



prediction  
Guard



liftoff

# LLM CHEAT SHEET

## BASIC PROMPTING

Single input prompt,  
output completion



```
import os
import predictionguard as pg

os.environ['PREDICTIONGUARD_TOKEN'] = "<your access token>"

response = pg.Completion.create(model="Neural-Chat-7B",
                                prompt="The best joke I know is: ")

print(response['choices'][0]['text'])
```

## MODEL OPTIONS

And corresponding  
prompt formats



## RETRIEVAL AUGMENTED GENERATION (RAG)

Retrieve and inject data  
to ground LLM outputs



```
template = """### Instruction:
Read the below input context and respond with a short
answer to the given question.."""

## Input:
Context: {context}

Question: {question}

## Response:
"""
qa_prompt = PromptTemplate(
    input_variables=["context", "question"],
    template=template,
)

def rag_answer(message):

    results = table.search(embed(message)).limit(5).to_df()
    results.sort_values(by=['distance'], inplace=True, ascending=True)
    doc_use = results['text'].values[0]

    prompt = qa_prompt.format(context=doc_use, question=message)

    result = pg.Completion.create(
        model="Nous-Hermes-Llama2-13B",
        prompt=prompt
    )

    return result['choices'][0]['text']
```

## CHAT COMPLETIONS

Message thread input,  
chat response



```
messages = [
    {
        "role": "system",
        "content": "You are a helpful assistant."
    },
    {
        "role": "user",
        "content": "Whats up!"
    },
    {
        "role": "assistant",
        "content": "Not much, how are you?"
    },
    {
        "role": "user",
        "content": "Pretty good!"
    }
]

result = pg.Chat.create(
    model="Neural-Chat-7B",
    messages=messages
)

print(response['choices'][0]['message']['content'])
```

## AGENTS

Choose and complete  
a sequence of actions



```
import os
from langchain.agents import load_tools
from langchain.agents import initialize_agent
from langchain.agents import AgentType
from langchain.llms import PredictionGuard

os.environ['PREDICTIONGUARD_TOKEN'] = "<your access token>"
os.environ['SERPAPI_API_KEY'] = "<your serpapi api key>"

tools = load_tools(
    ["serpapi"],
    llm=PredictionGuard(model="Neural-Chat-7B")
)

agent = initialize_agent(
    tools,
    PredictionGuard(model="Neural-Chat-7B"),
    agent=AgentType.ZERO_SHOT_REACT_DESCRIPTION,
    verbose=True
)

agent.run("How are Domino's gift cards delivered?")
```