PSG COLLEGE OF TECHNOLOGY, COIMBATORE - 641004

Department of Applied Mathematics and Computational Sciences

MSc SS/TCS - Semester 6

IoT Lab - Assignment 3

1. Create a python Flask web application. Your application must allow a user to log in using their Google identity instead of creating a new account. Explore the specifications, OAuth2, OpenID Connect(OIDC) that is used for authentication. Create necessary web application end points. Provide a ‘Logout’ functionality.

Reference: <https://realpython.com/flask-google-login/>

1. Create a RESTful python web application using Flask-RESTful library. Make the code available in GitHub and host the application in Heroku. Use Uwsgi (production server) for deploying the application. Demonstrate usage of HTTP methods.
2. GitHub is a code hosting platform used widely by many websites. It has REST API (many are free). Using their API, you can perform any of the following:
3. **Web of Trust** – Website reputation validation
4. **Better doctor** - Detailed information about doctors in your area etc
5. **Details about a github user** - For example, if we want all the details on a certain user, you’d set up your application to ping the GitHub API with the HTTP GET method to retrieve a certain user: GET /users/:username

(d) **Weather tracking** - Build an app that suggests what users should wear to go running, by accessing temperate data, precipitation conditions, sunrise and sunset times, and more in order for your app to make the predictions.

Build a REST based web service client that executes on a Mobile phone, that consumes the above mentioned web service.

[Ref Link: <https://github.com/toddmotto/public-apis>]