Design of Educational Big Data Application using Spark

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Abstract—Educational institutions utilize various academic systems. Systems related to various tasks such as academic administration, general administration, and subsidiary institution administration are used. These systems provide information with complex and diverse attributes. Students and faculty want to get the information quickly. Also, systems are important for providing services for students and faculty to use their academic information.

The academic information has large datasets, among which lecture information can be used to find students' learning patterns. So we use an FP-Growth algorithm that compresses data of frequent items into a frequent pattern tree and then divides the compressed data into a set of related condition data for one frequent item and mining it separately does.

Keyword-Spark, MLlib, Recommendation Algorithm, Big Data



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