Abstract

Learning one’s own strengths and weaknesses is essential when making important life decisions; especially for students that are obliged to make decisions about what path they are to persuade leading them to a carrier path without regret. Today most of the students do not have a proper understanding of their own talents, abilities or how they can accomplish their future goals. The system mentioned in this research paper provides a solution by helping grade 10 and 11 local students to learn about their own strengths and weaknesses thus guiding them when making important decisions about what paths to follow in the future and what aspect they need to improve on. Students’ past performances, logical thinking and other attributes were taken into consideration to provide an accurate and comprehensible output depicting their weaknesses and strengths. Moreover, the output was analysed and used to aid teachers when dividing student groups inside the classroom for cooperative group activities. An intelligent system driven by algorithms to support logical and cooperative grouping strategies that uses statistical analysis and output analysis along with an online quiz for students to learn their
logical thinking skills were used to produce the expected output. Information about extracurricular activities were collected from a selected group of 50 students using a questionnaire that had being analysed by the research group. Patterns of students’ scoring were analysed to predict the score the same student would gain in the future using data mining methods and tools. Sisu Manthalawa is a web application that can help the local students to make decisions thus helping them stride towards a better future.

References


**Index Terms**

Computer Science

Information Sciences

**Keywords**

Cooperative group activities, data mining, grouping strategies, intelligent system, logical thinking, making decisions, online quiz, strengths, weaknesses