ABSTRACT

The concept of sustainable design is an important issue in designing a product that pays attention to sustainability. This means that a number of products in circulation require special attention to maintain the continuity of human activities regarding their products. That way, user activities with the product do not experience obstacles and limitations in using the product. In this design, the current mechanical keyboard is still not optimal in implementing sustainable design. The reason is that current mechanical keyboards are still not effective and efficient for the needs of their users. Especially difficulties during case customization, because case customization is not as easy as replacing other mechanical keyboard components. Therefore, many users experience the inability to continue customizing mechanical keyboard cases. So users prefer to buy a new keyboard rather than customizing it, and thus case customization is only underestimated compared to customizing keycaps and switches. Judging from these problems, this design was carried out to create a modular mechanical keyboard as a design for this final project. In designing this modular mechanical keyboard, it is seen from the selection of various aspects of mechanical keyboard components, based on the preferences and needs of each mechanical keyboard user. The modular system is used without using screw locks using the joint tongue and groove technique. The aim of this design is to create a modular mechanical keyboard based on current problems that occur in mechanical keyboards. It is hoped that this design can help in the need for mechanical keyboard customization activities to make it easier to use. This design uses Sustainable Design, with qualitative research methods and User Centered-Design (UCD) design methods. The result of this design is a modular mechanical keyboard product which can make it easier to carry out customization activities on the case components,

Keywords: Customization, Sustainable design, Mechanical keyboard, Modular, Joint tongue and groove