PROJECT DESIGN PHASE - I

SOLUTION ARCHITECTURE

INTRODUCTION

Every solution architecture design contains 6 to 7 phases these standards should be followed by all development team to ensure the standard of the software, so the software is scalable, versatile and reusable .

REQUIREMENTS

This project is done using the Flask framework for backend development, and other required packages like flasklogin, flask-sqlalchemy, werkzeug,pandas,security packages etc..

For frontend development CSS, HTML is used along with CSS framework like bootstrap. For API testing postman application is used, and for deployment IBM cloud service is used.

DESIGN

All the requirements are used to design the software. The design and architecture of the software is done in a unique manner so the software can be reused and developed in future. The templates folders contains index,login,profile and signup files. The database model is created in sql_tools.py file, the authentication are done using auth.py file. Finally HTML files are stored in templates folder

IMPLEMENTATION

The designing process is done and implementation is done by developing the logic by coding. All the required packages are imported and for each router specific logic is developed according to the use.

UNIT TESTING

Each part of the software is developed

by individual team members, and it is tested individually by the python unit testing package.

INTEGRATION AND TESTING

After unit testing all parts of the software are integrated and tested finally, so the flask application can be runned in any platform. The testing process includes Alpha testing and Beta testing.

DEPLOYMENT

The flask application is finally deployed in IAAS platform like IBM cloud service, so it can be runned in HTTPS protocol along with SSL. In the deployment process a real time database is connected along with real time file storage.

MAINTENANCE

After successful deployment, if there is a package update, it is implemented in the software