is true)[It was good to (display:"walk feeling")
yesterday and you think (display: "uncle mood").<br></br>]
}Today he is (display: "activity").

{(if: $stop is true or $selfhelpcounter is >3) [(set: $selfhelpcounter to
it +1) You let him get on with it. Tonight, you're // (cycling-link:
"washing your hair", "out on the lash", "playing videogames") // and
[[tomorrow is your own.|Sunday]]]
(else:) [Tomorrow's probably going to be tough on both of you, so you
<br>[[Do the same|FriHelp]]</br>
<br>[[Turn on the radio for some background noise|FriRadio]]]</br>}
```

walk feeling

```
(either: "feel the sun on your hair", "get a lungful or two of
fresh air", "go somewhere other than the linear route between your
house and $name's", "stretch your legs")
```

```
uncle mood
(either: "it did $name a world of good", "$name enjoyed it too", "it
lifted $name's spirits a little")
```

Sunday

```
(colour: "#1e7603")+(hover-style:(color:
#f2bcf0)) [(align:"=><=") [#//''Sunday''//]]
```

```
(click: "Sunday") [(go-to: "Sun1")]
```

```
{(if: $helpcounter is >4) [(set: $attendancearray to (shuffled: "accepted",
"accepted", "accepted", "accepted", "declined"))]
(elseif: $helpcounter is >3) [(set: $attendancearray to (shuffled:
"accepted", "accepted", "accepted", "declined", "declined"))]
(elseif: $helcounter is >2) [(set: $attendancearray to (shuffled: "accepted",
"accepted", "declined", "declined", "declined"))]
(else:) [(set: $attendancearray to (shuffled: "accepted", "declined", "declined",
"declined", "declined"))]
(set: $attendance to $attendancearray's 1st)
}
```

FriHelp

```
{(set: $helpcounter to it +1)
}Is this helping?
```

```
[[You hope so.|Fri2]]
```

FriRadio

```
{(set: $selfhelpcounter to it +1)
}A play about two (display: "professions") (display: "doing a thing")
echoes off the walls.
```

```
[[You try not to think about tomorrow.|Fri2]]
```

Saturday

```
(colour: "#1e7603")+(hover-style:(color: #f2bcf0)) [(align:"=><=")
[#//''Saturday''//]]
```

```
(click: "Saturday") [(go-to: "Sat1")]
```

Fri2

```
{(if: $helpcounter is >4) [<br>"Lilies were her favourite", he mutters to  
himself as he works on his current diversion.</br>]  
}{(if: $helpcounter is >3) [<br> You notice the photo of Aunt Caroline  
is gone from its usual place on the (display: "place").</br>]  
}{(if: $selfhelpcounter is >1) [<br> You wonder if you should have put  
the TV on. Maybe that show $name likes about (display: "professions")  
(display: "doing a thing") is on somewhere.</br>]  
}{(if: $helpcounter is >2) [<br> You notice how dusty it is in here.</br>]  
}
```

Is your presence useful?

```
[[You keep quiet|Fri3]]  
[[You grab a  
duster|Fri3]]
```

place

```
(either: "mantelpiece", "coffee table", "window sill", "corner table",  
"living room wall")
```

Fri3

It's a small thing, but small things can help sometimes.

```
[[Can't they?|Saturday]]
```

Sat1

You stop at the supermarket on the way to the cemetery. You used to
(display: "supermarket") and so the older lady behind the counter smiles
at you as she puts the //((cycling-link: bind \$flowers, "daffodils",
"tulips", "roses", "lilies", "sunflowers"))// through the till.

"So sorry about Caroline", she says. (display: "response").

The [[walk|Sat2]] to the cemetery is (display: "pace") and (display: "mood").

supermarket

(either: "work here as a teenager", "shop in here with your (print: \$dmrelation's relative) as a kid", "come in and see Aunt Caroline when she was working her Friday shift")

response

(either: "You find yourself strangely tightlipped, unable to do anything other than give a curt nod", "You thank her, glad Uncle \$name isn't with you", "You realise tears are welling in your eyes, throw the money onto the counter and flee")

Sat2

You meet Uncle \$name by Caroline's grave. He's holding a bunch of lilies.

```
{(if: $flowers is "lilies") [(set: $helpcounter to it +1) "Snap", you say  
as he does his best to smile.]  
(else:) [You add your $flowers to the pile.]  
}
```

You both stand for a moment, taking in the bunches of (display: "flowers"), the pots of (display: "flowers"), the wreaths twined with (display: "flowers") and (display: "flowers") and (display: "flowers"). (display: "reaction 1") (display: "reaction 2").

```
[[You hug your uncle.|Sat3]]  
[[You let yourself  
cry.|Sat3]] [[You hold in the  
tears.|Sat3]]  
[[You listen to the sounds of the cemetery.|Sat3]]  
[[You remember the time Aunt Caroline told you never to cut  
your fringe yourself.|Sat3]]
```

pace

(either: "brisk", "short", "long", "quick", "dawdling")

mood

(either: "maudlin", "beautiful", "sun-dappled", "windswept", "filled with bird song")

flowers

(either: "lilies", "gerberas", "daisies", "poppies", "snapdragons", "carnations", "violets", "pansies", "forget-me-nots", "primroses", "petunias", "lilac", "freesias", "eucalyptus", "crocuses", "asters", "ferns", "irises")

reaction 1

(either: "Such a kaleidoscope of colours", "So many messages of grief and love and loss", "So many petals and leaves and name cards")

reaction 2

(either: "you feel oddly ashamed, like your sadness isn't big or beautiful enough", "your head swims and you feel dizzy", "the scents and the shapes of the bloom are too much stimulus and you feel like your knees might buckle")

Sat3

There is no wrong way to be at a time like this.

You are already by your uncle's side.

[[Let that be enough.|Sunday]]

Sun1

(print: \$dmrelation's relative) is making Sunday dinner. The house is filled with the smell of // (cycling-link: bind \$dmdinner's side, "three cheese sauce", "steamed spinach", "herby potatoes", "creamy polenta", "pigs in blankets") // and // (cycling-link: bind \$dmdinner's main, "sausage

```
casserole", "roast chicken", "white bean stew", "lasagne", "honey-glazed salmon")//.
```

```
Uncle $name was invited but {(if: $attendance is "accepted") [he's not here yet.]  
(else:) [he said he couldn't make it.  
<br> You feel // (cycling-link: "kind of glad.", "sad he's not coming.", "indifferent's the wrong word. Numb?") // </br>] }
```

```
[[You help (print: $dmrelation's relative) set the  
table|Sun2]] [[Retreat to your childhood bedroom until dinner  
is ready|Sun2]]
```

Sun2

```
{(display: "dinner setter")  
}When it's time to eat {(if: $attendance is "accepted") [$name comes  
rushing in smelling faintly of (display: "smell") and takes his  
seat.]  
(else:) [(print: $dmrelation's relative) finally moves $name's empty seat  
away.]}
```

```
Everyone starts passing the (print: $dmdinner's sidedesc) and helping  
themselves to (print: $dmdinner's maindesc).
```

```
// (cycling-link: "You find yourself suddenly without an appetite.", "You  
fill your plate.", "You feel guilty to feel so hungry, so normal.",  
"You know this was Caroline's favourite.") //
```

```
// (cycling-link: "Everybody is silent.", "Everybody makes light-hearted  
chitchat about nothing.", "Everyone shares their stories about Caroline  
and what she would have done and said if she was here.") //
```

```
// (cycling-link: "You wish it would stop.", "You want to scream.",  
"You want to leave the table.", "You find it comforting.", "You're  
glad to just be sitting here.") //
```

```
// (cycling-link: "You wonder how Uncle $name is feeling right now.", "You  
wonder if you should tell them to stop.", "You wonder if Caroline would  
hate this.", "You wonder if your family will ever be okay again.", "You  
wonder if you will ever be okay again.") //
```

```
//(cycling-link: "You think about smashing a plate.", "You think about running out the front door.", "You think about Caroline.", "You think about $name.", "You think about how you love all of them.")//
```

```
[[Eventually, the meal is over.|Sun3]]
```

smell

```
(either: "lilies", "outdoors", "last night's beers")
```

dinner setter

```
{(if: $dmdinner's side is "three cheese sauce") [(set: $dmdinner's sidedesc to "rich cheesy sauce")]  
(if: $dmdinner's side is "steamed spinach") [(set: $dmdinner's sidedesc to "green leafy spinach")]  
(if: $dmdinner's side is "herby potatoes") [(set: $dmdinner's sidedesc to "fragrant herbed potatoes")]  
(if: $dmdinner's side is "creamy polenta") [(set: $dmdinner's sidedesc to "soft creamy polenta")]  
(if: $dmdinner's side is "pigs in blankets") [(set: $dmdinner's sidedesc to "handfuls of pigs in blankets")]  
(if: $dmdinner's main is "sausage casserole") [(set: $dmdinner's maindesc to "ladle-fulls of hot casserole")]  
(if: $dmdinner's main is "roast chicken") [(set: $dmdinner's maindesc to "slices of succulent chicken")]  
(if: $dmdinner's main is "white bean stew") [(set: $dmdinner's maindesc to "bowls brimming with delicious garlicky stew")]  
(if: $dmdinner's main is "lasagne") [(set: $dmdinner's maindesc to "golden slices of lasagne overflowing with fresh tomatoes")]  
(if: $dmdinner's main is "honey-glazed salmon") [(set: $dmsinner's maindesc to "chunks of seared fish garnished with lemon")]}
```

Sun3

You go upstairs.

```
(click: "You go upstairs.") [You open the bathroom door.]
```

```
(click: "You open the bathroom door.") [I'm already in there.]
```

(click: "I'm already in there.") [I forgot to lock it.]

(click: "I forgot to lock it.") [How embarrassing.] (click: "How embarrassing.") [[[Apologise.|Okay]] [[Back away.|Okay]]]

Okay

It's okay.

(click: "It's okay.") [I need to say this to you.]

(click: "I need to say this to you.") [To myself.]

(click: "To myself.") [Whatever you experienced this week]

(click: "Whatever you experienced this week") [You may feel like you made mistakes.]

(click: "made mistakes") [Like you said or did the wrong thing.]

{(click: "wrong thing.") [(if: \$attendance is "declined") [Like he might have come to dinner if you did things differently.
[[Well]]</br>]

(else:) [[[Well|Well]]]]}

Well

It's true that \$name may be struggling.

(click: "struggling") [But so are you.]

(click: "But so are you.") [And so am I.]

(click: "so am I.") [We can only ever do our best.]

(click: "best.") [We will try again.]

(click: "try again.") [Make different choices.]

(click: "Make different choices.") [The outcome may be the same.]

(click: "outcome") [But we will be different.]

(click: "will be different") [[[The end|End]]]

End

[[About this story|About]]

[[Credits|Credits]]

[[Replay|Titles]]

Advisory

This is a story about grief and loss. There are no specifics regarding death. Elements of the narrative are randomised and so some playthroughs may intimate the use of alcohol as a coping mechanism (again, this is not specifically or heavily depicted).

[[Back|Titles]]

About

This story was written as part of the (link:"InGAME") [(open-url: '<https://www.innovationforgames.com/about-ingame/#team>') research project: Creativity Amplification, which considers how technology might extend, enhance and shape writers' capabilities and processes. This particular piece explores methods of integrating text generation (with minimal code) into narrative to further the creative aims of the piece. A paper on this is forthcoming.

(colour: #ffffff) [[What it's really about.|Truth]]

[[Back to start|Titles]]

Truth

In August 2019, my big sister died. Around six months later, as the pandemic swept the nation, a lot more people lost loved ones. But even for those who didn't, there was so much loss. Loss of physical contact, loss of social contact, loss of opportunities, loss of a way of life. So this is a story about loss, but it's about loss on different scales and for different reasons and it's about loss prompting different thoughts, feelings and reactions. It's about the fact that there is no one way to lose someone or something. And it's about trying to be okay with that.

(Not always successfully.)

[[Back to Start|Titles]]

Case Study 6: Excel Planning Document for “Getting Back Out There”

Please note: during implementation, some fields were merged or removed to prevent unnecessary complexity. Those that made it through from planning to final in some format have been highlighted in green.

Seasons	Locations	Animals			Requirements:	Implemented
Spring	Glade	Deer			Expandable	
Summer	Pond	Toad			Sufficient variation	
Autumn	Meadow	Rabbit			Simple narrative for now (although more so than previously).	
Winter	Pathways	Fox			Some animals more elusive than others	

Season	Location	Weather	Animal Present	Pre-requisites	Event
Spring	Glade	Light rain	Deer	Seen Deer	Deer & fawn sheltering
		Light rain	None	None	Lambs in field
		Light rain	None	None	Glade empty
		Light rain	Toad	None	Toad sheltering
		Light rain	Rabbit	None	Rabbit sheltering
		Light rain	Rabbit	Seen Rabbit	Rabbit & kits sheltering
		Light rain	Fox	None	Fox sheltering
		Light rain	Fox	Seen Fox	Fox & cubs sheltering
		Sunshine	Deer	Seen Deer	Deer & fawn present
		Sunshine	None	None	Birds overhead
		Sunshine	None	None	Glade empty
		Sunshine	Rabbit	None	Rabbit present
		Sunshine	Rabbit	Seen Rabbit	Rabbit & kits present

		Sunshine	Fox	None	Fox present
		Sunshine	Fox	Seen Fox	Fox & cubs present
Pond		Light rain	Toad	Seen Toad	Toad & tadpoles present
		Light rain	Toad	None	Toad present
		Light rain	None	None	Ducks in pond
		Light rain	None	None	Pond empty
		Sunshine	Toad	Seen Toad	Toad & tadpoles present
		Sunshine	Toad	None	Toad present
		Sunshine	Deer	None	Deer drinking from pond
		Sunshine/Light Rain	Deer	Deer	Deer & fawns drinking from pond
		Sunshine	Fox	None	Fox drinking from pond
		Sunshine	Fox	Seen Fox	Fox & cubs drinking from pond
		Sunshine/Light Rain	Rabbit	None	Rabbit drinking from pond
		Sunshine/Light Rain	Rabbit	Seen Rabbit	Rabbit & kits drinking from pond
		Sunshine	None	None	Ducks in pond
		Sunshine	None	None	Pond empty
Meadow		Light rain	None	None	Flowers budding & blooming
		Sunshine	None	None	Birds overhead
		Sunshine	Deer	None	Deer grazing
		Sunshine	Deer	Seen Deer	Deer & fawns grazing
		Sunshine	Rabbit	None	Rabbit grazing
		Sunshine	Rabbit	Seen Rabbit	Rabbit & kits grazing
Pathways		Light rain	None	None	Path growing muddy

		Light rain	Toad	None	Toad hops across
		Light rain	Fox	None	Fox runs across
		Light rain	Fox	Seen Fox	Fox & cubs run across
		Sunshine	None	None	Flowers budding & blooming
		Sunshine	None	None	Birds overhead
		Sunshine	Fox	None	Fox in middle of path
		Sunshine	Fox	Seen Fox	Fox & cubs in middle of path

Season	Location	Weather	Animal Present	Pre-requisites	Event
Summer	Glade	Sunshine	Deer	Seen Deer & Fawns	Deer & fawns grown
		Sunshine	None	None	Birds overhead
		Sunshine	None	None	Glade empty
		Sunshine	Rabbit	None	Rabbit present
		Sunshine	Rabbit	Seen Rabbit & Kits	Rabbit & kits grown
		Sunshine	Fox	None	Fox present
		Sunshine	Fox	Seen Fox & Kits	Fox & cubs grown
		Sunshine	None	None	Enjoy shade
		Sunshine	None	None	Enjoy flowers
		Sunshine	None	Built snowman	Think about snowman
	Pond	Sunshine	Toad	Seen Toad & tadpoles	Pond hopping with toadlets
		Sunshine	Toad	None	Toad present
		Sunshine	Deer	None	Deer drinking from pond
		Sunshine	Deer	Seen Deer & Fawns	Deer & fawns grown
		Sunshine	Fox	None	Fox lounging by pond

		Sunshine	Fox	Seen Fox & Cubs	Fox & cubs grown
		Sunshine	Rabbit	None	Rabbit drinking from pond
		Sunshine	Rabbit	Seen Rabbit & Kits	Rabbit & kits grown
		Sunshine	None	None	Ducks in pond
		Sunshine	None	None	Pond empty, water level low
		Sunshine	None	None	Waterboatmen
Meadow	Sunshine	None	None	Birds overhead	
	Sunshine	Deer	None	Deer grazing	
	Sunshine	Deer	Seen Deer & Fawns	Deer & fawns grown	
	Sunshine	Rabbit	None	Rabbit grazing	
	Sunshine	Rabbit	Seen Rabbit & Kits	Rabbit & kits grown	
	Sunshine	Fox	Seen Fox & Cubs	Fox & grown cubs playing	
	Sunshine	None	None	Bees on flowers	
	Sunshine	None	None	Sheep bleating	
Pathways	Sunshine	None	None	Flowers blooming & wilting	
	Sunshine	None	None	Birds overhead	
	Sunshine	Fox	None	Fox crossing	
	Sunshine	Fox	Seen Fox & cubs	Fox & cubs grown	
	Sunshine	None	None	Path sunbaked	
	Sunshine	Deer	Seen Deer & Fawns	Deer & fawns grown	
	Sunshine	Rabbit	Seen Rabbit & Kits	Rabbit & kits grown	
	Sunshine	None	Found berries	Think about berries	

Season	Location	Weather	Animal Present	Pre-requisites	Event
Autumn	Glade	Misty	None	None	Glade empty
		Misty	None	None	Distant birdsong
		Misty	Deer	None	Stag present
		Misty	Deer	Seen Deer & Fawns	Stags rutting
		Cool	None	None	Glade empty
		Cool	None	None	Birds overhead
		Cool	Deer	None	Stag present
		Cool	Deer	Seen Deer & Fawns	Stags rutting
		Cool	None	None	Admire trees
		Cool	None	None	Find conker
Pond		Misty	None	Seen Toad	Hear toads ribbetting
			Deer	Seen Deer & Fawns	Stag drinking from pond
			None	None	Hear stag bellowing
		Misty	None	None	Pond empty
		Cool	None	None	Pond empty
		Cool	Deer	Seen Deer & Fawns	Stag drinking from pond
		Cool	None	None	Ducks in pond
		Meadow	None	None	Meadow empty
			Deer	Seen Deer & Fawns	Stag grazing
			None	None	Hear stag bellowing
			Deer	None	Stag grazing
			Rabbit	Seen Rabbit & Kits	Rabbits chasing one another
		Cool	Rabbit	Seen Rabbit & Fox	Fox chasing rabbit

		Cool	None	None	Birds overhead
		Cool	None	None	Meadow empty
Pathways		Misty	None	None	Find berries
		Misty	None	None	Hear stag bellowing
		Cool	Fox	Seen Fox	Fox lurking
		Cool	None	None	Birds overhead
		Cool	None	None	Find berries
		Cool	None	None	Scuff through leaves
		Cool	None	None	Find conker

Season	Location	Weather	Animal Present	Pre-requisites	Event
Winter	Glade	Snow	None	None	Glade empty
		Snow	None	None	Build snowman
		Snow	None	Found conker	Build snowman - conker for nose
		Snow	Deer	Seen Deer	Deer prints leading to deer
		Snow	Deer	Seen Stag	Stag present
		Snow	None	None	Admire evergreens
		Snow	None	None	See birds
		Snow	None	None	Admire icicles
		Snow	None	Found berries	Think about food
		Snow	None	Seen Rabbit in Glade	Think about Rabbit
		Snow	None	None	Prints
		Snow	None	Seen Deer & Fawns	Deer present
	Pond	Snow	None	Seen Toad	Think about Toad
		Snow	Deer	Seen Deer & Fawns & Stag	Stag drinking from pond

		Snow	Fox	Seen Fox in Glade	Think about Fox
		Snow	Rabbit	Seen Rabbit in Glade	Think about Rabbit
		Snow	None	None	Pond frozen
		Snow	None	None	Pond empty
		Snow	None	Found berries	Feed ducks
	Meadow	Snow	None	None	Meadow empty -make footprints
		Snow	None	None	Deer prints
		Snow	None	None	Rabbit prints
		Snow	Rabbit	Seen Rabbit	Rabbit prints leading to rabbit
		Snow	None	None	Enjoy snow
	Pathways	Snow	None	None	Pathways empty
		Snow	Fox	Seen Fox & Rabbit in Meadow	Fox with grouse in mouth
		Snow	None	Seen Fox	Fox prints leading to fox
		Snow	None	None	Admire evergreens
		Snow	None	None	Admire icicles
		Snow	None	None	Make footprints
		Snow	None	Found berries	Think about food
		Snow	None	Found berries	Scatter food for birds
		Snow	None	Found berries	See bird with berry