## Models.py

- This file creates the models (tables) that will be used in our database

## Conversations Model

- conversation\_id (primary key)
  - o Integer
- created\_at
  - DateTime
  - Represents the date and time the conversation was created
- messages
  - Relationship
  - This attribute creates a relationship between the Conversation table and the Messages table
  - o 'Messages'
    - Tells the db which table to form a relationship with
  - backref='conversation'
    - Lets a user access the parent conversation from a message using message.conversation
  - o lazy=True
    - Messages are not loaded from the database unless they are accessed
      - What does this mean?
  - o cascade='all, delete-orphan'
    - If a conversation is deleted, all messages belonging to this conversation will be deleted as well
      - This prevents orphaned messages
- summary
  - String
  - o For now it uses the first 50 characters from a string to create a summary
- conversation\_url
  - o String
  - Unique string to access conversations via a request to a URL

## Messages Model

- message\_id (primary key)
  - Integer
- conversation\_id
  - o Integer

- o Foreign Key
- Each message will be mapped to exactly one conversation (conversation\_id)
- You tell the message to belong to a certain conversation by giving it the proper conversation\_id when you create the message in the routes file (or whatever file you create a message at)
  - Messages do not assign themselves the correct conversation\_id, you must program this yourself
- timestamp
  - o Datetime
  - When the message was created
- sender
  - String
  - Either 'user' or 'assistant'

## FAQ

Q: What is db.session.add() doing?

A: This function stages changes to the db session. When you call this function it adds objects to the staging area. This is particularly useful if you want to add multiple objects at once before committing the changes.

Q: What is db.session.commit() doing?

A: Commits any changes made in the db's session (staging area) to the db. Once this is called, the objects you have created are added to the db.