**Python Flask Tutorials**: Full Feature App

1. **Getting Started**

In this Python Flask Tutorial, I learn how to get started using the Flask framework. I install the necessary packages and get a basic Hello World Application running in our browser.

1. **Templates**

In this Python Flask Tutorial, I learn how to use templates. Templates allow us to reuse sections of code over multiple routes and are great for serving up dynamic HTML pages.

1. **Forms and Validation**

In this Python Flask Tutorial, I learn how to create forms and accept user input and I also learn how to validate that user input and notify the user if the input was invalid.

1. **Database**

In this Python Flask Tutorial, I learn how to create a database using Flask-SQLAlchemy. SQLAlchemy is a great tool for working with databases because it allows us to interact with the database in an Object-Oriented manner, which is very intuitive once I get used to it. I use an SQLite database to get us to start and then move on to a Postgres database when I deploy the application.

1. **Package Structure**

In this Python Flask Tutorial, I learn how to restructure our application into a package rather than running from a single module. to has major benefits in terms of importing modules across our application.

1. **User Authentication**

In this Python Flask Tutorial, I learn how to add users to our database. I then create an authentication system so that users can log in and log out of our application. I using the flask-bcrypt and flask-login extensions to help us with this.

1. **User Account Profile Pic**

In this Python Flask Tutorial, I finishing our user account page so that a user

can update their information. I also am adding the ability for a user to upload a

profile picture. I learn how we can resize this image so that it doesn't take up

much room on our server.

1. **Create a Post**

In this Python Flask Tutorial, I learn how to add the ability for users to

create, update, and delete posts. I also learn how we can prevent users from

updating posts that don't belong to them.

1. **Pagination**

In this Python Flask Tutorial, I learn how to use pagination within our

application. Pagination allows us to only load a select number of items at a time so

that our application doesn't get bogged down. I also learn how to display links

to different pages at the bottom of our page so users can quickly navigate to the

page of their choice.

1. **. Password Reset Email**

In this Python Flask Tutorial, I learn how to send emails to reset a user's password. Users will be able to fill out a form with their email and have a unique token sent to them, and if their token is verified then they will be able to create a new password. I wi used the flask-mail and its dangerous packages to help us with this.

1. **. Blueprints and Configuration**

In this Python Flask Tutorial, I learn how to restructure our application to use blueprints. Blueprints allow us to split up our application into more manageable sections. I also move our configuration into its own file and create a configuration class. Lastly, I move the creation of our application into its own function. This is called an Application Factory, and it allows us to easily create multiple instances of our app with different configurations.

1. **. Custom Error Pages**

In this Python Flask Tutorial, I learn how to create custom error pages.

I created new error blueprints from scratch it is easy

to add different sections to our application by using blueprints.