

CMPE313 SOFTWARE ENGINEERING
ASSIGNMENT 2 – USE CASE DIAGRAM

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Use Case	Election Setup
Actor	System Administrator
Description	Election setup allows the admin to setup the initial requirement for the voting process beforehand. It also allows admin to provide the needed information such as the list and number of the voters, and polling clerks and provide the fingerprint database.

Use Case	Register Possible Candidates
Actor	System Administrator
Description	Register possible candidates allows admin to register the possible candidates for this specific election period before the election happens. The admin manually registers the candidates who will participate in this election. Every time they register a new candidate, the list of the possible candidates is updated.

Use Case	Providing The List of Voters
Actor	Admin
Description	Providing the list of voters allows admin to provide a list of citizens who are eligible to vote from the governments database. The list also includes other identity information about these citizens. The provided list is shown on the screen as it is pulled from the database and the admin can edit the information on this list.

Use Case	Set Bounding Number of Votes
Actor	Admin
Description	Set bounding limits for the votes allows admin to set a bounding number for the votes that the system can receive so there won't be duplicate or fake votes. The admin gets the number of possible voters from the list of voters and sets this number as the maximum number of votes that the system can receive in one period of election. At any time before the election, the admin can edit this number according to the changes in the voters list.

Use Case	Viewing the Results
Actor	Admin
Description	Viewing the results allows admin to see the results of the election. There are three different result slots on the system: number of total votes, distribution of the votes among the candidates, distribution of the votes among the regions. At the end of the election process the admin can view the results on these slots. They can not edit or change any value on this screen.

Use Case	Viewing the List of Faulty Votes
Actor	Admin
Description	Viewing the list of the faulty votes allows admin to see the list of citizens who gave a faulty vote, where the fingerprint did not match or was registered more than once. Admin can only view this list after the election process is over. List provides the users' ID info, the ballot device that they were using to vote.

Use Case	Voting
Actor	User
Description	Voting is the process that allows citizens to vote using their fingerprints. The citizen interacts with an interface that shows them boxes with the possible candidates and a blank one for them to press their finger underneath the candidate that they want to vote for. After they pressed their finger, the system puts an X underneath the chosen candidate. User can change their vote as many times as they want by pressing their fingers underneath another candidate.

Use Case	Approving the Vote
Actor	User
Description	Approving the vote allows the user to approve their vote when they are sure of their choice. After the voting is done the user needs to press the "APPROVE" button in order to have their vote counted by the system.

Use Case	ID Checking
Actor	Polling Clerk
Description	ID checking allows polling clerk to make sure that only the citizens that are assigned to this particular 'ballot device' votes using it. It also allows the clerk to make sure that the user is eligible to vote. Polling clerk already has the list of voters that are assigned to their ballot device and their ID information, previously supplied by the admin. If the citizens on that list show up to vote, the clerk first checks if their ID information match the one on the system and if it does marks the citizen as present by clicking the check mark beside the citizens name on the list.

Use Case	Tally Checking
Actor	Polling Clerk
Description	Tally checking allows polling clerk to view the tally of the votes on that particular 'ballot' that they are assigned to. Every time a user gives an eligible vote, the system increments the tally and displays the number on the polling clerk's window. Polling clerk cannot edit this number. The tally number does not disclose the votes, it just simply holds the number of votes given.

Use Case	Checking the Legitimacy of the Vote
Actor	Polling Clerk
Description	Checking the legitimacy of the vote allows polling clerk to check whether the citizen's vote is legit. Citizen votes by using their fingerprint and if the fingerprint does not match their initial fingerprint in the database or was used to vote beforehand, the system lets the polling clerk know with a warning page. Only the polling clerk that was assigned to that particular voting device can see the warning page. The system also shows the identity information of the citizen to this polling clerk and adds their information to a faulty votes list. If the vote is legit, system simply lets the clerk know that the vote is approved.

