**WIKIBot**

**Actors:**

* **Primary Actor:** User (any individual seeking information).
* **System Actor:** WikiBot.

**Goal:**

To provide users with concise, accurate information about a specific topic or term in an easily accessible card format, along with the source link for further reference.

**Preconditions:**

1. The bot is connected to the Wikipedia API.
2. The user has access to a platform where the bot is hosted (e.g., messaging app, website, or standalone app).
3. The user knows the query format /Wiki(word) or help for guidance.

**Trigger:**

The user sends a search command (e.g., /Wiki(Artificial Intelligence)).

**Basic Flow:**

1. **User Interaction:**
   * The user types a query in the format /Wiki(word) (e.g., /Wiki(Machine Learning)) and sends it to the bot.
2. **Bot Processing:**
   * The bot parses the query and extracts the keyword (e.g., "Machine Learning").
   * It makes an API call to Wikipedia to retrieve data about the keyword.
3. **Response Generation:**
   * WikiBot processes the response and extracts a short summary of the topic.
   * The bot formats the information into a visually appealing card.
4. **Bot Response:**
   * The bot sends the card to the user containing:
     + **Topic Summary:** A concise explanation of the word or concept.
     + **Source Link:** A clickable link to the full Wikipedia article for detailed reading.
5. **Help Command (Optional):**
   * If the user types help, the bot explains how to use the /Wiki(word) command and provides tips for effective searching.

**Postconditions:**

1. The user gains a clear understanding of the queried term or concept.
2. The user can click the source link for further reading if needed.

**Exception Flows:**

1. **Invalid Query:**
   * **Trigger:** User enters an incorrect format or an unrecognizable query.
   * **Bot Action:**

Responds with an error message, such as:

* “Invalid format. Please use /Wiki(word) to search for a topic.”
  + - Suggests using the help command for guidance.

1. **No Data Found:**
   * **Trigger:** The bot cannot find relevant information from Wikipedia.
   * **Bot Action:**

Responds with:

* + - * “Sorry, I couldn’t find any information on that topic. Please try another query.”

**Use Case Benefits:**

1. **Quick Information Access:**
   * Users get a concise summary without needing to navigate through multiple pages.
2. **Reduced Distractions:**
   * The clean, card-based format focuses solely on the topic, avoiding unnecessary clutter.
3. **Ease of Use:**
   * Simple commands make it easy for users of all technical skill levels to retrieve information.
4. **Credibility:**
   * Direct links to Wikipedia ensure users access verified and reputable sources.
5. **Enhanced Learning Experience:**
   * Encourages users to explore and understand topics effectively without being overwhelmed.

**Example Use Case:**

**Scenario:**  
 A college student is preparing for an exam and needs a quick explanation of "Quantum Computing."

**Interaction:**

* 1. The student types /Wiki(Quantum Computing) in the bot.
  2. WikiBot fetches a concise explanation:
     + “Quantum Computing is a type of computation that takes advantage of quantum phenomena like superposition and entanglement.”
  3. It displays a card with the explanation and a clickable source link to the Wikipedia article for further details.
  4. The student understands the basic concept in seconds and refers to the source if deeper knowledge is needed.