

## Importing Flask

```
from flask import Flask
```

## Most used import functions

These are some of the most used import functions

```
from flask import Flask, render_template, redirect, url_for, request
```

## Boilerplate

This is the basic template or barebone structure of Flask.

```
from flask import Flask

app = Flask(__name__)

@app.route("/")
def hello_world():
    return "<p>Hello, World!</p>"

app.run()
```

## route(endpoint)

This is to make different endpoints in our flask app.

```
@app.route("/")
```

## Route method

Allowing get and post requests on an endpoint.

```
methods = ['GET', 'POST']
```

## Re-run while coding

This is used to automatically rerun the program when the file is saved.

```
app.run(debug=True)
```

## Change host

This is used to change the host.

```
app.run(host='0.0.0.0')
```

## Change port

This is used to change the port.

```
app.run(port=80)
```

## SQLAlchemy

```
from flask_sqlalchemy import SQLAlchemy
```

## Database URI

This is the database's address.

```
app.config['SQLALCHEMY_DATABASE_URI'] = 'mysql://username:password@localhost  
or  
app.config['SQLALCHEMY_DATABASE_URI'] = 'sqlite:///test.db'
```

## Initialization

This is used to initialize SQLAlchemy.

```
db = SQLAlchemy(app)
```

## Creating Model

Class to get data from database and to send data to the database.

```
class TableName(db.Model):  
    column_1 = db.Column(db.Integer, primary_key=True)
```

```
column_2 = db.Column(db.String(80), nullable=False)
column_3 = db.Column(db.String(12), nullable=False)
```

## Get all data(.all())

This is used to get all the data from the database.

```
data = ClassName.query.filter_by().all()
```

## Filtered data(.first())

This is used to get the first dataset from the list returned by the filter\_by function. You can get targetted data by this.

```
data = ClassName.query.filter_by().first()
```

## Send/add data to database

This is used to send/add data to the database.

```
data_to_send = ClassName(column_1=dataset1, column_2=dataset2, column_3=data)
db.session.add(data_to_send)
db.session.commit()
```

## Delete data from the database

This is used to delete data from the database.

```
data_to_send = ClassName(column_1=dataset1, column_2=dataset2, column_3=data)
db.session.delete(data_to_send)
db.session.commit()
```

## Request method

This is used to know what request is made(get/post).

```
request.method
```

## Render Template

This is used to pass whole html file directly.

```
render_template("file.html")
```

## FSADeprecationWarning

```
app.config['SQLALCHEMY_TRACK_MODIFICATIONS'] = True|False
```

## Creating Database file

This is used to create a database file

```
from yourapplicationname import db
db.create_all()
exit()
```

## Method to return database items

This is used to return database items.

```
def __repr__(self) -> str:
    return f"{self.item}"
```

## Printing returned content from the method

This is used to print returned database items.

```
data = ClassNameWithMethod.query.all()
print(data)
```

## Flask Documentation

<https://flask.palletsprojects.com/en/latest/>

## Flask SQLAlchemy Documentation

<https://flask-sqlalchemy.palletsprojects.com/en/2.x/>