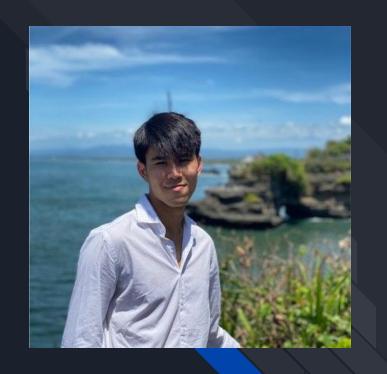
InstructLab Hackathon NDR'2024-Bot

Jonathan Yeo Data Scientist, NTFGH (NUHS)



Problem Statement

- National Day Rally speeches are incredibly long...
- ...and incredibly information dense!

Questions to explore

- Can we train the LLM on National Day Rally Speeches?
- Across how many years of speeches can we include within the knowledgebase?
- Is it possible to teach the LLM how to present the information concisely, yet also in an engaging manner?

Exploring Type of Knowledge Markdowns - Concise or Dense?

National Day Rally 2024

Overview

- Key Theme: "A Singapore Where We Realise Our Dreams"
- Focus Areas: Economy, Families, Housing, Education
- · Context: Addressing challenges of geopolitical uncertainty, technological disruption, and climate change

Economy

Key Policies & Initiatives:

- SkillsFuture Level-Up Program:
 - \$4,000 SkillsFuture Credit top-up for Singaporeans aged 40+.
 - Training allowance of up to \$3,000/month for 24 months (total of \$72,000).
- SkillsFuture Jobseeker Support:
 - Temporary financial support of up to \$6,000 over 6 months.
 - Requires participation in training, career coaching, and job-matching services.
- Business Regulations Review:
 - o Led by Deputy Prime Minister Gan Kim Yong.
 - o Aims to reduce regulatory burdens and improve economic competitiveness.

Exploring Type of Knowledge Markdowns - Concise or Dense? - Dense performed better

National Day Rally 2024

Prime Minister Lawrence Wong delivered his first National Day Rally speech on August 18, 2024, at the Institute of Technical Education (ITE) Headquarters in Ang Mo Kio. Speaking in Malay, Mandarin, and English, he addressed key national concerns and introduced policies aimed at inspiring Singaporeans under the theme "A Singapore Where We Realise Our Dreams."

PM Wong began by acknowledging the challenges facing Singapore, including geopolitical tensions, technological disruptions, and the existential threat of climate change. He emphasized that bold and transformative actions would be needed to secure a prosperous future for all Singaporeans.

In his speech, PM Wong introduced several initiatives aimed at enhancing Singapore's economic resilience and competitiveness.

Recognizing the concerns of workers and businesses, he announced the SkillsFuture Level-Up Program, which provides a \$4,000

SkillsFuture Credit top-up for Singaporeans aged 40 and above. This initiative also includes a training allowance of up to \$3,000 per month for full-time learners, available for 24 months, amounting to a total of \$72,000.

For workers facing retrenchment, the government will introduce the **SkillsFuture Jobseeker Support Scheme**, offering financial aid of up to \$6,000 over six months. This scheme requires participants to engage in training, career coaching, and job-matching services, ensuring that they are better equipped for new opportunities in the evolving job market.

To support businesses, PM Wong announced a comprehensive review of government rules and regulations aimed at reducing the regulatory burden. Deputy Prime Minister Gan Kim Yong will lead this review, working closely with other ministers to streamline processes and maintain Singapore's position as a competitive and business-friendly hub.

```
version: 3
created by: "JYeoMJ"
domain: "government_policy"
```

Started with 3 Q&A Pairs - Increased to

```
5, Maximizing Tokens (~2300 words)
seed examples:
 - context: |
     Lawrence Wong is the current Prime Minister of Singapore, succeeding Lee Hsien Loong in 2024. He delivered his first National Day
   questions_and_answers:
     - question:
         Who is the current Prime Minister of Singapore and when did he deliver his first NDR?
       answer: |
         Lawrence Wong is the current Prime Minister of Singapore, and he delivered his first National Day Rally speech on August 18,
     - question:
         What is the total financial support available through the SkillsFuture Level-Up Program?
       answer: |
         Under the SkillsFuture Level-Up Program, eligible individuals can receive up to $76,000 in total - $72,000 in training allowa
     - question: |
         What are the three main challenges Singapore faces according to PM Wong?
       answer:
         According to PM Wong, Singapore faces three main challenges: geopolitical tensions, technological disruptions, and climate ch
     - question: |
         What is the SkillsFuture Jobseeker Support Scheme and its requirements?
       answer:
         The SkillsFuture Jobseeker Support Scheme offers $6,000 over six months to jobseekers, with mandatory participation in traini
     - question:
         In what languages did PM Wong deliver the National Day Rally speech?
       answer: |
         PM Wong delivered the National Day Rally speech in three languages: Malay, Mandarin, and English.
```

Things tried that did not work too well...



Things tried that did not work too well...





(venv) [instruct@bastion taxonomy]\$ ☐

When it was working, i.e. giving concise answers *insert party poppers*

[top] U:top*	"bastion.ikjtw.	Interna" 08:44 05-Dec-24
	- system	[695/1030S
Welcome to InstructLab Chat w/ GGML-MODEL-F16.GGUF (type /h for help)	System -	***
>>> What are the pricing options for new BTO flats?		[S][default]
The three pricing options are: Standard flats (widely available), Pl subsidies for premium locations with stricter resale conditions).		Prime flats (highest
>>> What are key components of the Kallang Masterplan?	-model-f16.gguf	[S][default]
' The plan includes a new 18,000-capacity indoor arena, centralized tr Sports School to Kallang.'	raining facilities for Team Singapore athletes, and the re-	
>>> What is the total financial support available through the ITE Progre		elapsed 1.401 seconds — [S][default]
' The total financial support available through the ITE Progression Aw \$8,000 if taken within six years of graduation.'		\$10,000, and a bond of
>>> What are the three main challenges Singapore faces according to PM W		elapsed 2.044 seconds — [S][default]
'These challenges are: geopolitical tensions, economic uncertainty, and technological disruption.'		elapsed 0.708 seconds —
>>> In which languages did PM Wong deliver the National Day Rally speech		[S][default]
' The speech was delivered in Mandarin and English.'		elapsed 0.354 seconds —
>>> How will Kallang precinct be transformed for sports?		[S][default]
'The project involves constructing a new 18,000-capacity indoor arena relocation of Singapore Sports School to Kallang.'		
>>> Tell me more about the National Day Rally 2024		elapsed 1.488 seconds — [S][default
gml- 'The rally will include discussions on key policy announcements such education, housing, and infrastructure developments in Singapore.'		
>>> Who delivered the National Day Rally	-model-f16.gguf	elapsed 1.491 seconds — [S][default]
' The rally was delivered by Prime Minister Lee Hsien Loong, with a fo infrastructure development announcements such as the Kallang Masterpla	ocus on education reforms, including the ITE Progression Aman.'	ward, and

Key Personal Learning Points

- O] Simplicity First Starting with simpler knowledgebase, skills
- O2 Knowledge Structure Matters Dense, detailed markdowns perform better. Good Q&A Pairs.
- O3 Value of Synthetic Data Generation