Ontology Based Decision Support System for Youth Counseling

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Abstract— The amount of data residing in social media currently untapped is certainly limitless as millions of people are constantly posting one or more messages to public forums on the internet. Social media, for example, Twitter with over 320 million monthly active users has proven to be a fertile ground for harvesting opinions from multiple people. This project develops an ontology based decision support system that analyses social media content for the purpose of youth counseling.

For the development of this project, Java programming language and My Structured Query Language (MYSQL) was used to design the interface while Java programming Language, Stanford Natural Language Processor (NLP), Jena Application Program Interface (API) and Protégé Owl was used to develop the text analysis component of the system.

This project has been able to create a system that bridges gap between parents and their wards, as teenagers spend a lot of time online. It serves as a tool for parents to monitor the interactions of their wards with other social media users as well as understand the mental state of their children. It will also help youth become an effective member of the society.

Index Terms— Ontology, Decision Support System, Text analysis, Social Media, Youth, counseling