

## general requirements/instructions for the 'votersrevenge-messaging' open source project

**NOTE: This spec has already been ordered. In turns out that using nedb was an impossible requirement, since it doesn't support foreign keys. We have agreed to switch to MongoDB. Also, I have requested an additional channel in all of the posse/local posse (previously called posseEditions, as in this spec) message boards, called "*potential/other candidates*"**

github repo: <https://github.com/sldev2/votersrevenge-messaging>

original source repo: <https://github.com/mattchewone/feathers-chat-app>

video: <https://tinyurl.com/jicm6f4>

reference article: <https://mattchaffe.uk/articles/feathersjs-channel-subscriptions>

screen capture: see below

NOTE: the results of this open source project will be used in another open source project called "votersrevenge", @ github.com/sldev2/votersrevenge. See votersrevenge.info for more information on the Voter's Revenge project.

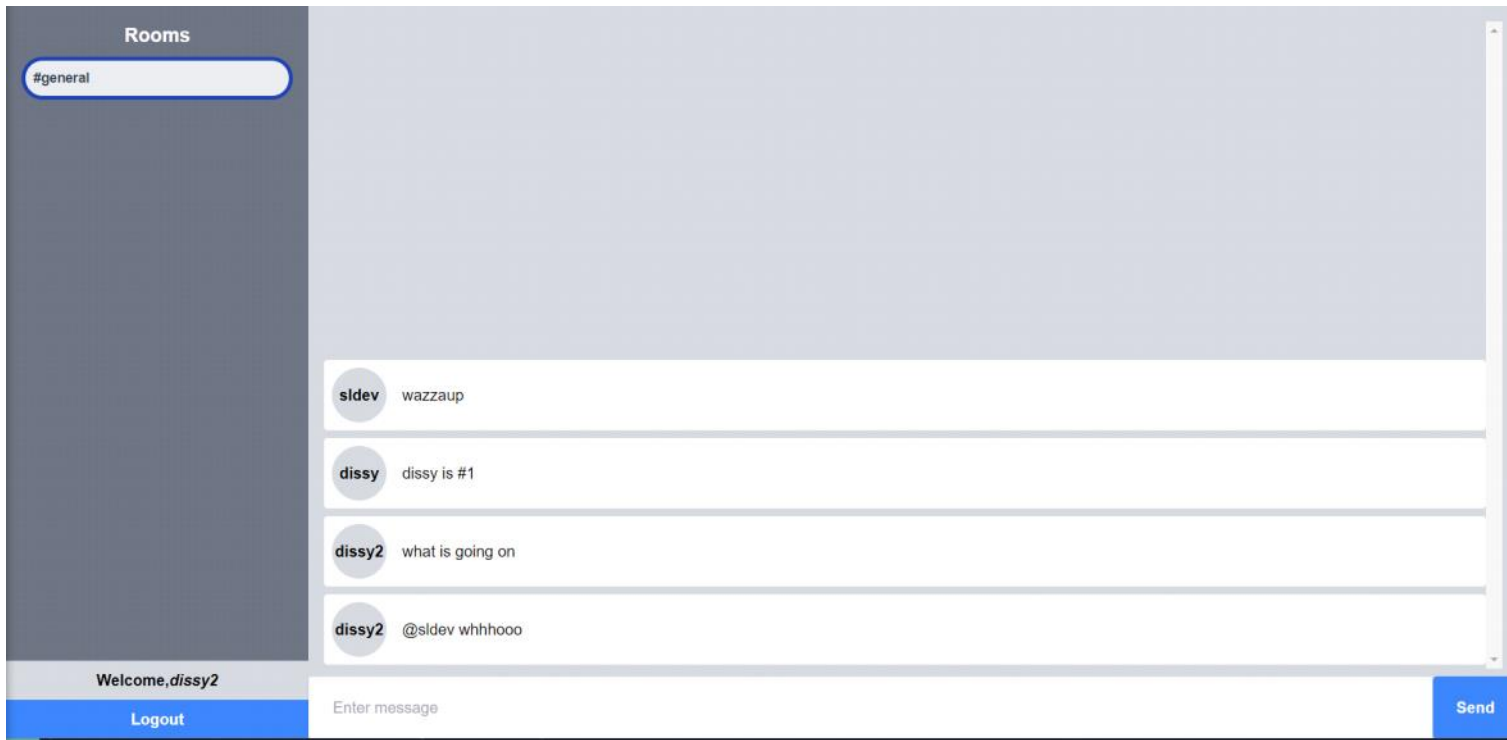
NOTE: **a posse is groups of citizens**; in the US wild west, posses used to hunt down criminals; the votersrevenge app, for which this project is being developed, has the purpose of empowering citizens to "fire" elected politicians who are corrupt, ineffective, etc. In the US, it is in general not possible for citizens to remove elected officials (though it should be...). Consequently, by "firing" a politician, I mean ensuring that the politician doesn't get re-elected. (In the case of the wrangler role, the idea is to exert pressure on elected officials by shaming the them, while educating fellow citizens about their misdeeds. This will indirectly damage their re-election prospects.)

It is hoped that citizens across the world will find votersrevenge useful, including when dealing with parliamentary democracies, which the US is not.

**The crux of this program is to modify the Mattchewone/feathers-chat-app, @ github, by**

- **increasing the number of "rooms" (*which I call "channels", following Slack*)**
- **controlling access to, and privileges in, each channel based on membership in one of 4 messaging roles within either the same posse; or within the same posseEdition**
  - **NOTE: a posseEdition is a child of a single posse, which will typically hold a much smaller subset of members, who will likely live very near each other**
  - **"privileges" with respect to a channel basically boils down to how many messages a user is allowed to post, each day, in that channel**
  - **the limit is set low, for non-admin users, since the point of the app is to facilitate "action, action, action", and a chat application is considered (by me) to be most useful only when used, sparingly**
  - **the data set I provide has examples of all 6 posse roles, which simply map to 1 of the 4 messaging roles**

Here is what the Mattchewone application looks like, now:



There should be no styling changes, that I can think of; and almost no html changes. The addition of tree components in the left hand side represents a change in the net resulting html; however, this is basically handled by the internal tree components' <template> sections, themselves.

Because there will eventually be large numbers posses and possesEditions, the tree components will eventually grow so large t hat some means of vertical scrolling of the components, themselves, will will be needed. Rather than a scroll bar, just use 2 big arrows, above and below the tree components. The tree components will then scroll vertically within a borderless div (however, please change the background color of this borderless div containers, slightly)

The data can be imported from the excel file provided using throw-away code. There is no need for any GUI representation of the data import process, though the throw-away code and instructions for doing the import should be provided. (Especially since I'm not familiar with NeDb.)

This is basically a proof of concept, so that is why the scope is limited, this way. Eventually, it will be tightly integrate d into the votersrevenge project, but on Day 1, the messaging can be done using a separate url and server.

## Requirements

- Add posse, posseEdition collections (NeDb is already installed)

### posse.db

posse\_id  
name  
photo (optional)

### posseEdition.db

posse\_edition\_id  
posse\_id  
name

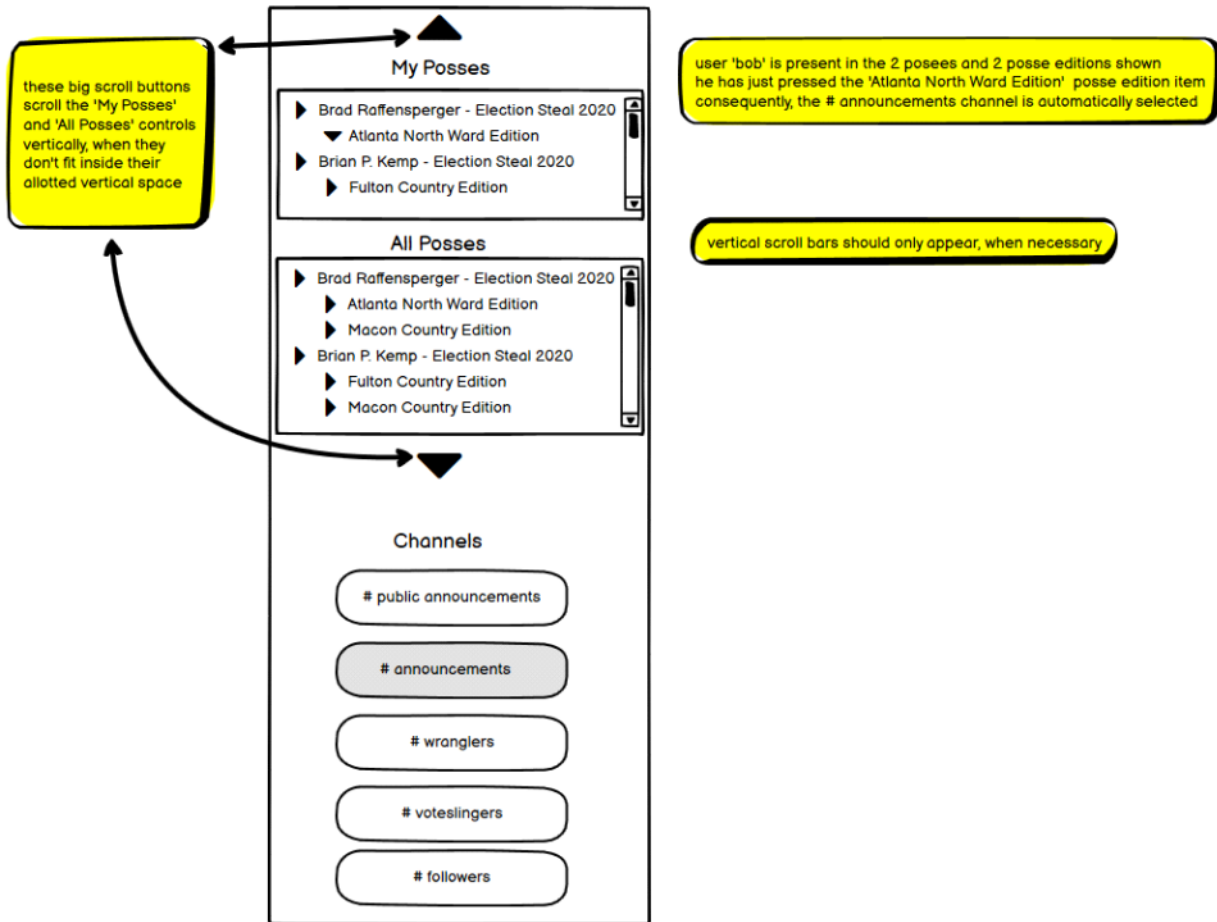
- implement a many to many relationship between users and posses; and between users and posseEditions; the users.db file is

already present, in the project

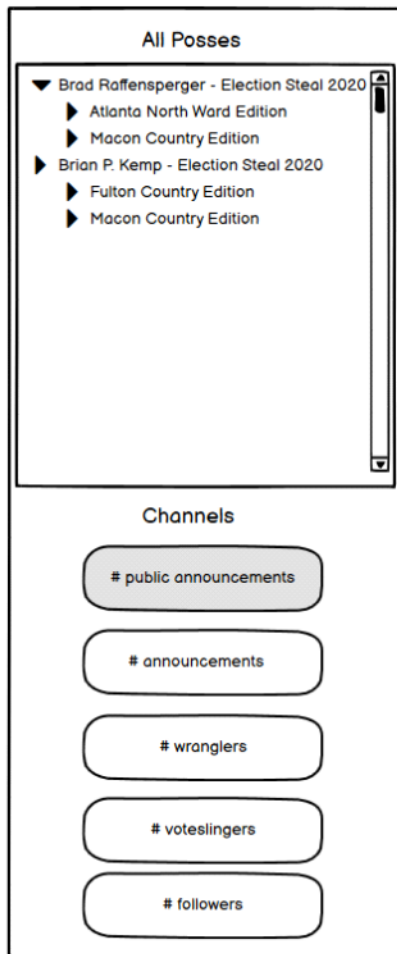
- add additional users to the users.db collection; these are in the sample data, some of which you can see below; all the data has been exported to the Excel attachment
- users have a role or roles in each posse or posse edition they are associated with
- add table(s) to associate the users with the their roles in those posses (generally, they will have only 1 role)
  - the lookup for determining messaging role, from the posse role, is a simple one, and I don't think should be present in the database

posse role	messaging role
super_sheriff	super_admin
deputy	admin
sheriff	admin
wrangler	buddy
voteslinger	buddy
follower	follower
visitor	----- // not logged in // can only view <i>public announcement</i> messaging channel

- of course, a user with multiple posse roles in a posse (or posseEdition) will inherit the corresponding messaging role with the highest privileges, in that posse (or posseEdition)
- posse : posseEdition is 1 to Many (posse editions are local chapters of the parent posse)
- Members of a posse do NOT have to belong to a posseEdition; but all posseEdition members must simultaneously belong to the parent posse
- add 2 rows of posse data (in nedb.posse)
  - name of 1st: "Brad Raffensperger - Election Steal 2020"
  - photo of 1st: take from [https://en.wikipedia.org/wiki/File:Brad\\_Raffensperger.jpg](https://en.wikipedia.org/wiki/File:Brad_Raffensperger.jpg)
  - name of 2nd: "Brian P. Kemp - Election Steal 2020"
  - photo of 2nd: take from [https://en.wikipedia.org/wiki/File:David\\_Perdue\\_and\\_Brian\\_Kemp\\_\(cropped\).jpg](https://en.wikipedia.org/wiki/File:David_Perdue_and_Brian_Kemp_(cropped).jpg)
- add 2 rows of posseEdition data - these are children of the 1st posse (in nedb.posseEdition)
  - name of the 1st: "Atlanta North Ward Edition"
  - name of the 2nd: "Macon County Edition"
- add 2 more rows of posseEdition data - these are children of the 2nd posse (in nedb.posseEdition)
  - name of the 1st: "Fulton County Edition"
  - name of the 2nd: "Macon County Edition"
- add sample data for users in the following roles - see "Sample Data", shown below, and available as an Excel attachment
  - note: the privileges of each role are detailed, below)
- introduce 2 tree component in the left hand side panel, so that different posse and posse edition channels can be shown and hidden; this can be placed above the list of channels which are contained in the selected posse or posse edition
- for a logged in user, the 'My Posses' tree component is populated with a filtered list of posses and posse editions that the user is in
- please pay special attention to the user named 'bob'; he is present in 2 posses and 2 posse editions, so the left hand side should show the following when 'bob' is tested (the big scroll buttons may or may not show, depending on whether the 'My Posses' and 'All Posses' exceed their allotted space)



- for visitors who are not logged in, hide the 'My Posses' tree component
  - you probably have to alter the logic that tries to get everybody to log in, or register, before they can see any of the channels
  - provide a link for logging in/registering from the main screen, for visitors who are not logged in
  - provide a link for logging out, for users who are logged in
- the left hand side will look like this, for visitors:



visitors (non-logged in, anonymous users) can only access the # public announcements channel

when such a visitor clicks any of the other channels, they should be alerted that they need to register, then become at least a follower of a posse or posseEdition, in order to see additional channels

vertical scroll bars should only appear, when necessary

- in the messages section of the GUI, please display the timestamp; note that messages.db already has a createdAt field, which I assume yields a useable timestamp.
  - use US Format: Month DD, YYYY // i.e., January, February, etc.; so, 'January 2, 2021' would be a full date example
- please perform at least manual tests for the following specs; I would prefer some sort of automatic, or semi-automatic (storybook?) tests be written, using any testing libraries you are comfortable with, but since I have no idea how difficult that would be, and suspect it is difficult enough to not be worth the effort, **it is not required**. As a rule of thumb, if you can add automatic tests in 2 hours or less, please do so. Otherwise, don't bother.
- since I am not looking for anything but extremely minor GUI changes, I have not made additional wireframes, or referred to any GUI objects; for private, 1-1 messages, something like the Facebook chat interface, which pops up, is fine

action	role or roles	specs (happy path, mostly)
	<p><b>(regular) posse</b> will have data record in nedb.posse</p> <p><b>messaging privileges vs. chat role</b></p>	<p><b>5 channels:</b> public announcements announcements // non-public wranglers // non-public voteslingers // non-public followers // non-public</p> <p><b>4 user chat roles</b> (ordered by increasing privilege level): visitor (not logged in) follower (posse role = follower) buddy (posse role = voteslinger or wrangler) admin (posse role = deputy, sheriff, or super_sheriff)</p>
view public message	same as <i>local edition posse</i>	same as <i>local edition posse</i>
view non-public messages	same as <i>local edition posse</i>	same as <i>local edition posse</i>
participate in the wrangler	same as <i>local edition posse</i>	same as <i>local edition posse</i>

channel or the voteslinger channel		
participate in the follower channel	same as <i>local edition posse</i>	same as <i>local edition posse</i>
message limits	same as <i>local edition posse</i>	same as <i>local edition posse</i>
private messaging (1 on 1) limits	same as <i>local edition posse</i>	same as <i>local edition posse</i>
	<p><b>local edition posse</b> (aka "buddy posse") will have data record in nedb.posseEdition</p> <p><b>messaging privileges vs. chat role</b></p>	<p><b>5 channels:</b> public announcements announcements // non-public wranglers // non-public voteslingers // non-public followers // non-public</p> <p><b>4 user chat roles</b> (ordered by increasing privilege level): visitor (not logged in) follower (posse role = follower) buddy (posse role = voteslinger or wrangler) admin (posse role = deputy, sheriff, or super_sheriff)</p>
view public message	<p>visitors +</p> <p><b>('+' means: "and up")</b></p> <p><b>visitors &lt; follower &lt; buddy &lt; admin</b></p> <p>so, visitors + = visitors + followers + buddy + admin</p>	view all messages in the "public announcements" channel
view non-public messages	follower +	view all messages in the non-public channels
participate in the wrangler channel or the voteslinger channel	buddy +	in any of the non-public channels: create a message
participate in the follower channel	follower +	create a message
message limits	<p>deputy+ : no limit</p> <p>buddy: 4 messages per channel per day</p> <p>follower: 4 messages per day, in the follower channel, only</p>	<p>show friendly SYSTEM message "you have reached your daily quota for message; remember "action, action, action" " when a user tries to exceed their message limit</p> <p>show message limit status with "X of 4 max messages, today; remember "action, action, action" "</p>
private messaging (1 on 1) limits	<p>follower +: 4 messages per 1-on-1 chat, per day</p> <p>admin +: any 1 on 1 chat involving an admin has no limits</p> <p>( for example: a 1 on 1 with a deputy and a follower, has no limits)</p>	<p>must send 'buddy request' (like a friend request in facebook) first (and be accepted) before can access private chat channel a user can only send 1 'buddy request' to another user in the same posse every 2 months</p> <p>show a friendly SYSTEM message: "you have reached your daily limit for messages in this channel; remember "action, action, action" " when user tries to exceed their message limit</p> <p>show a friendly SYSTEM message: "{user} tried to send you another message, today, but had already exceeded their message limit" if the person you are chatting with tries to exceed their message limit</p> <p>show message limit status with "X of 4 max private messages with { user} , today; remember "action, action, action" "</p>

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Some of the Sample Data (all sample data in Excel file)

Wednesday, August 11, 2021 6:18 PM



Sample Data - Spreadsheet

posse_id	posse_edition_id	username	posse roles	messaging roles
1	null	sam	super_sheriff	super_admin
1	null	amna	sheriff	admin
1	null	billy	sheriff	admin
1	null	olivia	deputy	admin
1	null	emma	deputy	admin
1	null	sofia	deputy	admin
1	null	eleanor	voteslinger	buddy
1	null	layla	voteslinger	buddy
1	null	grace	voteslinger	buddy
1	null	hazel	wrangler	buddy
1	null	tom	wrangler	buddy
1	null	bob	wrangler	buddy
1	null	simon	follower	follower
1	null	peter	follower	follower
1	null	tera	follower	follower
1	null	joann	follower	follower
1	null	lesley	follower	follower
1	null	hubbie	follower	follower
1	null	carol	wrangler	buddy
1	null	margaret	wrangler	buddy
1	null	hope	wrangler	buddy
1	null	heddy	wrangler	buddy
1	null	zelda	wrangler	buddy
1	null	quickdraw_mcgraw	follower	follower
1	null	fango	follower	follower
1	null	wango	follower	follower
1	null	tango	follower	follower
1	null	tera	follower	follower
1	null	liam	voteslinger	buddy
1	null	noah	voteslinger	buddy
1	null	william	voteslinger	buddy
1	null	avie	follower	buddy
1	null	coralee	wrangler	buddy
1	null	oliver	follower	follower
1	null	benji	follower	follower
1	null	ellena	follower	follower
1	null	lucas	follower	follower
1	1	sam	super_sheriff	super_sheriff
1	1	carol	sheriff	admin
1	1	margaret	deputy	admin
1	1	hope	deputy	admin
1	1	amna	deputy	admin
1	1	heddy	wrangler	buddy
1	1	zelda	wrangler	buddy
1	1	zelda	voteslinger	buddy
1	1	hazel	wrangler	buddy



1	1	zelda	wrangler	buddy			
1	1	zelda	voteslinger	buddy			
1	1	hazel	wrangler	buddy			
1	1	hazel	voteslinger	buddy			
1	1	bob	voteslinger	buddy			
1	1	quickdraw_mcgraw	voteslinger	buddy			
1	1	fango	follower	follower			
1	1	tango	follower	follower			
1	1	wango	follower	follower			
1	1	tera	follower	follower			
1	2	sam	super_sheriff	super_admin			
1	2	liam	sheriff	admin			
1	2	noah	deputy	admin			
1	2	william	deputy	admin			
1	2	avie	voteslinger	buddy			
1	2	coralee	voteslinger	buddy			
1	2	oliver	wrangler	buddy			
1	2	benji	wrangler	buddy			
1	2	ellena	follower	follower			
1	2	lucas	follower	follower			