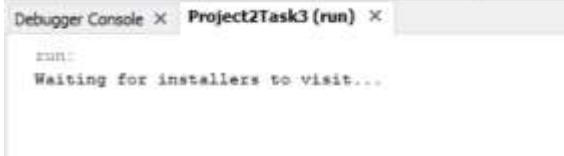| **Scenario 1:** Barack installs sensor 1	
Server: When the server is run for the first time it will no more prompt the user for the symmetric session key. It will wait for the client to send the key encrypted using its public key. Keys are derived from keystore Debugger Console ✕ **Project2Task3 (run)** ✕ run: Waiting for installers to visit... Upon the data transmission from client the server deciphers the session key using its private key and use the session key to decrypt further messages. Server maintains the state, update the KML file accordingly in the desktop and displays the a logs a message on the console **KML** Sensors.kml	**Client:**

Scenario 2: Barack moves sensor 1	
Server	**Client**
run: Waiting for installers to visit... Got visit 1 from Barack, Chief Sensor Installer Got visit 2 from Barack, Chief Sensor Installer, a sensor has been moved KML: Sensors.kml	Enter your ID: Barack Enter your Password: baracko Enter sensor ID: 012323 Enter new sensor location: -79.96002024, 40.43929865, 0.000 Thank you. The sensor's new location was securely transmitted to GunshotSe BUILD SUCCESSFUL (total time: 27 seconds)

Scenario 3: Donald installs sensor 2

Server

```
run:
Waiting for installers to visit...
Got visit 1 from Barack, Chief Sensor Installer
Got visit 2 from Barack, Chief Sensor Installer, a sensor has been moved
Got visit 3 from Donald, Associate Sensor Installer
|
```

KML

Sensors.kml

Client

```
run:
Enter your ID:
Donald
Enter your Password:
donaldt
Enter sensor ID:
454356
Enter new sensor location:
-79.95920304, 40.4398469, 0.00
Thank you. The sensor's location was securely transmitted to GunshotSensing In
BUILD SUCCESSFUL (total time: 17 seconds)
|
```

Scenario 4 : Donald attempts to relocate sensor 2

Server	Client
run: Waiting for installers to visit... Got visit 1 from Barack, Chief Sensor Installer Got visit 2 from Barack, Chief Sensor Installer, a sensor has been moved Got visit 3 from Donald, Associate Sensor Installer Got visit 4 from Donald, Associate Sensor Installer, authorization failure to relocate sensor **KML** Sensors.kml	run: Enter your ID: Donald Enter your Password: donaldt Enter sensor ID: 454356 Enter new sensor location: -79.94893572, 40.44583796, 0.00 You dont have sufficient previleges to relocate the Sensor! BUILD SUCCESSFUL (total time: 20 seconds)

Scenario 5: Donald forgot his password

Server	Client
run: Waiting for installers to visit... Got visit 1 from Barack, Chief Sensor Installer Got visit 2 from Barack, Chief Sensor Installer, a sensor has been moved Got visit 3 from Donald, Associate Sensor Installer Got visit 4 from Donald, Associate Sensor Installer, authorization failure to relocate sensor Illegal password attempt, This may be an attack	run: Enter your ID: Donald Enter your Password: DonaldT Enter sensor ID: 435443 Enter new sensor location: -79.96002024, 40.43929865, 0.000 Invalid ID or Password BUILD SUCCESSFUL (total time: 21 seconds)