İSTANBUL TECHNICAL UNIVERSITY
Faculty of Computer Science and Informatics

Information Technologies
Developing new features and bugfixes with AngularJS and ReactJS on international post Forwading Company.

INTERNSHIP PROGRAM REPORT

Lına Fahad A Alrehaılı
150160930

18 June – 27 July / 2018

İSTANBUL TECHNICAL UNIVERSITY

Faculty of Computer Science and Informatics

INTERNSHIP PROGRAM ACTIVITY REPORT

Academic Year: 2017-2018

Period of Training: [✓ ☐Summer] ☐Spring ☐Autumn

Student Information

Name Surname: Lına Fahad A Alrehaılı

Student ID: 150160930

Department: Computer Engineer

Program: 100% English

E-Mail: Alrehailil16@itu.edu.tr

Mobile Phone: +90 536 860 37 67

Pursuing a Double Major? ☐Yes (Faculty/Department of DM: ________________________________)

[✓ ☐No]

Graduated? ☐ Yes

☐No

Taking a class at Summer School? [✓ ☐Yes(Number of Classes: 1)]

☐ No

Institution Information

Company Name: ETTS

Department: Front-End Department

Web Address: https://www.etts.com.tr/

Postal Address: Akat mahallesi, Zeytinoğlu Caddesi, Fenerli Hristo Sokak,
Çevre Sitesi, 14/C 2D, Akatlar 34335 Beşiktaş - İstanbul / Türkiye

Authorized Person Information

Department:	Front-End Department
Title:	Front-End Team Leader
Name Surname:	Ilke Ertem
orporateE-Mail:	ilke.ertem@etts.com.tr
Corporate Phone:	+90 53 255 827 52

Internship Program Information

Location	□Turkey □Abroad
Starting Date	18.06.2018
End Date	27.07.2018
Number of Days Worked	30 days
During your internship, did you have insurance?	□Yes, I was insured by İTÜ. □Yes, I was insured by institution. □No, I did my internship abroad. □No.

Table of Contents

The internship report with the above given "Table of Contents" was seen and approved for the student with student ID "150160930" and name "Lına Fahad A Alrehaılı"

Authorized staff of the institution who filled in the form

Name and Surname: *İlke Ertem*
Title: *Table of Contents Approval*
Manager-Signature-Seal:

ETTS ELEKTRONİK
TİC. TAH. SİS. SAN. VE TİC. LTD. ŞTİ.
Akat Mah. Ferenli Hristo Sok. No: 2 D:1
Beşiktaş / İSTANBUL
Beşiktaş Vergi Dairesi: 381 043 1560

(Institutional) E-mail: *illke.ertem@etts.com.tr*
(Institutional) Phone Number: *+90 532 5582 752*

1. INFORMATION ABOUT THE COMPANY

ETTS (Elektronik Ticaret Tahsilat Sistemleri San. ve Tic. Ltd. Sti.) is a project development and implementation company, specializing in mobile solutions, payment systems, loyalty applications, field sales solutions, field operations and event management, international logistics services, E-Service and E-Commerce solutions. Turkey's largest banks, global giant financial institutions, have created successful stories with retail leaders [1]. The company is located in Zeytinoğlu Caddesi, Fenerli Hristo Sokak, Beşiktaş - İstanbul / Türkiye.

In this internship, I had the opportunity to work in the projects of the company, I had an overview about the company’s working fields and the company's environment, the projects that I have worked with are Shippn-FroneEnd project, Elf project and Sauron project, the first two projects are web applications dealing with shipping tasks, and the Sauron is a new project which focus in learning how to extract and modify objects within a website.

ETTS Company had many successful projects, their established applications [2]:

- MasterCard
- Garanti
- DenizBank
- Amerikadaniste
- Ship Zip
- AKBank
- Citi
- Moka
- Carrefour
- Aviva SA
- OdeaBank

- In 2010: a service was provided for the infrastructure and management of Citi Globeshopper service to Citibank A.Ş. (*www.globeshopperturkey.com*).

-In 2011: Citibank A.Ş. The (*www.SaleByDownload.com*) project has been renewed and a lot of time has passed. (*www.indirimkartimda.com*) also, Akbank T.A.Ş. Wings Globeshopper service was launched for (*www.globeshopperturkey.com*).

-In 2012: Citibank A.Ş. Citi Ettikett service was launched for Global Mağazam service for Finansbank was launched (*www.globalmagazam.com*). Also, ShopByAmex service for Garanti Bank was launched (*www.shopbyamex.com*).

-In 2015: Denizbank A.Ş. Credit cards for mobile application "Deniz Kartım" was developed.

-In 2016: AvivaSA Field Sales Automation Mobile Application was developed, Holiday Basket Mobile Application development service was provided, MasterCard became a mobile application partner in the European Balkan region.

-In 2017: AIK Bank Mobile Application was developed. Shippn was established. OdeaBank Loyalty Portal was developed. Turkcell Paycell card product was developed.

-In 2018: Peppara mobile payment application has been improved, BKT Bank Mobile application development process started.

2. INTRODUCTION

During this report, I will review what I have learned during my internship at ETTS Company, which lasted for 30 working days (6 June – 27 July 2018) during summer period time, the internship type I applied for is Information Technology, I applied for this internship because I am interested in learning the Front-end web developments, and I would like to learn more about it in order to boost my future career plans. Throughout the internship, I took the chance to acquire and retain the knowledge and skills I have gained in my education time at Istanbul Technical University, in order to apply it in the real world field, my main duty in the company was to implement many tasks depending on the daily activities of my colleagues and supervisor. Furthermore, it made my resume a more qualified resume; as it can result in additional job offers compared to individual who lack such work experience. What I have gained from this experience:

- I had the chance to see the working environment of the company
- how to participate and work as a team with other workers within the company
- identify my weaknesses and my strengths
- how to find a problem and conquer it
- how to find an alternative solution other than the existed solution

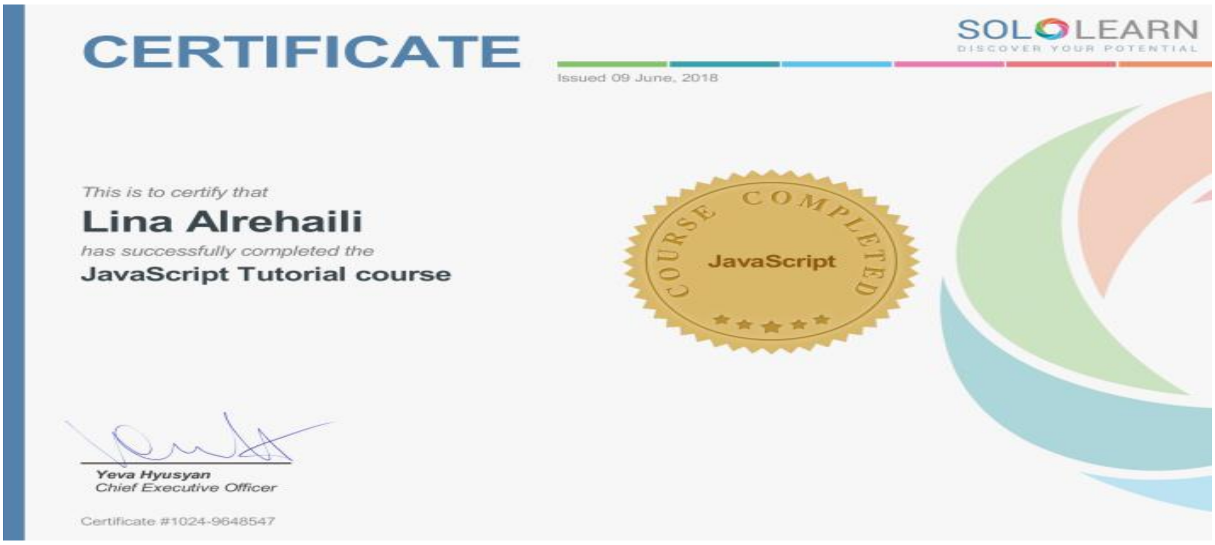
Therefore, I am pleased that I had the chance to gain this knowledge and experience, as I will know what to do later in my life when I start a particular career.

3. INTERNSHIP WORK AND PROJECTS DESCRIPTION

In this section, I will describe the work that I have done during my internship, what I have learned, the company projects which I have worked on such as Shippn-FroneEnd project, Elf project and Sauron project, I was engaged in solving some issues distributed to multiple of projects, and I was able to solve those assigned issues.

3.1 Html, css, jquery and javascript

In the first week, I had to learn the fundamentals of HTML, CSS, jQuery and JavaScript, having the knowledge of these fundamentals is very important when you are a beginner in the Front-End Web Development. Luckily, I already knew HTML, CSS and jQuery; because I have used it before in the project of database management system course ***BLG 361E***, I just had to learn JavaScript to complete the first step. Therefore, I took some courses from (*https://sololearn.com*) [3]; to learn JavaScript and to enhance my previous skills in HTML, CSS and jQuery. The certificates of the courses I completed are as shown in Figure 3.1.1, Figure 3.1.2, Figure 3.1.3 and Figure 3.1.4.



CERTIFICATE

SOLOLEARN
DISCOVER YOUR POTENTIAL

Issued 09 June, 2018

This is to certify that

Lina Alrehaili

has successfully completed the

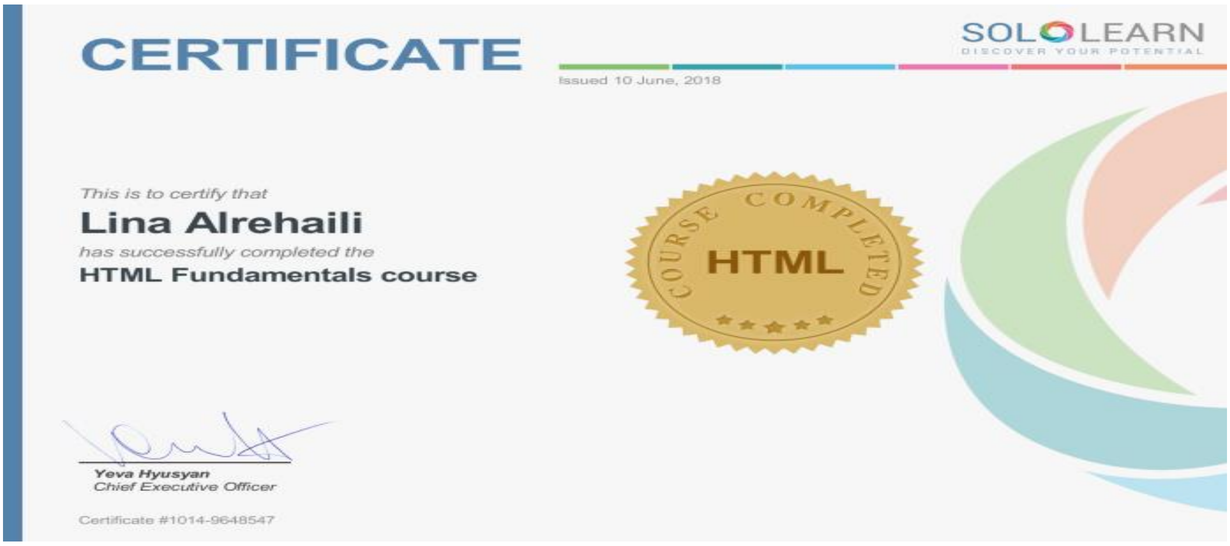
JavaScript Tutorial course

COURSE COMPLETED
JavaScript

Yeva Hyusyan
Chief Executive Officer

Certificate #1024-9648547

Figure 3.1.1 *JavaScript course certificate*



CERTIFICATE

SOLOLEARN
DISCOVER YOUR POTENTIAL

Issued 10 June, 2018

This is to certify that

Lina Alrehaili

has successfully completed the

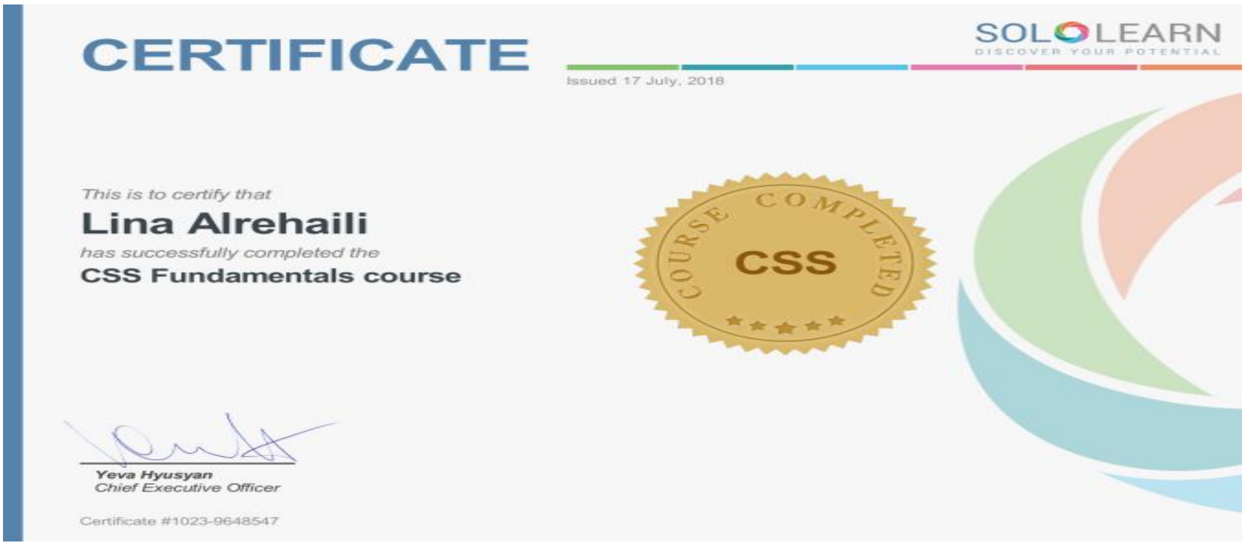
HTML Fundamentals course

COURSE COMPLETED
HTML

Yeva Hyusyan
Chief Executive Officer

Certificate #1014-9648547

Figure 3.1.2 *HTML course certificate*



CERTIFICATE

SOLOLEARN
DISCOVER YOUR POTENTIAL

Issued 17 July, 2018

This is to certify that

Lina Alrehaili

has successfully completed the

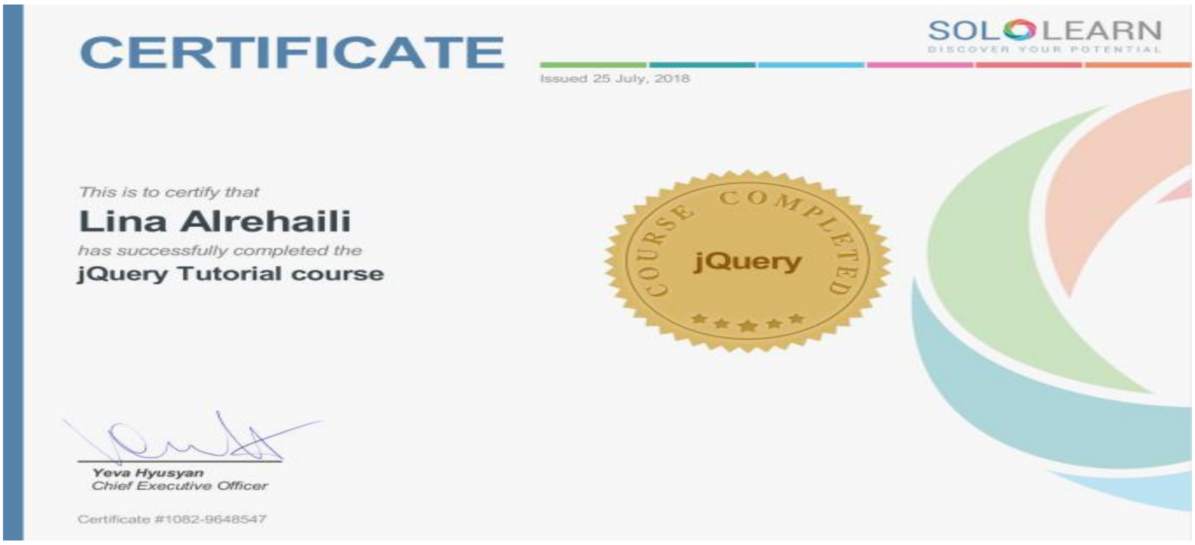
CSS Fundamentals course

COURSE COMPLETED
CSS

Yeva Hyusyan
Chief Executive Officer

Certificate #1023-9648547

Figure 3.1.3 *CSS course certificate*



CERTIFICATE

SOLOLEARN
DISCOVER YOUR POTENTIAL

Issued 25 July, 2018

This is to certify that

Lina Alrehaili

has successfully completed the

jQuery Tutorial course

COURSE COMPLETED
jQuery

Yeva Hyusyan
Chief Executive Officer

Certificate #1082-9648547

Figure 3.1.4 *JQuery course certificate*

3.2 Bitbucket and git commands

Bitbucket is a web-based hosting service to manage Git repositories for projects and source codes, Bitbucket is very similar to GitHub, the project I worked on used Bitbuket instead of GitHub; because its easier when dealing with Jira application and it's free for private repositories, I will talk more in detail about Jira later in the report of section /3.3/.
To start up, when I work on a new project from Bitbucket, I clone the file repository to my desktop by clicking the Clone button as seen in Figure 3.2.1, then I open the Git Bash terminal to clone the repository, by the command**" $ git clone (link of the repository).git ".**

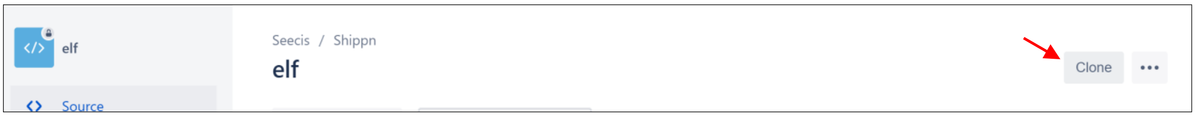
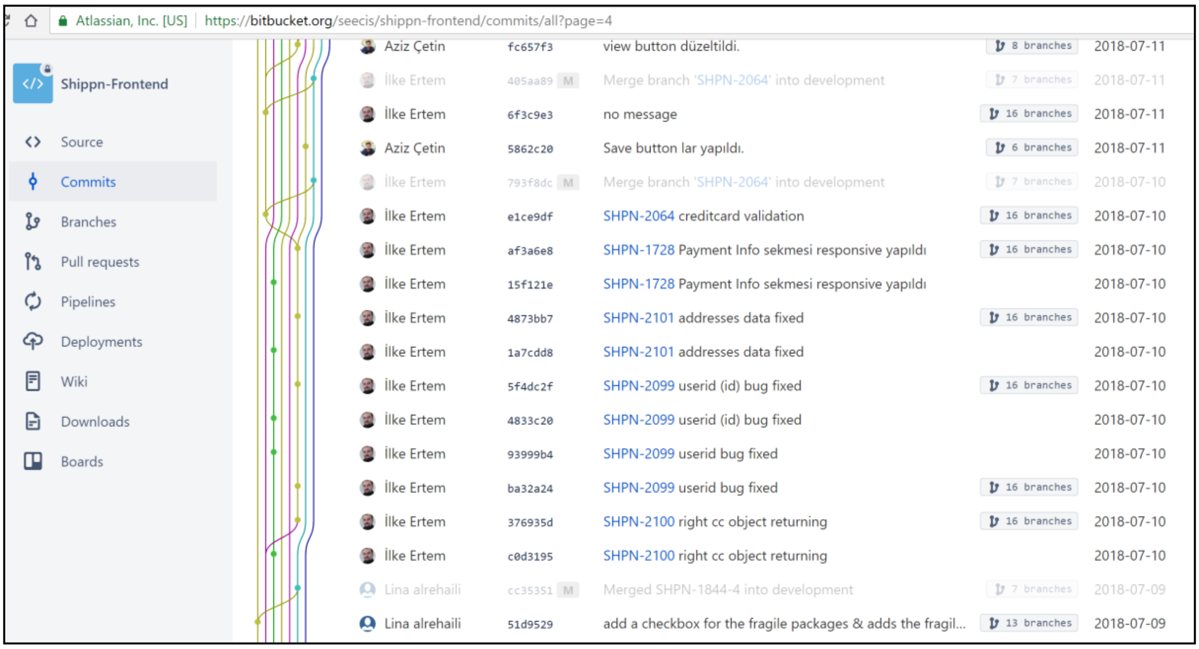


Figure 3.2.1 *How to clone a file repository*

Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency [4]. If I want to push a change I did in the local repository to Bitbucket, I write the following Git commands:

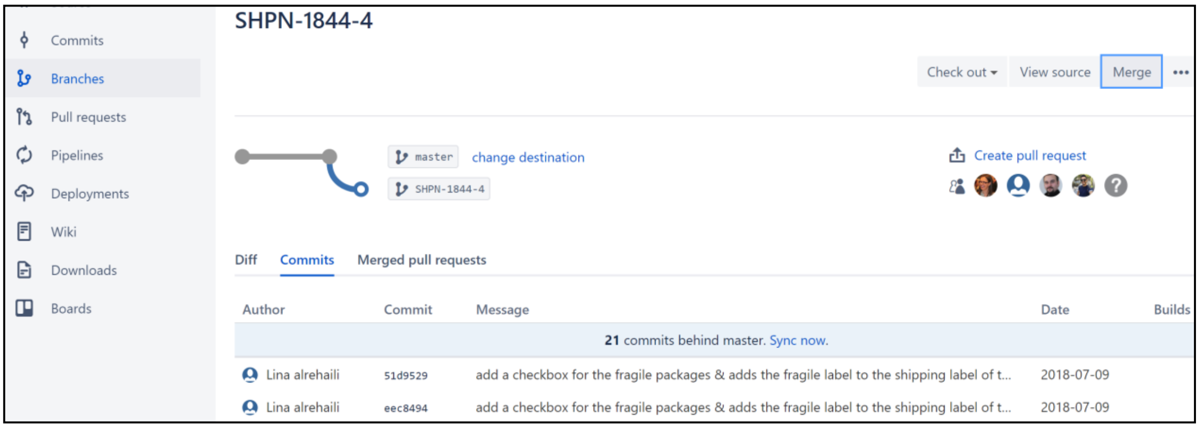
- **"$ cd Desktop/elf"**
  To access the local repository of the project file I cloned before.
- **"$ git branch"**
  To list the branches I have created before, and to see which branch I am on now,
- **"$ git fetch"**
  To update the local repository with the latest changes done, and to fetch the latest branches created.
- **"$ git add."**
  To update and add all changes I have done.
- **"$ git commit –m 'your comment' "**
  To commit all the changes that has done with adding a comment about the change.
- **"$ git push origin SHPN"**
  The last command I write to push my changes to the project repository of Bitbucket.

The commit page of when you push the changes to Bitbucket is as seen in Figure 3.2.2. When you click a comment you can view the changed lines in each file, we can also merge the current branch to any other branch we choose, in this project we merge it to master, it means join my current branch to master branch as in Figure 3.2.3.



Aziz Çetin	fc657f3	view button düzeltildi.	8 branches	2018-07-11
İlke Ertem	405aa89 M	Merge branch 'SHPN-2064' into development	7 branches	2018-07-11
İlke Ertem	6f3c9e3	no message	16 branches	2018-07-11
Aziz Çetin	5862c20	Save button lar yapıldı.	6 branches	2018-07-11
İlke Ertem	793f8dc M	Merge branch 'SHPN-2064' into development	7 branches	2018-07-10
İlke Ertem	e1ce9df	SHPN-2064 creditcard validation	16 branches	2018-07-10
İlke Ertem	af3a6e8	SHPN-1728 Payment Info sekmesi responsive yapıldı	16 branches	2018-07-10
İlke Ertem	15f121e	SHPN-1728 Payment Info sekmesi responsive yapıldı		2018-07-10
İlke Ertem	4873bb7	SHPN-2101 addresses data fixed	16 branches	2018-07-10
İlke Ertem	1a7cdd8	SHPN-2101 addresses data fixed		2018-07-10
İlke Ertem	5f4dc2f	SHPN-2099 userid (id) bug fixed	16 branches	2018-07-10
İlke Ertem	4833c20	SHPN-2099 userid (id) bug fixed		2018-07-10
İlke Ertem	93999b4	SHPN-2099 userid bug fixed		2018-07-10
İlke Ertem	ba32a24	SHPN-2099 userid bug fixed	16 branches	2018-07-10
İlke Ertem	376935d	SHPN-2100 right cc object returning	16 branches	2018-07-10
İlke Ertem	c0d3195	SHPN-2100 right cc object returning		2018-07-10
Lina alrehaili	cc35351 M	Merged SHPN-1844-4 into development	7 branches	2018-07-09
Lina alrehaili	51d9529	add a checkbox for the fragile packages & adds the fragil...	13 branches	2018-07-09

Figure 3.2.2 *A screenshot of Bitbucket commits*



Author	Commit	Message	Date	Builds
21 commits behind master. Sync now.				
Lina alrehaili	51d9529	add a checkbox for the fragile packages & adds the fragile label to the shipping label of t...	2018-07-09	
Lina alrehaili	eec8494	add a checkbox for the fragile packages & adds the fragile label to the shipping label of t...	2018-07-09	

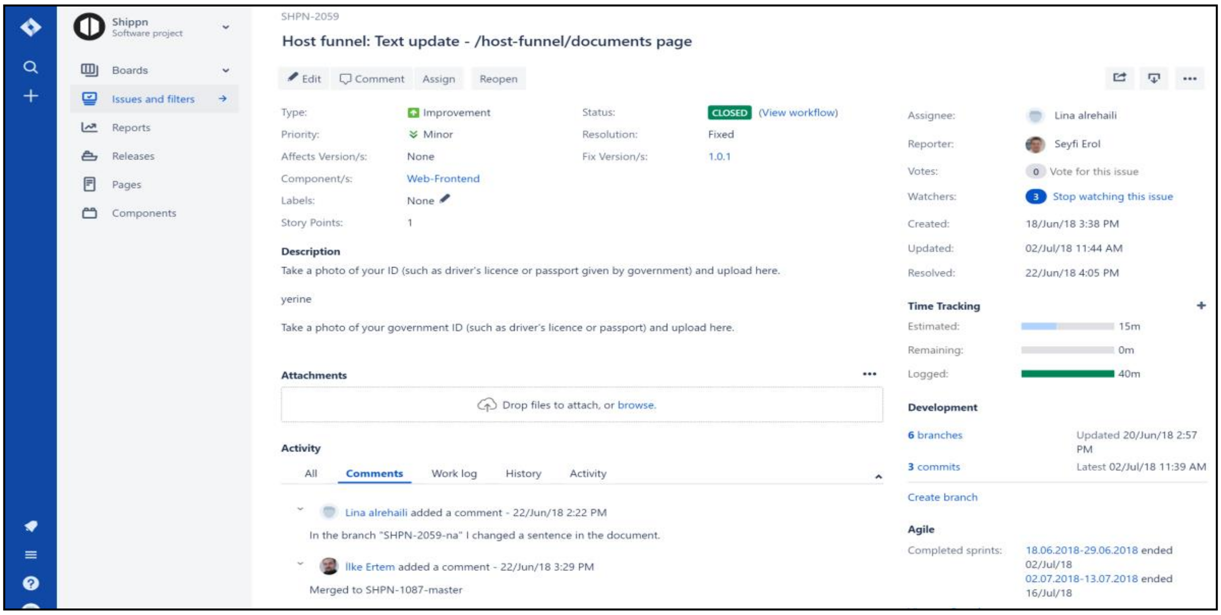
Figure 3.2.3 *The changes of the seleceted commit*

3.3 Jira and angularjs

JIRA is a famous platform that is used to track project issues, solve project problems, fix bugs issued within a project, it can help teams and groups to handle projects in a faster and a more effective way. Some issues were assigned to me individually, and other issues were assigned to me and my teammate 'Jilan Alrehaili' to work together in terms of solving it.
My first assignment in JIRA was to change a text line to a new text line from the project repository as seen in Figure 3.3.1, my second assignment was to learn AngularJS. Therfore, I took an AngularJS course from udemy website [5], I watched a YouTube playlist videos to learn AngularJS [6].

The main topics I have learned in AngularJS are:

- Introduction
- MVC
- Views, models and controllers
- Static template to dynamic views
- Getting tabular with ng-repeat
- Avoid naming pollution using modules
- SPA using routing
- Taking dependencies out of controllers
- Filters for formatting and animation



SHPN-2059

Host funnel: Text update - /host-funnel/documents page

Type: Improvement
Priority: Minor
Affects Version/s: None
Component/s: Web-Frontend
Labels: None
Story Points: 1

Status: CLOSED (View workflow)
Resolution: Fixed
Fix Version/s: 1.0.1

Description

Take a photo of your ID (such as driver's licence or passport given by government) and upload here.

yerine

Take a photo of your government ID (such as driver's licence or passport) and upload here.

Attachments

Drop files to attach, or browse.

Activity

All Comments Work log History Activity

Lina alrehaili added a comment - 22/Jun/18 2:22 PM

In the branch "SHPN-2059-na" I changed a sentence in the document.

Ilke Ertem added a comment - 22/Jun/18 3:29 PM

Merged to SHPN-1087-master

Assignee: Lina alrehaili
Reporter: Seyfi Erol
Votes: 0 Vote for this issue
Watchers: 3 Stop watching this issue
Created: 18/Jun/18 3:38 PM
Updated: 02/Jul/18 11:44 AM
Resolved: 22/Jun/18 4:05 PM

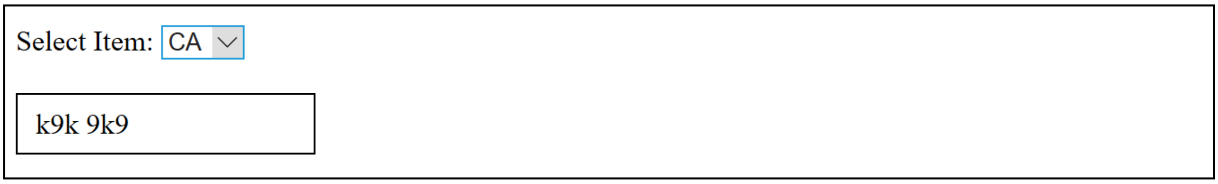
Time Tracking
Estimated: 15m
Remaining: 0m
Logged: 40m

Development
6 branches Updated 20/Jun/18 2:57 PM
3 commits Latest 02/Jul/18 11:39 AM
Create branch

Agile
Completed sprints: 18.06.2018-29.06.2018 ended 02/Jul/18
02.07.2018-13.07.2018 ended 16/Jul/18

Figure 3.3.1 *Screenshot of JIRA assigment to change a text in a file*

I have also built an AngularJS program that can make a mask for a postal-code, which means if you select a country for example with mask = "LL0000", then the postal-code will be masked as two letters and four numbers. The code editor application I used to edit my codes is Sublime-Text-3, last year I used to work with Eclipse editor, but Eclipse application has many libraries and tools that I don't use. Therefore, Sublime-Text-3 worked better and faster for me. As seen in Figure 3.3.2, the user can select a country code, the postal code must be written as the mask of the selected country code. The code I wrote to solve this assignment is as seen in Figure 3.3.3. The $scope.maskList will hold the country code and its mask, in the $scope.countryChanged function it will take the selected country code and save its mask in $scope.mask_val.



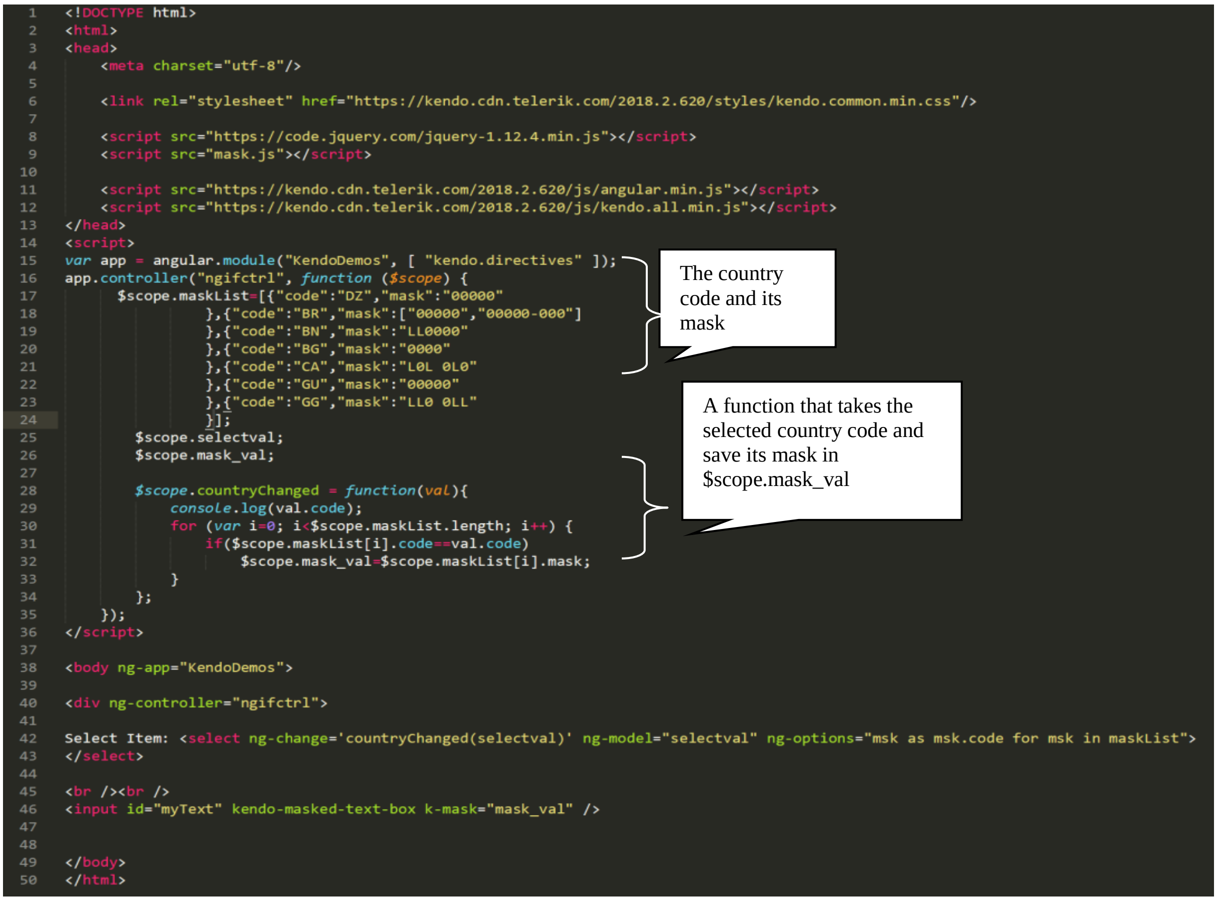
Select Item: CA

k9k 9k9

Figure 3.3.2 *Screenshot of selecting a country code with its mask*

Therefore, to implement this I have used the kento library to help me mask the input field of country mask. *$scope.maskList* will hold all the country codes and their masks, and *$scope.maskList* will hold which country is selected from the selection box, and

$scope.mask_val will hold the correct mask value form of the selected country. The function *countryChanged()* will take the selected country code and save its mask in *$scope.mask_val*, then it will see which country code is selected, to take the mask value of the selection and imply it in the input mask field.



```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8"/>

    <link rel="stylesheet" href="https://kendo.cdn.telerik.com/2018.2.620/styles/kendo.common.min.css"/>

    <script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>
    <script src="mask.js"></script>

    <script src="https://kendo.cdn.telerik.com/2018.2.620/js/angular.min.js"></script>
    <script src="https://kendo.cdn.telerik.com/2018.2.620/js/kendo.all.min.js"></script>
</head>
<script>
var app = angular.module("KendoDemos", [ "kendo.directives" ]);
app.controller("ngifctrl", function ($scope) {
      $scope.maskList=[{"code":"DZ","mask":"00000"
                 },{"code":"BR","mask":["00000","00000-000"]
                 },{"code":"BN","mask":"LL0000"
                 },{"code":"BG","mask":"0000"
                 },{"code":"CA","mask":"L0L 0L0"
                 },{"code":"GU","mask":"00000"
                 },{"code":"GG","mask":"LL0 0LL"
                 }];
        $scope.selectval;
        $scope.mask_val;

        $scope.countryChanged = function(val){
            console.log(val.code);
            for (var i=0; i<$scope.maskList.length; i++) {
                if($scope.maskList[i].code==val.code)
                    $scope.mask_val=$scope.maskList[i].mask;
            }
        };
    });
</script>

<body ng-app="KendoDemos">

<div ng-controller="ngifctrl">

Select Item: <select ng-change='countryChanged(selectval)' ng-model="selectval" ng-options="msk as msk.code for msk in maskList">
</select>

<br /><br />
<input id="myText" kendo-masked-text-box k-mask="mask_val" />


</body>
</html>
```

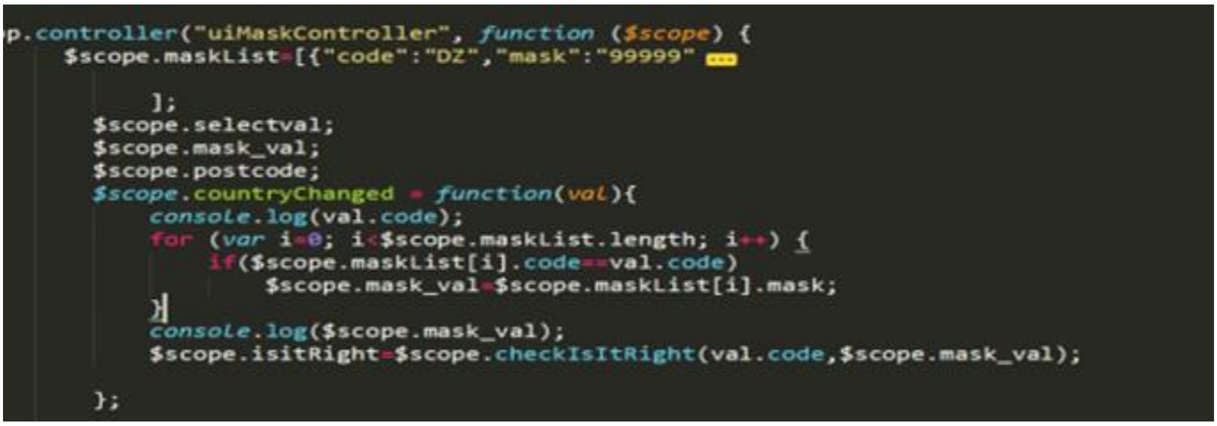
The country code and its mask

A function that takes the selected country code and save its mask in $scope.mask_val

Figure 3.3.3 *Screenshot of AngularJS code of how to mask a postal-code*

Another issue that was assigned to me and my teammate was about making the system be able to change the entered zip code on addresses according to a specific format, we have done this work on the original company's project. Therefore, the user will select a country at first, then he/she will enter a zip code of the selected country, the system should check if the entered zip code is correct or not. Therefore, by AngularJS I decided to make three functions that depends on each other to return the final result which shows if the entered zip code is correct or not.

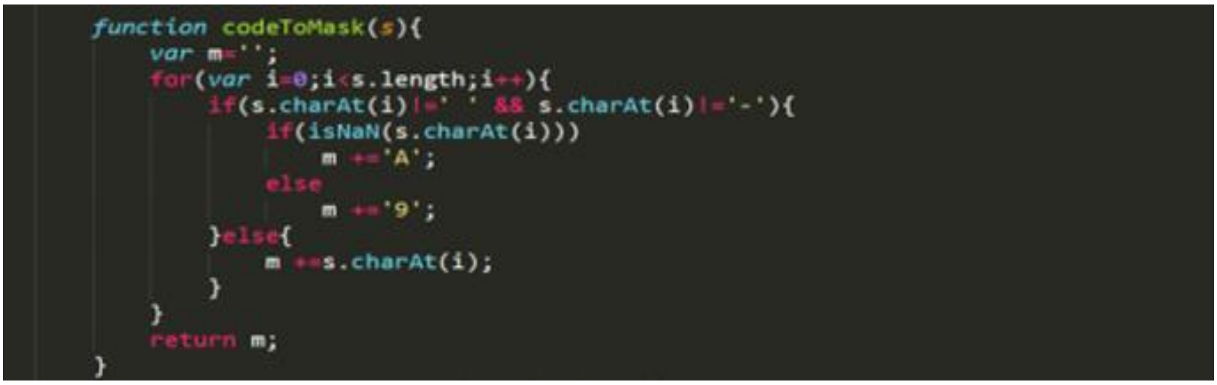
The first function is called "getCountryPostcodeFormat" as seen in Figure 3.3.4, this function is the same as the previous project function, it will take the selected country code and save its mask in *$scope.mask_val*, the only additional thing I added is *$scope.CheckIsItRight()*, this will show the final result of entered mask code if its in the correct form of the original mask or not, the final check up value will appear after calling the two additional functions which I will mention about later.



```
p.controller("uiMaskController", function ($scope) {
    $scope.maskList=[{"code":"DZ","mask":"99999" ...

        ];
    $scope.selectval;
    $scope.mask_val;
    $scope.postcode;
    $scope.countryChanged = function(val){
        console.log(val.code);
        for (var i=0; i<$scope.maskList.length; i++) {
            if($scope.maskList[i].code==val.code)
                $scope.mask_val=$scope.maskList[i].mask;
        }
        console.log($scope.mask_val);
        $scope.isitRight=$scope.checkIsItRight(val.code,$scope.mask_val);

    };
```

Figure 3.3.4 *AngularJS "getCountryPostcodeFormat" function*

The second function is called "codeToMask", this function will take the zip code input and will return it in the correct mask code format, e.g. if the user enters "ABC 123" for the mask code, the function will return it as "AAA 999" code format and so on, as seen in Figure 3.3.5.



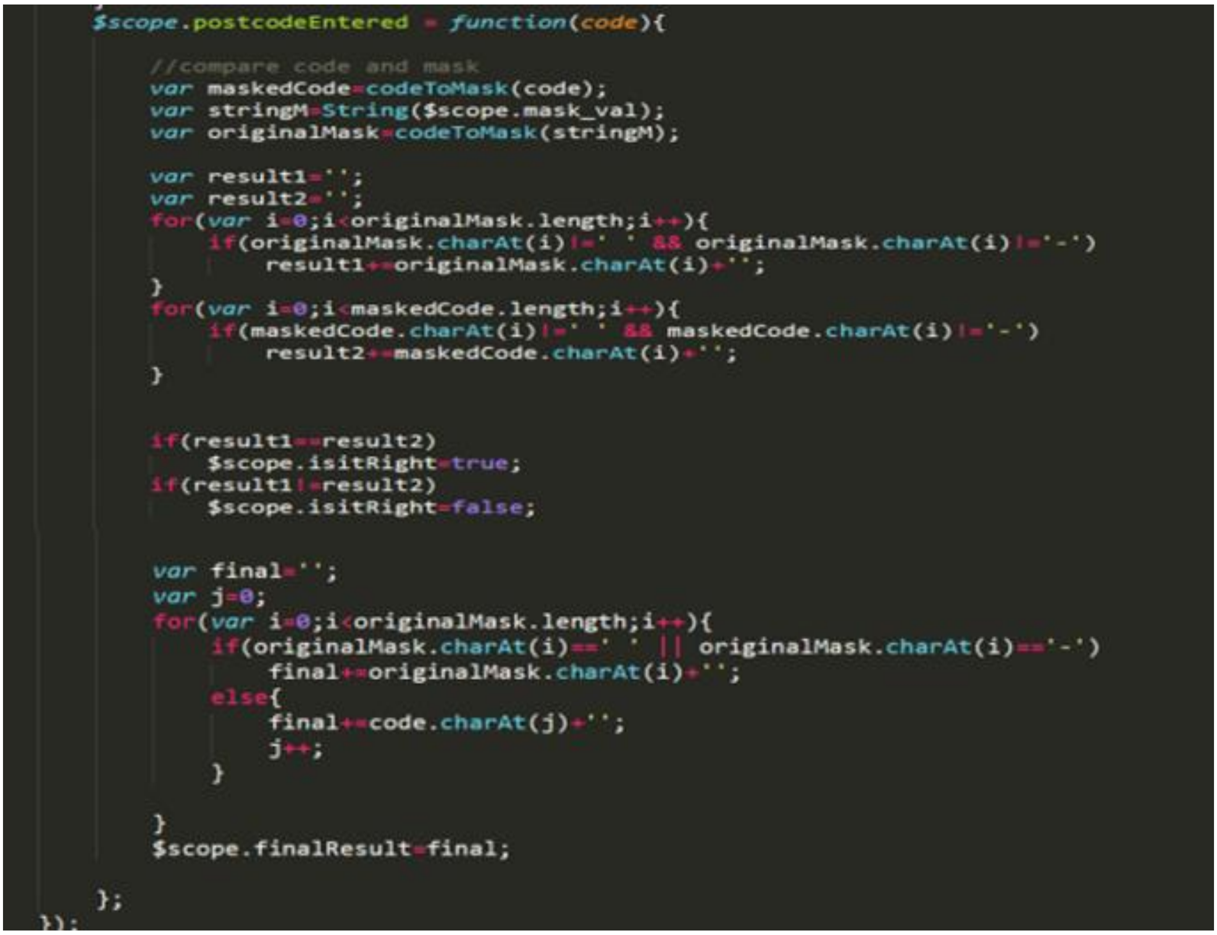
```
    function codeToMask(s){
        var m='';
        for(var i=0;i<s.length;i++){
            if(s.charAt(i)!=' ' && s.charAt(i)!='-'){
                if(isNaN(s.charAt(i)))
                    m +='A';
                else
                    m +='9';
            }else{
                m +=s.charAt(i);
            }
        }
        return m;
    }
```

Figure 3.3.5 *AngularJS "codeToMask" function*

The last function is called" *postcodeEntered*", this function will take the mask code value which the user have entered after it has been formatted from the "codeToMask" function, and will take the original mask code from the country the user have selected, at the end it will check if both masks are equal, if they are equal it will return true, else it will return false, as seen in Figure 3.3.6.

To explain in detail, first we have the variable maskedCode, which is the mask which the user have entered, secondly I made stringM variable which will hold the correct form of the mask value as string; because if its not in string I have noticed that codeToMask function can't return the correct form I need, therefore I made it as string to use it in originalMask variable which holds the correct mask form of the selected country. Next, I have result1 which will take the actual value of the original mask, e.g. if the original mask is "AAA-999" result1 will be "AAA999" without the dash symbol. Furthermore, result2 will do the same but for the entered mask value by the user, e.g. if the user entered mask "A 9-A 9" result2 will be "A9A9", I have done this part so that when I compare result1 to result2 if they are equal then *$scope.isitRight* will be true, else it will be false.

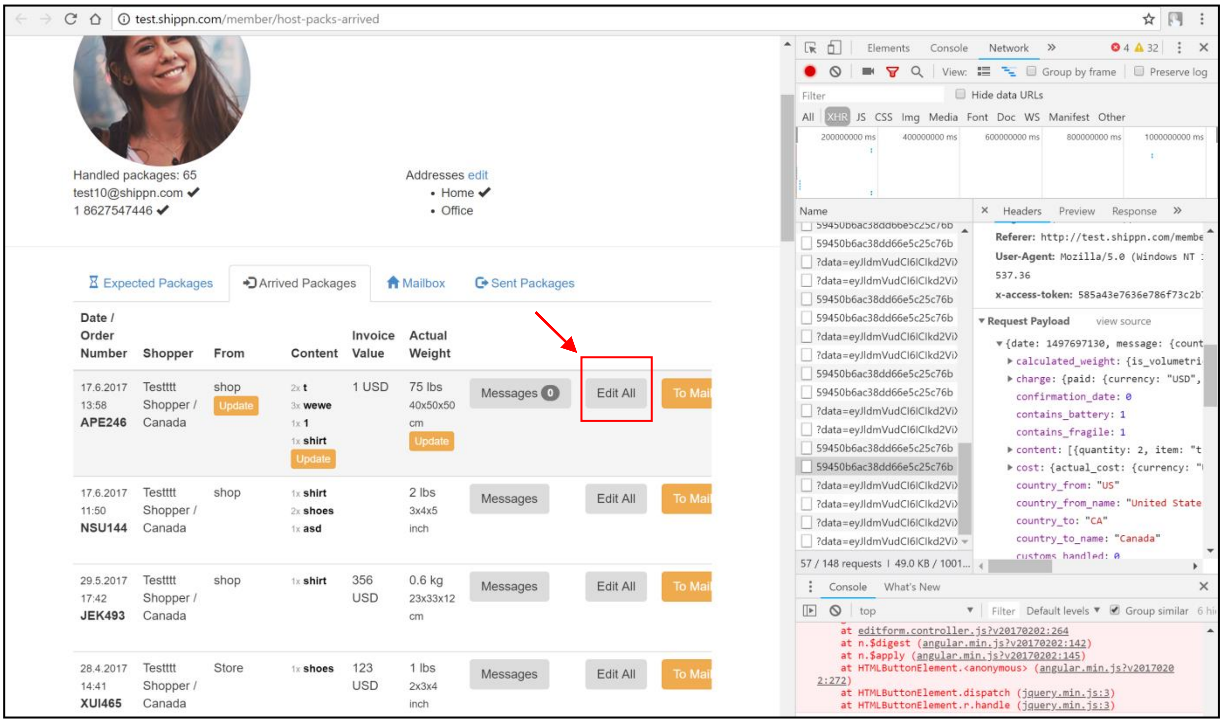
The final step will just save the original mask value to *$scope.finalResult*, so that if we have *$scope.isitRight* is true, then we can show the correct mask from *$scope.finalResult*.



```
    $scope.postcodeEntered = function(code){

        //compare code and mask
        var maskedCode=codeToMask(code);
        var stringM=String($scope.mask_val);
        var originalMask=codeToMask(stringM);

        var result1='';
        var result2='';
        for(var i=0;i<originalMask.length;i++){
            if(originalMask.charAt(i)!=' ' && originalMask.charAt(i)!='-')
                result1+=originalMask.charAt(i)+'';
        }
        for(var i=0;i<maskedCode.length;i++){
            if(maskedCode.charAt(i)!=' ' && maskedCode.charAt(i)!='-')
                result2+=maskedCode.charAt(i)+'';
        }


        if(result1==result2)
            $scope.isitRight=true;
        if(result1!=result2)
            $scope.isitRight=false;


        var final='';
        var j=0;
        for(var i=0;i<originalMask.length;i++){
            if(originalMask.charAt(i)==' ' || originalMask.charAt(i)=='-')
                final+=originalMask.charAt(i)+'';
            else{
                final+=code.charAt(j)+'';
                j++;
            }

        }
        $scope.finalResult=final;

    };
});
```

Figure 3.3.6 *AngularJS "postcodeEntered" function*

In a new issue that was assigned to me, I had to add a checkbox for the fragile packages, the hosts can click it and the button will call the service that adds the fragile label to the shipping label of the order. To explain more, when a user click "Edit All" button, he\she can edit any of the arrived packages as seen in Figure 3.3.7.



test.shippn.com/member/host-packs-arrived

Handled packages: 65
test10@shippn.com ✓
1 8627547446 ✓

Addresses edit
- Home ✓
- Office

Date / Order Number	Shopper	From	Content	Invoice Value	Actual Weight			
17.6.2017 13:58 APE246	Testttt Shopper / Canada	shop Update	2x t 3x wewe 1x 1 1x shirt Update	1 USD	75 lbs 40x50x50 cm Update	Messages 0	Edit All	To Mai
17.6.2017 11:50 NSU144	Testttt Shopper / Canada	shop	1x shirt 2x shoes 1x asd		2 lbs 3x4x5 inch	Messages	Edit All	To Mai
29.5.2017 17:42 JEK493	Testttt Shopper / Canada	shop	1x shirt	356 USD	0.6 kg 23x33x12 cm	Messages	Edit All	To Mai
28.4.2017 14:41 XUI465	Testttt Shopper / Canada	Store	1x shoes	123 USD	1 lbs 2x3x4 inch	Messages	Edit All	To Mai

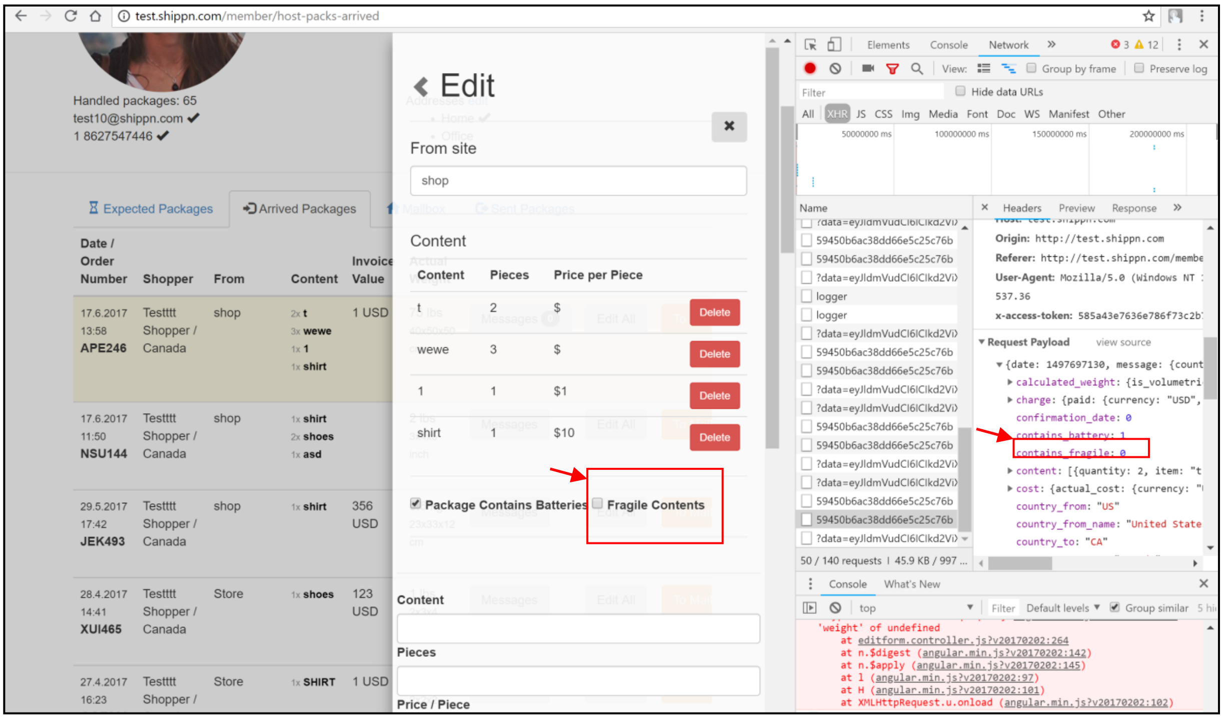
```
59450b6ac38dd66e5c25c76b
59450b6ac38dd66e5c25c76b
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
59450b6ac38dd66e5c25c76b
59450b6ac38dd66e5c25c76b
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
59450b6ac38dd66e5c25c76b
59450b6ac38dd66e5c25c76b
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
59450b6ac38dd66e5c25c76b
59450b6ac38dd66e5c25c76b
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
?data=eyJldmVudCI6ICIkd2Vi
57 / 148 requests | 49.0 KB / 1001...
```

```
Referer: http://test.shippn.com/membe
User-Agent: Mozilla/5.0 (Windows NT 1
537.36
x-access-token: 585a43e7636e786f73c2b
▼ Request Payload    view source
  ▼ {date: 1497697130, message: {count
    ▶ calculated_weight: {is_volumetri
    ▶ charge: {paid: {currency: "USD",
      confirmation_date: 0
      contains_battery: 1
      contains_fragile: 1
    ▶ content: [{quantity: 2, item: "t
    ▶ cost: {actual_cost: {currency: "
      country_from: "US"
      country_from_name: "United State
      country_to: "CA"
      country_to_name: "Canada"
      customs_handled: 0
```

```
    at editform.controller.js?v20170202:264
    at n.$digest (angular.min.js?v20170202:142)
    at n.$apply (angular.min.js?v20170202:145)
    at HTMLButtonElement.<anonymous> (angular.min.js?v2017020
2:272)
    at HTMLButtonElement.dispatch (jquery.min.js:3)
    at HTMLButtonElement.r.handle (jquery.min.js:3)
```

Figure 3.3.7 *Screenshot of packs arrived page*

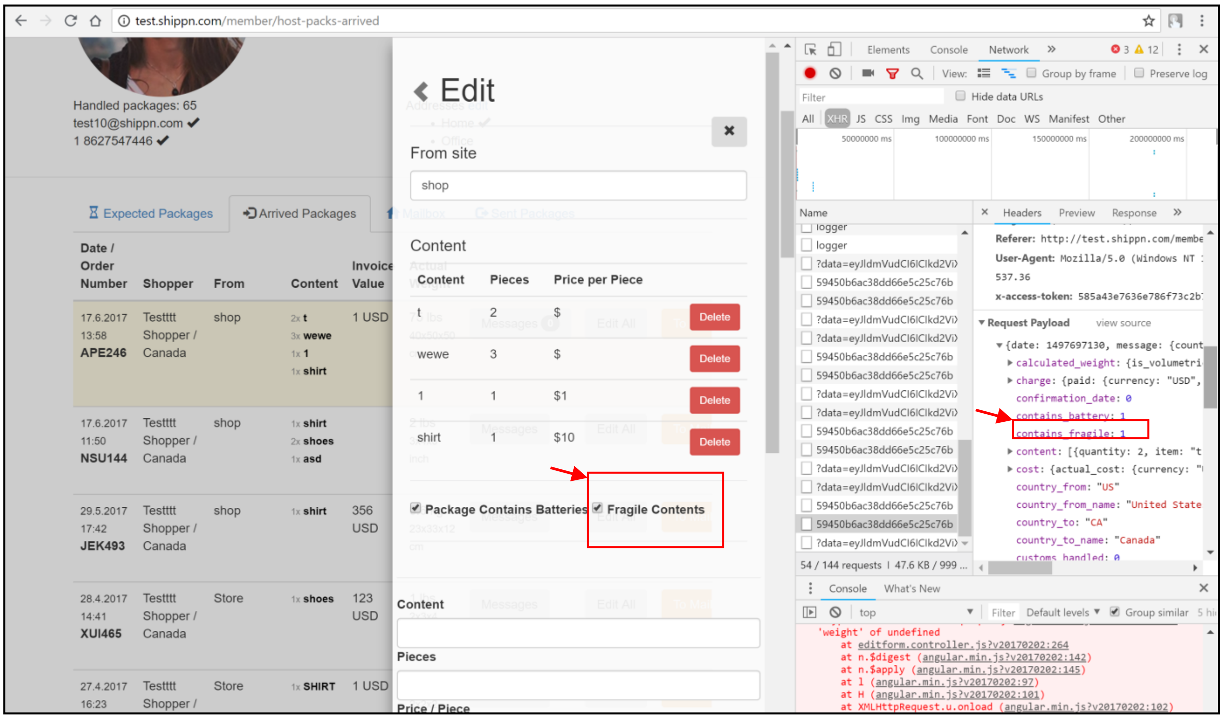
when a user unchecks the box “Fragile Contents” as seen in Figure 3.3.8, then the contain_fragile should equal 0 as seen in the inspect tool, when a user checks the “Fragile Contents” box, the contain_fragile should equal 1 as seen in Figure 3.3.9.



```
Origin: http://test.shippn.com
Referer: http://test.shippn.com/membe
User-Agent: Mozilla/5.0 (Windows NT
537.36
x-access-token: 585a43e7636e786f73c2b
▼ Request Payload    view source
  ▼{date: 1497697130, message: {count
    ▶calculated_weight: {is_volumetri
    ▶charge: {paid: {currency: "USD",
     confirmation_date: 0
     contains_battery: 1
     contains_fragile: 0
    ▶content: [{quantity: 2, item: "t
    ▶cost: {actual_cost: {currency: "
     country_from: "US"
     country_from_name: "United State
     country_to: "CA"
```

```
'weight' of undefined
    at editform.controller.js?v20170202:264
    at n.$digest (angular.min.js?v20170202:142)
    at n.$apply (angular.min.js?v20170202:145)
    at l (angular.min.js?v20170202:97)
    at H (angular.min.js?v20170202:101)
    at XMLHttpRequest.u.onload (angular.min.js?v20170202:102)
```

Figure 3.3.8 *Screenshot of un-check the fragile with the inspect tool*



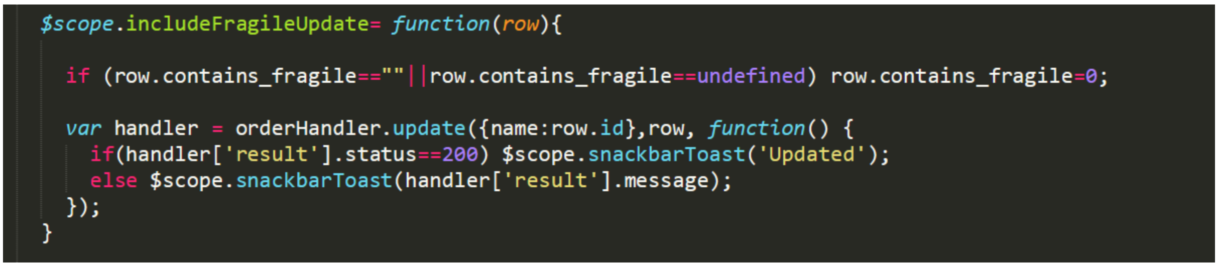
```
Referer: http://test.shippn.com/membe
User-Agent: Mozilla/5.0 (Windows NT
537.36
x-access-token: 585a43e7636e786f73c2b
▼ Request Payload    view source
  ▼{date: 1497697130, message: {count
    ▶calculated_weight: {is_volumetri
    ▶charge: {paid: {currency: "USD",
     confirmation_date: 0
     contains_battery: 1
     contains_fragile: 1
    ▶content: [{quantity: 2, item: "t
    ▶cost: {actual_cost: {currency: "
     country_from: "US"
     country_from_name: "United State
     country_to: "CA"
     country_to_name: "Canada"
     customs_handled: 0
```

```
'weight' of undefined
    at editform.controller.js?v20170202:264
    at n.$digest (angular.min.js?v20170202:142)
    at n.$apply (angular.min.js?v20170202:145)
    at l (angular.min.js?v20170202:97)
    at H (angular.min.js?v20170202:101)
    at XMLHttpRequest.u.onload (angular.min.js?v20170202:102)
```

Figure 3.3.9 *Screenshot of check the fragile with the inspect tool*

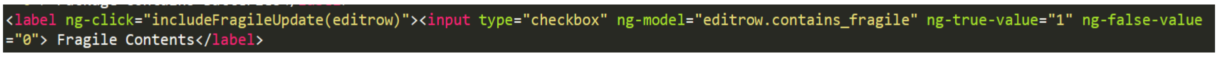
I wrote a small function called “*includeFragileUpdate*” to solve this issue as seen in Figure 3.3.10, at first the argument (*row)* will hold the selection value if fragile checkbox is selected or not, in first line if user did not select fragile checkbox, then contain_fragile will be equal to zero. Next lines is about if fragile is selected, it will handle it by a function that will see if status is equal to 200 which means checkbox is selected and page is running correctly, then it will save updated in $scope.snackbarToast() which is an object for the company project that they use to save popup snackbar feedbacks, else if status is not 200 then it will hold the appropriate message of the status to $scope.snackbarToast().

I added a checkbox for the fragile packages, the hosts can click it and the button will call the “includeFragileUpdate” function that adds the fragile label to the shipping label of the order as seen in Figure 3.3.11, I have added all these changes to the company’s Shippn-Frontend project file.



```
$scope.includeFragileUpdate= function(row){

  if (row.contains_fragile==""||row.contains_fragile==undefined) row.contains_fragile=0;

  var handler = orderHandler.update({name:row.id},row, function() {
    if(handler['result'].status==200) $scope.snackbarToast('Updated');
    else $scope.snackbarToast(handler['result'].message);
  });
}
```

Figure 3.3.10 *Screenshot of the includeFragileUpdate function*



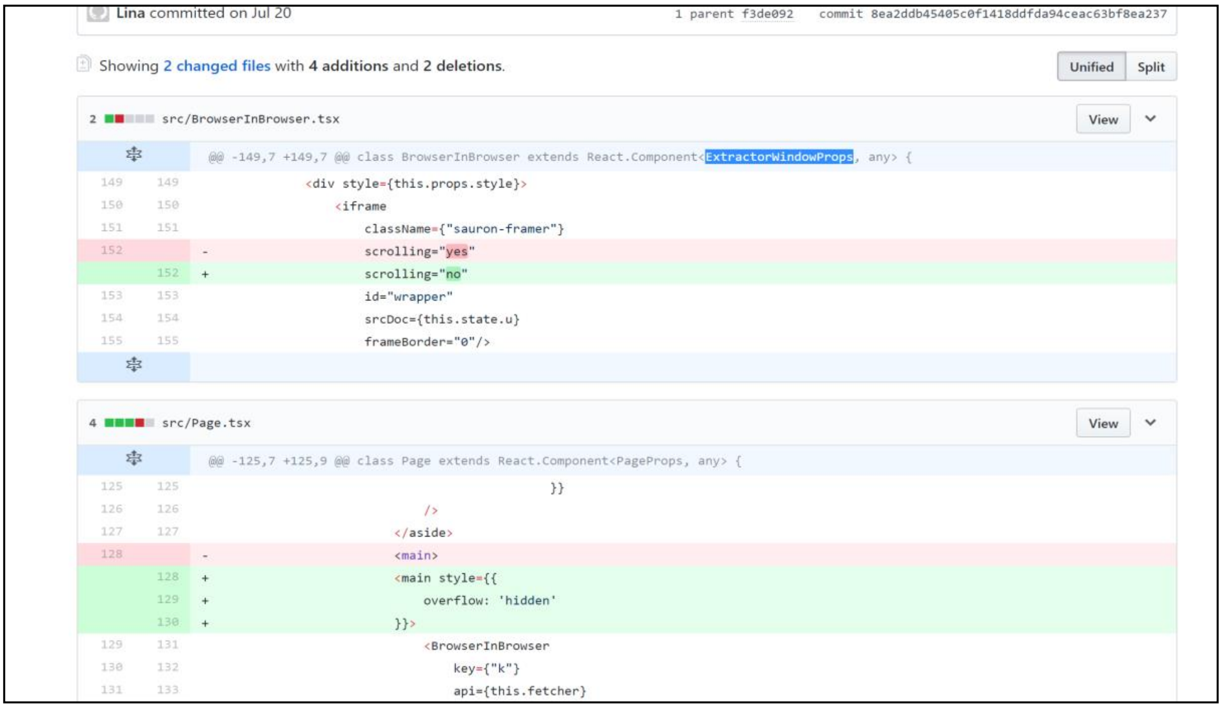
```
<label ng-click="includeFragileUpdate(editrow)"><input type="checkbox" ng-model="editrow.contains_fragile" ng-true-value="1" ng-false-value
="0"> Fragile Contents</label>
```

Figure 3.3.11 *Screenshot of checkbox calling the includeFragileUpdate function*

3.4 Reactjs and jenkins

Jenkins is an open-source software tool for testing and reporting changes in a larger code base [7]. Basically, after saving some new changes to your code, Jenkins will test/compile the code, and will deploy your work successfully to the server if there’s no error, if the deploy failed, then it means that there is a bug or an error that you need to fix. ReactJS is an open-source JavaScript library which is used for building user interfaces [8], a ReactJS reading project documentation was assigned to me, the documentation link shows the project data models, services and components. Also, what is URL parser, fetcher and related automation tools, and why every intelligent thing needs an eye to see other things. Furthermore, how you can either use GUI or API (JSON) to interact and enjoy Sauron, GUI currently on roadmap but can be cut out and removed altogether, the project Sauron provides a Json REST API to interact with your predefined data extraction processes. This project is created to serve ongoing AI research/development.

My first assignment related to this project was about an iFrame which doesn't fit on a page, the scrolling area should be bigger, and the unusable scrolling bars should not be visible, only one scrolling bar is enough. In order to solve this issue, I had to learn ReactJS, I took a ReactJS course from codecademy website [9], I watched a YouTube playlist videos to learn ReactJS [10], then I observed the project code to detect the problem point, the code I wrote to solve this issue is as seen in Figure 3.4.1.



Lina committed on Jul 20 1 parent f3de092 commit 8ea2ddb45405c0f1418ddfda94ceac63bf8ea237

Showing 2 changed files with 4 additions and 2 deletions.

2 src/BrowserInBrowser.tsx

```
@@ -149,7 +149,7 @@ class BrowserInBrowser extends React.Component<ExtractorWindowProps, any> {
                <div style={this.props.style}>
                    <iframe
                        className={"sauron-framer"}
-                       scrolling="yes"
+                       scrolling="no"
                        id="wrapper"
                        srcDoc={this.state.u}
                        frameBorder="0"/>
```

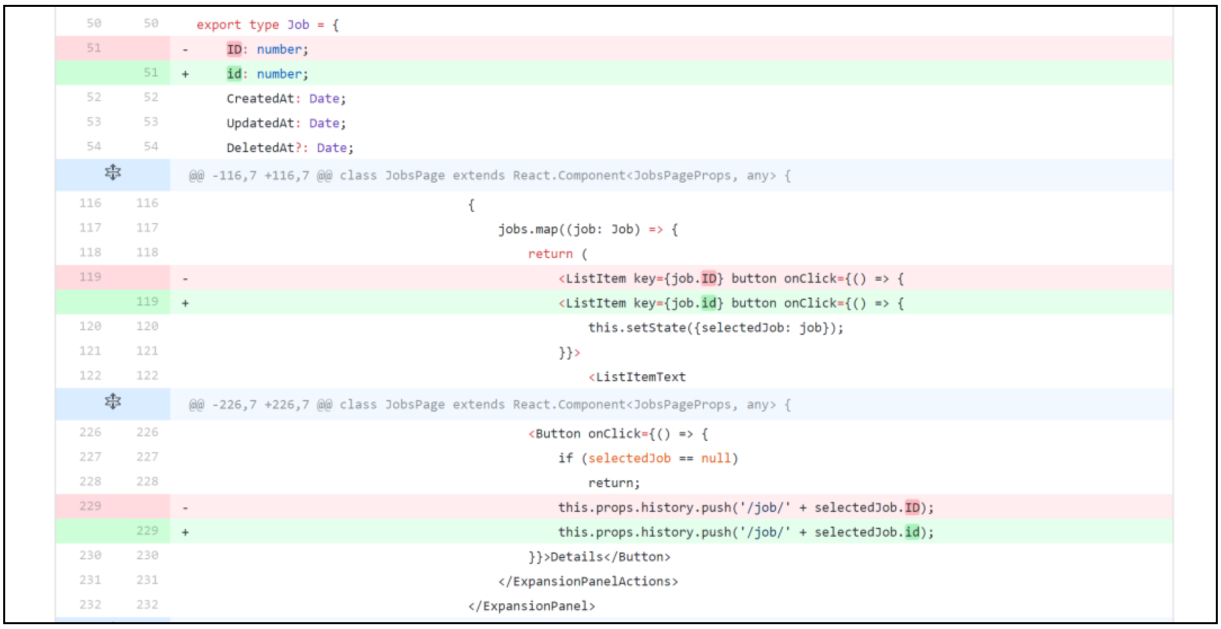
4 src/Page.tsx

```
@@ -125,7 +125,9 @@ class Page extends React.Component<PageProps, any> {
                                    }}
                            />
                        </aside>
-                       <main>
+                       <main style={{
+                           overflow: 'hidden'
+                       }}>
                            <BrowserInBrowser
                                key={"k"}
                                api={this.fetcher}
```

Figure 3.4.1 *Screenshot of code implemented for the Iframe issue*

When I change anything in the project code, I push my changes to the GitHub repository of the project [11], as seen in the above figure, I have changed the scrolling ability to ‘yes’, and in the main I added an element style with overflow type ‘hidden’ to hide the extra scrolling bar shown, which at the end solved the issues related to this page.

The last issue I have done with my teammate was about when navigating from reports page to report detail page there's an error shown in page which I need to fix (404 not found), the code I wrote to solve this issue is as in Figure 3.4.2. As you can I have changed all the "id" field of Job model to "ID", because the correct field name was miswritten, and that was the main reason which caused the error problem. After fixing all the ‘id’ to ‘ID’ the error page was fixed and didn’t show a broken page anymore. At the end, I have deployed the work and pushed it to GitHub after I finished my work.



```
 export type Job = {
-    ID: number;
+    id: number;
     CreatedAt: Date;
     UpdatedAt: Date;
     DeletedAt?: Date;
@@ -116,7 +116,7 @@ class JobsPage extends React.Component<JobsPageProps, any> {
                              {
                                  jobs.map((job: Job) => {
                                      return (
-                                         <ListItem key={job.ID} button onClick={() => {
+                                         <ListItem key={job.id} button onClick={() => {
                                              this.setState({selectedJob: job});
                                          }}>
                                              <ListItemText
@@ -226,7 +226,7 @@ class JobsPage extends React.Component<JobsPageProps, any> {
                                      <Button onClick={() => {
                                          if (selectedJob == null)
                                              return;
-                                         this.props.history.push('/job/' + selectedJob.ID);
+                                         this.props.history.push('/job/' + selectedJob.id);
                                      }}>Details</Button>
                                  </ExpansionPanelActions>
                              </ExpansionPanel>
```

Figure 3.4.2 *Screenshot of of code implemented for the Iframe issue*

4. CONCLUSION

In conclusion, Internship period at ETTS company was an excellent experience, I gained a lot of knowledge, skills and met new people, the company's staffs and workers have welcomed me in the best way possible, they helped me a lot whenever I had any issue or a question, and I am very thankful for that. Before taking the internship, my knowledge and experience in the Front-End Web Development was not the best, I have gained from this internship a lot of skills about "AngularJS, ReactJS, Git, etc", I also had the chance to learn more things about myself as a worker, I focused on improving my weakness points, and how to handle pressure at work. Furthermore, at the start of the internship I had a lot of work, tasks and things to learn, but as the internship was getting close to an end, the tasks were not as much as I used to do at the beginning, but that wasn't a problem; because I kept learning more stuff about the Front-End Web Development from online sources.

At the end, I believe that each student should have the opportunity to do an internship training before applying to a real world job, as it can make him more prepared to the working environment, and will give him the chance to decide which field he wants to work on.

5. REFERENCES

[1] https://www.etts.com.tr/who-are-we.html

[2] https://www.etts.com.tr/works.html

[3] https://www.sololearn.com/Profile/9648547

[4] https://git-scm.com/

[5] https://www.udemy.com/quickstart-angularjs/

[6]https://www.youtube.com/watch?v=fyCL9mwIRQ0&list=PLF8OvnCBlEY1wS7CSq_FKPYD_2E5eng79&index=1S

[7] https://searchsoftwarequality.techtarget.com/definition/Jenkins

[8] https://www.c-sharpcorner.com/article/what-and-why-reactjs/

[9] https://www.codecademy.com/learn/react-101

[10]https://www.youtube.com/watch?v=MhkGQAoc7bc&list=PLoYCgNOIyGABj2GQSlDRjgvXtqfDxKm5b

[11] https://github.com/seecis/sauron-web