Controlling a smart room

User (actor)
Smart device
Server
Smart appliance

User → Smart device: Log in

Smart device → Server: Verify user credentials

alt [user credentials are valid]

Server --> Smart device: User connected

Smart device --> User: Request device to interact with

[else]

Server --> Smart device: Invalid credentials

Smart device --> User: Throw "invalid credentials" error

User --> Smart device: Selected appliance to interact with

Smart device → Server: Check appliance availability

alt [appliance is available]

Server --> Smart device: Appliance available

Smart device --> User: Request appliance state to change to

[else]

Server --> Smart device: Unavailable appliance

Smart device --> User: Throw "appliance unavailable" error

User --> Smart device: Selected appliance state to change to

Smart device → Server: Selected appliance

Server → Smart appliance: Check appliance state availability

alt [appliance state is available]

Smart appliance --> Server: Appliance state available

Server → Smart appliance: Changed appliance state

Smart appliance --> Server: Appliance state changed successfully

Server --> Smart device: Successful appliance state change

Smart device --> User: "Changed appliance state" message

[else]

Smart appliance --> Server: Appliance state change already met

Server --> Smart device: Unsuccessful appliance state change

Smart device --> User: "Appliance state was already changed" message