# Annuity Calculator Web Application

## Overview:

This project involves building a user-friendly annuity calculator using Flask and HTML. The goal is to help users determine the future value of their investments or savings based on parameters such as initial capital, interest rate, periodic payment, and time period.

## Backend Logic:

The core computation is based on the standard future value of an ordinary annuity formula, which accounts for compound interest and recurring payments. The logic is implemented in Python using Flask. The function takes user input, calculates the result, and dynamically renders it back on the web interface.

## Frontend Interface:

The HTML frontend is styled for clarity and ease of use. It uses form elements to capture the necessary inputs and displays the result once the form is submitted.

## Deployment:

The app was deployed on Render, enabling public access to the calculator. This demonstrates how Flask apps can be served using a lightweight deployment infrastructure.

## Outputs & Usage:

The user receives an instant calculation of their annuity’s future value. For example, with a starting capital of $5,000, a 5% annual interest rate, a $1,000 yearly contribution, and a 10-year horizon, the calculator shows the accumulated value of the annuity.

## Conclusion:

This project combines backend logic with web design and deployment, serving as a practical demonstration of full-stack Python development with real-world financial utility.