Globally, breast cancer is the most common cancer among women, and the most likely cause of female cancer deaths as per statistical analysis given by WHO. High-income countries (HICs) have made the most progress in improving breast cancer outcomes. Between 1990 and 2014, breast cancer death rates dropped by 34% in the US attributable to the combination of improved earlier detection and effective adjuvant therapies. By contrast, breast cancer is an increasingly urgent problem in low- and middle-income countries (LMICs), where historically low incidence rates have been rising by up to 5% per year. In view of earlier detection of breast cancer, the research aims in developing a classification model using CNN. The model primarily uses Wisconsin Dataset for training the model and classifies the cancer tissues. The accuracy of the model is evaluated and found to be better compared to other existing models. The system could be further improved in integrating the image inputs to the optimized features.