

# Project Title: Flask & MongoDB Atlas Integration (Beginner Level)

## Overview

- Brief about what the project does
- Technologies used: Flask, MongoDB Atlas, PyMongo, HTML

## Project Structure

```
project/
├── app.py
├── data.json
├── requirements.txt
├── templates/
│   ├── form.html
│   └── success.html
```

## Step-by-Step Setup

### 1. Install Dependencies

```
pip install flask pymongo
```

### 2. MongoDB Atlas Setup

- Created free cluster at [mongodb.com](https://mongodb.com)
- Added DB user and whitelisted my IP
- Connection string used:

```
mongodb+srv://<user>:<pass>@cluster0.mongodb.net/flaskdb?retryWrites=true&w=majority
```




## app.py Code Explained

- `/api` : Returns data from `data.json`
- `/` : Loads form
- `/submit` : Submits data to MongoDB Atlas
- `/success` : Redirects on success

## HTML Templates

- **form.html**: User form with error handling
- **success.html**: Displays "Data submitted successfully"

## Testing

-  API route tested at `/api`
-  Form tested with valid and invalid inputs
-  Verified data in MongoDB Atlas collection

## GitHub Push Guide

### Git Commands:

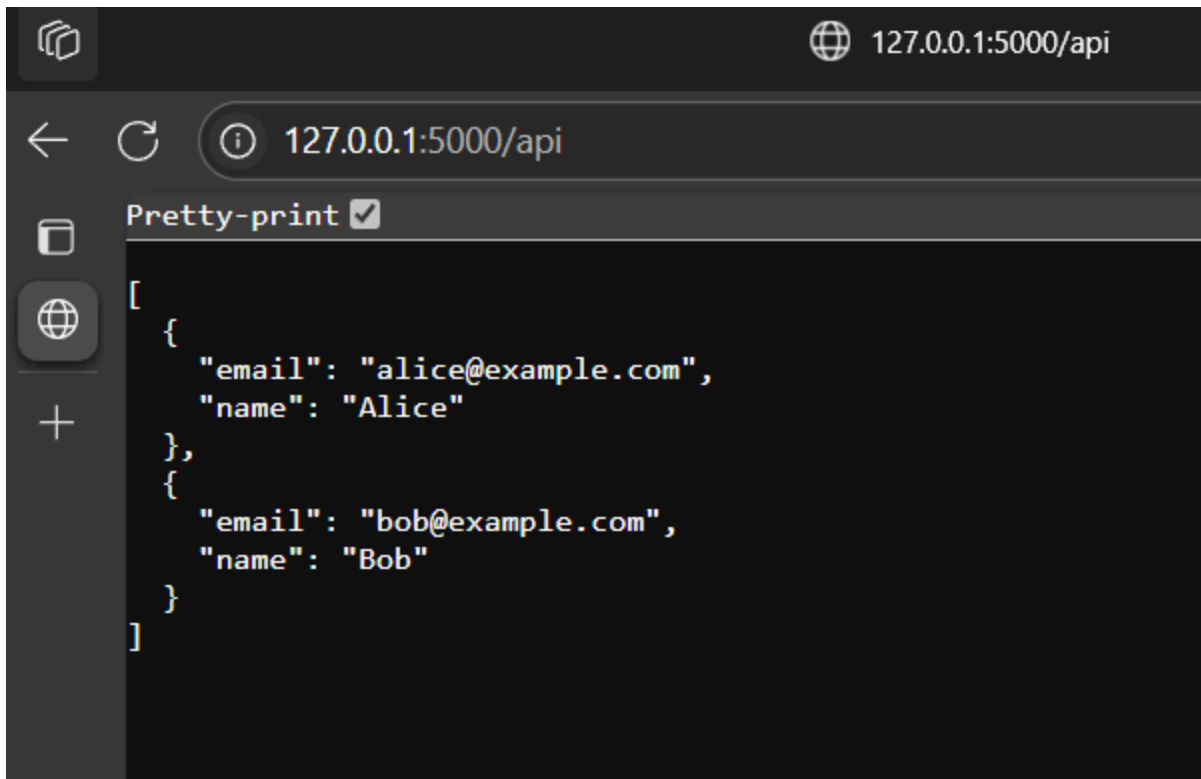
```
git init
git remote add origin https://github.com/MukherjeePushpendu/flask-mongodb-project.git
git add .
git commit -m "Initial commit"
git pull origin main --allow-unrelated-histories
git push origin main
```

## Notes:

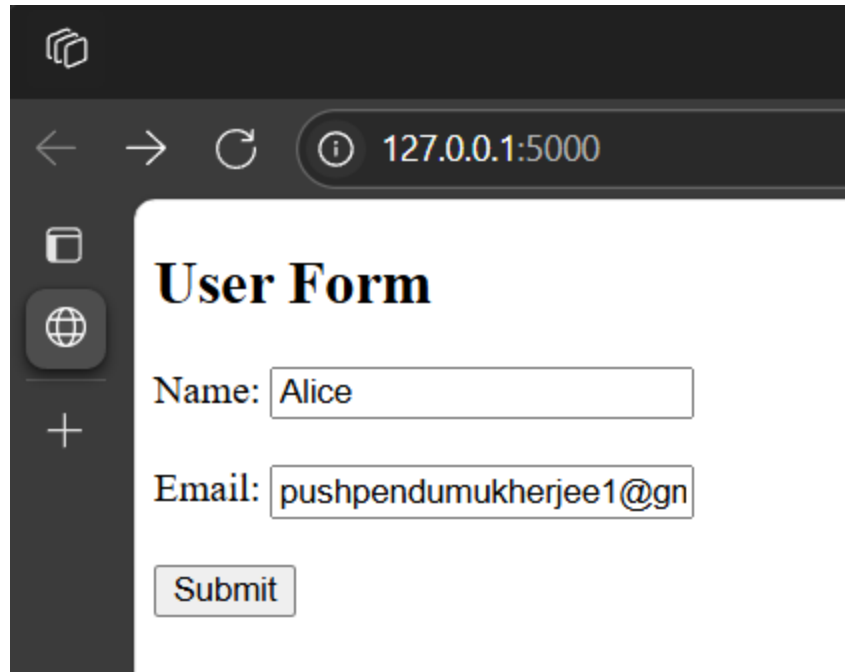
- Used `-allow-unrelated-histories` to resolve mismatch
  - Used `.gitignore` to exclude cache and `.env`
- 

## Screenshots

- API output



- Form page



A screenshot of a web browser window. The address bar shows the URL `127.0.0.1:5000`. The page title is "User Form". The form contains two input fields: "Name" with the value "Alice" and "Email" with the value "pushpendumukherjee1@gn". Below the fields is a "Submit" button.

- Success page

