Pore size and structure of bread is an important factor for evaluation of bread quality. Affect of bread components, additives, bread making process and storage periods on pore structure of breads has been researched in the literature by different researchers. Determination of bread pore structure is usually carried out by using subjective traditional methods which can be affected by human factor. However, there is a need for new studies that will provide more objective and precise results to put forward the characteristics of pore. In this study a new web based application which reveals the results of the bread pore structure in the digital environment was developed. This application in which data was obtained by using MATLAB was created with the PHP programming language. Total pore number, total pore area (pixel) and average pore area (pixel) were calculated and compared with each other on bread pore taken from middle two slices of several bread samples. As a result, when the validity and repeatability of this application is proven by the further studies, more objective measurements least affected from the human factor can be done to evaluate the bread quality. Thus, this new method will be bring more practical and more useful application for the bakery industry.