Product	Song Wars - Team 17		
Date	9/19/20		
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Defect #	Description	Severity	How corrected
DESIGN INSPECTION			
1	Our original design exposed the client secret	1	Store the client secret on our backend API
2	Client had no way of refreshing access token when expired without having to reload the page	2	Adding a dedicated API call to refresh tokens
3	Original cookie design could not guarantee uniqueness of identity	1	Changing the design and information stored inside the cookie
CODE INSPECTION			

4	`switch (action.type) {`
	` case TOGGLE_SIDEBAR:`
	`  state.sidebarIsVisible =`
	`!state.sidebarIsVisible`
	` }`
		2	`switch (action.type) {`
			` case TOGGLE_SIDEBAR:`
			`  return { ...state,`
			`sidebarIsVisible:`
			`!state.sidebarIsVisible }`
			`}`

5	`export const toggleSidebar = () => {`
	`type: TOGGLE_SIDEBAR }`
		1	`export const toggleSidebar`
			`= () => ({ type:`
			`TOGGLE_SIDEBAR })`

6	`fetch(`https://api.spotify.com/v1/search?${qs}`, myInit)`
	`  .then(data => data.json())`
	`  .then((json) => {`
	`   this.setState({`
	`    searchResults:`
	`json.tracks.items`
	`   });`
	`  }`
	`})`
		3	`fetch(`https://api.spotify.com/v1/search?${qs}`,`
			`myInit)`
			`  .then(data => data.json())`
			`  .then((json) => {`
			`   if (json.tracks.items) {`
			`    this.setState({`
			`     searchResults:`
			`json.tracks.items`
			`    });`
			`   }`
			`  })`

				.catch(err => console.error(err))

7	static public String string(Map<String, Object> json, String fieldname)
	{
	    String string;
	    if (!json.containsKey(fieldname)
	       || !(json.get(fieldname) instanceof String)
	       || !((string = (String) json.get(fieldname)) != null)) {
	       throw new RuntimeException("[BadRequest] Could not access \'" + fieldname + "\' string of AWS transformed JSON.");
	    } else
	       return string;
	}
		1	public static void error(Map<String, Object> json) {
			    String error;
			    if (!json.containsKey("error")
			       || !(json.get("error") instanceof String)
			       || !((error = (String) json.get("error")) != null)) {
			       return;
			    }
			    else
			       throw new RuntimeException("[Unauthorized] Error \'" + error + "\' occurred during service authentication and user cannot be accepted.");
			}

UNIT TESTING INSPECTION			
Test #	Description	Severity	Defects Found
1	Tested search results for a boundary case ie: 0 results	1	When search parameter returned zero results, it threw an undefined error that crashed the application when it tried to search with nothing.
2	Tested search term for default case ie: blank entry	1	When the search term was removed, the entire application would crash because the API would return an undefined value
3	Tested login and authentication functionality with Spotify's API	1	N/A (No defects found)
4	Tested API Gateway's ability to return error response codes	2	When an Internal Server Error was supposed to be reported, a response code 400 was returned.

5	Tested song recommendation API call	1	N/A