IAS PROJECT

COMMUNICATION DIAGRAM
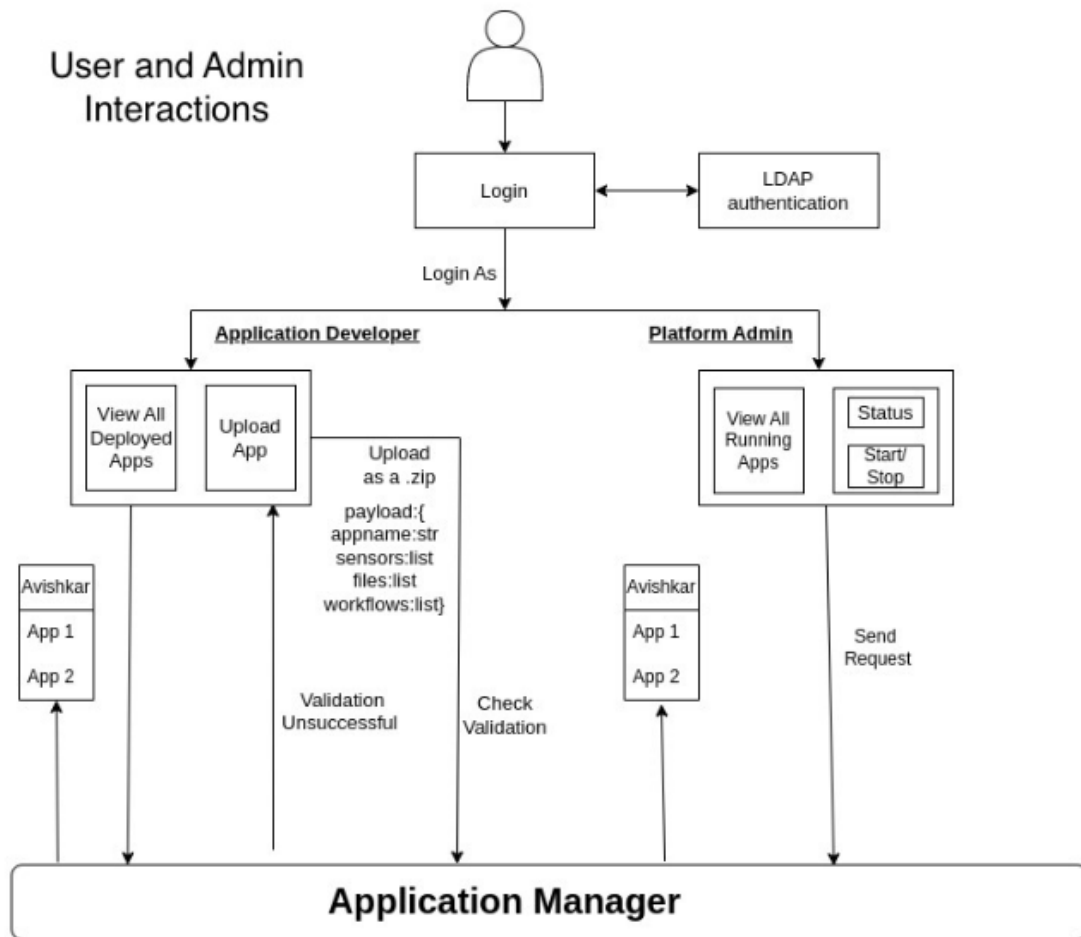
GROUP 3
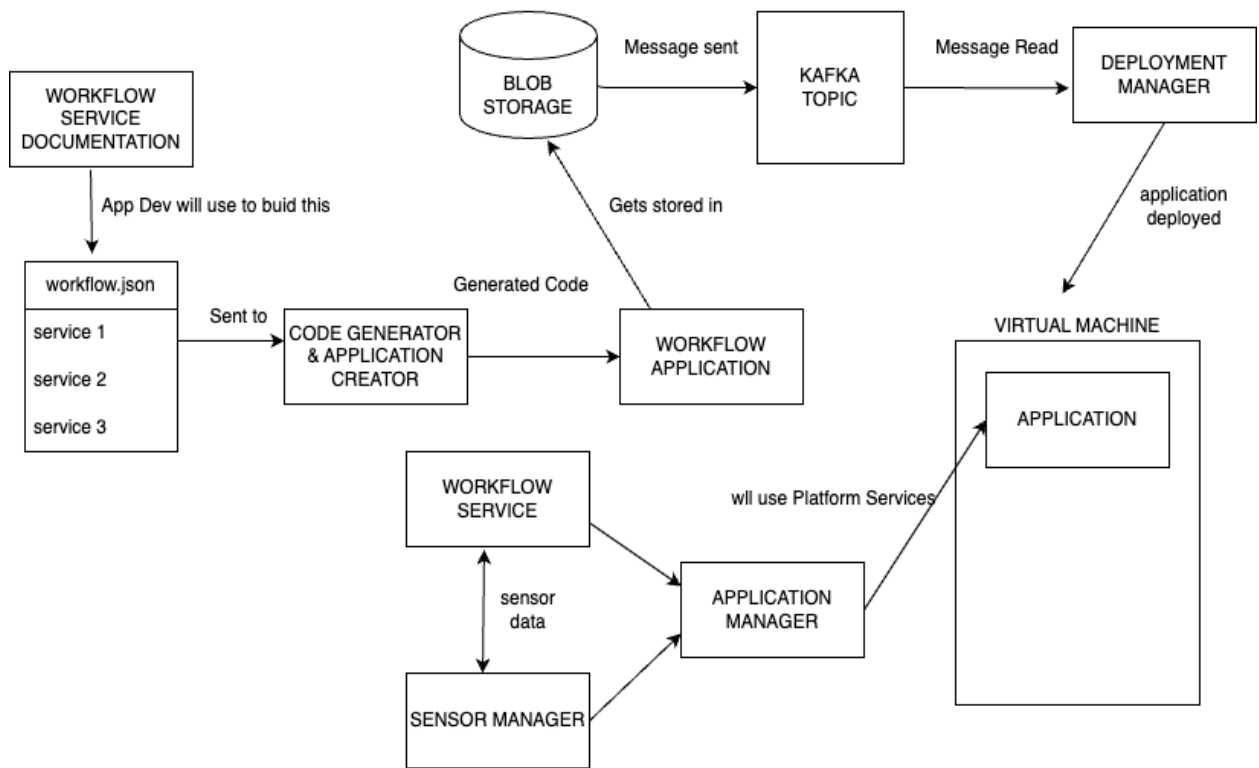
TEAM 5
Harshit Kashyap (2022201050)
Prashant Kumar (2022201058)
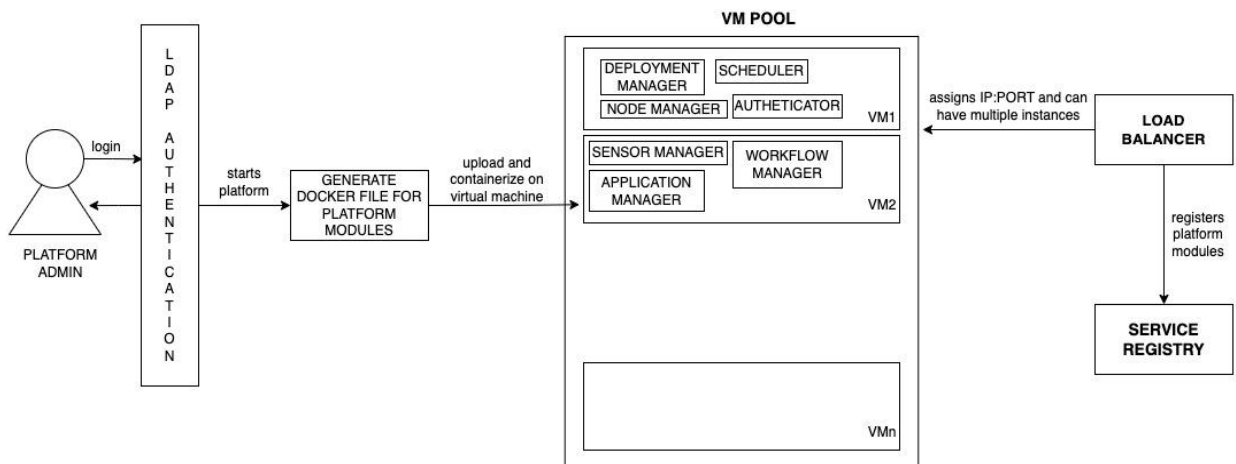Rishabh Gupta (2022202011)

WORKFLOW MODULE

```
WORKFLOW
SERVICE
DOCUMENTATION
```

App Dev will use to buid this

```
workflow.json
service 1
service 2
service 3
```

Sent to

```
CODE GENERATOR
& APPLICATION
CREATOR
```

Generated Code

```
BLOB
STORAGE
```

Message sent

```
KAFKA
TOPIC
```

Message Read

```
DEPLOYMENT
MANAGER
```

application deployed

Gets stored in

```
WORKFLOW
APPLICATION
```

```
VIRTUAL MACHINE
```

```
APPLICATION
```

```
WORKFLOW
SERVICE
```

sensor data

wll use Platform Services

```
APPLICATION
MANAGER
```

```
SENSOR MANAGER
```

PLATFORM INITIALIZER

```
PLATFORM
ADMIN
```

login

```
LDAP
AUTHENTICATION
```

starts platform

```
GENERATE
DOCKER FILE FOR
PLATFORM
MODULES
```

upload and
containerize on
virtual machine

VM POOL

```
DEPLOYMENT
MANAGER          SCHEDULER
NODE MANAGER     AUTHETICATOR
                              VM1
```

```
SENSOR MANAGER   WORKFLOW
                 MANAGER
APPLICATION
MANAGER
                              VM2
```

```
                              VMn
```

assigns IP:PORT and can
have multiple instances

```
LOAD
BALANCER
```

registers
platform
modules

```
SERVICE
REGISTRY
```

SAMPLE APPLICATION

SAMPLE
APPLICATION

app.py
app.json
index.html
requirements.txt

ZIP AND UPLOAD

APPLICATION
MANAGER

VALIDATION

UPLOAD

APPLICATION
REPOSITORY

NODE MANAGER

DEPLOYEMENT
MANAGER

DOWNLOAD