# Abstract

**Table of Contents**

[Abstract 1](#_Toc75518344)

[1. Background 3](#_Toc75518345)

[2. Problem Statement OR Related Research OR Related Work 3](#_Toc75518346)

[3. Research Questions (If any) 3](#_Toc75518347)

[4. Aim and Objectives 3](#_Toc75518348)

[5. Significance of the Study 4](#_Toc75518349)

[6. Scope of the Study 4](#_Toc75518350)

[7. Research Methodology 4](#_Toc75518351)

[8. Requirements Resources 4](#_Toc75518352)

[9. Research Plan 4](#_Toc75518353)

[References 4](#_Toc75518354)

# 1. Background

# 2. Related Work

Controllable story generation has been studied from different angles. Earlier works have focused on controlling story generation using broad thematic elements such as sentiment, genre, style, topic, etc. (STORY\_FROM\_THEME). Some works have tried more fine-grained control using plot, story-plans and story-lines (STORY\_FROM\_PLOT). These works were benchmarked using relatively short-text datasets such as the 5-lines story dataset, ROCStories (Mostafazadeh et al., 2016). Later on, some works have tried to controllable story generation with long-form text (LONG\_STORY\_GENERATION). Similar to short story generation, researchers have tried using fine-grained control to drive story generation. (Fang et al., 2021) proposed generation of story given an outline of story events/phrases. (Rashkin et al., 2020) proposed a similar method using a dedicated architecture and memory mechanism.

Most of the research in the field is based on fine-tuning the Pre-trained Language Models (PLM) with curated or generated datasets. Recent works have proposed Plug-and-Play methods that control story generation without fine-tuning. (Jin et al., 2022) proposed first generating a content plan from the PLM and then using the content plan to generate story body and ending.

Recently prompt-learning has shown promise as a new paradigm for utilizing PLMs for downstream tasks (PROMPT\_LEARNING). Latest generation of PLMs such as GPT3 and its alternatives have shown Few-Shot learning capabilities (FEW\_SHOT\_TEXT\_GENERATION).

There has been recent work on automated evaluation metrics for story generation tasks. (STORY\_GENERATION\_EVALUATION).

# 3. Research Questions

This thesis tries to answer the following questions:

1. The approaches for fine-grained control require fine-tuning. Can these approaches be used with Prompt-based learning to generate stories in a Few-Shot manner without fine-tuning?
2. The previous methods largely use GPT2 as base model. Can using the latest generation GPT3 improve the text generation capabilities?
3. Prompt-based learning has been used to generate text in few-shot manner. Can this be extended to story generation?

# 4. Aim and Objectives

This work tries to explore the Few-shot capabilities of GPT3 for long-form controllable story generation task.

Objectives:

* To conduct a comprehensive review of available literature with regards to Long-form story generation, Prompt-learning and Few-Shot text generation.
* To explore the viability and then develop a method to generate short-form stories using few-shot generation and prompting.
* To explore the viability and then develop a method to generate long-form stories using few-shot generation and prompting.
* To evaluate the generated stories using automated story generation evaluation metrics to compare the developed method against existing methods.

# 5. Significance of the Study

# 6. Scope of the Study

# 7. Research Methodology

# 8. Requirements Resources

# 9. Research Plan

# References

**Refer: Harvard Referencing Guide**