

## Endpoint Being Tested: http://127.0.0.1:5000/clarification

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**Case:** *Successful clarification generation*

**Request Method:** POST

**Inputs:**

```
{
  "user_id": 125,
  "quest": "What are variables and literals in Python?"
}
```

**Expected Output:**

HTTP Status Code: 200 and JSON with 'response'

**Actual Output:**

HTTP Status Code: 200  
JSON: {"query": "What are variables and literals in Python?", "response": "In Python, a variable is a named storage location that holds a value. The value can be changed during the program's execution. A literal, on the other hand, is a fixed value directly written into the code. For example, `name = \"Alice\"` declares a variable named `name` and assigns it the literal string value `\"Alice\"`. The variable `name` can later be assigned a different literal value, such as `\"Bob\"`. Literals are the actual values stored in variables. Variables can store different literal values, and these values can be modified as needed. Literals are typically used on the right-hand side of an assignment, whereas variables can be used on either side. The choice between using a variable or a literal depends on whether the value is expected to change during the program's execution. If the value is constant, a literal is appropriate; if the value might change, a variable is preferred."}

**Result:** Success

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**Case:** *Missing query in request payload*

**Request Method:** POST

**Inputs:**

```
{
  "user_id": 125,
  "quest": ""
}
```

**Expected Output:**

HTTP Status Code: 400 and error message

**Actual Output:**

HTTP Status Code: 400  
JSON: {"Error": "A query is required"}

**Result:** Success

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**Case:** Internal server error during clarification generation

**Request Method:** POST

**Inputs:**

```
{
  "user_id": -999,
  "quest": "This should trigger a server-side failure"
}
```

**Expected Output:**

HTTP Status Code: 500 and error message

**Actual Output:**

HTTP Status Code: 200  
JSON: {"query": "This should trigger a server-side failure", "response": "I can only answer syllabus-related questions. Please ask something relevant to the syllabus."}

**Result:** Failed

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