# Cheatsheet: Web App Deployment using Flask

**Skills Network**

**Estimated time needed:** 5 minutes

| Package/Method | Description | Code Example |
|---|---|---|
| @app decorator | An app decorator is a Python tool that allows programmers to modify the behavior or function of a class. App decorators take paths as an argument. | ```from flask import Flask``` |
| @app.route decorator | A decorator in Flask used to map URLs to specific functions in a Flask application. | ```app = Flask(__name__)```<br>```@app.route('/')```<br>```def hello_world():```<br>`    return "<b>My first Flask application in action!</b>"`<br>```@app.route('/')``` |
| 200 OK status | Flask servers automatically return a 200 OK status when you return from the @app.route method. 200 is also returned by default when you use the jsonify() method to respond to a request. A successful response with a status code of 200 will be sent back when the given code executes. | ```def hello_world():```<br>`    return ("<b>My first Flask application in action!", 200)`<br>```@app.route('/')```<br>```def search_response():```<br>`    query = request.args.get("q")`<br>`    if not query:`<br>`        return {"error_message": "Input parameter missing"}, 422`<br>`    # fetch the resource from the database`<br>`    resource = fetch_from_database(query)`<br>`    if resource:`<br>`        return {"message": resource}` |
| Error 404 | 400 indicates an invalid request. This status could imply the parameters are missing or improper or the request is invalid in another way.<br><br>401 indicates the credentials are missing or invalid.<br><br>403 implies that the client credentials are not sufficient to fulfill the request. If the server is unable to find the resource, it returns a 404 status.<br><br>405 indicates that the requested operation is not supported. | `    else:`<br>`        return {"error_message": "Resource not found"}, 404`<br>```@ app.errorhandler(500)``` |
| Error 500 | 500 is used when there is an error on the server. | ```def server_error(error):```<br>`    return {"message": "Something went wrong on the server"}, 500` |

## Author(s)

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## Changelog

| Date | Version | Changed by | Change Description |
|---|---|---|---|
| 2023-07-10 | 0.1 | Andrew Pfeiffer | Initial version created |