Another element of the setup is the process of defining the issues to be voted upon and the options that are presented to the users. The election officials must specify the list of political offices and issues to be voted upon, as well as creating the list of candidates and their party affiliations.

The Voter may also have a nominated party affiliation, and based on this he or she will be presented with a variation of the ballot. This background setup information is known as a ballot definition.

~~At first,~~ the system can create a new election. In this election object, we need to define a new Ballot Definition. This object has candidates and political offices. ~~The party affiliation is specified for each candidate.~~ ~~And the ballot definition also includes the political offices for voting.~~ ~~In the election, based on the candidates’ party affiliation,~~ Moreover, this definition object includes several ballot formats ~~for different voters~~ based on the candidates’ party affiliation. ~~Some for party preference, some for generic.~~ And then, the election needs to set up the validation date. ~~The start date and time, then the end date and time.~~ In that period, the election is valid and voters can vote. At the end, All these data could be stored in the database ~~using the add method in each object~~.

For voter registration, the voters would choose what election they want to attend, so the system will get the corresponding election object. Maybe there are several elections at same time. And then, the election can trigger the voter creation process. The system will check the validity of this voter, if the result is true and this voter has not been created yet, then ~~the system will add this voter’s data to~~ these data could be stored in the database and also the smartcard object could be created ~~to store smartcard data~~.

In the voting process, the first step is the smartcard checking. When the voter swipe his smartcard, the system can get smartcard object and ovter object by id, ~~then smartcard object could get Voter object~~ then the voter object calls the checking method to check voter’s validation. For example, if the voter has already voted, he cannot vote again. So after checking, ~~IF the result is true,~~ voter object can get appropriate ballot form to display based on the voter’s preference. The second step is to make the selection. When the voter finish ~~to make~~ the selection on the Voting Page, the system shows up the summary page and voter can commit it. At the end, the system will close the Voter object and Smartcard object. Furthermore the Smartcard data in the database also should be deleted because the voter cannot use this card to revote.