BMI Calculator Microservice Project

Project Links
- GitHub Repository: https://github.com/pravatn01/_12factor_bmi_microservice

- Demo Video: https://www.youtube.com/watch?v=TaVXJhU9zj8

What This Project Does
The BMI Calculator Microservice is a modern web application that:
- Calculates BMI (Body Mass Index) in real-time
- Stores calculation history in MySQL database
- Provides a beautiful Streamlit frontend
- Implements a RESTful API using FastAPI
- Follows 12-Factor methodology for cloud-native applications

Detailed Documentation
For comprehensive documentation about this project, please refer to the main README.md in the GitHub repository:
https://github.com/pravatn01/_12factor_bmi_microservice/blob/main/README.md

It includes:
- Detailed project architecture
- Complete setup instructions
- 12-Factor methodology implementation details
- API endpoints documentation
- Database schema
- Testing procedures
- Security considerations
- Screenshots and usage examples

The documentation covers everything you need to know about:
- Setting up the development environment
- Running the application locally
- Database configuration
- Available API endpoints
- Frontend features
- Testing procedures
- And much more!

Test Results

Below is the evidence of test suite passing test cases for the backend API:

```
PS C:\Users\prbt3\OneDrive\Desktop\_12factor_bmi_microservice> pytest tests/test_bmi_api.py -v
================================================ test session starts ================================================
platform win32 -- Python 3.12.7, pytest-7.4.3, pluggy-1.0.0 -- C:\Users\prbt3\anaconda3\python.exe
cachedir: .pytest_cache
rootdir: C:\Users\prbt3\OneDrive\Desktop\_12factor_bmi_microservice
plugins: anyio-3.7.1
collected 1 item

tests/test_bmi_api.py::test_calculate_bmi_normal_weight PASSED                                                  [100%]

================================================ 1 passed in 1.20s ================================================
PS C:\Users\prbt3\OneDrive\Desktop\_12factor_bmi_microservice>
```

The test suite covers:
- API endpoint functionality
- Data validation
- Database operations
- Error handling

The test is implemented using pytest.