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# Vote Extractor For iClicker-Based Voting

By: **Dr. James Fenwick**

**Abstract**

RECAPP 2019 Award Winner. Faculty Senate replaced manual vote tallying with an iClicker-based system that works more smoothly. The iClicker system records vote data in an extensible markup language (XML) format that is human readable but not easily understood. Since the secretary must still report member votes for the minutes, this presents a barrier. iClicker provides a utility that converts XML into a comma separated values (CSV) format accepted by Excel. However, even this must be edited by the secretary to eliminate unnecessary and redundant information, extracting out the relevant and salient data. Using my understanding of the XML and CSV formats coupled with expertise in programming, I developed the VoteExtractor application that accepts as input the iClicker XML file and outputs the precise CSV file needed by the Faculty Senate secretary. This eliminates a secretary task that is tedious and error-prone. Faculty Senate has used VoteExtractor has successfully for over a year for a dozen meetings and scores of votes. VoteExtractor is deployed as a standalone Java JAR file and executed directly from a command window prompt. A graphical user interface (GUI) application was also developed (in part as a student project) to gather required inputs and invoke the standalone JAR application itself thereby simplifying the use of the VoteExtractor. The GUI uses the JavaFX platform for a robust visual desktop application that works across all computing operating systems. The VoteExtractor has applicability for any voting scenario; for example, committees, clubs, classes, etc. It is publicly available under the MIT License on GitHub.