**Simple Web Application**

This is a simple web application using [Python Flask](http://flask.pocoo.org/) and [MySQL](https://www.mysql.com/) database. This is used in the demonstration of development of Ansible Playbooks.

Below are the steps required to get this working on a base linux system.

* Install all required dependencies
* Install and Configure Database
* Start Database Service
* Install and Configure Web Server
* Start Web Server

**1. Install all required dependencies**

Python and its dependencies

apt-get install -y python python-setuptools python-dev build-essential python-pip python-mysqldb

**2. Install and Configure Database**

Install MySQL database

apt-get install -y mysql-server mysql-client

**3. Start Database Service**

* Start the database service
* service mysql start
* Create database and database users
* # mysql -u <username> -p
* mysql> CREATE DATABASE employee\_db;
* mysql> GRANT ALL ON \*.\* to db\_user@'%' IDENTIFIED BY 'Passw0rd';
* mysql> USE employee\_db;
* mysql> CREATE TABLE employees (name VARCHAR(20));
* Insert some test data
* mysql> INSERT INTO employees VALUES ('JOHN');

**4. Install and Configure Web Server**

Install Python Flask dependency

pip install flask

pip install flask-mysql

* Copy app.py or download it from source repository
* Configure database credentials and parameters

**5. Start Web Server**

Start web server

FLASK\_APP=app.py flask run --host=0.0.0.0

**6. Test**

Open a browser and go to URL

http://<IP>:5000 => Welcome

http://<IP>:5000/how%20are%20you => I am good, how about you?

http://<IP>:5000/read%20from%20database => JOHN