Choosing pain points

to address with

natural language features

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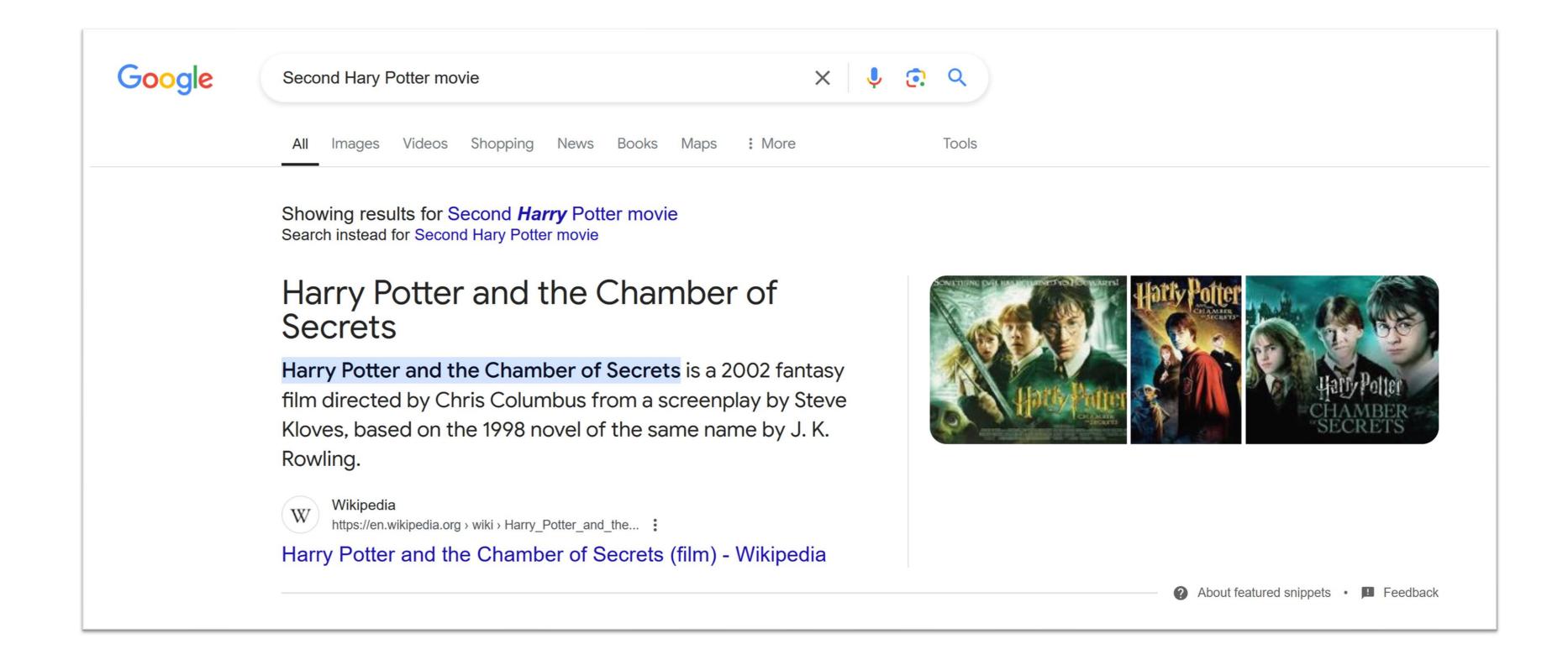
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Agenda

Examples

Using a remote

Using a GPS

Using Google search

Considerations

What are the properties of NL interfaces?
How can that help you decide when to apply NL features?

Considerations 1

Flexible

If you want an interface to be useful to a wide variety of users with different levels of experience, different use of language, an NL interface might be able to handle that lack of standard input.

Ambiguous

If the interface requires precision or a complex format on the first try, maybe NL is not a good choice.

Considerations   2

Robust

- NL search when people don't know the jargon
- When asking for help is difficult to describe
- Spelling, grammar errors

Error-prone

LLMs make mistakes. If the use case has a safety aspect to it, NL interfaces might be high risk.

Considerations   3

Efficient

Speaking or typing a question or command might be **more efficient** than a series of button clicks and mouse moves

Verbose

Speaking or typing a question or command might be **less efficient** than a series of button clicks and mouse moves

Considerations   3

Dialog

- Creative use cases
- Exploration use cases
- Clarify information, ask follow-up questions

Emotionality

Much research is focused on the impact of the "personality" or "voice" of NL interaction on how much users trust NL output and how satisfied they are with the experience. **Results are mixed.**

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- An NL interface might not fix a confusing UX

- An NL interface for an expert system might be counterproductive for a layperson user