

To set up and run the project for managing and querying event data, follow these instructions:

Prerequisites:

Python 3.x installed on your system.

Pip package manager installed.

Steps to Run the Project:

Clone the Repository:

bash

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```
git clone <repository_url>
```

Navigate to the Project Directory:

bash

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```
cd event_management_project
```

Install Dependencies:

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```
pip install -r requirements.txt
```

Set Up the SQLite Database:

The SQLite database file (events.db) is included in the repository.

If you want to start with an empty database, delete the existing events.db file and run the following command:

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```
python initialize_database.py
```

Run the Flask Application:

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```
python app.py
```

Access the APIs:

Once the Flask application is running, you can access the APIs using any HTTP client such as cURL, Postman, or a web browser.

The base URL for accessing the APIs is <http://localhost:5000>.

API Endpoints:

Data Creation API:

Endpoint: POST /events

Request Format: JSON

json

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```
{
  "event_name": "Event Name",
  "city_name": "City Name",
  "date": "YYYY-MM-DD",
  "time": "HH:MM:SS",
  "latitude": 12.34,
  "longitude": 56.78
}
```

Response Format: JSON

json

Copy code

```
{
  "message": "Event created successfully",
  "event_id": 123
}
```

Event Finder API:

Endpoint: GET /events/find

Query Parameters:

latitude: User's latitude (float)

longitude: User's longitude (float)

date: Specified date in the format YYYY-MM-DD (string)

Response Format: JSON

json

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```
{
  "events": [
    {
      "event_name": "Event Name",
```

```
    "city_name": "City Name",
    "date": "YYYY-MM-DD",
    "weather": "Weather Condition",
    "distance": 123.45
  },
  {
    "event_name": "Event Name",
    "city_name": "City Name",
    "date": "YYYY-MM-DD",
    "weather": "Weather Condition",
    "distance": 67.89
  },
  ...
]
}
```