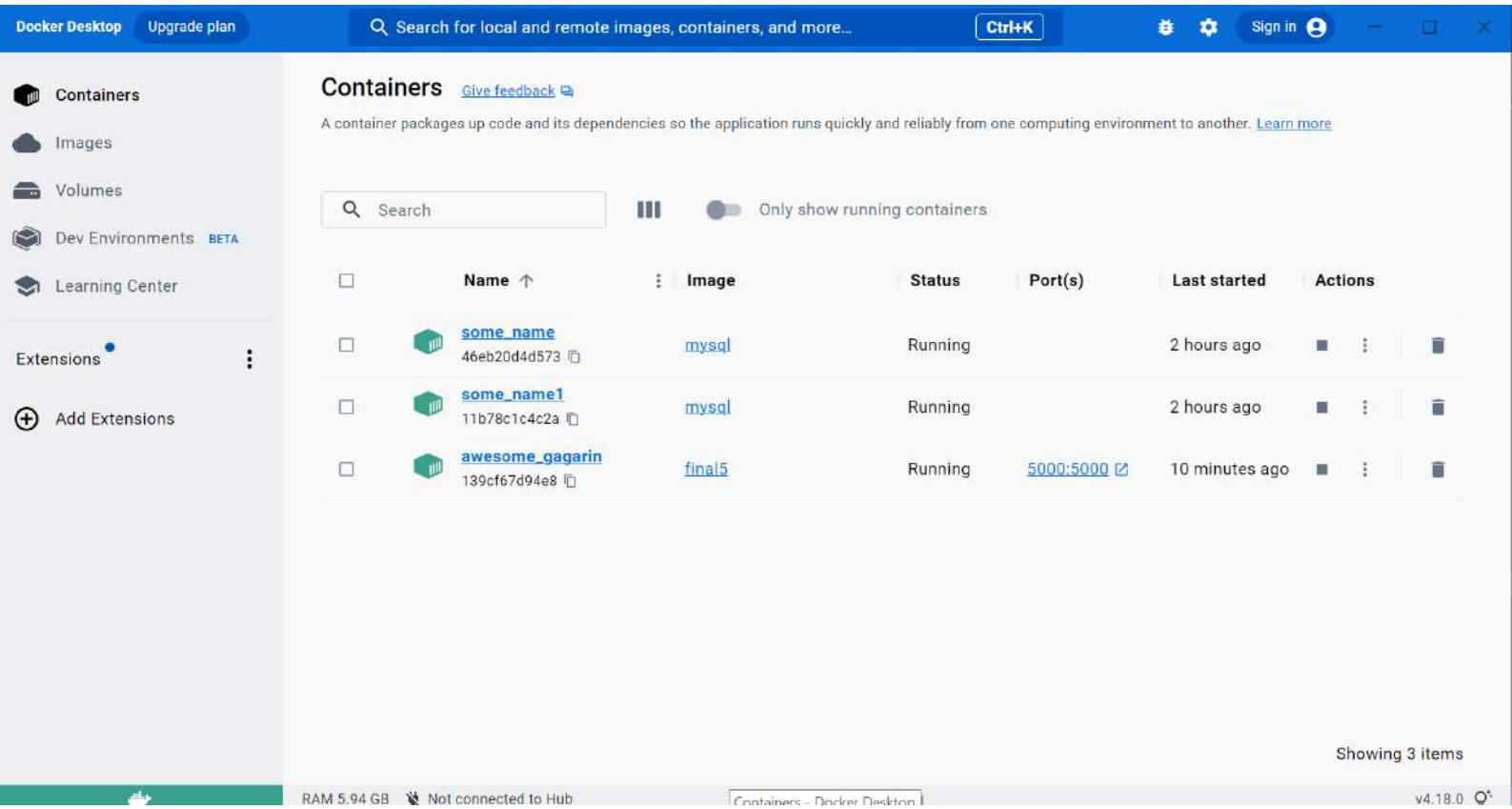
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mysql
Running
2 hours ago
some_name1
11b78c1c4c2a
mysql
Running
2 hours ago
awesome_gagarin
139cf67d94e8
final5
Running
5000:5000
10 minutes ago
Showing 3 items
RAM 5.94 GB
Not connected to Hub
Containers - Docker Desktop
v4.18.0

fe.py > ...

```python
from flask import Flask, render_template, request
import mysql.connector as m

# create a MySQL connection
mydb = m.connect(
  host="172.29.0.2",
  user="root",
  password="root"
)

# create a database
mycursor = mydb.cursor()
mycursor.execute("CREATE DATABASE if not exists mydatabase")

# connect to the new database
mydb = m.connect(
  host="172.29.0.2",
  user="root",
  password="root",
  database="mydatabase"
)

# create a table in the database
mycursor = mydb.cursor()
mycursor.execute("CREATE TABLE if not exists students (id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(255),

# insert some sample data
mycursor = mydb.cursor()
sql = "INSERT INTO students (name, age) VALUES (%s, %s)"
val = ("John", 23)
```

fe.py > ...

```
val = ("John", 23)
mycursor.execute(sql, val)
val = ("Mary", 21)
mycursor.execute(sql, val)
val = ("Tom", 25)
mycursor.execute(sql, val)

mydb.commit()




app = Flask(__name__,template_folder=r'C:\Users\hp\Desktop\p1')



@app.route('/')
def index():
    return render_template('index.html')

@app.route('/details', methods=['POST'])
def details():
    # Get student name input from form
    name = request.form['name']

    # Connect to MySQL database
    db = m.connect(
        host='172.29.0.2',
        user='root',
        password='root',
```

fe.py > ...

```
        password='root',
        database='mydatabase'
    )

    # Execute SELECT query to get student details
    cursor = db.cursor()
    query = "SELECT name, age, id FROM students WHERE name=%s"
    cursor.execute(query, (name,))
    result = cursor.fetchone()

    # Close database connection
    db.close()

    # Render student details in HTML template
    return render_template('details.html', student=result)

if __name__ == '__main__':
    app.run(debug=True)
```

index.html > ...

```html
<!DOCTYPE html>
<html>
<head>
    <title>Student Details</title>
</head>
<body>
    <h1>Enter a student name:</h1>
    <form action="/details" method="post">
        <input type="text" name="name">
        <input type="submit" value="Get Details">
    </form>
</body>
</html>
```

details.html > html > body > table > tr

```
<!DOCTYPE html>
<html>
<head>
    <title>Student Details</title>
</head>
<body>
    {% if student %}
    <h1>Student Details for {{ student[0] }}</h1>
    <table>
        <tr>
            <th>Name</th>
            <th>Age</th>
            <th>Grade Level</th>
        </tr>
        <tr>
            <td>{{ student[0] }}</td>
            <td>{{ student[1] }}</td>
            <td>{{ student[2] }}</td>
        </tr>
    </table>
    {% else %}
    <h1>No student found with that name</h1>
    {% endif %}
</body>
</html>
```

dockerfile > ...

```dockerfile
# Use an official Python runtime as a parent image
FROM python:3.11

# Set the working directory to /app
WORKDIR /app

# Copy the current directory contents into the container at /app
COPY . /app

# Install any needed packages specified in requirements.txt
RUN pip install --no-cache-dir -r requirements.txt

# Expose the port Flask app is running on
EXPOSE 5000

# Define environment variables for MySQL connection
ENV MYSQL_DATABASE=mydatabase
ENV MYSQL_HOST=some_name1
ENV MYSQL_USER=root
ENV MYSQL_PASSWORD=root

# Run the command to start the app
CMD ["python", "fe.py"]

```

requirements.txt

```
1  Flask
2  mysql-connector-python
3
```

Enter a student name:

Tom Get Details

Student Details for Tom

Name Age

Tom 25 3