

**APPLICATION OF SHQ GROUPING USING
K-MEANS METHOD
(CASE STUDY OF MUHAJIRIN CENTER)**

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ABSTRACT

Muhajirin Center is a Hafizh institution Qur'an has several programs, one of them is Hafizh Qur'an School (SHQ). At the beginning of the recruitment of new students, the institute gives pre-test to be grouped according to the provision and ability possessed in reading dan memorizing Al-Qur'an. But in the process of grouping an error that is the presence of students who belong to groups that are the place.

This research applies K-Means method for grouping students based on pre-test value.

The System test was performed three times with three clusters and the initial centroid was randomly selected at each test and 10000 objective function value in absolute terms and the absolute 0.1 treshold value in the RHQ and MHQ classes. Then, the results of each test will be evaluated by the Davies Bouldin Index (DBI). Results obtained from testing, the best grouping of RHQ are in test 3 with DBI 0.3729 and the best MHQ grouping are in test 1 eith DBI 0.5877.

Keywords : K-Means, Clustering, Davies Bouldin Index (DBI)

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