Voice Upon Al

Once Upon a Time there was an application that generates fairy tales in both text and audio format, allowing users to customize them according to their preferences.



Al-generated fairy tales Barbora Šmodrková

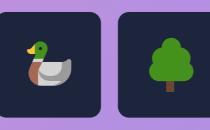
Generation steps

1. Customization of text

How to insert keywords

Keywords can be added either by selecting them with the prepared component or by providing a full description.

Select keywords



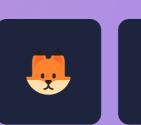






Figure 1

2. Customization of audio

How to select voice

Voice can be selected by either choosing a voice from predefined options, uploading an audio file or by recording own voice.

Choose a voice



Towerella





Shadow Flicker Knight

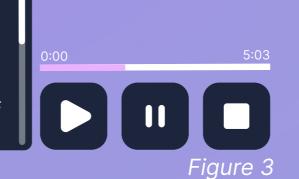
Figure 2

3. Read & Listen

How to access the story

Once the story is generated, it can be read or listened to using the voice selected earlier.

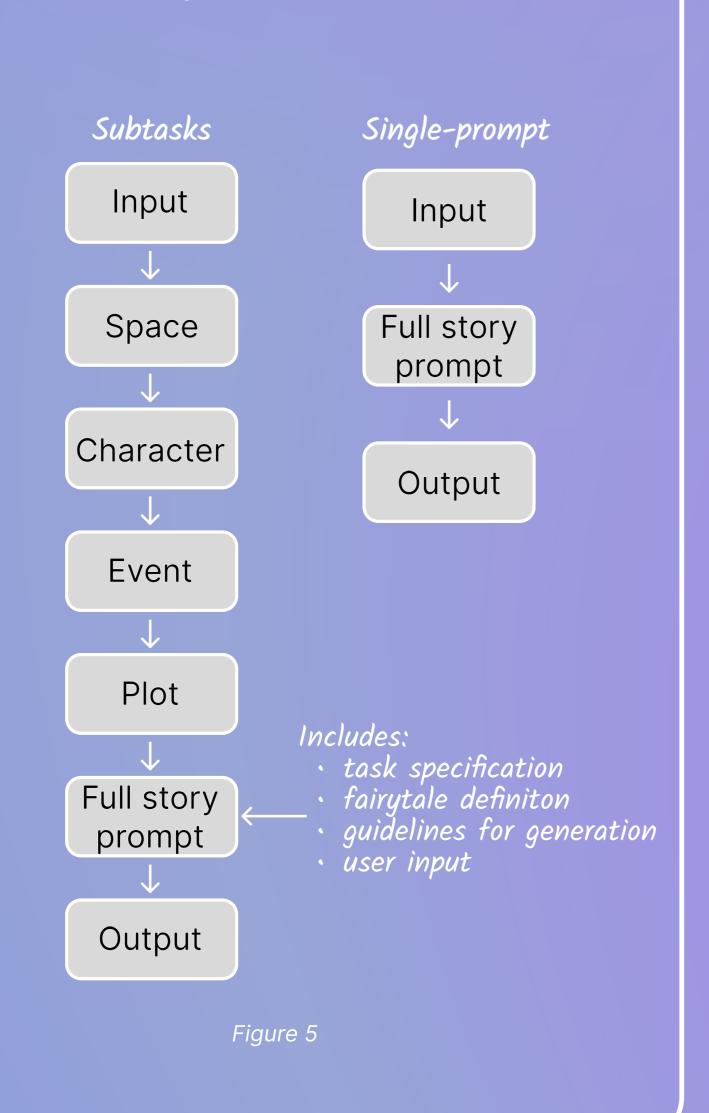
Once upon a time, in a vibrant underwater city called Coral Cove, there lived a unique shark named Finn. Finn was not just any ordinary shark; he was a dazzling creature with scales that shimmered like the sunlit ocean. But what made him truly special was the golden chain...



Architecture How the components communicate Client keywords story audio voice prompt LLM Server story voice audio story TTS Figure 4

Generation approaches

How is the text generated



Evaluation

Fairy tale definition

A fairy tale is a story for people of all

ages that is meant to make us a

structure and vocabulary.

How to test if generated text is a fairy tale

The term "fairy tale" can be tricky, as it brings different ideas to mind for different people. For this reason, it is important to define a clear fairy tale definition in order to use it for generation and evaluation purposes.

world...

With the use of automatic text evaluation metrics like BERTScore or Readability, it is possible to define ranges of values that are typical for fairy tales. With this approach it is possible to determine if the generated text shares similar sentence

Fairy tale checklist

☐ Imaginitive, creative

☐ Unreal element or situation

Fairy tales dataset

Metrics

BERTScore

Compare each fairy tale

with every other fairy tale

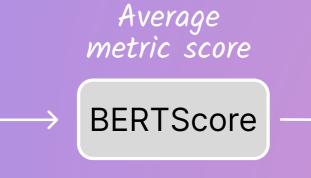
Metrics

Metrics

Metrics $\frac{1}{\sqrt{2}}$ $\frac{1}$

Compare text against

all fairy tales



Fits within ranges?

Distribution of BERTScore

Distribution of BERTScore

Distribution of BERTScore

Distribution of BERTScore

Figure 7

Generated text



