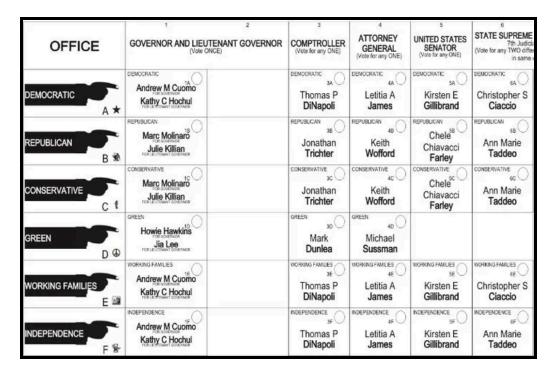
Elections



Goals of the Assignment

The goal of this assignment is to practice creating and using Java classes and enumerations. Please read this document *in its entirety* before seeking help from the course staff.

Activities

1. Use the following problem statement to guide you through software development:

The local municipality would like to create a system for managing candidates for the next local election. Each candidate will be identified by their name, political affiliation, and the position they are running for. In this election cycle, the only positions being offered are mayor, sheriff, judge, and one assembly member. Political parties must be registered with the city and only the following have registered in time for the election: Republican, Democrat, Working Family, Libertarian, and Independent.

Candidates can be endorsed by multiple parties. If two candidates, in the system, have the same name and are running for the same position, they need to be considered the same candidate for counting purposes. Additionally, each candidate, position, and party will need to be printable in an easy to read format.

- 2. **Note:** In order to keep the scope of this problem reasonable, candidates won't be used directly by a final program (for example, a program that prints ballots). Instead, you should use JUnit 5 to test all of the functionality you create for it. This means there is no need for a main method unless you want to use it for your own debugging purposes.
- 3. Start by doing a noun verb analysis. When deciding on your classes, keep in mind that objects with a set and a limited number of possibilities may be better represented as enumerations rather than a traditional class. Save your analysis in a file called "analysis.txt" and push it to your repository.
- 4. Create any classes and/or enumerations that you may need to implement the problem statement.
 - a. Remember to use proper encapsulation.
 - b. Implement any required methods.
 - c. Write tests for each method, including one test for each likely variation of the method. (I.E. If the method has a branch statement in it, write a test for each path that is likely to occur during normal use.)

Submission Instructions

You must ensure that your solution to this assignment is pushed to GitHub *before* the start of the next lecture period. See the <u>course syllabus</u> for the rubric that will be used to evaluate your submission.