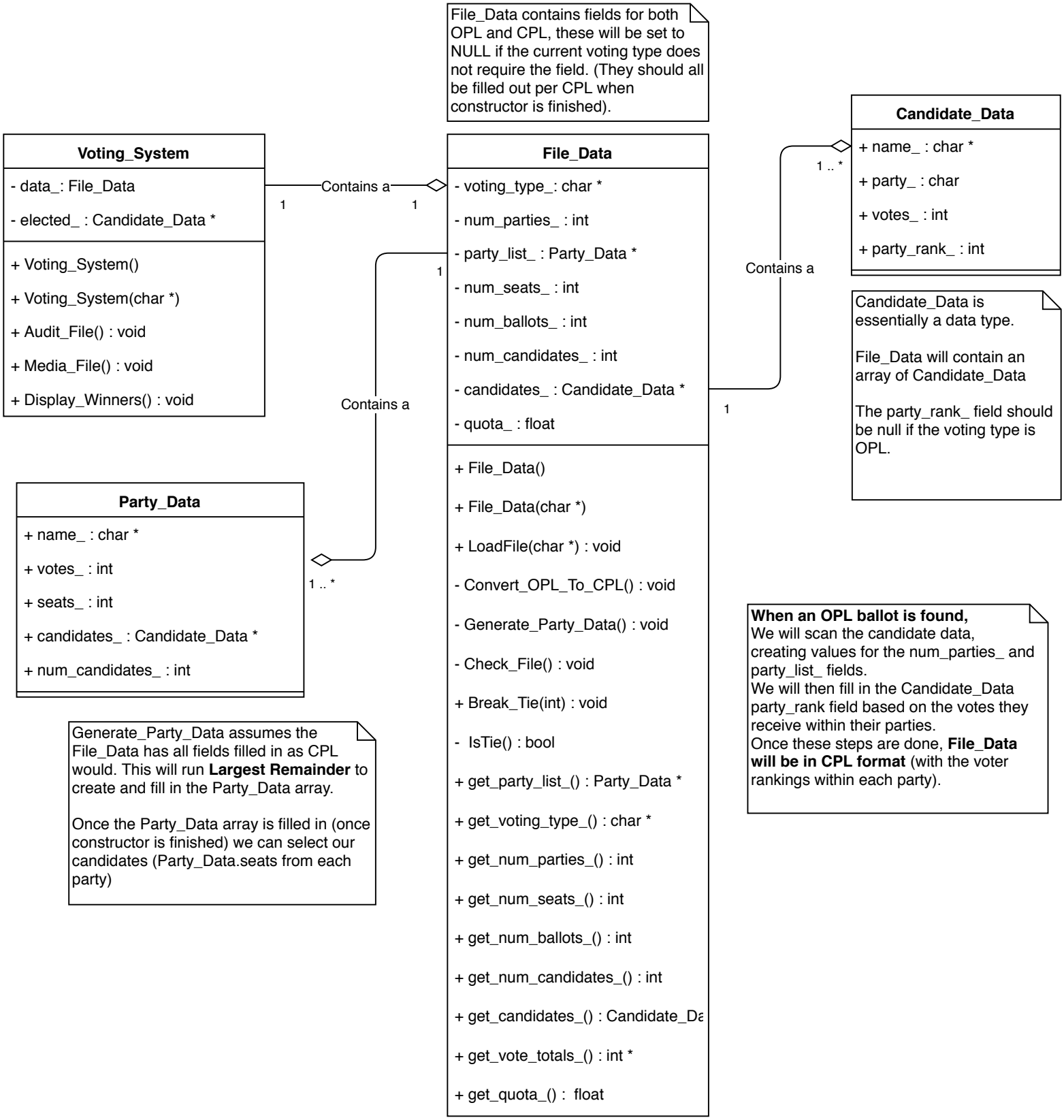
File_Data contains fields for both OPL and CPL, these will be set to NULL if the current voting type does not require the field. (They should all be filled out per CPL when constructor is finished).
Voting_System
- data_: File_Data
- elected_ : Candidate_Data *
+ Voting_System()
+ Voting_System(char *)
+ Audit_File() : void
+ Media_File() : void
+ Display_Winners() : void
Contains a
1
1
File_Data
- voting_type_: char *
- num_parties_ : int
- party_list_ : Party_Data *
- num_seats_ : int
- num_ballots_ : int
- num_candidates_ : int
- candidates_ : Candidate_Data *
- quota_ : float
+ File_Data()
+ File_Data(char *)
+ LoadFile(char *) : void
- Convert_OPL_To_CPL() : void
- Generate_Party_Data() : void
- Check_File() : void
+ Break_Tie(int) : void
- IsTie() : bool
+ get_party_list_() : Party_Data *
+ get_voting_type_() : char *
+ get_num_parties_() : int
+ get_num_seats_() : int
+ get_num_ballots_() : int
+ get_num_candidates_() : int
+ get_candidates_() : Candidate_Da
+ get_vote_totals_() : int *
+ get_quota_() : float
Contains a
1
1 .. *
Candidate_Data
+ name_ : char *
+ party_ : char
+ votes_ : int
+ party_rank_ : int
Candidate_Data is essentially a data type.
File_Data will contain an array of Candidate_Data
The party_rank_ field should be null if the voting type is OPL.
Contains a
1
1 .. *
Party_Data
+ name_ : char *
+ votes_ : int
+ seats_ : int
+ candidates_ : Candidate_Data *
+ num_candidates_ : int
Generate_Party_Data assumes the File_Data has all fields filled in as CPL would. This will run Largest Remainder to create and fill in the Party_Data array.
Once the Party_Data array is filled in (once constructor is finished) we can select our candidates (Party_Data.seats from each party)
When an OPL ballot is found,
We will scan the candidate data, creating values for the num_parties_ and party_list_ fields.
We will then fill in the Candidate_Data party_rank field based on the votes they receive within their parties.
Once these steps are done, File_Data will be in CPL format (with the voter rankings within each party).