# 6. User Interface

In this section, user interface of Smart Home application is explained in detail. The details will be explained on the user interface templates in a simple way in the following subtitles.

## 6.1. Overview of the User interface

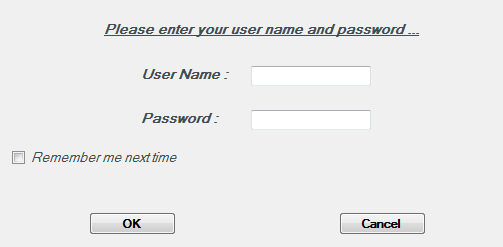
At the beginning of the application, the system authorization is required for the users. This login process is same for all users. They will submit valid authorized username and password.

After the user succeeds in logging in the system, he will be redirected to a new page to select a device to be able to manipulate it. After the device selection process, there will be created a panel to make the related adjustments according to the device type.

## 6.2. Screenshots

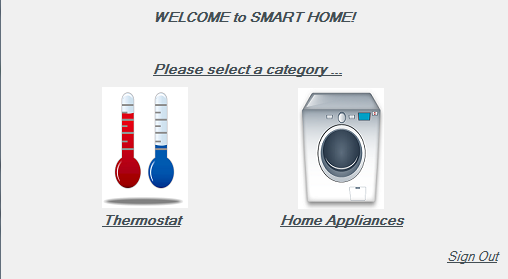
The example screenshots are shown in the following subsections.

### 6.2.1 Sign In



When the Smart Home web page is opened, the user will face with the login screen. Previously authenticated users will login the system with their exact usernames and passwords. By this means, different users can be associated with different home appliances. However, this association can only be achieved by the system admin.

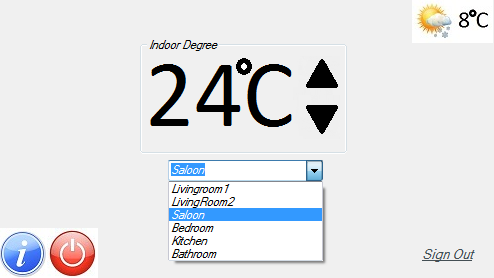
### 6.2.2 Select Category



After the authentication process explained above, the user is waited for category selection. If the user clicks on one of the links below the icons, the user will be redirected to a new page related to the clicked category adjustments. There is also a sign out preference on the screen, which allows the user to log out from the system.

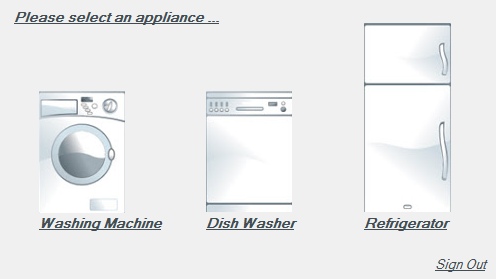
### 6.2.3 Adjust Configurations

#### 6.2.3.1 Thermostat



If the user selects the thermostat category, the user should be redirected to this page. In this page there are two buttons on the bottom left side, one of them is to display all degree information gathered from the rooms. Second button stands for shutting down the whole heating system. In the above screenshot, indoor degree is shown as 24 Celcius in the livingroom2. The up and down arrows are used for temperature adjustments. For instance, if the user clicks on the down button, the system starts to cool down. This screenshot is taken just before clicking on the saloon choice. Moreover, on the top right corner, the user can see the outdoor degree information.

#### 6.2.3.2 Home Appliances



If the user selects the home appliances category, s/he will be redirected to a new page showing some home appliances connected to the system. By clicking the links under the images, the user can pass to the next step to make adjustments or see current situation of the selected home appliance.

##### 6.2.3.2.1 Washing Machine

##### WashingMachine1.png

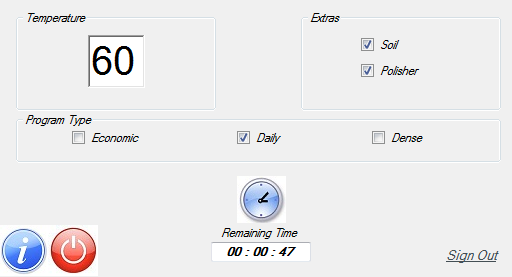
##### 

##### After the user selects the washing machine home appliance, s/he will be redirected to a page whose screenshots shown on above and below pictures. There are four preference type on the interface: cloth type, temperature, wash load, spin speed. The user can select the cloth type from the menu and it is shown on the left box of the cloth type menu. This is valid for other preference types. If the user does not specify the temperature and spin speed, they will be set automatically according to cloth type.

##### WashingMachine2.png

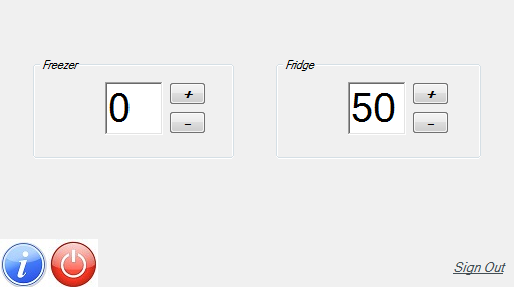
The purpose of the above screenshot is to introduce cloth type menu.

##### 6.2.3.2.2 Dish Washer



If the user selects the dishwasher home appliance, s/he will be redirected to the page whose screenshot shown on the above picture. There are 3 types of dish washing programs. The user can click the checkbox of one of them to select the washing type. Temperature will be automatically assigned to its field on the top left part according to the program. There are also extra choices that can be applied at the time of washing according to the user wishes.

##### 6.2.3.2.3 Refrigerator



If the user selects the refrigerator, s/he will be redirected to the page whose screenshot shown on the picture. There two types of adjustments seen on the interface. One of them is the freezer temperature in Fahrenheits and the other one is the fridge temperature in Fahrenheits too. The user can adjust them by clicking on the plus and minus buttons as increasing and decreasing functionalities relatively.

### 6.2.3 Sign Out



If the user clicks on the sign out button seen on every page after signing in, s/he will be redirected to the page whose screenshot is shown on the above picture. There are two choices left after signing out: OK and Home Page. If the user clicks on the OK button, the window will be closed. If the user clicks on Home Page, the user should be redirected to login page previously described.

## 6.2. Screen Objects and Actions

Smart Home System is interacted with the user via a browser. Consequently screen objects will be mainly in a form of web application interface objects.

* Text Box: It is used for input fields, such as user name and password.
* Check Box: It is used for approving a preference. For instance, soil and polisher preferences approvement can be done done via checkboxes.
* Button: It is used for the use of functionality defined in the button event.
* Combo Box: It is used for menu displaying. The user can make a choice between multiple choices included in the drop menu.
* Picture Box: It is used for helping the user easily understand the meanings of the functionalities by supporting them with icons placed into the picture boxes.
* Link Labels: This component is used at making the user redirected to a new page.