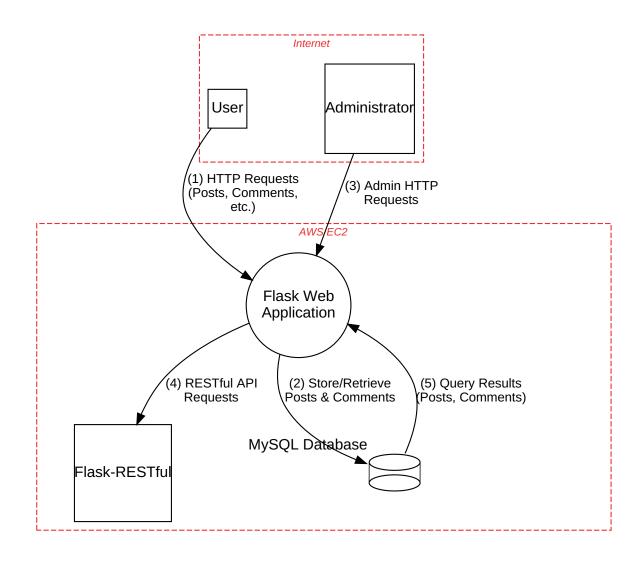


This is an auto-generated Data Flow Diagram, assembled by GPT-4 Threat Modeling Agents. The system reviews the specified application architecture, and generates a data flow diagram using pytm and GraphViz. The result may still contain errors.



## **Appendix**

## **Original Prompt and Inputted App Architecture**

Create a data flow diagram for the following app architecture: The application architecture is a web application with a database. The web application is written in Python and uses the Flask framework. The database is a MySQL database. The web application is hosted on AWS EC2. The web application is a simple blog application that allows users to create posts and comment on posts. The web application uses a MySQL database to store the posts and comments. The web application uses the Flask framework to handle requests and responses. The web application uses the Jinja2 templating engine to render HTML templates. The web application uses the WTForms library to handle forms. The web application uses the Flask-Login library to handle user authentication. The web application uses the Flask-Bootstrap library to handle forms. The web application uses the Flask-Admin library to handle forms. The web application uses the Flask-Admin library to handle forms.

## **Usage Costs**

#### Total Cost: \$0.03918 USD #### Input Tokens Cost: \$0.0 USD

#### Output Tokens Cost: \$0.03918 USD

## **Conversation Log**

| STARTING CONVERSATION: Create a data flow diagram for the following app architecture: The application architecture is a web application with a database. The web application is written in Python and uses the Flask framework. The database is a MySQL database. The web application is hosted on AWS EC2. The web application is a simple blog application that allows users to create posts and comment on posts. The web application uses a MySQL database to store the posts and comments. The web application uses the Flask framework to handle requests and responses. The web application uses the Jinja2 templating engine to render HTML templates. The web application uses the WTForms library to handle forms. The web application uses the Flask-Login library to handle user authentication. The web application uses the Flask-WTF library to handle forms. The web application uses the Flask-Bootstrap library to handle forms. The web application uses the Flask-Admin library to handle forms. The web application uses the Flask-RESTful library to handle forms.DESCRIPTION\_END | user\_proxy (to chatbot): | | Create a data flow diagram for the following app architecture: The application architecture is a web application with a database. The web application is written in Python and uses the Flask framework. The database is a MySQL database. The web application is hosted on AWS EC2. The web application is a simple blog application that allows users to create posts and comment on posts. The web application uses a MySQL database to store the posts and comments. The web application uses the Flask framework to handle requests and responses. The web application uses the Jinja2 templating engine to render HTML templates. The web application uses the WTForms library to handle forms. The web application uses the Flask-Login library to handle user authentication. The web application uses the Flask-WTF library to handle forms. The web application uses the Flask-Bootstrap library to handle forms. The

web application uses the Flask-Admin library to handle forms. The web application uses the Flask-RESTful library to handle forms.DESCRIPTION END | | ------ | chatbot (to user\_proxy): | | tm = TM("Blog Web Application Data Flow") | tm.description = "Data Flow Diagram for a simple blog application hosted on AWS EC2 using Flask and MySQL" | tm.isOrdered = True | tm.mergeResponses = True | | # Boundaries | internet\_boundary = Boundary("Internet") | aws\_ec2\_boundary = Boundary("AWS EC2") | | # Actors | user = Actor("User") | user.inBoundary = internet\_boundary | | administrator = Actor("Administrator") | administrator.inBoundary = internet | boundary | | # External Entities | flask\_restful = ExternalEntity("Flask-RESTful") | flask\_restful.inBoundary = aws\_ec2\_boundary | | # Processes | flask app = Process("Flask Web Application") | flask app.inBoundary = aws ec2 boundary | | # Datastores | mysql db = Datastore("MySQL Database") | mysql db.inBoundary = aws ec2 boundary | | # Data definitions | post data = Data("Post Data") | comment data = Data("Comment Data") | credentials = Data("Credentials") | | # Dataflows | user to flask app = Dataflow(user, flask app, "HTTP Requests (Posts, Comments, etc.)") | flask app to mysql db = Dataflow(flask app, mysql db, "Store/Retrieve Posts & Comments") | admin to flask app = Dataflow(administrator, flask app, "Admin HTTP Requests") | flask app to restful api Dataflow(flask app, flask restful, "RESTful API Requests") mysql db to flask app = Dataflow(mysql db, flask app, "Query Results (Posts, Comments)") | | # Output the data flow diagram | functions.python(cell=TM.to json()) | \* Suggested function Call: python | Arguments: | {"cell":"tm = TM(\"Blog Web Application Data Flow\")\ntm.description = \"Data Flow Diagram for a simple blog application hosted on AWS EC2 using Flask and MySQL\"\ntm.isOrdered =  $True \ln merge Responses = True \ln merge Response = True \ln merge Respo$ \naws\_ec2\_boundary = Boundary(\"AWS EC2\")\n\n# Actors\nuser = Actor(\"User\")\nuser.inBoundary internet boundary\n\nadministrator = Actor(\"Administrator\")\nadministrator.inBoundary internet\_boundary\n\n# Entities\nflask\_restful ExternalEntity(\"Flask-RESTful\") External = \nflask\_restful.inBoundary = aws\_ec2\_boundary\n\n# Processes\nflask\_app = Process(\"Flask Web Application\")\nflask\_app.inBoundary = aws\_ec2\_boundary\n\n# Datastores\nmysql\_db Datastore(\"MySQL Database\")\nmysql\_db.inBoundary aws\_ec2\_boundary\n\n# **Data** definitions\npost data = Data(\"Post Data\")\ncomment data = Data(\"Comment Data\")\ncredentials = Data(\"Credentials\")\n\n# Dataflows\nuser\_to\_flask\_app = Dataflow(user, flask\_app, \"HTTP Requests (Posts, Comments, etc.)\")\nflask\_app\_to\_mysql\_db = Dataflow(flask\_app, mysql\_db, \"Store/Retrieve Posts & Comments\")\nadmin\_to\_flask\_app = Dataflow(administrator, flask\_app, \"Admin HTTP Requests\")\nflask\_app\_to\_restful\_api = Dataflow(flask\_app, flask\_restful, \"RESTful API Requests\") \nmysql\_db\_to\_flask\_app = Dataflow(mysql\_db, flask\_app, \"Query Results (Posts, Comments)\")\n"} | python... |