Project Requirements

Versions:

Version ID	Date	Changes
1.0	30/08/2020	Explained the project requirements as per the communication with client and project description

Functional Requirements:

1. Develop a utility or a windows service that can automate the process of converting the IFC file in to the 3D models for various project.
2. The utility should be easy to use and should require minimum input from the user to work
3. Introduce the feature for viewing the 3D model(s) for different products. The model(s) need to be displayed in the following pages: Product Details, Basket Details and Product Listing
4. The 3D model(s) presented should be interactive, that is the users should be able to rotate the models, as well as zoom in or out of them via buttons and shortcut keys.
5. The database need to be extended as well to allow either the storage of the 3D image(s) or links to the location where the 3D image(s) will be stored for a particular product
6. The system should also display the parameterized data, such as depth, width, height, etc. which is to be taken from the IFC files. Thus the system will need to store the data for these 3D models as well

Non-Functional Requirements:

1. The standalone utility and the 3D model viewer should be easy to use
2. The website and the utility needs to be robust, that is if some data is missing, or a wrong IFC file is presented, the applications should not crash
3. The response time for the website to load the 3D model(s) should be very fast as users don't like to wait
4. The utility should take an acceptable amount of time to convert the IFC files into the 3D model(s)
5. The 3D model(s) viewer needs to be interactive