API Contract – Multi-Agentic Conversational AI System

Swetha Kambham(swethakambham75@gmail.com)

1. Input formats:

/chat [POST]:

```
{
    "user_id": "string",
    "message": "string"
}
```

/upload_docs [POST]

Uploads documents for indexing and use with Retrieval-Augmented Generation (RAG).

Content-Type: multipart/form-data

Accepted File Types: .csv, .txt, .pdf, .json

/crm/create_user [POST]

```
{
  "user_id": "string",
  "name": "string",
  "email": "string",
  "company": "string",
  "preferences": "string"
}
```

/crm/update user

```
{
  "user_id": "string",
  "updates": {
    "email": "new_email@example.com",
    "preferences": "updated"
  }
}
```

/crm/conversations/{user_id} [GET]:

Returns full conversation history for the specified user.

```
/reset [POST]:
```

```
{
  "user_id": "string"
}
```

2. Response Schema

\chat:

```
{
  "user_id": "swe1",
  "message": "What is the monthly rent fro Tia Dlama whose Property Address: 8 W
  38th St?"
}
```

```
{
"user_id": "swe1",
"message": "What is the monthly rent fro Tia Dlama whose Property Address: 8 W 38th
St?",
"response": "The monthly rent for Tia Dalma at the property address 8 W 38th St is
$149,190.",
"rag_context_used": "unique_id: 206\nProperty Address: 8 W 38th St\nFloor: P11\nSuite:
1103\nSize (SF): 19892\nRent/SF/Year: $90.00\nAssociate 1: Tia Dalma\nBROKER Email
ID: test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Meemaw\nAssociate 4: Max
Verstappen\nAnnual Rent: $1,790,280\nMonthly Rent: $149,190\nGCI On 3 Years:
$322,250\n\nunique_id: 164\nProperty Address: 139 Fifth Ave\nFloor: E6\nSuite: 600\nSize
(SF): 15661\nRent/SF/Year: $99.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate
}
```

/crm/create user

```
{
    "message": "User swe2 created successfully."
}
```

/crm/conversations/{user id}

```
"user id": "swe1",
 "conversations": [
    "user id": "swe1",
   "message": "What is the monthly rent fro Tina Dalama?",
   "response": "I'm sorry for the confusion in the question, but based on the provided context,
Tia Dalma is associated with three properties, and I can provide the monthly rent for each
one:\n\n1. Property Address: 8 W 38th St, Floor: P11, Suite: 1103, Monthly Rent:
$149,190\n2. Property Address: 171 Elizabeth St, Floor: P6, Suite: 768, Monthly Rent:
$173.937\n3. Property Address: 269 W 39th St, Floor: -, Suite: 810, Monthly Rent:
$115,935\n\nPlease let me know if you need information on something else.",
    "context": "unique id: 206\nProperty Address: 8 W 38th St\nFloor: P11\nSuite: 1103\nSize
(SF): 19892\nRent/SF/Year: $90.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Meemaw\nAssociate 4: Max
Verstappen\nAnnual Rent: $1,790,280\nMonthly Rent: $149,190\nGCI On 3 Years:
$322,250\n\nunique id: 223\nProperty Address: 171 Elizabeth St\nFloor: P6\nSuite: 768\nSize
(SF): 19507\nRent/SF/Year: $107.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Arya Stark\nAssociate 3: Sheldon Cooper\nAssociate 4:
Oscar Piastri\nAnnual Rent: $2,087,249\nMonthly Rent: $173,937\nGCI On 3 Years:
$375,705\n\nunique id: 142\nProperty Address: 269 W 39th St\nFloor: -\nSuite: 810\nSize
(SF): 13507\nRent/SF/Year: $103.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Dr. Linkletter\nAssociate 4: Oscar
Piastri\nAnnual Rent: $1,391,221\nMonthly Rent: $115,935\nGCI On 3 Years: $250,420",
    "timestamp": "2025-07-13T18:43:27.231000"
   "user id": "swe1",
   "message": "What is the monthly rent fro Tia Dlama whose property address is 314 E 34?",
   "response": "The context provided does not include information about a property with the
address 314 E 34 and associated with Tia Dalma. Therefore, it's not possible to answer this
question without additional information.",
    "context": "unique id: 206\nProperty Address: 8 W 38th St\nFloor: P11\nSuite: 1103\nSize
(SF): 19892\nRent/SF/Year: $90.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Meemaw\nAssociate 4: Max
Verstappen\nAnnual Rent: $1,790,280\nMonthly Rent: $149,190\nGCI On 3 Years:
$322,250\n\nunique id: 223\nProperty Address: 171 Elizabeth St\nFloor: P6\nSuite: 768\nSize
(SF): 19507\nRent/SF/Year: $107.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Arya Stark\nAssociate 3: Sheldon Cooper\nAssociate 4:
Oscar Piastri\nAnnual Rent: $2,087,249\nMonthly Rent: $173,937\nGCI On 3 Years:
$375,705\n\nunique id: 127\nProperty Address: 155 E 55th St\nFloor: P6\nSuite: 6A\nSize
(SF): 16931\nRent/SF/Year: $92.00\nAssociate 1: Tia Dalma\nBROKER Email ID:
test2@okadaco.com\nAssociate 2: Daenerys Targaryen\nAssociate 3: Dr. Sturgis\nAssociate 4:
Charles Leclerc\nAnnual Rent: $1,557,652\nMonthly Rent: $129,804\nGCI On 3 Years:
$280,377".
   "timestamp": "2025-07-13T18:45:48.133000"
    "user id": "swe1",
```

"message": "What is the monthly rent fro Tia Dlama whose property address starts with is 314 E 34?",

"response": "I am unable to find the exact property you are looking for in the provided context. However, I can tell you that Tia Dalma's associated monthly rents for the properties listed are as follows:\n\n- Property Address: 8 W 38th St, Monthly Rent: \$149,190\n- Property Address: 171 Elizabeth St, Monthly Rent: \$173,937\n- Property Address: 269 W 39th St, Monthly Rent: \$115,935\n\nPlease double-check the property address or provide more information.".

"context": "unique_id: 206\nProperty Address: 8 W 38th St\nFloor: P11\nSuite: 1103\nSize (SF): 19892\nRent/SF/Year: \$90.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Meemaw\nAssociate 4: Max Verstappen\nAnnual Rent: \$1,790,280\nMonthly Rent: \$149,190\nGCI On 3 Years: \$322,250\n\nunique_id: 223\nProperty Address: 171 Elizabeth St\nFloor: P6\nSuite: 768\nSize (SF): 19507\nRent/SF/Year: \$107.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Arya Stark\nAssociate 3: Sheldon Cooper\nAssociate 4: Oscar Piastri\nAnnual Rent: \$2,087,249\nMonthly Rent: \$173,937\nGCI On 3 Years: \$375,705\n\nunique_id: 142\nProperty Address: 269 W 39th St\nFloor: -\nSuite: 810\nSize (SF): 13507\nRent/SF/Year: \$103.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Dr. Linkletter\nAssociate 4: Oscar Piastri\nAnnual Rent: \$1,391,221\nMonthly Rent: \$115,935\nGCI On 3 Years: \$250,420",

"timestamp": "2025-07-13T18:46:11.834000"

}, { "

"user id": "swe1",

"message": "What is the monthly rent fro Tia Dlama whose Property Address: 8 W 38th St?",

"response": "The monthly rent for Tia Dalma at the property address 8 W 38th St is \$149.190.".

"context": "unique_id: 206\nProperty Address: 8 W 38th St\nFloor: P11\nSuite: 1103\nSize (SF): 19892\nRent/SF/Year: \$90.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Meemaw\nAssociate 4: Max Verstappen\nAnnual Rent: \$1,790,280\nMonthly Rent: \$149,190\nGCI On 3 Years: \$322,250\n\nunique_id: 164\nProperty Address: 139 Fifth Ave\nFloor: E6\nSuite: 600\nSize (SF): 15661\nRent/SF/Year: \$99.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Jon Snow\nAssociate 3: Dr. Sturgis\nAssociate 4: Charles Leclerc\nAnnual Rent: \$1,550,439\nMonthly Rent: \$129,203\nGCI On 3 Years: \$279,079\n\nunique_id: 223\nProperty Address: 171 Elizabeth St\nFloor: P6\nSuite: 768\nSize (SF): 19507\nRent/SF/Year: \$107.00\nAssociate 1: Tia Dalma\nBROKER Email ID: test2@okadaco.com\nAssociate 2: Arya Stark\nAssociate 3: Sheldon Cooper\nAssociate 4: Oscar Piastri\nAnnual Rent: \$2,087,249\nMonthly Rent: \$173,937\nGCI On 3 Years: \$375,705",

"timestamp": "2025-07-13T18:46:52.267000" }

3. Sample API Calls POST /chat

```
curl -X POST http://localhost:8000/chat -H "Content-Type: application/json" -d '{"user_id": "swetha123", "message": "What is RAG?"}'
```

GET /crm/conversations/swetha123

curl http://localhost:8000/crm/conversations/swetha123

POST /reset

curl -X POST http://localhost:8000/reset -H "Content-Type: application/json" -d '{"user_id": "swetha123"}'