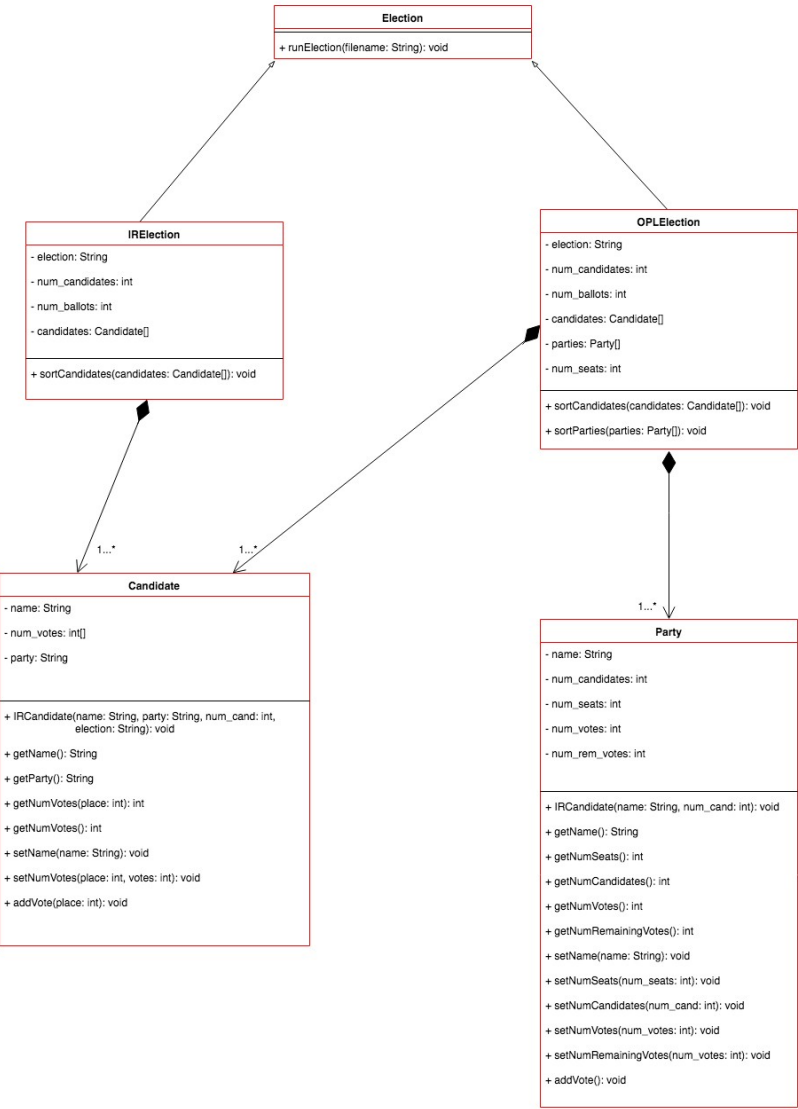Team #17

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Election

+ runElection(filename: String): void

IRElection

- election: String
- num_candidates: int
- num_ballots: int
- candidates: Candidate[]

+ sortCandidates(candidates: Candidate[]): void

OPLElection

- election: String
- num_candidates: int
- num_ballots: int
- candidates: Candidate[]
- parties: Party[]
- num_seats: int

+ sortCandidates(candidates: Candidate[]): void
+ sortParties(parties: Party[]): void

1...*   1...*

Candidate

- name: String
- num_votes: int[]
- party: String

+ IRCandidate(name: String, party: String, num_cand: int, election: String): void
+ getName(): String
+ getParty(): String
+ getNumVotes(place: int): int
+ getNumVotes(): int
+ setName(name: String): void
+ setNumVotes(place: int, votes: int): void
+ addVote(place: int): void

1...*

Party

- name: String
- num_candidates: int
- num_seats: int
- num_votes: int
- num_rem_votes: int

+ IRCandidate(name: String, num_cand: int): void
+ getName(): String
+ getNumSeats(): int
+ getNumCandidates(): int
+ getNumVotes(): int
+ getNumRemainingVotes(): int
+ setName(name: String): void
+ setNumSeats(num_seats: int): void
+ setNumCandidates(num_cand: int): void
+ setNumVotes(num_votes: int): void
+ setNumRemainingVotes(num_votes: int): void
+ addVote(): void

BallotFile

- name: String
- input_stream: FileInputStream

+ BallotFile(fname: String)
+ geName(): String
+ getInputStream(): FileInputStream
+ setName(name: String): void

AuditFile

- name: String
- output_stream: FileOutputStream

+ AuditFile(name: String)
+ getName(): String
+ getOutputStream(): FileOutputStream
+ setName(name: String): void

UserInterface

+ requestBallotFile(): void
+ displayAuditFileName(name: String): void
+ displayElectionResults(election: Election): void

Assume a default constructor exists if none is explicitly specified

———— Election Subsystem
———— File I/O Subsystem
———— UI Subsystem