ABSTRACT

The psychological condition of university students is among the problems with mental health that is often overlooked despite its wide and deep impact. The psychological condition assessment system aimed at students still uses traditional methods and Google Forms which have proven to be less effective in detecting mental symptoms. This research develops web-based psychological assessment system for university students using the Waterfall method, aiming to detect and assess Mental health issues that are frequently disregarded include anxiety and sadness. This system overcomes the weaknesses of traditional methods by providing an efficient and easily accessible solution. Testing was conducted using blackbox testing methods, such as Boundary Value Analysis (BVA) and Equivalency Partitioning (EP), to evaluate the validity and robustness of the system in handling various inputs. The test results showed the system had a conformance score of 83.33% for EP, indicating that the system was "Highly Conformant", while BVA yielded a score of 50%, indicating "Moderately Conformant". Although the system functioned well in most cases, some areas, particularly email validation and hash parameters, required further improvement. These results show that application meets the established testing standards and requires continued maintenance to improve the system's ability to handle more complex input variations.

Keywords: Web-based assessment system, Waterfall method, Blackbox testing, Equivalence Partitioning, Boundary Value Analysis, student mental health, psychological condition detection.