

# **JVoter**

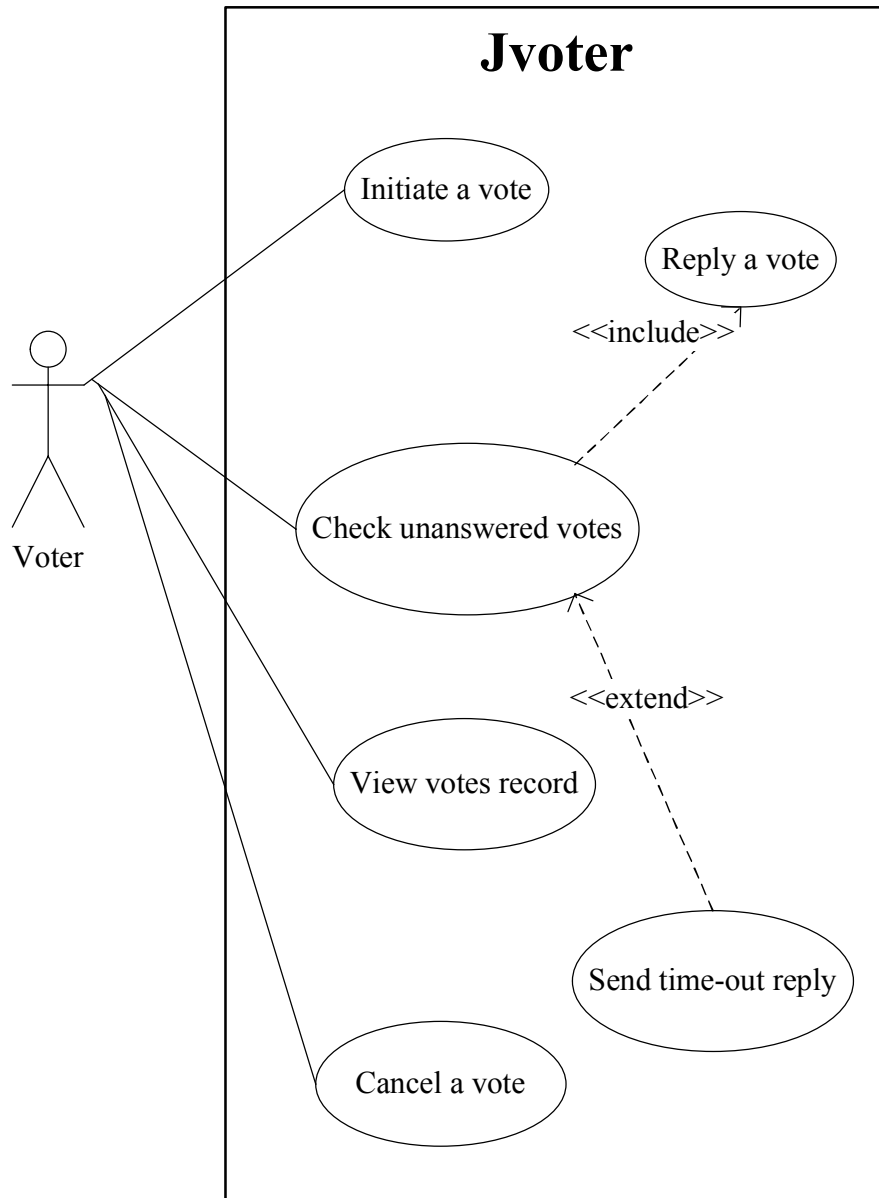
## **Use Case Model & Specification**

Author: LU MUKAI

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# Use Case Model



# Use Case Specification

Use Case UC1		Initiate a vote
Description		Initiate a vote to all online users or a group of them
Pre-condition		Voters has successfully connect to the multicast group for JVoter and want to initiate a vote
Flow of Events	Basic Path	1. Voter click the initiate button and get a new windows for creating a new vote
		2. Voter fill in all details of the vote with a specified deadline and then choose all online users or a group of them as the participators
		3. Click the send button and this window will be closed automatically after successfully transmission of the vote
		4. Record this vote to the voter’s local file
	Alternate Path	2.1 Voter click cancel button to cancel this initiation and this window will be closed and back to main windows
	Exceptional Path	2.1 Voter dose not choose any one as participator and still click send button
		2.2 Give voter the warning that this vote will not be send until there is at least one participator and then back to the initiate windows
		3.1 Voter disconnect from the multiple group during the transmission of the new vote
		3.2 Transmission will be cancelled automatically
	Post-condition	
Use Case UC2		Check unanswered votes
Description		Voter check the unanswered votes sent by other voters
Pre-condition		Voter has received at least one vote and has not replied it yet
Flow of Events	Basic Path	1. Voter click the unanswered button and get a list of votes which have not been replied and still not exceed the deadline and also not be cancelled by its initiator
		2. Voter can choose one of them to reply, then go to Use Case UC3
		3. Alternatively voter can choose to reply later and back to main windows
	Alternate Path	Null
	Exceptional Path	Null.
Post-condition		If voter choose to reply one vote, and then get a new windows with all the information of this vote with a default selected option
Use Case UC3		Reply a vote
Description		Voter reply the vote received from other voters with a selected option among all the items displayed in this vote
Precondition		Voter choose the Bath path 2 in Use Case UC2

Flow of Events	Basic Path	1. Voter select the option which he/she prefer most
		2. Voter click reply button
		3. After the successful transmission of this reply, this windows will be closed automatically and back to main windows
		4. Record this reply to the voter’s local file
	Alternate Path	2.1 Voter click cancel button to cancel this reply and back to main windows without send any reply message to the initiator of this vote
	Exceptional Path	2.1 Before voter click the reply button, one cancel message has been received to cancel this vote
		2.2 Prompt voter that this vote has been cancelled by its initiator and do not need to reply and then close the reply windows and back to main windows
		3.1 Voter disconnect from the multiple group during the transmission of the reply
		3.2 Transmission will be cancelled automatically
Post-condition		A vote will be successfully replied to its initiator and removed from the unanswered list
Use Case UC4		Send time-out reply
Description		When a unanswered vote exceed its deadline, Jvoter will reply it automatically to its initiator with its default selected option
Pre-condition		The timer in JVoter scan all the unanswered vote periodically and find at least one unanswered vote has exceeded its deadline
Flow of Events	Basic Path	1. JVoter get all the information of the vote from voter’s locality file
		2. JVoter send the reply to its initiator with the default selected option
	Alternate Path	Null
Exceptional Path	Null.	
Post-condition		A vote which exceeded its deadline was removed from the unanswered list and sent to its initiator with its default selected option
Use Case UC5		View vote records
Description		Voter view all the votes either initiated by him/her or he/she has participated in
Pre-condition		Null
Flow of Events	Basic Path	1.Voter click the view button and get a new windows with the list of all votes he/she has initiated or participated in
		2.Voter click one of the votes and get all the information of this vote
	Alternate Path	Null
Exceptional Path	Null	
Post-condition		Null
Use Case UC6		Cancel a vote
Description		Voter passively cancels the votes which are initiated by him/her;

		because of the early leaving before receive replies from all participators.
Pre-condition		There is at least one vote initiated by this voter and has not been finished (means still not receive all the replies from participators). And the voter exits this program before get all the replies.
Flow of Events	Basic Path	1. Prompt the voter that all the votes which have not been finished will be cancelled
		2. JVoter send the cancel message to all the participators
		3. Store the current reply status into the voter's locality file instead of waiting for the all replies before storing.
		4. Close the program
	Alternate Path	1.1 Voter choose to back to main windows to wait for the all replies
	Exceptional Path	Null
Post-condition		The votes which are initiated by him/her and have not been finished are cancelled. And cancel message have been sent to all participators to inform them to ignore this vote.