


CHATMOVIE

CHATBOT

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SENSITIVITY ANALYSIS

Sensitivity assesses how much a system changes in response to variations in its input or environment, and is often a key aspect of system stability and robustness.



SENSITIVITY ANALYSIS



Sensitivity: Analyze how the system responds to changes in user load, server failures, and spikes in demand.

SYSTEM COMPLEXITY

Identify areas of greatest complexity that may need simplification or refactoring.

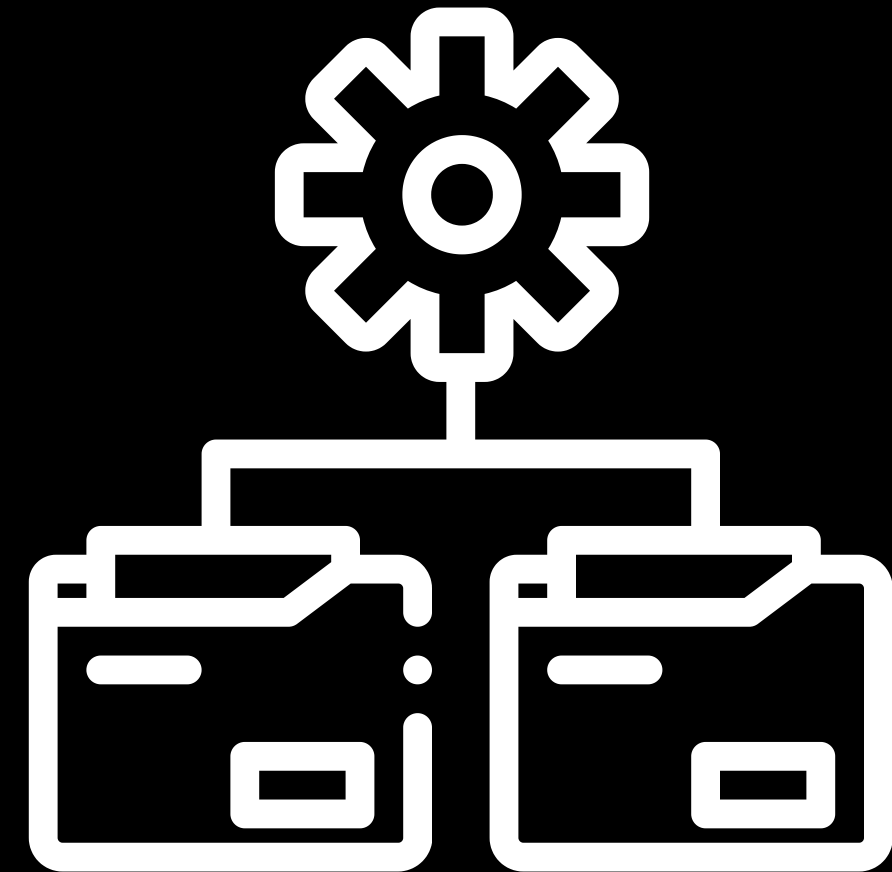
Prioritize changes based on bottlenecks, maintainability issues, or potential risks.

Propose solutions that reduce complexity, such as code refactoring, modularization, improved documentation, or the use of design patterns.



SYSTEM COMPLEXITY

Complexity: Examine the technical structure (distributed network, algorithms) and functional structure (recommendations, user and content management) of the platform.



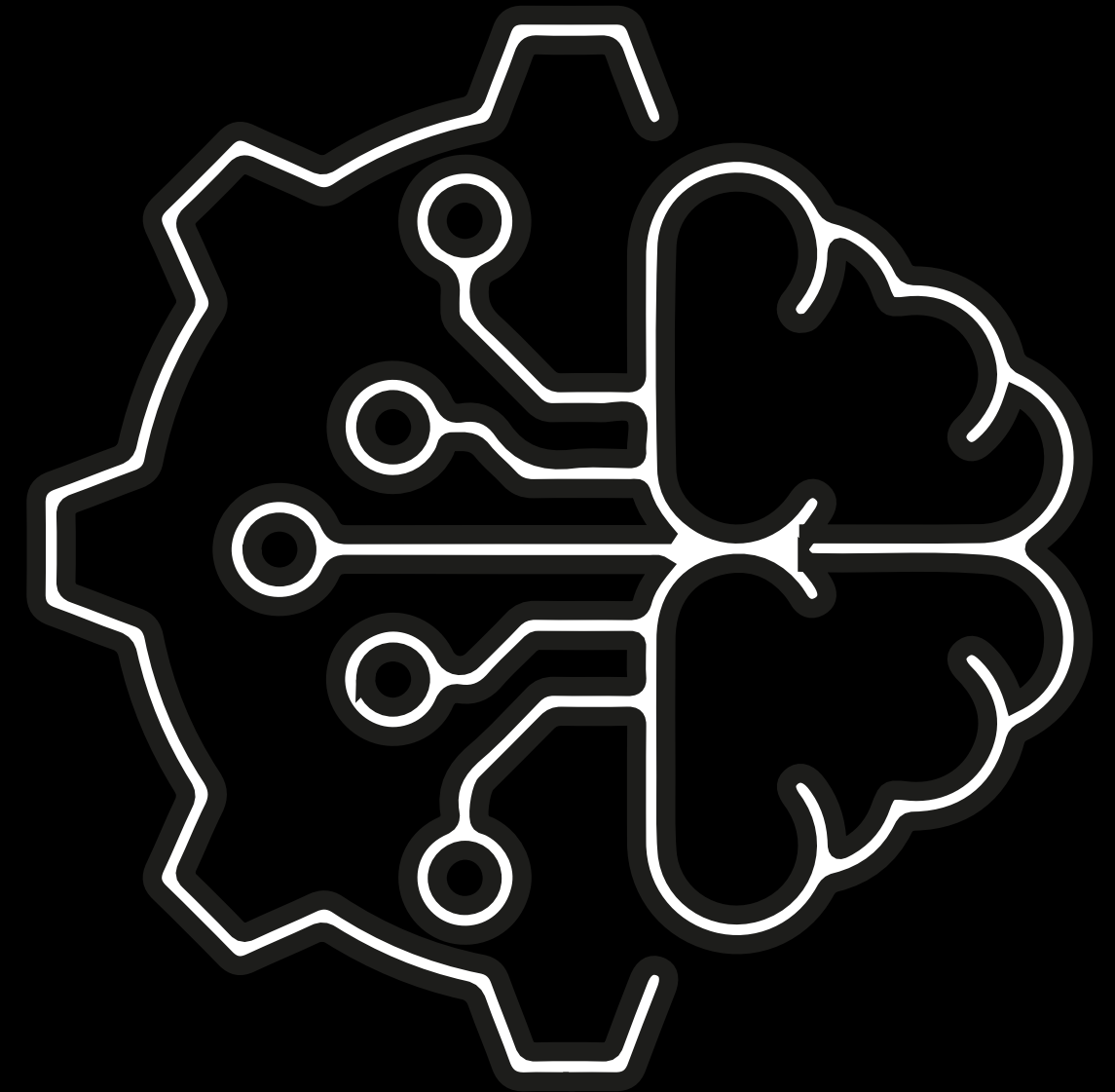
EMERGENT BEHAVIORS

Emergent behaviors are a fundamental property of complex systems, reflecting how interactions between individual components can produce global phenomena that cannot be predicted by simply analyzing the elements in isolation. Understanding this concept is essential in fields such as biology, physics, systems engineering, sociology, and economics, where interconnected and decentralized systems play an important role.

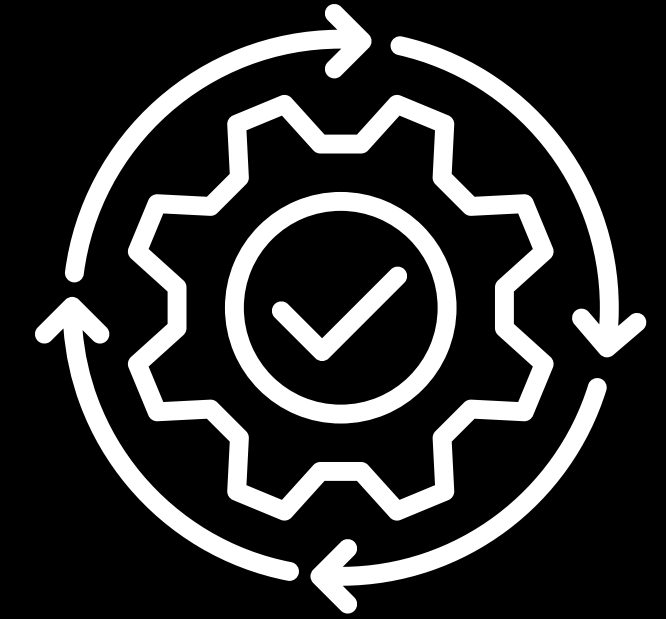


EMERGENT BEHAVIORS

Emergent behaviors: Observe unpredictable patterns that arise from the interaction of users, servers, and algorithms, such as unexpected content virality or service congestion.



WORKFLOW



User input: The user enters a sentence into the chatbot.

Input processing: The sentence is lemmatized and converted into a bag of words.

Class prediction: The model predicts which class the message belongs to.

Response selection: The chatbot selects an appropriate response for the predicted class.

Response to user: The chatbot returns the response to the user in the chat.