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| F-UR 1 | User’s Data Storage |
| F-UR 1.1 | The system will store general personal details (name, age, etc.) for each user in a database, as well as their login details (username and password). The database will also store the type of user they are, i.e. home manager or standard user. |
| F-UR 1.2 | The system will provide the ability for new user’s to be added. This will be a function accessible to home managers only. |
| F-UR 2 | Login System |
| F-UR 2.1 | The system will provide a login interface which will allow users to login to the system using a username and password to access all the functions of the system that they will have access to. |
| F-UR 3 | Power Data |
| F-UR 3.1 | The system will obtain the home’s energy consumption from the smart devices and appliances throughout the home which use energy and are capable of sharing the data. |
| F-UR 3.2 | The system will obtain the home’s energy generation from the home’s solar panels. |
| F-UR 3.3 | The system will store the home’s energy consumption in a database. |
| F-UR 3.4 | The system will store the home’s energy generation in a database. |
| F-UR 4 | Display Current Data |
| F-UR 4.1 | The system will display how much energy the home is consuming at the moment in time when the user requests it. This will be displayed on a colour coded gauge, the colours on the gauge and their meanings are described below:   * When the energy consumption is too high, the gauge needle will be in the red zone. This will be the danger zone, indicating that the home is consuming too much energy. * When the gauge needle is in the orange zone, this will mean that the energy consumption could be improved/lowered. * When the gauge needle is in the green zone, this will mean that the energy consumption is perfect and does not need decreased. |

Stage 2 – FR

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| F-UR 6 | Energy Saving Alerts |
| F-UR 6.1 | The system will provide an alert system which will warn the user when certain smart appliances/devices have been left on throughout the home, providing them with the ability to make power changes throughout their home. |
| F-UR 6.1.1 | The system will alert the user when a television has been on for 3 hours. This time can be customised. This customisation will be a function accessible to home managers only. |

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| F-UR 6.1.2 | The system will alert the user when a plug socket has been of for 3 hours. This time can be customised. This customisation will be a function accessible to home managers only. |
| F-UR 6.1.3 | The system will alert the user when an oven has been on for 3 hours.  This time can be customised. This customisation will be a function accessible to home managers only. |
| F-UR 6.1.4 | The system will alert the user when a light has been on for 2 hours.  This time can be customised. This customisation will be a function accessible to home managers only. |
| F-UR 6.1.5 | The system will alert the user when the fridge door has been open for 10 minutes.  This time can be customised. This customisation will be a function accessible to home managers only. |
| F-UR 6.1.6 | The system will alert the user when the freezer door has been open for 10 minutes. This time can be customised. This customisation will be a function accessible to home managers only. |
| F-UR 7 | Smart Devices and Appliances Management System |
| F-UR 7.1 | The system will provide a smart devices and appliances management system which will provide the user with the ability to control smart devices/appliances from their device when logged into the system. |
| F-UR 7.1.1 | The system will provide the ability for the user to switch off a television using the system. |
| F-UR 7.1.2 | The system will provide the ability for the user to switch off a plug socket using the system. |
| F-UR 7.1.3 | The system will provide the ability for the user to switch off an oven using the system. |
| F-UR 7.1.4 | The system will provide the ability for the user to switch off a light using the system. |

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| F-UR 11 | Fault Reports |
| F-UR 11.1 | The system will be able to detect system faults. |
| F-UR 11.1.1 | The system will be able to detect faults relating to smart devices, i.e. faulty/fused wiring. |
| F-UR 11.1.2 | The system will be able to detect faults relating to energy generating devices, i.e. no energy generation for 48 hours. |

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| F-UR 9 | Report Generation |
| F-UR 9.1 | The system will provide reports on the home’s energy consumption and energy generation when requested by the user. This will be a function accessible to home managers only. |
| F-UR 9.1.1 | The system will provide daily reports for dates specified by the user. |
| F-UR 9.1.2 | The system will provide weekly reports for dates specified by the user. |
| F-UR 9.1.3 | The system will provide monthly reports for dates specified by the user. |
| F-UR 9.1.3 | The system will provide yearly reports for dates specified by the user. |