

**Project Name:** Waterfall Voting System Implementation

**Team:** 25

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index	Description of Bug (be specific  About what is not working)	Location of Bug  (file, class, method, etc)	Steps to Recreate Bug  and/or Test Case #	Root Cause Analysis  Notes
1	Process election constructors execute processElection internally	IRProcessing and CPLProcessing, method is processElection and their constructors.	n/a	Everything runs as intended, however, program behavior should execute processElection outside of the constructor.
2	Attempting to update a ballot that has no remaining candidates causes system failure	updateBallot() method in Ballot.java	ArrayList<String> cands = new ArrayList<String>(); // Ballot blt1 = new Ballot(0,0,cands); blt1.updateBallot()	updateBallot calls candidates.remove(0), which will throw an IndexOutOfBoundsException since candidates is empty, exception not handled
3	System fails for CPL election when more seats are allocated to a party than there are candidates	processElection() method in CPLProcessing.java	n/a	System tries to access an index that is out of bounds of an ArrayList.
4	Generating audit file alongside of working directory instead of inside of working directory	processResults.java	n/a	Unaware of root cause. If the audit file is generated in a different location it doesn't have anything inside of it.
5	Auditing Ties in CPL Elections will display the index of the parties in a tie, not the name of the parties.	CPLProcessing.java	Run a CPL election file where more than 1 party share the same ballot remainder.	The root cause is an underlying error of variable type conversions. When looking to grab Party name strings, mistakenly getting their indexes instead.