JS Applications Exam - DonUni SPA

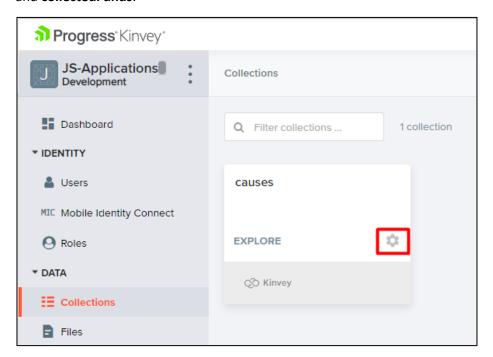
You are assigned to implement a Web application (SPA) using HTML5, JavaScript, AJAX, REST and JSON with cloud-based backend (Kinvey). Using libraries like jQuery, Handlebars and Sammy is allowed. The app keeps users and causes. Guests should be able to register and login. Logged-in users should be able to view all causes (dashboard), create and view cause and logout. Logged-in users should also be able to edit or delete the causes they have created.

1. Create a Kinvey REST Service

Register at Kinvey.com (https://console.kinvey.com/login) and create application to keep your data in the cloud.



Create a collection called causes. Each cause has a donors, cause, pictureUrl, neededFunds, description and collectedFunds.











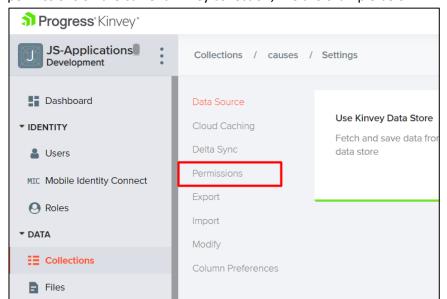


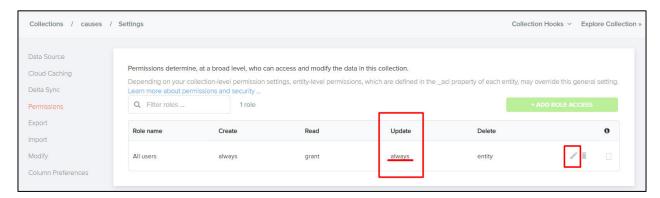






In order to perform a successful donation to other person's cause, you should change the default permissions on the current kinvey collection, like the example below.





Here some example with already created cause:



2. Test the Kinvey REST Services

Using Postman or other HTTP client tool (you can use Kinvey's built-in API Console), test the REST service end points:

User Registration (Sign-Up)

The request needs "Basic" authentication. Use the Kinvey App Key and App Secret as credentials.



















```
POST <a href="https://baas.kinvey.com/user/app_key/">https://baas.kinvey.com/user/app_key/</a>
Request headers
                 Authorization: Basic base64(app_key:app_secret)
                 Content-Type: application/json
Request body
                    "username": "testuser",
                    "password": "weakpass123"
                 }
Response
                 {
                      "_id": "59930c78a743e20c7d3fca77",
201 Created
                      "username": "testuser",
                      "password": "weakpass123"
                 }
                 { "error": "UserAlreadyExists", "description": "This username
Error response
                 is already taken. Please retry your request with a different
409 Conflict
                 username", "debug": "" }
                 { "error": "InvalidCredentials", "description": "Invalid
Error response
                 credentials. Please retry your request with correct
401 Unauthorized
                 credentials", "debug": " }
```

User Login (Sign-In)

Successful login returns an authtoken which is later used to authenticate the CRUD operations.

POST https://baas.kinvey.com/user/app_key/login		
Request headers	Authorization: Basic base64(user_username:user_password) Content-Type: application/json	
Request body	<pre>{ "username": "testuser", "password": "weakpass123" }</pre>	

















User Logout

To logout, you need to provide the **authtoken** given by login/register as "**Kinvey**" authorization header.

POST https://baas.kinvey.com/user/app_key/_logout		
Request headers	Authorization: Kinvey authtoken	
Response 204 No Content	null	
Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }	

Dashboard (List All Causes)

GET https://baas.kinvey.com/appdata/app_key/causes		
Request headers	Authorization: Kinvey authtoken	
Response	[{	

















```
"cause": "...",
200 OK
                   "donors": [...],
                   "pictureUrl": "https://....",
                   "neededFunds": ...,
                   "description": ...,
                   "collectedFunds": ...,
                   " acl":
                   {
                      "creator": "5bfd4674682ae23931b4f91c"
                   },
                   "_kmd":
                      "lmt":"2018-11-28T15:25:24.521Z",
                      "ect": "2018-11-28T14:55:00.958Z"
                   }
               }, ...]
               { "error": "InvalidCredentials", "description": "Invalid
Error response
               credentials. Please retry your request with correct
401
               credentials", "debug": "" }
Unauthorized
```

Create Cause

POST https://baas.kinvey.com/appdata/app_key/causes		
Request headers	Authorization: Kinvey authtoken Content-Type: application/json	
Request body	<pre>{ "cause": "", "donors": [], "pictureUrl": "https://", "neededFunds":, "description":,</pre>	



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```
"collectedFunds": ...,
               }
                {
Response
                   "cause": "...",
201 Created
                   "donors": [...],
                   "pictureUrl": "https://....",
                   "neededFunds": ...,
                   "description": ...,
                   "collectedFunds": ...,
                    "_acl": {
                        "creator": "5bfd4674682ae23931b4f91c"
                    },
                    "_kmd": {
                        "lmt": "2018-11-28T15:39:58.801Z",
                        "ect": "2018-11-28T15:39:58.801Z"
                    },
                    " id": "5bfeb6ce682ae23931bf7d26"
                }
                { "error": "InvalidCredentials", "description": "Invalid
Error response
                credentials. Please retry your request with correct
401 Unauthorized
               credentials", "debug": "" }
```

Edit Cause

PUT https://baas.kinvey.com/appdata/app_key/causes/cause_id		
Request headers	Authorization: Kinvey authtoken Content-Type: application/json	
Request body	{ "cause": "", "donors": [], "pictureUrl": "https://",	















```
"neededFunds": ...,
                   "description": ...,
                   "collectedFunds": ...,
                }
Response
                {
                    "_id": "59931398996ab5127d2a84d1",
200 Ok
                    "cause": "...",
                    "donors": [...],
                    "pictureUrl": "https://....",
                    "neededFunds": ...,
                    "description": ...,
                    "collectedFunds": ...,
                }
                { "error": "InvalidCredentials", "description": "Invalid
Error response
                credentials. Please retry your request with correct
401 Unauthorized
                credentials", "debug": " }
```

Delete Cause

DELETE https://baas.kinvey.com/appdata/app_id/causes/cause_id		
Request headers	Authorization: Kinvey authtoken	
Response 200 OK	{ "count": 1 }	
Error response 404 Not Found	{ "error": "EntityNotFound", "description": "This entity not found in the collection", "debug": "" }	
Error response 401 Unauthorized	{ "error": "InvalidCredentials", "description": "Invalid credentials. Please retry your request with correct credentials", "debug": "" }	















3. DonUni - HTML and CSS

You have been given the web design of the application as **HTML** + **CSS** files.

Initially all views and forms are shown by the HTML. Initially, all views and forms are shown by the HTML. Your application must display the current views depends on the routing URL. You may render the views/forms/components with Handlebars.

Important

Don't change the elements' class names and ids. You are allowed to add data attributes to any elements. You may modify href attributes of links and add action/method attributes to forms, to allow the use of a routing library.

4. DonUni - Client-Side Web Application

Design and implement a client-side front-end app (SPA) for managing causes and donations. Implement the functionality described below.

Navigation Bar (Header) (5)

Navigation links should correctly change the current page (view).

Clicking on the links in the NavBar should display the view behind the link (views are represented as sections in the HTML code).

Your application must display the views it needs to display.

The Logged-in user navbar should contain the following elements: [DonUni], [\$\$\$\$\$\$\$\$\$\$], and [Logout ({username})].



The guest users navbar should contain the following elements: [DonUni], [Login] and [Register]

DonUni

Footer

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Register Page (5)

By given **username** and **password**, the app should register a new user in the system.

The following validations should be made:



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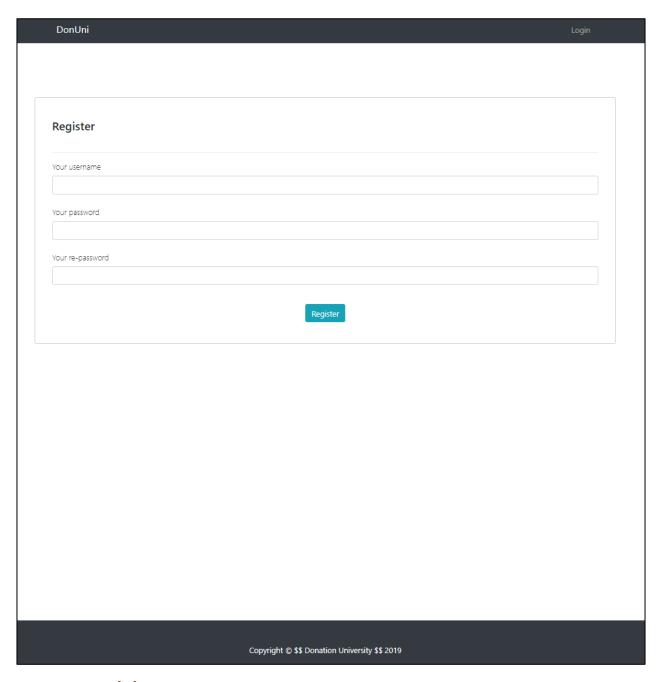








- o The username and password must be non-empty string
- o The re-password should be equal to the password
- After a successful registration, home page should be displayed with the right navbar.
- Keep the user session data in the browser's session or local storage.



Login Page (5)

By given username and password, the app should login an existing user.









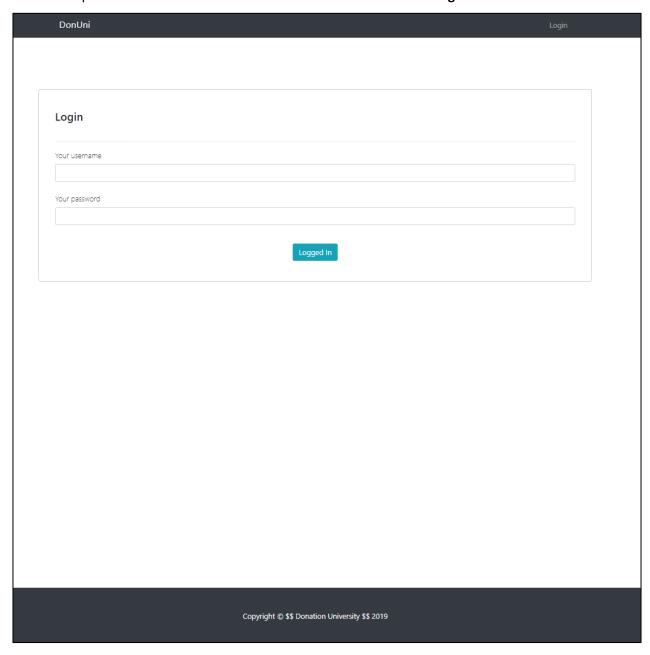








- After a successful login, a home page should be displayed with the right navbar.
- Keep the user session data in the browser's **session or local storage**.



Logout (5)

Successfully logged in users should be able to logout from the app.

- After a successful logout the home page for guest users should be shown
- The "logout" REST service at the back-end must be called at logout
- All local information in the browser (user session data) about the current user should be deleted













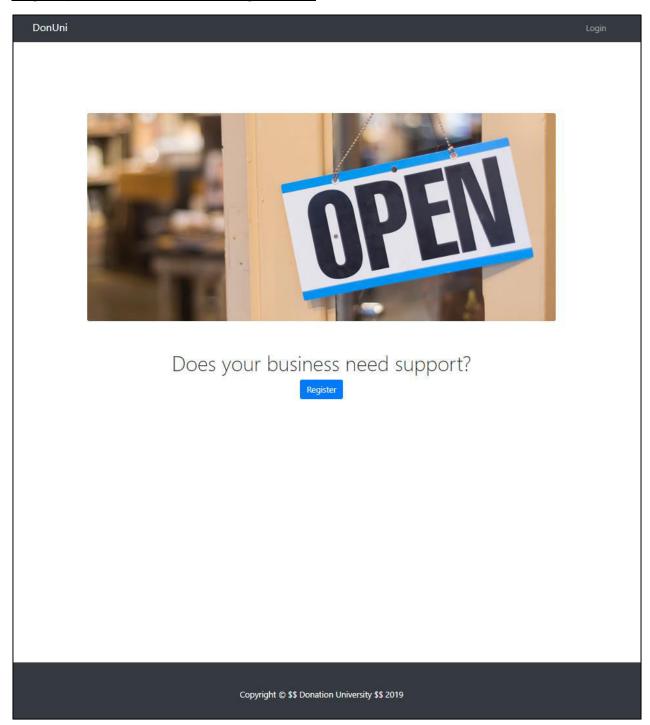




Home Page (5)

The initial page (view) should display the **navigation bar for guest users** + **Home Page** + **Footer**. [DonUni] button should refer to the home page (view)

[Register] button should refer to the register view.













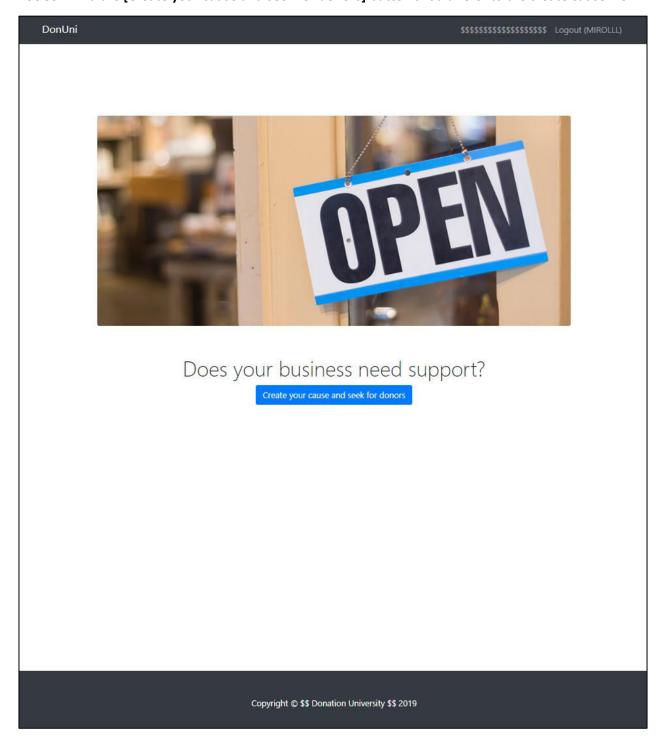








If user is logged-in the page (view) should display the navigation bar logged-in users + Home Page + Footer. And the [Create your cause and seek for donors] button should refer to the create cause view.





















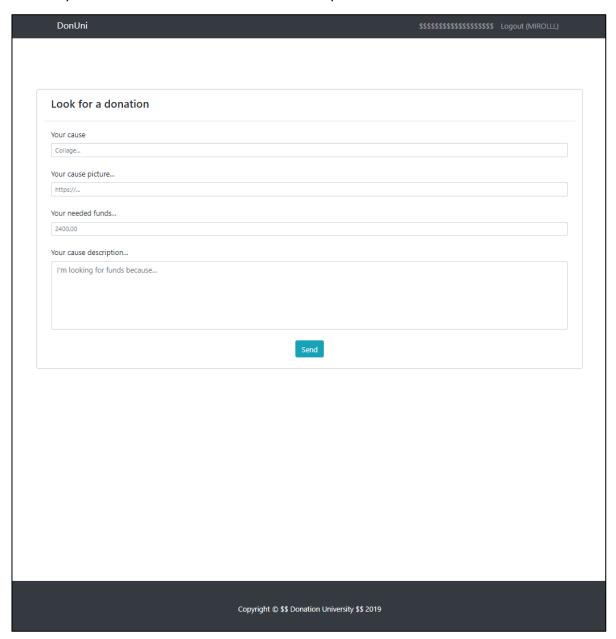
Create Cause (15)

Logged-in users should be able to Create causes.

Clicking the [Create your cause and seek for donors] button in the Home page view should display the Create Cause View.

- The input fields must be **non-empty strings**
- Note that you should add additional two properties (donors and collectedFunds)
- After a successful offer creation the Dashboard or Home Page should be shown

The newly created offer should be stored in the Kinvey collection "causes".





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Dashboard (25)

By clicking over [\$\$\$\$\$\$\$\$\$\$\$\$ button, the currently logged-in user should be able to see all created causes.

The initial page (view) should display the **navigation bar for logged-in users** + **Dashboard** + **Footer**.

If there are **NO** such causes, the following view should be displayed.



If there is at least **one registered cause**, the causes must be shown like the example below:







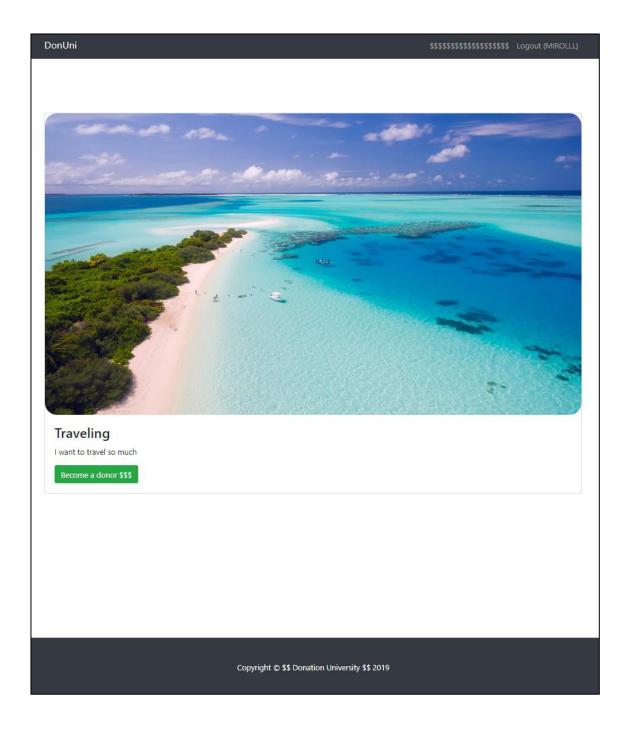












Cause Details (15)

Logged-in users should be able to **view details** about causes and their donations.

Clicking the [Become a donor \$\$\$] link in of a particular cause should display the Cause Details view, where the cause's name, pictureUrl, collected and needed funds, description and donors are shown in the format below on the picture.









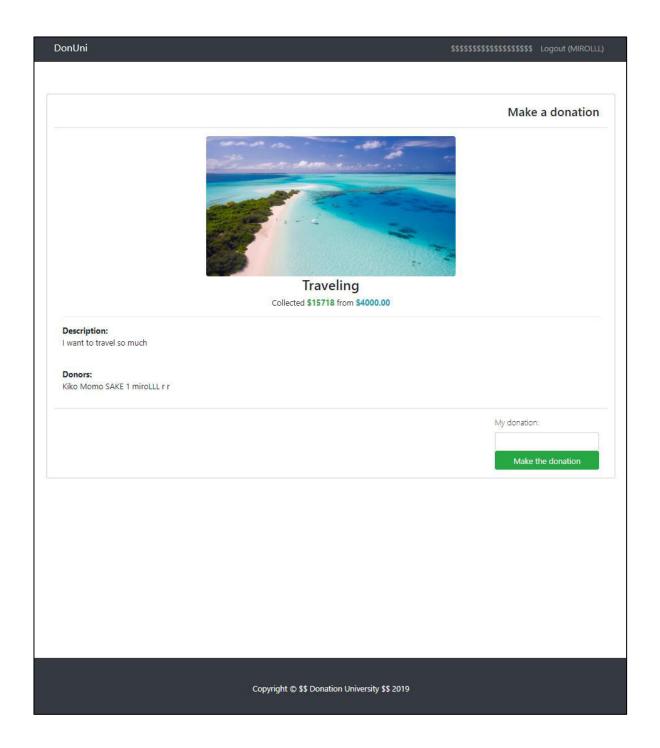












Edit Cause (15)

Logged-in users should be able to edit (Make a donations) to others causes.

Clicking the [Make the donation] link of a particular cause, a put request should be send to the causes collections and the current cause'collected funds should be changed (increased with the given value).





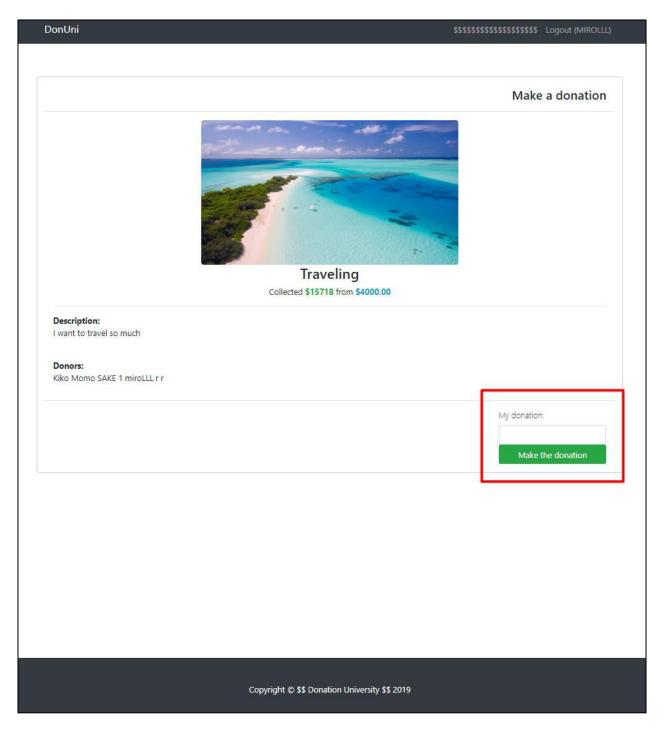












Delete Offer (5)

Logged-in users should be able to **delete their** causes.

Clicking the [Delete] link of an particular offer the Offer Delete page should be displayed with already filled information about that offer, but all input fields are disabled.













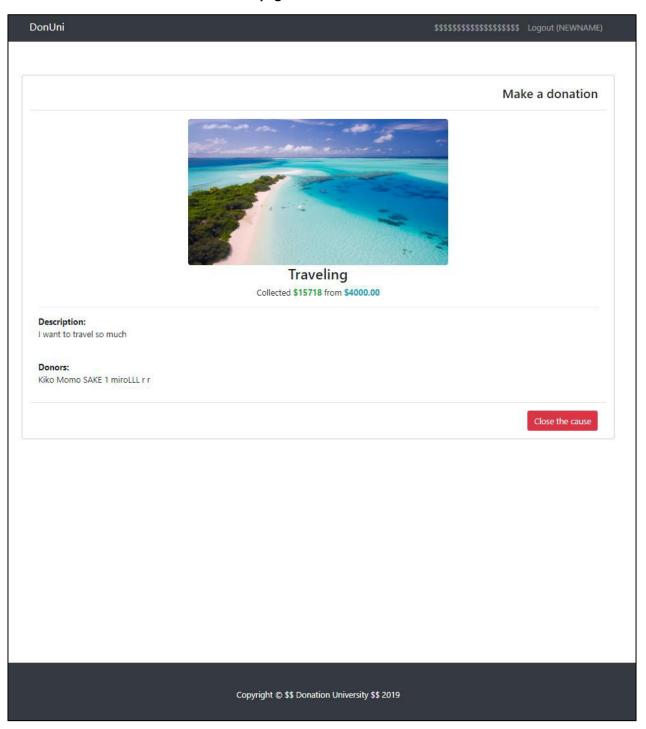






If the [Close the cause] button in the Cause Details View, the current offer must be deleted from the DOM and from the Kinvey collection.

After successful offer delete a Dashboard page must be shown.





















BONUSES (5)

Notifications (5)

In case of a successful action (create cause, login, registration, edit, delete), a notification message (green) should be shown, which disappears manually when the user clicks it.



In case of error (wrong passwords, wrong ajax call, authorization, etc...), an error notification message (red) should be shown, which disappears on user click.



During the AJAX calls a loading notification message (blue) should be shown. It should disappear automatically as soon as the AJAX call is completed.



Note

Each view should have his own unique and properly named action (url), to be able to get the full points from each section.

















