

Team 14

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Use Cases

1. Generate the election results

Name	Generate the Election Results
ID	UC_001
Description	The user will run the Voting System program on the provided CSV ballot file. Once the program calculates the correct election results, they will be displayed to the user and a related audit file containing more detailed information will be created.
Actors	Tester, electoral officer, software engineer <i>Do different actors have different access or view options for the audit file?</i>
Organizational Benefits	Processing the information programmatically saves the user time and money. Money is saved because this program can be utilized multiple times on different input files to calculate results for different elections that have the same structure. Excess time and human power would be used if the election results were manually calculated. There is also the possibility of human error if election results are tabulated by hand. With the program, the user has the ease of simply entering a file name in order to process all ballot results.
Frequency of Use	This program will be run multiple times during the year at normal election times and special elections. Depending on the actor, the program may be run at least once to multiple times to test functionality or to check the accuracy of the output results.
Triggers	<i>Can we assume that the program is already running (i.e. the user has already double-clicked or called a command to open the file in a terminal)?</i> The user types the correct file name on the command line and presses Enter to call the program.
Preconditions	The file provided must be formatted as a CSV file and must be placed in the same directory as the program.
Postconditions	The ballot information will be processed. Once the program is

	<p>finished processing and calculating all necessary information, the election results will be displayed on the console. More detailed election information will be output into an audit file which will be placed in the same directory as the program. The user will be able to read but not edit the audit file by opening it from the directory.</p>
Main Course	<ol style="list-style-type: none"> 1. The actor provides the file name as a command line argument. 2. System parses csv for ballot information and implements the proper algorithm; system displays information as soon as it is available. 3. System finishes processing election results and displaying results to the terminal. 4. More election information is saved to an audit file that will contain a unique name related to its timestamp. 5. Audit file can be opened from the same directory as the program.
Alternate Courses	<p>AC1 The user did not provide a file name while running the program</p> <ol style="list-style-type: none"> 1. The program prompts the user for the filename 2. Return to main course 2.
Exceptions	<p>EX1 The program cannot find file</p> <ol style="list-style-type: none"> 1. Notifies the user that the file is not found. <p>EX2 The file has an unexpected MIME type</p> <ol style="list-style-type: none"> 1. Notifies the user that the file is of wrong MIME type