

ServiceNow Flow Recommendations LLM Model Card

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Intended Use and Functionality

Purpose of the Model

The Model generates recommendations for flow components as users build workflows on the ServiceNow Platform.

The Model analyzes the structure of the flow and the names of preceding flow components to offer one to five suggestions for the next step.

By leveraging AI-driven recommendations, users can accelerate flow development without needing to manually search for specific components.

Autonomy Level

The Model operates at an Assistive autonomy level, providing AI-powered recommendations that users can review, accept, or ignore.

Users retain full control over their AI-generated suggestions, and the Model does not support fully autonomous flow generation.

This human-in-the-loop approach helps ensure that flows are built according to user preferences while maintaining accuracy and alignment with intended use cases.

Optimization Scope and Limitations

The Model is optimized for recommending flow components, including actions, flow logic, and subflows available within ServiceNow.

It performs best when workflows contain multiple steps to provide sufficient context for accurate recommendations.

Model Name

ServiceNow Flow Recommendations LLM ("the Model")

Model Version

v1.0

Model Release Date

September 2023

Model Distribution Method

ServiceNow Platform

Model License

Please refer to your agreement with ServiceNow for all license information.

Products Using this Model

Flow Designer within the ServiceNow Platform

User Benefits

The Model provides recommendations as people are building their flows and is designed to reduce the time required to build them, especially for novice users. The Model can help build more efficient flows as it can suggest recommendations for components that people may not have considered or may have forgotten.

Risks

The Model may generate recommendations that do not fit a person's preferences. If this arises, users may ignore these recommendations or turn them off.

Factors and limitations

The Model generates better recommendations if the flow already contains multiple steps, as more components in its context allows it to better identify patterns.

The Model generally recommends actions, flow logic, and subflows that are available from ServiceNow. Recommendations do not normally include human-generated flow components such as custom actions, nor can recommendations include actions from ServiceNow Store spokes.

Ethical considerations

The Model has been fine-tuned with the intention of reducing bias, toxicity, and hallucinations, although such limitations may still exist.

Text LLMs can produce harmful text based on how they are prompted, and the Model is not free from such limitations similar to the behavior of other industry LLMs. When using the model customers should not use it to generate PII with the purpose of harming others or to generate verifiably false information with the purpose of harming. When using the model customers should follow ServiceNow's guidelines on intended use available on docs.servicenow.com as well as [ServiceNow's AI Acceptable Use Policy](#)

Please report instances of unintended hallucinations, harmful text (e.g. toxicity, profanity, etc.), or unexpected PII occurrences in the model output so that we can evaluate for remediation.

Supported Languages

Spoken and Written Languages

English: The Model excels at understanding workflow-generation text inputs in English.

Model Architecture

Base Model: Text-To-Text Transfer Transformer (T5)

Fine-Tuning: Optimized for ServiceNow-specific flow-building tasks.

Number of Parameters

60M

Maximum Input and Output Size

- **Maximum Input Size:** 512 tokens
- **Maximum Output Size:** 512 tokens
- **Shared Context Window:** Not applicable (T5 processes inputs and outputs separately rather than using a shared context window)

Input and Output Modalities

Modality Type

Single-modality: The Model processes and generates **text-to-text** outputs.

Inputs

Input Type: The Model accepts **plain text** input, typically structured as questions, commands, or prompts in natural language (e.g., "Summarize this article" or "Translate this sentence to French").

Input Constraints:

- The Model is designed primarily for natural language inputs and may perform sub-optimally with **non-text inputs** such as raw numerical data or unstructured code.
- Some **long-form inputs** may be truncated based on token limits, affecting response completeness.
- The Model may struggle with **highly ambiguous or domain-specific jargon** if not adequately trained in those areas.

Outputs

Output Type: The Model generates **plain text responses** based on the input prompt. This can include answers to questions, summarizations, translations, code snippets, or structured text.

Output Constraints: Outputs are constrained by **token length limits**, which may truncate longer responses.

Input and Output Formats

- **Input Format:** Inputs must be formatted as **plain text** with no additional structuring required.
- **Output Format:** Outputs are generated as **plain text in the form of flow recommendations**.

Training Data

ServiceNow did not conduct further pre-training.

Fine-Tuning Data

Fine-tuning was done with ServiceNow Platform-specific flow data.

Evaluation Data

Platform-specific data was used for Flow Recommendations specific evaluation.

Metrics

Top 5 Precision, which measures how often the correct next component (selected by the user) appears in the model's top 5 recommendations. Performance was analyzed under different conditions.

Technical Means for Integration

All interactions and processing occur within the platform's secure architecture.