

Generative Storytelling

A Hero's Journey

Experience the power and creativity of generative AI. In this exhibit, you witness how AI can create entirely novel stories and experiences. Immerse yourself in the audio and visual experience!

Story Generation - AWS Bedrock w/ Anthropic's Claude

The story generation process is based on two main components: a generative language model and an iterative multi-pass generation process.

- **Claude**, a Large Language Model (LLM), provides coherent and diverse texts on any topic. Trained using a large-scale dataset of text from various domains and genres, this powerful neural network can comprehend inputs and generate new coherent textual outputs.
- **Amazon Bedrock** provides simple and responsive access to the power of Claude that we utilized.

We generate stories based on a simple topics i.e., "A young boy finds a mysterious device that can manipulate time." Through the following iterative process, Claude provides us a full story the same way a human would:

- Create an **outline**, consisting of the main events and plot points.
- Define **chapters**, which creates building blocks to expand from based on the outline.
- Detail out **characters** who will be the "actors" of the story, speaking and progressing through their journey.
- Script **dialog** for each chapter that will be spoken by our characters and creates our full story.
- Cast a **voice** for each character to speak their dialog lines.
- **Imagine** a unique image for the key scene in each chapter of the story.

This process builds our story that will come to life through art and storytelling.

Art Generation - Stable Diffusion & DALL·E



Scenes of the story can be expressed clearly through powerful image generation from **DALL·E 3** and **Stable Diffusion XL**. Each of these provide powerful generative models that create novel images guided by text. These image generation models leverage a novel technique based around the concept of applying a series of noise injections and denoising steps.

In our process, we extended beyond the story generation to have Claude determine a key scene from each chapter and draft image generation prompts automatically. This creates the artistic scenes you experience during this exhibit.

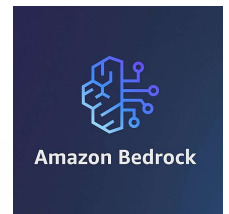


DALL·E 3



Stable Diffusion XL

ANTHROPIC



Voice Generation - ElevenLabs

The story comes to life with the power of generative voice provided by **ElevenLabs**. Their implementation of real-time text-to-speech provides truly impressive voice audio that is so good, it almost feels pre-recorded. This high-quality text-to-speech system synthesizes natural and expressive voices for any text input utilizing a myriad of pre-made voices or hundreds of community created / cloned voices.

Throughout this experience, all the voices you hear are generated this way. We again extended our story generation process, allowing Claude to select a unique voice for each character based on their personality and role they play in the story. This allows our story to step beyond the typical narrative, becoming a unique experience.

ElevenLabs



Listening Experience - Amazon Connect



The listening experience is creatively provided through a call integration process with Amazon Connect. **Amazon Connect** is a cloud-based contact center solution that allows you to easily set up and manage a customer service system. Amazon makes it easy to integrate with other AWS services and external applications, such as generative AI models.

In this exhibit, we have integrated Amazon Connect with the voice generation component, so that you can listen to the story over a voice call. The listeners utilize the supervisor observation feature to monitor the call and hear the story along with other observers.

Conclusion - A Journey with Generative AI

The **journey** to create and demonstrate the true capabilities of generative AI is only just beginning. However, we invite you to witness and enjoy the magic of generative storytelling - where AI creates stories, art, and voices for you!

Your experience with the exhibit immerses you in the hero's journey, allowing you to explore different worlds, and meet different characters as you hear and see them come to life. With Generative AI, you can truly unleash your imagination and creativity! We hope you can be inspired as you continue to create your story!

