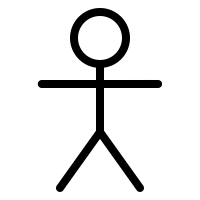
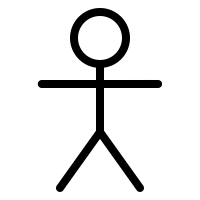
Users:

* Regular user (Production operator)
  + Can log in and view sensors
  + Can see data visualisations (charts, statistics, traffic light system)
  + Can view real-time and historical data
* Admin user (Manager staff member)
  + Can do anything a regular user can do
  + Able to approve or decline new registration
  + User management features e.g. resetting passwords, managing accounts



<<Extends>>

<<includes>>

Reset Passwords

<<Extends>>

Approve Registration

Register

<<includes>>

<<includes>>

Manager User

Views dashboard

View sensor statistics

View anomaly detection

View real time sensor data

View past sensor data

Manager staff member

Login

Production Operator

@startuml

class User {

- userID: String

- username: String

- password: String

- email: String

- role: String

- createdAt: Date

+ login()

+ logout()

+ updateProfile()

}

class ProductionOperator {

+ viewSensors()

+ viewDataVisualizations()

+ viewRealTimeData()

+ viewHistoricalData()

}

class ManagerStaffMember {

+ approveRegistration()

+ resetPasswords()

+ manageAccounts()

}

class SensorData {

- sensorID: String

- type: String

- value: Float

- timestamp: Date

+ getRealTimeData()

+ getHistoricalData()

}

class Visualization {

- visualizationID: String

- type: String

- data: SensorData

+ generateChart()

+ generateStatistics()

}

User <|-- ProductionOperator

User <|-- ManagerStaffMember

ManagerStaffMember <|-- ProductionOperator

ProductionOperator -- SensorData

ProductionOperator -- Visualization

@enduml