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# PyBlog

MARCH 18TH, 2022

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# Why Python & Flask?



- Python:
  - Listed in most job postings
  - Most popular language
  - General purpose
- Flask:
  - Light weight, easier to learn

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# Solution Overview

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CkEditor post

jim@jim.com March 14 2022 02:25:39  
Lorem ipsum dolor...

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CkEditor post

jjm@jjm.com March 14 2022 02:25:39

**Lorem ipsum dolor sit amet.** At voluptas odio et unde  
pariatur et **recusandae consequuntur a dolor** odio qui  
delectus eaque ut nihil consectetur hic saepe totam. Et  
eius debitis aut voluptatibus totam aut facilis dolor in  
exercitationem doloribus

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kim@kim.com March 17 2022 00:48:31  
so cool!

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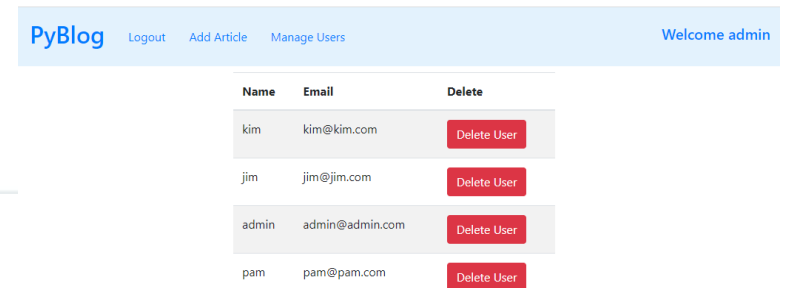
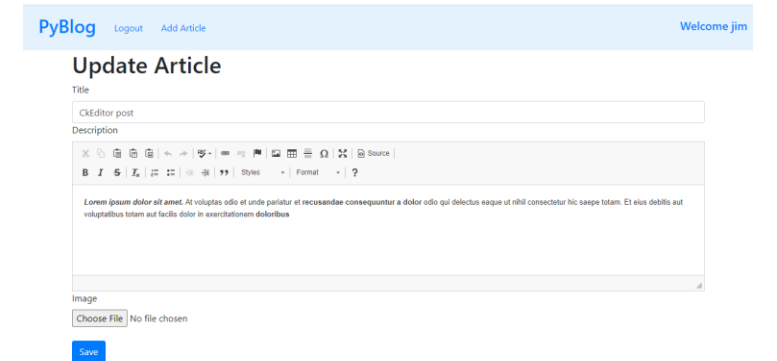
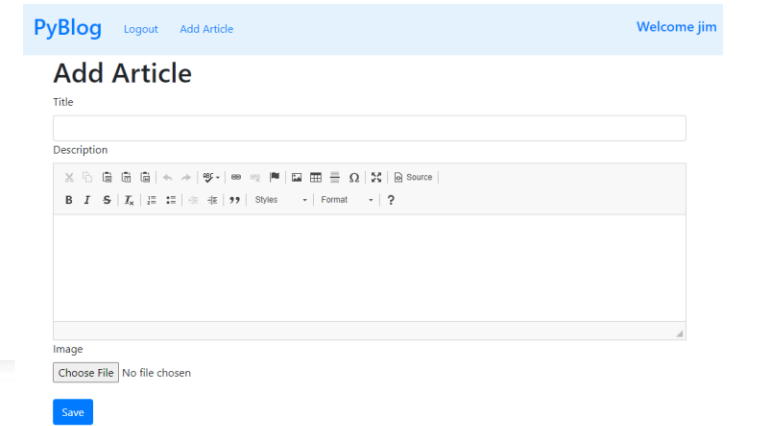
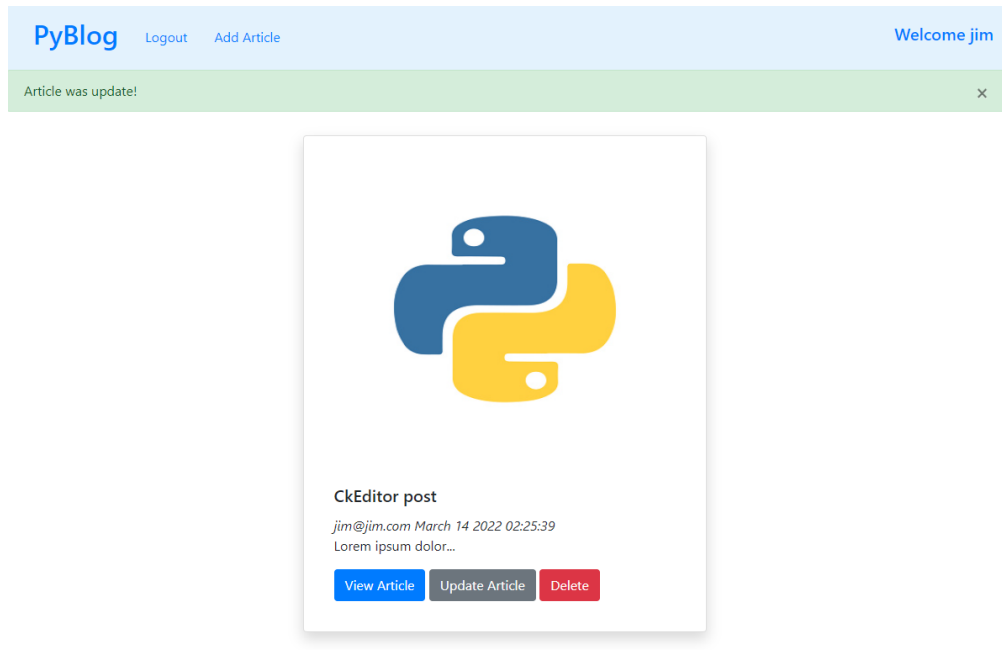
Enter password

Password (Confirm)

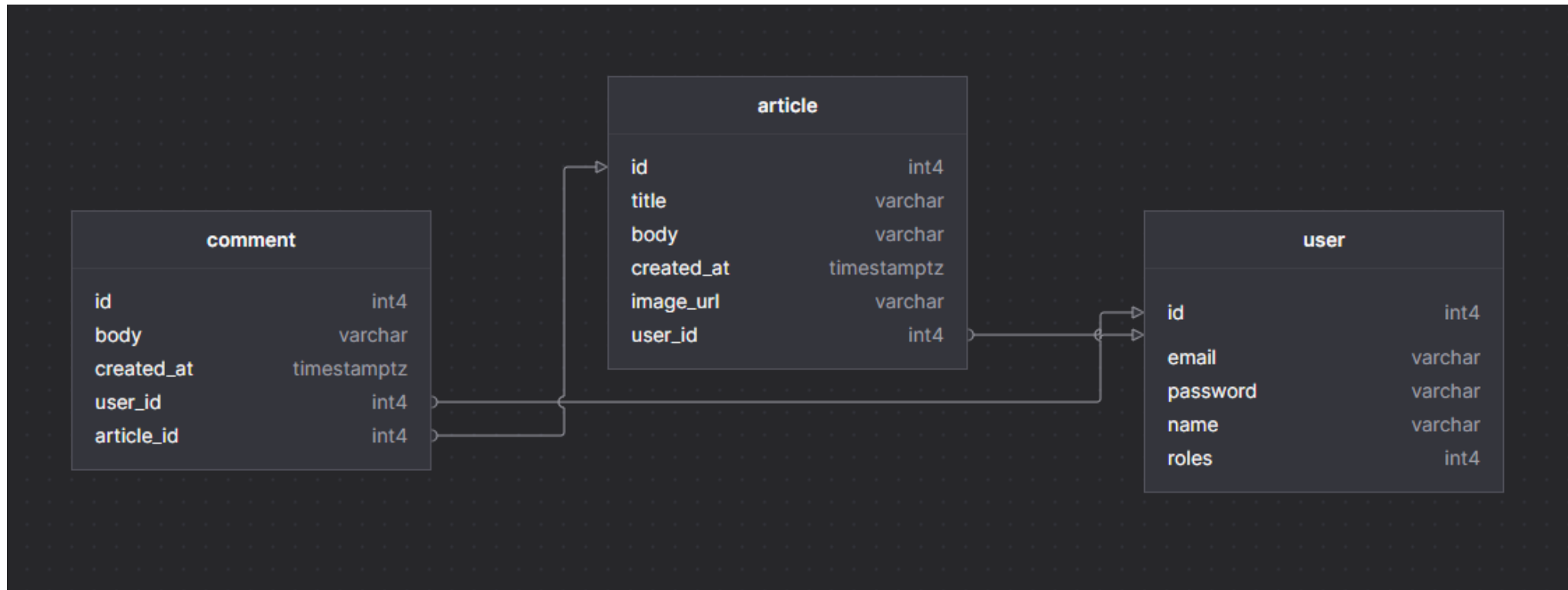
Confirm password

Submit

# Solution Overview



# Database



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# Challenges & Solutions

- Python syntax
  - No brackets
  - No semicolons
  - No datatypes
  - Snake case
  - Indentation matters

Wrong

```
def view_users():  
users = User.query.all()  
return render_template("manage_users.html", user=current_user, users=users)
```

Correct

```
def view_users():  
    users = User.query.all()  
    return render_template("manage_users.html", user=current_user, users=users)
```

# Challenges & Solutions

- Jinja2



```
{% extends "base.html" %}
{% block title %}Members{% endblock %}
{% block content %}
  <ul>
    {% for user in users %}
      <li><a href="{{ user.url }}">{{ user.username }}</a></li>
    {% endfor %}
  </ul>
{% endblock %}
```

## List of Builtin Filters

<a href="#">abs()</a>	<a href="#">float()</a>	<a href="#">lower()</a>	<a href="#">round()</a>	<a href="#">tojson()</a>
<a href="#">attr()</a>	<a href="#">forceescape()</a>	<a href="#">map()</a>	<a href="#">safe()</a>	<a href="#">trim()</a>
<a href="#">batch()</a>	<a href="#">format()</a>	<a href="#">max()</a>	<a href="#">select()</a>	<a href="#">truncate()</a>
<a href="#">capitalize()</a>	<a href="#">groupby()</a>	<a href="#">min()</a>	<a href="#">selectattr()</a>	<a href="#">unique()</a>
<a href="#">center()</a>	<a href="#">indent()</a>	<a href="#">pprint()</a>	<a href="#">slice()</a>	<a href="#">upper()</a>
<a href="#">default()</a>	<a href="#">int()</a>	<a href="#">random()</a>	<a href="#">sort()</a>	<a href="#">urlencode()</a>
<a href="#">dictsort()</a>	<a href="#">join()</a>	<a href="#">reject()</a>	<a href="#">string()</a>	<a href="#">urllize()</a>
<a href="#">escape()</a>	<a href="#">last()</a>	<a href="#">rejectattr()</a>	<a href="#">striptags()</a>	<a href="#">wordcount()</a>
<a href="#">filesizeformat()</a>	<a href="#">length()</a>	<a href="#">replace()</a>	<a href="#">sum()</a>	<a href="#">wordwrap()</a>
<a href="#">first()</a>	<a href="#">list()</a>	<a href="#">reverse()</a>	<a href="#">title()</a>	<a href="#">xmlattr()</a>

```
<p class="card-text">{{ article.body|striptags|truncate(20)}}</p>
```

```
<p class="card-text">{{ article.body|safe }}</p>
```

# Challenges & Solutions

- Form Validation/WTForms

```
#Create a form class
class ArticleForm(FlaskForm):
    title = StringField("Title", validators=[DataRequired(), Length(min=4, max=100)])
    body = CKEditorField("Description", validators=[DataRequired(), Length(min=4, max=5000)])
    file = FileField("Image", validators=[FileAllowed(['jpg', 'png'], 'Images only!')])
    submit = SubmitField("Save")
```

```
@views.route('/add-article', methods=['GET', 'POST'])
@login_required
def add_article():
    title = None
    body = None
    file = None
    form = ArticleForm()

    if form.validate_on_submit():
        title = form.title.data
        body = form.body.data
        file = request.files['file']
```

```
    return render_template("add_article.html", user=current_user, form=form)
```



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```
<form method="POST" action="" enctype="multipart/form-data">
  {{ form.hidden_tag() }}
  {{ form.title.label(class="form-label") }}
  {{ form.title(class="form-control") }}
  {{ form.body.label(class="form-label") }}
  {{ form.body(class="form-control") }}
  {{ form.file.label(class="form-label") }}
  {{ form.file(class="form-control-file") }}
<br/>
<div>
  {{ form.submit(class="btn btn-primary") }}
</div>
</form>
```

[illegible]

# Challenges & Solutions

- Deployment

Install gunicorn (WSGI server)

Install postgresql (psycopg2)

sqlalchemy.exc.NoSuchModuleError: Can't load plugin:  
sqlalchemy.dialects:postgresql

DATABASE\_URL

postgres://z

postgresql://z

# Challenges & Solutions

- Deployment

Install gunicorn (WSGI server)

Install postgresql (psycopg2)



**gunicorn**



`sqlalchemy.exc.NoSuchModuleError: Can't load plugin:  
sqlalchemy.dialects:postgres`

DATABASE\_URL

postgres://:

DATABASE\_URL

postgresql://:





# Future Work

- Completing admin CRUD
- Infinite scrolling
- Better front-end styling



# Summary

- Learned the basics of Python Flask
- Relatively easy to learn
- Useful skill