Class Quiz

05/04/2021

Q1: Artifacts:

1. AppConfig.json file: This config file is used to define the algorithms and their respective sensors needed by them.
2. Plaform_libfile.py: This is the library which needs to be imported in the src folder along with the codes so that it can be used. The libfile will be inserted in the src folder by the platform

Q2: There is no base class that is needed to be built but the developer has to import the platform_libfile and use its methods for fetching the kafka topics.

Q3. AppConfig.json and algorithm codes, DeployConfig.json files. SensorTypeRegistration.json, SensorInstanceRegistration.json.

Q4. The app would be in a folder where there would be two things :

AppConfig.json file

Src folder which contains all the application codes.

The platform_libfile would be added in the src folder.

Q5. First the application folder is uploaded in the compressed form I.e app.zip file.

Then the platform manager will validate the file and then savev it to the app repository.

The configurator will then write the deployConfig.json file and upload it to the platform manager which will again validate and save it in the repo.

The scheduler which is waiting for the deploy config file will read it and acording to the scheduling details will call the deployer. The deployer will pass the app files to the service life cycle which will run the application on a server.

Q6. After the deployment the data rate and the kafka topics mapping is configured so that we can give the data to the app according to its needs.

Q7. The sensor-binder service which will run before the scheduler will also fetch the deploy config file and according the query written in the file will map the sensor instances returned to the instace id of the application running. The instance id of the application is created after the deploy config file is uploaded.

Thus we have in Database the mapping of the application instance ids and the sensor instances.

When the application needs any sensor input the binding database is searched for the appropriate sensor according to the application running.

The instances of the application needed to be run is provided in the deployConfig file.

Q8. The different modes of the application can be:

1. Daemon mode in which the application is like a background service with low interaction from the user.
2. Interactive mode where the application need the user to interact with the application most of the time
3. Hybrid mode where the application needs less interacton than the interactive mode but not as low as the daemon