

### **3.3 A CONTAINER FOR FACE RECOGNITION TERMINAL**

#### **3.3.1 Problem Statement**

During the training period, a container was designed for the face recognition terminal. The container had to be fixed inside the surface mounting box, include the maximum space that could be taken inside the box, and included all the essential components in an accurate and precise arrangement. A book of product specifications was provided. The container had to be designed considering all the data.

#### **3.3.2 Design Methodology**

When designing this container, mainly, I had to focus on the specific components that were going to be implemented inside this container, as a memory card should not be parallel to the card reader, and the display should not overlap with the camera module. Considering those specifications, the initial design of the container was designed as shown in Figure 3.12 and Figure 3.13.

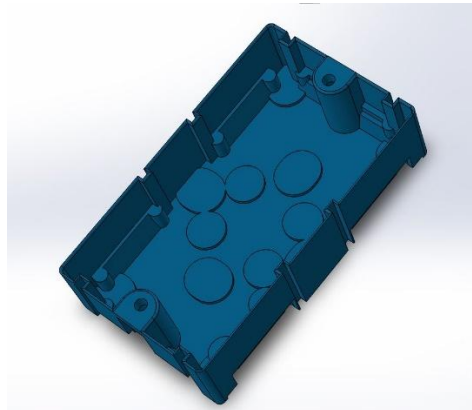


Figure 3.12:Initial design of the container

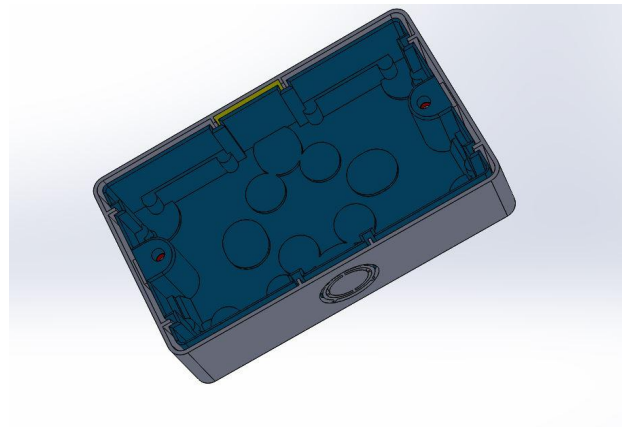


Figure 3.13 Initial design of the container which has been assembled to the surface mounting box

The initial design had some drawbacks as it was a little bit complex and the wall seemed to be not stronger as they were thin. To make the wall stronger and prevent warping when separating the molded part from the cavity, a set of linearly patterned ribs was implemented to the walls. (See Figure 3.14)

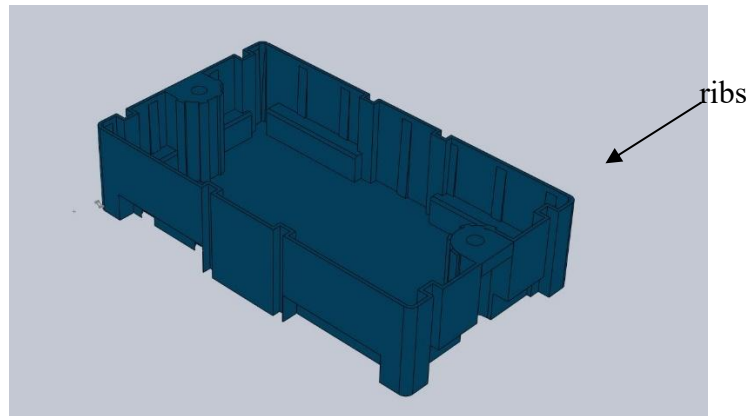


Figure 3.14 The modified model of the container with ribs on the wall