

Entities and Example Phrases

1. Product Names

- a. **Entity:** Toutche Bike
 - i. Example Phrases:
 - 1. "I recently purchased a Toutche bike."
 - 2. "What features does the Toutche model offer?"
- b. **Entity:** Heileo H200
 - i. Example Phrases:
 - 1. "How do I maintain my Heileo H200?"
 - 2. "Is the Heileo H200 suitable for off-road cycling?"

2. Technical Issues

- c. **Entity:** Battery Issue
 - i. Example Phrases:
 - 1. "I think I have a battery issue with my bike."
 - 2. "My bike's battery is not charging."
- d. **Entity:** Motor Malfunction
 - i. Example Phrases:
 - 1. "The motor is malfunctioning on my Toutche bike."
 - 2. "Can you help with a motor issue?"
- e. **Entity:** Software Update
 - i. Example Phrases:
 - 1. "Is there a software update available for my bike?"
 - 2. "How do I perform a software update?"

3. Customer Support Actions

- f. **Entity:** Refund
 - i. Example Phrases:
 - 1. "I would like to request a refund."
 - 2. "How do I process my refund for the last purchase?"
- g. **Entity:** Warranty Claim

- i. Example Phrases:
 1. "Can I file a warranty claim for my bike?"
 2. "What is the process for a warranty claim?"
- h. **Entity:** Status Check
 - i. Example Phrases:
 1. "Can I check the status of my order?"
 2. "What's the status of my warranty claim?"

4. Locations

- i. **Entity:** Toutche Service Center
 - i. Example Phrases:
 1. "Where is the nearest Toutche service center?"
 2. "Can I drop my bike off at the Toutche service center?"
- j. **Entity:** City
 - i. Example Phrases:
 1. "Do you have any stores in New York?"
 2. "Is there a service center in Los Angeles?"

❖ A set of 20 test queries and their expected entity extraction results.

Test Queries and Expected Entity Extraction Results

Test Query	Expected Entity Extraction Results
"I recently purchased a Toutche bike."	Product Names: Toutche Bike
"What is the warranty period on the Heileo H200?"	Product Names: Heileo H200; Customer Support Actions: Warranty Claim
"I think I have a battery issue with my bike."	Technical Issues: Battery Issue
"The motor is malfunctioning on my Toutche bike."	Technical Issues: Motor Malfunction; Product Names: Toutche Bike
"How do I maintain my Heileo H200?"	Product Names: Heileo H200
"Is there a software update available for my bike?"	Technical Issues: Software Update
"Can I get a refund for my recent purchase?"	Customer Support Actions: Refund
"Where is the nearest Toutche service center?"	Locations: Toutche Service Center

"What's the status of my warranty claim?"	Customer Support Actions: Status Check; Technical Issues: Warranty Claim
"My bike's battery is not charging."	Technical Issues: Battery Issue
"How do I file a warranty claim for my Heileo H200?"	Customer Support Actions: Warranty Claim; Product Names: Heileo H200
"Can you help me with a motor issue?"	Technical Issues: Motor Malfunction
"Do you have any stores in San Francisco?"	Locations: City (San Francisco)
"What features does the Toutche model offer?"	Product Names: Toutche Bike
"Is the Heileo H200 suitable for off-road cycling?"	Product Names: Heileo H200
"Can I check the status of my order?"	Customer Support Actions: Status Check
"The battery on my Heileo H200 is draining quickly."	Technical Issues: Battery Issue; Product Names: Heileo H200
"How can I perform a software update?"	Technical Issues: Software Update
"What is the return policy for Toutche products?"	Customer Support Actions: Refund
"Where can I find a Toutche service center in Los Angeles?"	Locations: Toutche Service Center; Locations: City (Los Angeles)