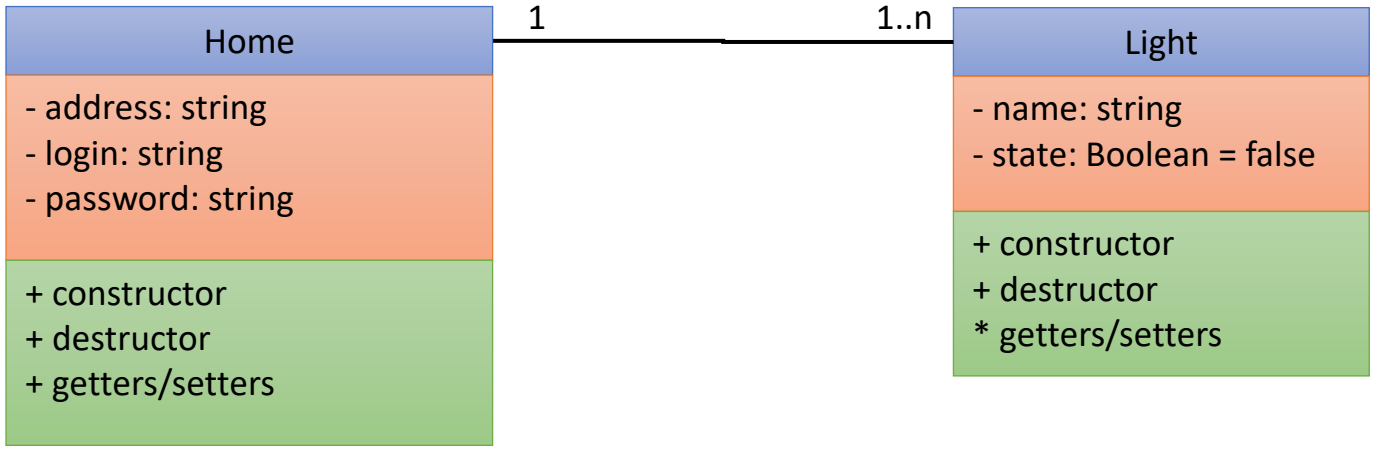
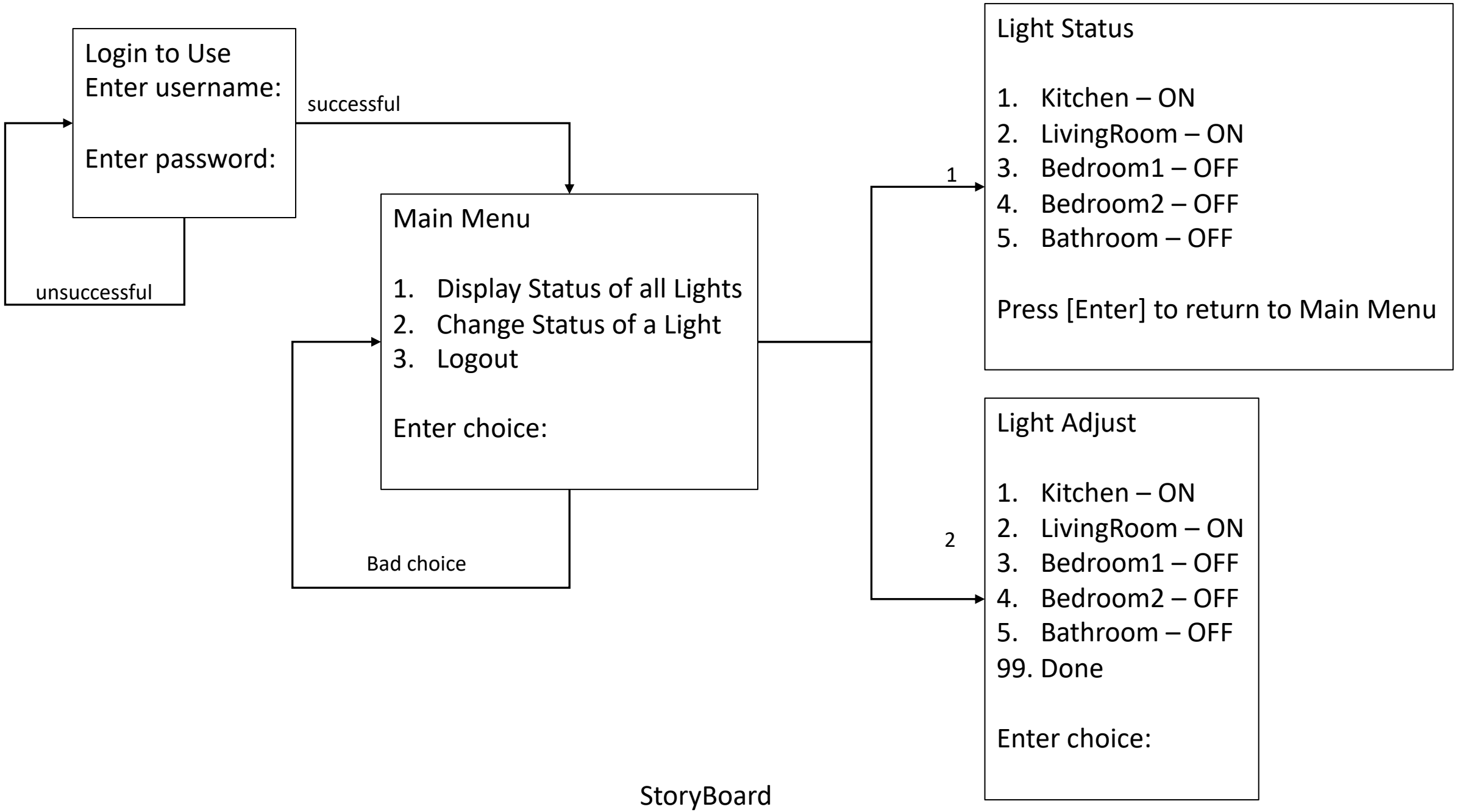
Simple Smart Home Design

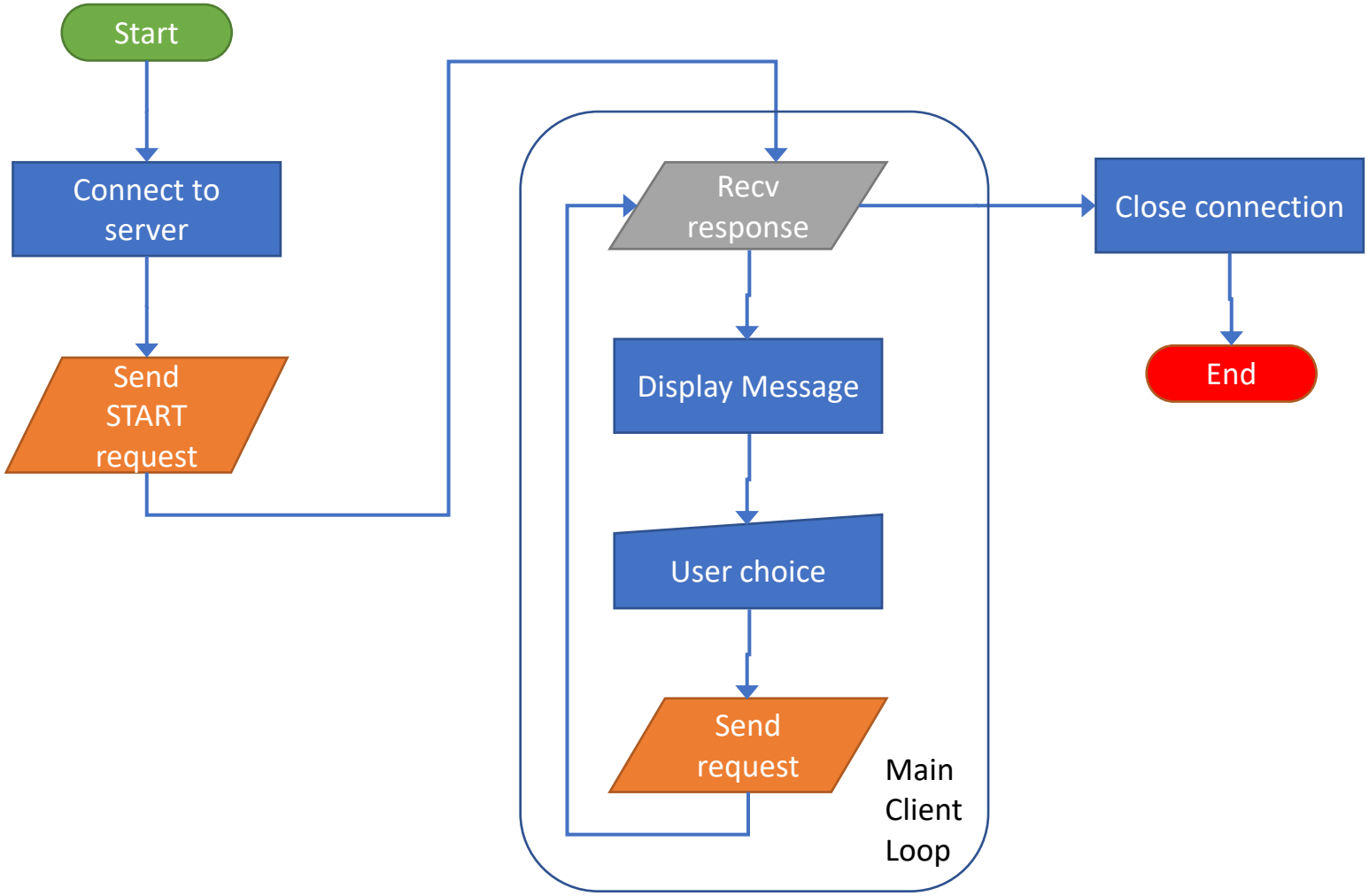
- These more formal diagrams go along with the design done in class (2/11).
- They show:
  - Data Model
  - A storyboard showing the menus
  - Client flowchart
  - Server flowchart.
- Note that the server flowchart is broken up into pieces to make it easier to read and to indicate how the code may be organized into functions/methods


Home
- address: string
- login: string
- password: string
+ constructor
+ destructor
+ getters/setters
1
1..n
Light
- name: string
- state: Boolean = false
+ constructor
+ destructor
* getters/setters

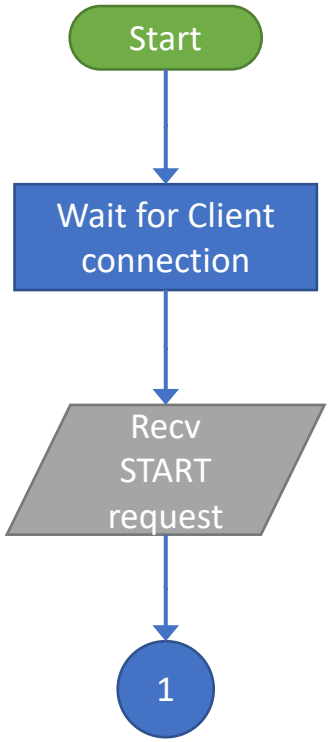
Data Model


Login to Use
Enter username:
Enter password:
successful
unsuccessful
Main Menu
1. Display Status of all Lights
2. Change Status of a Light
3. Logout
Enter choice:
Bad choice
1
2
Light Status
1. Kitchen – ON
2. LivingRoom – ON
3. Bedroom1 – OFF
4. Bedroom2 – OFF
5. Bathroom – OFF
Press [Enter] to return to Main Menu
Light Adjust
1. Kitchen – ON
2. LivingRoom – ON
3. Bedroom1 – OFF
4. Bedroom2 – OFF
5. Bathroom – OFF
99. Done
Enter choice:

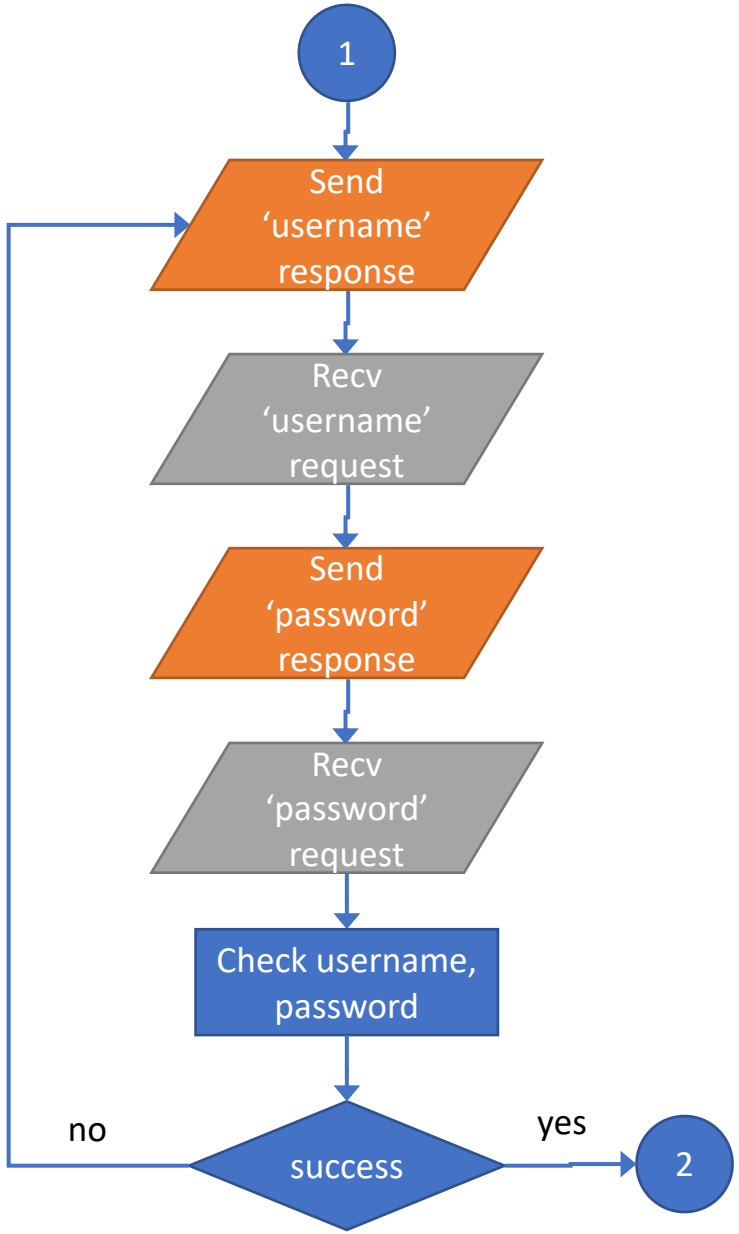
StoryBoard


Start
Connect to server
Send START request
Recv response
Display Message
User choice
Send request
Main Client Loop
Close connection
End

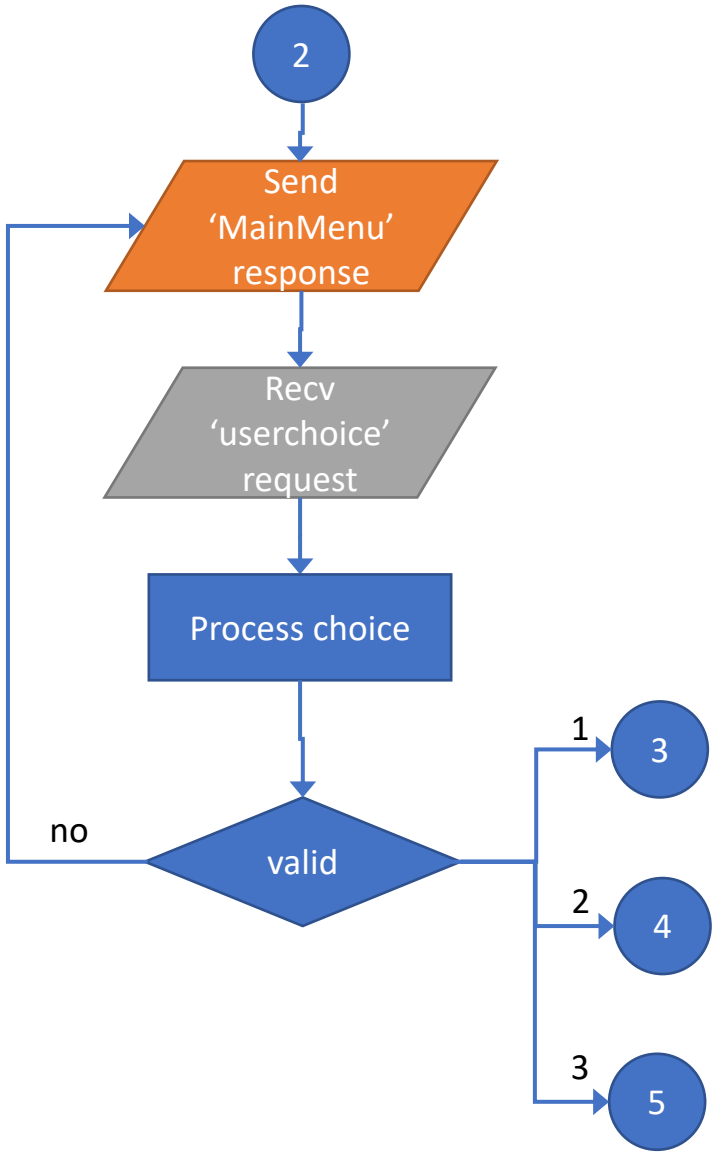
Client



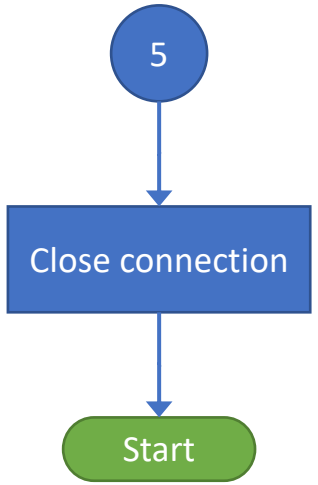
Server Startup



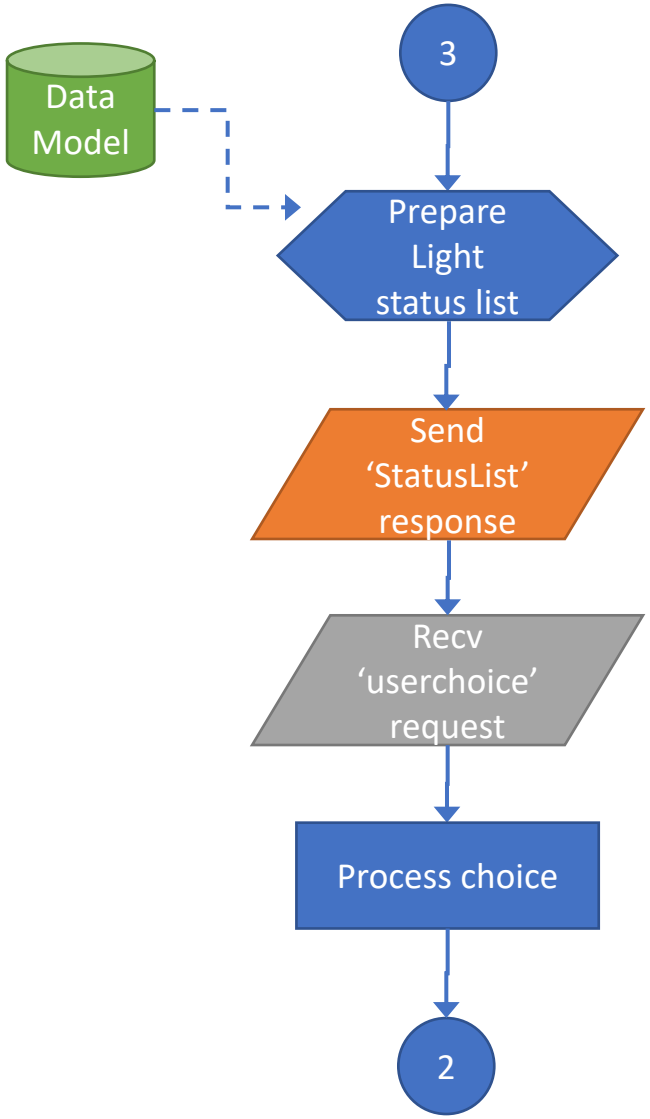
Server Login Loop



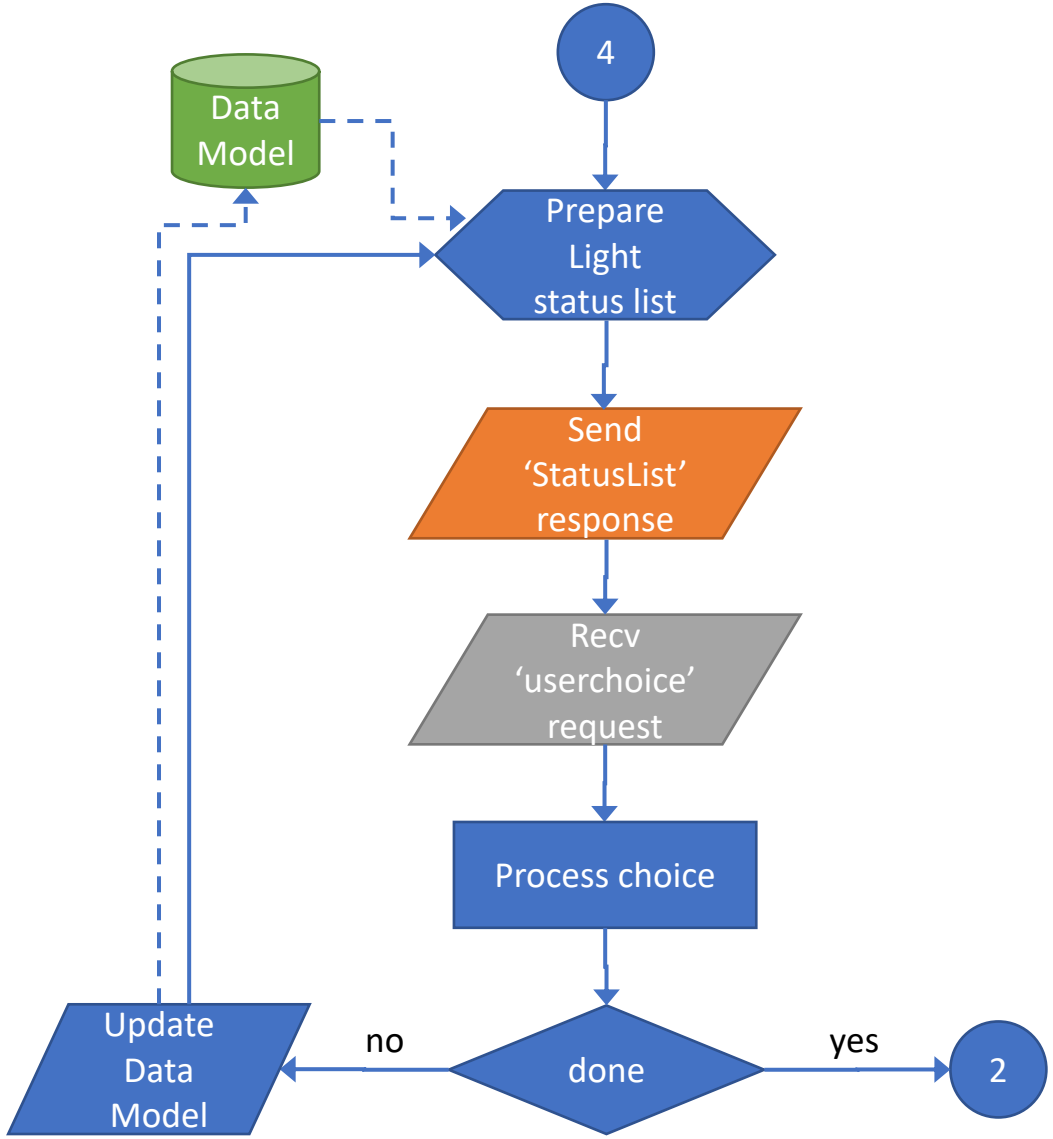
Server Main Menu Loop



Server Logout



Server Show Light Status



Server Change Light State Loop