## 'Fennec' Defect Log Sprint 2

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## **Design Inspection**

Teams: Backend, Web, Fennec Chat, Crawler

Product	Web Module Design Inspection		
Date	03/3/2016		
Author	Mitch		
Defect #	Description	Severity	How corrected
1	Users could change their username, complicating username assignment	2	Users can no longer change their username, and are assigned animals instead
2	Footer took up way too much space, and had no intended purpose	3	Changed to a much smaller, less intrusive size.

Product	Fennec Chat Module Design Inspection		
Date	03/3/2016		
Author	Joe, John, Michael, Shawn		
Defect #	Description	Severity	How corrected
3	IRC is too much and fairly difficult to work with.	2	Switch chat server to simple websocket architecture.
4	Username field is not necessarily unique.	2	Changed username field to a unique client ID field.
5	There was no way for any user to tell where messages actually came from.	1	Changed message from simple string to JSON object to hold both client ID and message contents.

Product	Backend Design Inspection		
Date	03/3/2016		
Author	George, Tim		
Defect #	Description	Severity	How corrected

6	There is no clean way for the front end web client to retrieve all the active stations.	1	Added a Web API endpoint on the server that simply returns a list of stations with their information
7	There was not an option for the user to destroy a station, due to lack of the feature on the back-end.	2	Added a Web API endpoint on server that destroys (deactivates a station and clears its media items queue).
8	The user was not able to name a station on the web client.	3	Modified the "add station" endpoint to take an extra parameter "name", and make the server return it whenever necessary.

## **Code Inspection**

Product	Web Module Code Inspection		
Date	03/3/2016		
Author	Mitch		
Defect #	Description	Severity	How corrected
9	Web client was using post requests to retrieve station info when it required a get request.	1	Changed to use get requests
10	Server cannot be joined with current settings	1	Moved opening socket to loading the page, and joining to loading the station

Product	Fennec Chat Module Code Inspection		
Date	03/3/2016		
Author	Joe, John, Michael, Shawn		
Defect #	Description	Severity	How corrected
11	Manually creating strings in the test harness that are correctly formatted to be JSON objects is inefficient and is likely to have errors.	3	Created JSON objects using built in javascript functionality instead.
12	Malformed JSON objects sent to the server caused user to automatically disconnect.	1	Implemented error handling on chat server to prevent user from being forcefully disconnected.
13	Whenever a user left a station, the message sent to indicate that was sent to all users in all stations instead of just one.	2	Changed "User left" message to only send to users in one station
14	When attempting to create a bot connection to the chat server, the bot was unable to connect to the server.	2	Changed the socket type used from a socket to a websocket
15	Attempting to connect to a websocket	1	Because we don't have an

to crash clients connect using the ws protocol
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Product	Backend Code Inspection		
Date	03/3/2016		
Author	Tim, George		
Defect #	Description	Severity	How corrected
15	Unused code from the chat server remained in the RESTful server.	3	The methods were removed (as they now exist in chatserver.py)
16	The server can crash if given any invalid parameters.	2	Added parameter validation to reject invalid parameters and return an error message
17	When a web client tries to look for the next media currently in the queue, the server response time can be bad if the queue is huge.	3	When the server tries to look for next media, it would try to do an object-to-object comparison. However, it is a lot faster after we convert mediald from web client to integer type, and use int-to-int comparison.
18	The server.py file contained both the RESTful API and the chatserver code which led to clutter.	3	Pulled out all of the code for the chatserver and put it into another file: chatserver.py

## **Unit Testing**

Product	Web Module Unit Testing		
Date	03/3/2016		
Author	Mitch		
Defect #	Description	Severity	How corrected
19	Ads play on many videos, harming synchronization.	2	Youtube reads cookies to determine if showing an ad, and you can change your cookies to skip them.
20	Removing videos from the playlist changes the internal numbering of the objects	2	Items are given a 'true number' and that never changes even if things before and after are removed.
21	Leaving a station doesn't disconnect from previous station's chat	3	Added socket leave statement in the station view function.

Product	Fennec Chat Module Unit Test		
Date	03/3/2016		
Author	Joe, John, Michael, Shawn		
Defect #	Description	Severity	How corrected
22	Closing connection forcefully on Safari results in an error reported by the server.	3	Ignored, does not negatively affect the server or end user in any tangible way.
23	Negative stationid enters a user into a real station.	3	Python interprets a negative array index as counting down from the opposite end of the array. A check was created to ensure that the stationid is not negative.
24	Entering a stationid with absolute value greater than 99 crashes the server.	1	Added a check to make sure that the stationid is less than or equal to 99.

	Checks for number of words given as input are now made.
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Product	Backend Unit Testing		
Date	03/3/2016		
Author	Tim, George		
Defect #	Description	Severity	How corrected
26	Users could add/remove media, get next and get all from stations outside the maximum range.	2	Added checks to constrain requests between 0 and 99
27	Users could add/remove media, get next and get all from inactive (uncreated) stations.	2	Added a field to station objects which is set to -1 by default, when the station is created it gets assigned to an id. This id is checked in the add method to see if it has been incremented above -1
28	User could create unlimited number of stations.	3	Limit the maximum number of stations to 100. If user insists on creating more, it will just not do so and return an error message.