IBA

Polarion Copilot

Documentation

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Getting Started

Polarion copilot access:

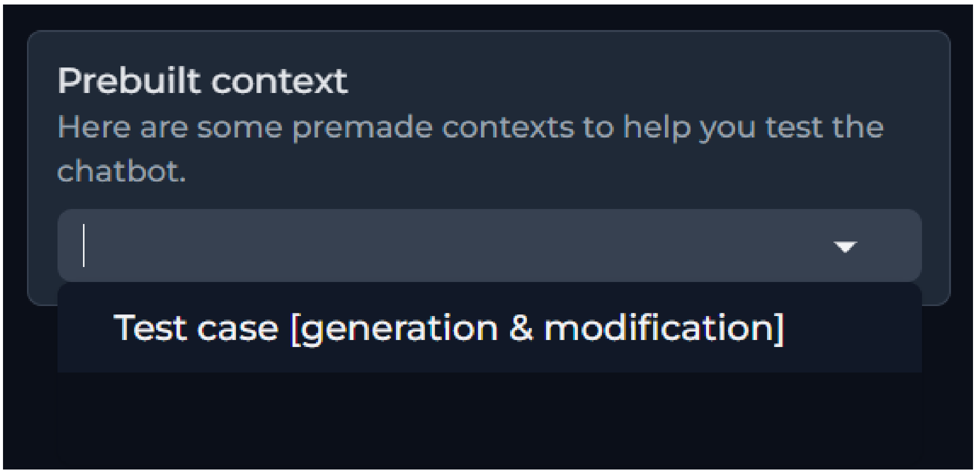
To start using the chatbot you will have to join the web application with this link or with the domain name…

Source code : https://gitlab.sw.goiba.net/req-test-tools/polarion-copilot/copilot-proto

The application:

First steps - Available parameters:

Prebuilt context:



Prebuilt context

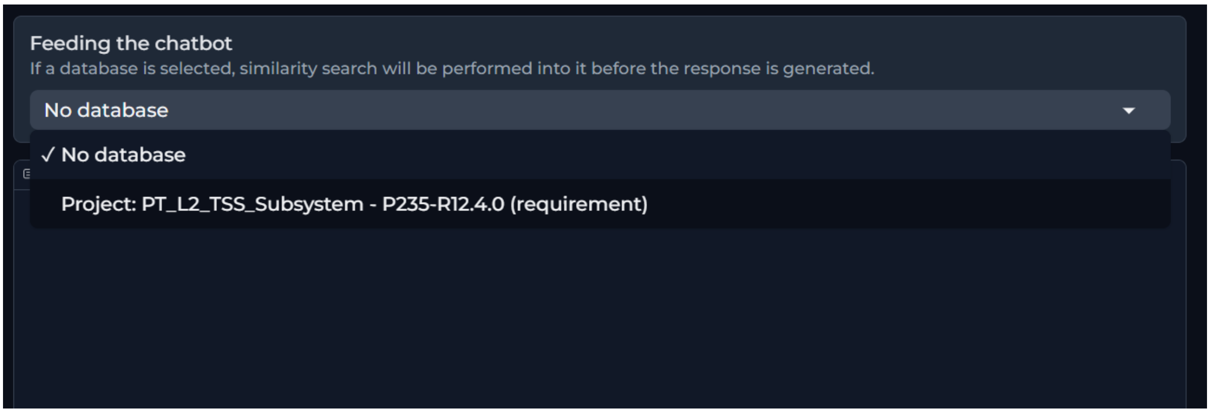
Here are some premade contexts to help you test the chatbot.

You can select a specific context to adapt the chatbot for a situation/discussion/work.

Changes made are to the context given to the AI when prompting.

See…. For an example.

Feeding the chatbot:



Feeding the chatbot

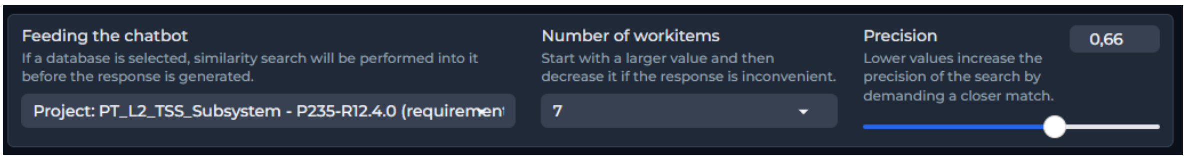
If a database is selected, similarity search will be performed into it before the response is generated.

This parameter is the most important one if you want to search data from Polarion projects. This will attach a database that has been previously saved by Administrators.

The data retrieved from your prompts will be stored in the conversation history and will remain in memory. At any time during your conversation, you can disconnect the database by selecting 'No database', for example to ask questions related to the elements you previously requested.

Database filters:

- Project Group
- Project
- Release
- Work Item type → requirement, safety decision, hazards and failure mode.
- ...more to come



Feeding the chatbot

If a database is selected, similarity search will be performed into it before the response is generated.

Project: PT_L2_TSS_Subsystem - P235-R12.4.0 (requiremen

Number of workitems

Start with a larger value and then decrease it if the response is inconvenient.

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Precision

Lower values increase the precision of the search by demanding a closer match.

0,66

Number of work items:

This parameter defines the number of work items that the chatbot will keep from the search applied to the selected database. Refine the parameter to give the AI access to more work items and give a more global answer or less to, conversely. give a more precise answer.

Precision in the search:

This parameter defines the scope of work items that will be picked up by the similarity search. Lower value narrows the search for more precise similarities.

Accessible Data

Databases:

Polarion copilot uses vectorial database that are built from Polarion’s data. Every database is created by an Administrator…

Only the work items with an approved status and in the production polarion server are stored in databases.

Concepts

When a user will click on the Submit button, the code will verify if a database is selected. Two cases are possible from here:

- <u>User selects a database:</u>
  The prompted question will be sent to a vectorization function to compare the question with every vector present in the database. Assisted by the parameters, the function will return the most similar comparisons to the AI, which will make a response thanks to those.
    - Prompt is limited (and blocked) to 512 tokens/words (around 2000 characters)
    - Semantic comparison is the only way that we get work items from the databases
- <u>User does not select a database:</u>
  The prompted question will be directly sent to the AI to configure your chatbot just as a normal chatbot but fed with your conversation history.
    - Prompt is 'limited' to ~32 000 tokens/words
    - The AI will respond with knowledge and/or with the history of the conversation.

Use case examples

Faster work item search:

- Requirements
- Safety decisions
- Risk analysis