Abstract

This study aims at building a database of soil and materials tests to use them as materials for construction of roads. The results of the tests will be used to write the materials reports to identify the soil resistance and judging whether or not suitable for use as road construction materials. If they are not valid for the purpose then other materials could be used and provide the required alternative of these materials or made the necessary treatment. The database has been developed through the Oracle database management system which is considered as the strong database system for it provided the management with the necessary work information by transferring them into practical databases which will be used in decision making process and monitoring the work performance in order to finalize the work in the quickest possible way. The oracle also provided the suitable amount of security for the sensitive practical laboratory information. The program could be executed in any computer having an Oracle database (SQL & Developer) or Developer program only if the program works on client/server system.

References
Building a Database for Soil Tests and judging their Validity as Road Construction Materials

6. American ASTM standard volume4.09 rocks and soils-2016-standard by ASTM international

Index Terms

Computer Science

Information Systems

Keywords

Database, Soil Tests, Oracle, Sudan.