Flask-SQLAlchemy

Exercise 4

In comparing stateful and stateless applications, stateful applications need not to constantly query the database since a global state variable would store a session variable for each session as opposed to the stateless architecture which requires a token to be used along with every transaction. This token has to always query the database to keep the user in the desired screen. Naturally the backend will be slower with a stateless architecture.

The RESTful service provides interoperability between computer systems and it supports several formats such as HTML, JSON, raw text etc. It consumes less bandwidth and resources and is easier and more flexible to use. Of course, it is also less secure because it uses security measures from underlying transport protocols. RESTless simply represents any web service that doesn't adhere to the RESTful protocols (e.g. SOAP).

The flask-sqlalchemy and flask-migrate modules were installed and the web service was updated with a new database schema which was migrated to a SQLite database. MYSQL was also experimented with (see project submission) where the only difference is to change the Database_URI to 'mysql://username:password@localhost/db_name' and migrate the database again.

The web service was also refactored as seen in the code submitted alongside this report.