Project - Using Python & Streamlit to Build A Simple Website

Setup Venv to Create Project

-> *python -m venv venv*
-> *venv\Scripts\activate.bat*
-> Git Bash: *source venv/Scripts/activate*

Create A New GitHub Repository

My_Portfolio_Website_Streamlit

- Create Project

- pip install streamlit
- pip install Pillow
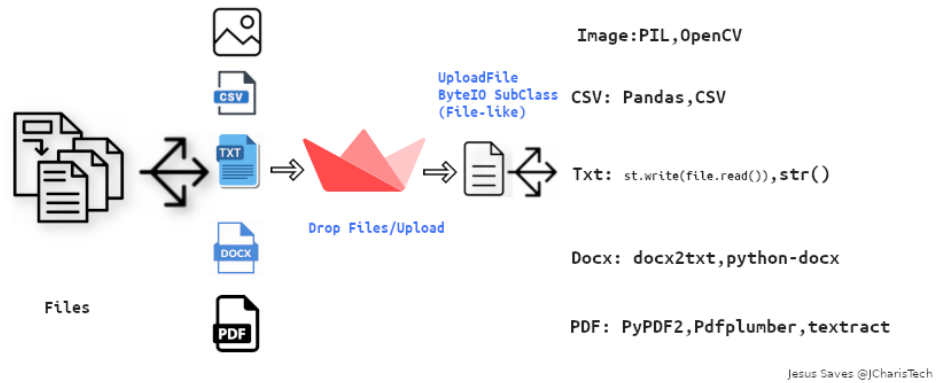
- Create `app.py`

-> import streamlit as st

- Integrate Lottie Animations and Load Image Files

- from pathlib import Path
- from PIL import Image
- import requests
- import streamlit as st

Emoji Website
Lottie Files

- Setup Contact Form

FormSubmit

- Change Theme - Load CSS file

Creating Custom Themes for Streamlit Apps
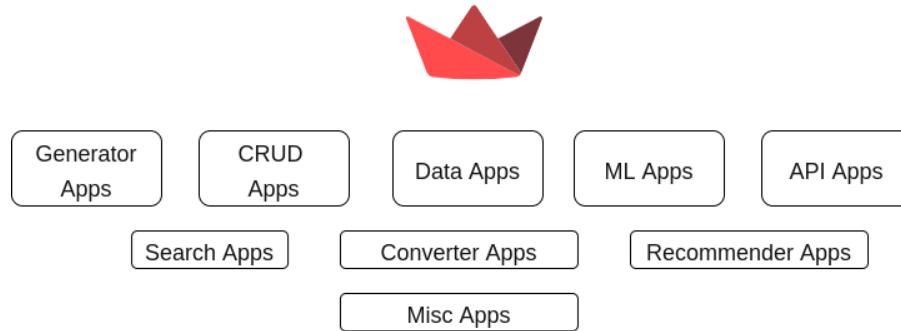
-> Create `./.streamlit` folder

-> Create `/config.toml`

- Deploy to Streamlit App

- Conneting Streamlit app with GitHub

Streamlit Cloud

- Python & Streamlit Codes

```python
from pathlib import Path
from PIL import Image
import requests
import streamlit as st
from streamlit_lottie import st_lottie


# --- Website Title ---
st.set_page_config(
        page_title="Portfolio",
        page_icon=":sunny:",
        layout="wide",
)


# --- Path Settings ---
current_dir = Path(__file__).parent if "__file__" in locals() else
Path.cwd()
css_file = current_dir / "static" / "style.css"
autobiography_file = current_dir / "static" /
"Autobiography_Resume_JainWha.pdf"
```

```python
        profile_pic = current_dir / "static" / "family_bythesea.jpg"
        map_pic = current_dir / "static" / "Self-Learning_Map.jpg"

        # --- General Settings ---
        NAME = "JainWha Huang"
        DESCRIPTION = """
            I am Passionate about Learning and Sharing.
        """
        EMAIL = "ericarthuang2021@gmail.com"
        SOCAIL_MEDIA = {
            "GitHub": "https://github.com/ericarthuang",
            "FB": "https://www.facebook.com/ericarthuang",
        }


        # --- Load CSS, PDF, Profile Picture, Animation Assets ---
        with open(css_file) as f:
            st.markdown(
                f"<style>{f.read()}</style>",
                unsafe_allow_html=True,
            )

        with open(autobiography_file, "rb") as pdf_file:
            PDFbyte = pdf_file.read()
        profile_pic = Image.open(profile_pic)

        img_learning_map = Image.open(map_pic)

        def load_lottieurl(url):
            r = requests.get(url)
            if r.status_code != 200:
                return None
            return r.json()
        lottie_animation =
        load_lottieurl("https://assets2.lottiefiles.com/private_files/lf30_rnpgzd


        # --- Header Section ---
        st.header("Copy Learning in Computer Science")

        with st.container():
            right_column, middle_column, left_column = st.columns((2, 3,
        3))
            with right_column:
                st_lottie(
                    lottie_animation,
                    height=240,
                    key="learning",
                )
            with middle_column:
                st.image(profile_pic, width=380)
            with left_column:
                st.subheader(f"Hi, I am {NAME} :penguin:")
                st.write("I am Passionate about Learning and Sharing.")
                # --- Social Link ---
                for index, (platform, link) in
        enumerate(SOCAIL_MEDIA.items()):
```

```python
            st.write(f"[{platform}]({link})")
        st.download_button(
            label="Autobiography and Resume",
            data=PDFbyte,
            file_name=autobiography_file.name,
            mime="application/octet-stream",
        )
        st.write(":e-mail:", EMAIL)


# --- Main Section ---
with st.container():
    st.write("---")
    st.header("What I Learn")
    st.markdown("[:earth_asia:Welcome to My Copy Learning Website
to Find the Memos and Projects]
(https://ericarthuang.github.io/My_Copy_Learning/)")

    left_column, right_column = st.columns((2, 3))
    with left_column:
        st.image(img_learning_map, width=420)
    with right_column:
        st.write("""
            - C, C++, Python, Data Structure and Algorithm
            - Machine Learning: Scilit-Learn, TensorFlow, Pytorch,
and Computer Vision
            - Data Analysis: Numpy, Pandas, Web Scraping, and
Power BI
            - Data Visulization: Matplotlib, Seaborn, and Plotly
            - Web Application: Django, Flask, FastAPI, HTML, CSS,
JavaScript, React, Node, and Express
            - Database and Cloud: MySQL, Postgres, and AWS
            - CI/CD: Github Version Control, GitHub Actions, and
Docker Deployment
            - Gaming: Pygame
            - COA, Networking, CyberSecurity, and Opeation System
            """
        )


# --- CONTACT ---
with st.container():
    st.write("---")
    st.header("Get in Touch")
    contact_form = """
    <form
action="https://formsubmit.co/ericarthuang2021@gmail.com"
method="POST">
        <input type="text" name="name" placeholder="Your name"
required>
        <input type="email" name="email" placeholder="Your email"
required>
        <textarea name="message" placeholder="Your Massages...">
</textarea>
        <button type="submit">Send</button>
    </form>
    """
```
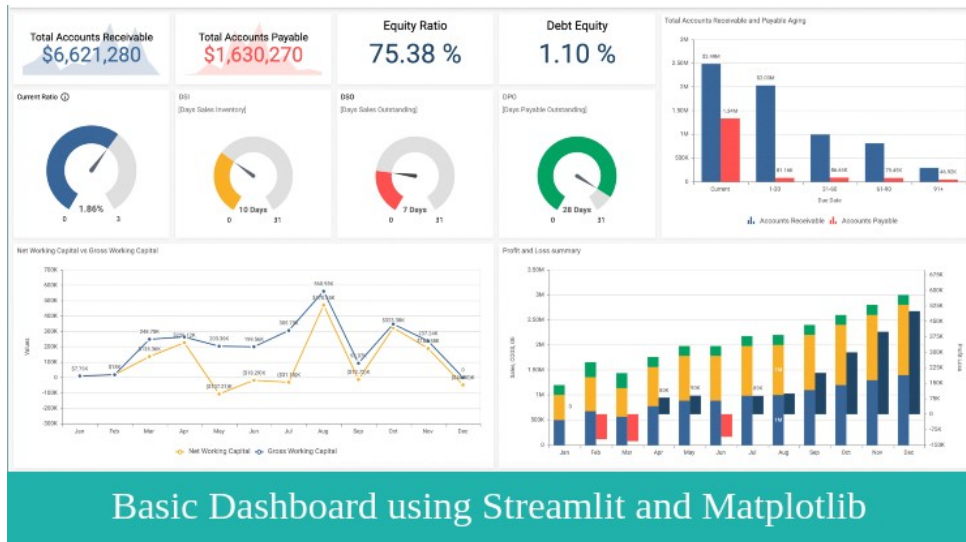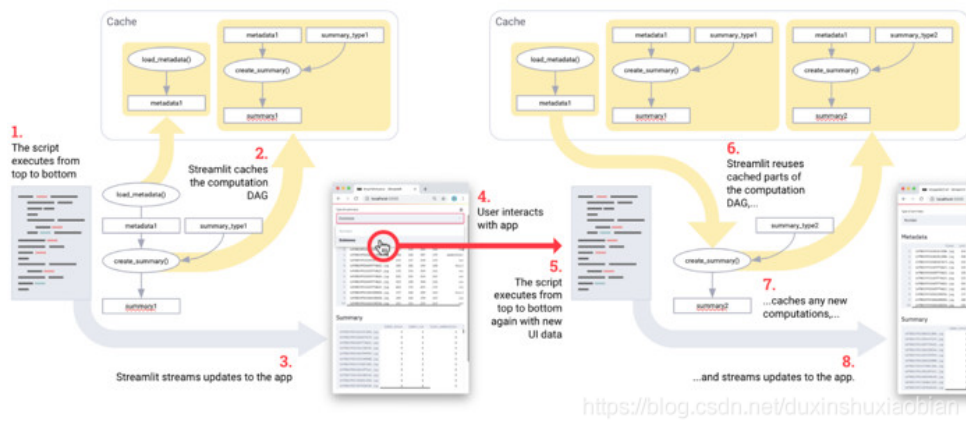
```
left_column, right_column = st.columns(2)
with left_column:
    st.markdown(contact_form, unsafe_allow_html=True)
with right_column:
    st.empty()
```

Future Plans

- Integrate Streamlit with Data Analysis

Basic Dashboard using Streamlit and Matplotlib

-- Project End --