

1 Design Inspection Defects

Product	LOFO System Design Inspection		
Date	02/09/17		
Author	Development team		
Moderator	Li Heng		
Inspectors	Ketao Chang, Yiyao ZHou, Yibin Wu		
Recorder	Weichu Hu		
Defect #	Description	Severity	How Corrected
1	When integrating "AddPost" component into "Map" component, the pop-up dialog of "AddPost" component is not shown when click on the Map.	1	It happens because "Map" component block the pop-up of "AddPost" component. So we integrate the code of both components to be a new component.
2	When connecting "History" and "Edit" component to our database, the posts do not show up.	2	The get method is not used correctly. It should grab all the posts in the database rather to get posts by ID.
3	When user don't have an account, they won't be able redirect any other page (like map main page) as the initial page for the system is the login page.	1	Add a 'register' button on the login page. When user don't have an account, they can click 'register' which would redirect the user the register page.
4	When connecting "Login" component to backend API, the return value is always true even when a incorrect email and password is sent.	2	The return value of an HTTP request in Angular is a Promise type so the value of it is always non-null even though API

			returns null. Corrected by getting the correct return value inside the Promise object.
5	When connecting “History” and “Edit” to our database. The “submit” button on the edit page does not work correctly. A single hit could cause the server to terminate.	1	Some API methods sens headers multiple times. So we return everytime when they send headers.

2 Code Inspection Defects

Product	Add Post Module Inspection		
Date	02/08/17		
Author	Yiyan Zhou		
Moderator	Ketao Chang		
Inspectors	Yibin Wu, Heng Li		
Recorder	Weichu Hu		
Defect #	Description	Severity	How Corrected
1	When using Bootstrap as CSS template, the whole page is not correctly shown.	1	Angular2 is not fully compatible with Bootstrap. Corrected by change default Bootstrap into ng2-bootstrap which is fully compatible with Angular2

Product	Map Module Inspection		
Date	02/08/17		
Author	Ketao Chang		
Moderator	Yiyan Zhou		

Inspectors	Yibin Wu, Heng Li		
Recorder	Weichu Hu		
Defect #	Description	Severity	How Corrected
1	When click on the map, only one default marker with a button floating over should appear. But numbers of markers will appear based on clicking times	1	The marker is now two-way bound with an object in the component.
2	When click on the 'x' above the button, the new marker should disappear as long as the button. But only the button will disappear.	3	Destroy the new marker when the closing event triggered.
3	Clicking on existing markers expands the navbar, and new marker should not. But clicking on the new marker will expand navbar.	3	Create a new object in component and bind it to the new marker.
4	When page loaded, map should show all ongoing cases as markers, but there is no marker shown.	1	Construct the markers inside the function retrieving data from the database.

Product	History Module Inspection		
Date	02/10/17		
Author	Yibin Wu		
Moderator	Li Heng		
Inspectors	Yiyan Zhou, Weichu Hu		
Recorder	Ketao Chang		
Defect #	Description	Severity	How Corrected
1	When open the page, all test post in the database should show up. But no posts showed.	2	The api is correctly used, now can extract posts from database.

2	Cannot pass the information of a post to the edit page.	3	Output every properties of history component and input it to the edit component.
3	When hit the “submit” button on the edit page, the post should be edited. But the server crashed with the error: “can’t send headers after they are sent”.	1	Fix the incorrect API methods.
4	When hit the “submit” button on the edit page, the post should be edited. But after refreshing the page, no posts changed.	1	Fix the posts’ property names to be same to the database.

Product	Login and Register Module Inspection		
Date	02/09/17		
Author	Weichu Hu		
Moderator	Heng Li		
Inspectors	Yiyan Zhou, Ketao Chang		
Recorder	Yibin Wu		
Defect #	Description	Severity	How Corrected
1	When the system load, it won’t start with login page.	1	Change the module file to correct the order of module load for initial page.
2	During the test, user enter fake account and page redirect with error message.	1	Set up and make sure the login page won't redirect until get verify success feedback from server.
3	Login page won’t redirect when click ‘register’ button.	2	Check the router setting for ‘register’ button.
4	Login page won't redirect with correct account information entered	2	Check the router module and make sure the setting is correct

Product	Backend Module Inspection		
Date	02/08/17		
Author	Heng Li		
Moderator	Yibin Wu		
Inspectors	Weichu Hu, Yiyan Zhou		
Recorder	Ketao Chang		
Defect #	Description	Severity	How Corrected
1	When login with a non-existing account, the function should return a message, but it continued to read the password property of a null object, and caused an error.	3	Check whether the account exists or not before matching the password.
2	When APIs are called in front-end and an error occurs, the back-end should return an error message and exit, but it keeps executing the next codes, and would send more data.	1	Exit the function when the error occurs.

3 Unit Testing Defects

We use 'karma' as the test framework. We built the unit tests for each component, but the configuration file is a little bit messed up so it may not run smoothly.

Product	Map Module Unit test		
Date	02/08/17		
Author	Ketao Chang		
Defect #	Description	Severity	How Corrected
1	When click on the map, only one default marker with a button floating over should appear. But numbers of markers will appear based on clicking times	1	Create 'newMarker' outside 'makers' array. Implement two-way binding.

2	When click on the 'x' above the button, the new marker should disappear as long as the button. But only the button will disappear.	3	Override the function trigger by 'infoWindowClose' event. Set newMarker to null.
3	Clicking on existing markers expands the navbar, and new marker should not. But clicking on the new marker will expand navbar.	3	Separate the newMarker object from the 'markers' array completely, so it can only create one instance once.
4	When page loaded, map should show all ongoing cases as markers, but there is no marker shown.	1	Create markers according to the retrieved array inside the getPost function.

Product	History Module Unit test		
Date	02/10/17		
Author	Yibin Wu		
Moderator	Li Heng		
Inspectors	Yiyan Zhou, Weichu Hu		
Recorder	Ketao Chang		
Defect #	Description	Severity	How Corrected
1	When open the page, all test post in the database should show up. But no posts showed.	2	Use the method that requests all existing posting in the database, not requesting posts by ID.
2	Cannot pass the information of a post to the edit page.	3	Set the post object to be an OUTPUT and inject it into the edit component.
3	When hit the "submit" button on the edit page, the post should be edited. But the server crashed with the error: "can't send headers after they are sent".	1	For each method in the database API, return immediately after sending headers. This eliminates multiple sending.
4	When hit the "submit" button on the edit page, the post should be edited.	2	For the properties, set their variable name to be same

	But after refreshing the page, no posts changed.		to the database object's name.
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Product	Login and Register Module Unit test		
Date	02/09/17		
Author	Weichu Hu		
Moderator	Heng Li		
Inspectors	Yiyan Zhou, Ketao Chang		
Recorder	Yibin Wu		
Defect #	Description	Severity	How Corrected
1	When the system load, it won't start with login page.	1	Change the 'index.html' page setting and in module setting make the 'LoginComponent' load first.
2	During the test, user enter fake account and page redirect with error message.	1	Check the api feedback information in browser console. Then we know the issue belong to the front-end. Issue solved after correct the setting for Api call in 'user.service.ts' file.
3	Login page won't redirect when click 'register' button.	2	Check the router setting for 'register' button in 'login.component.ts' file and module setting in 'app.module.ts' and corrected the invalid code.
4	Login page won't redirect with correct account information entered	2	Check the api feedback information in browser console. Issue solved after correct the router file setting for 'login' click action in 'login.component.ts' file.

The unit tests for the module below are automatic, I use mocha for the unit test.
When enter “npm test” in the root directory, the scripts will call “mocha”, and it leads to
UnitTest.js, then it will run 13 unit tests for the backend APIs.
(The unit tests script for this module is in dev branch now)

Product	Backend Module Unit test		
Date	02/08/17		
Author	Heng Li		
Defect #	Description	Severity	How Corrected
1	When login with a non-existing account, the function continues to read the password property of a null object, and caused an error.	3	Add an if statement to check whether the account exists or not, if not, return a message with “No such user”.
2	When APIs are called in front-end and an error occurs, the back-end keeps executing the next codes, and would send more data.	1	Add a return before res.json(error).