

Design Inspection
Code Inspection
Unit Testing

Team 7 uCal

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1. Design Inspection Defects

Product	uCal		
Date	31 January 2018		
Author	Team 7		
Moderator			
Inspectors	Andrew Bostock, Ben Collier, Matt Kramer, Eli Scherrer, Maneesh Tewani, Hector Trevino		
Recorder			
Defect #	Description	Severity	How Corrected
1	Some users could be unaware of how to add different events to their calendar	2	Create an intuitive UI where you can hover on an event to expose a button to create an event
2	A session may get overridden or hacked	2	Implemented system where routes were protected based on whether the token was valid and api requests return 400 if a token is not found
3	There is no protection for deleting information. If a user submits a delete request all the users information will be deleted	3	Have a backup version of user information that can be restored [Not Implemented]

2. Code Inspection Defects

Product	uCal		
Date	11 February 2018		
Author	Development Team		
Defect #	Description	Severity	How Corrected
1	Inconsistent Endpoint Routes	1	Changed the routes to be more consistent names.
2	When the string of the date was casted as a date object, the date object would change the day of the string by one	1	Set the day of the date object to (day + 1)
3	The string format of the date accessed was incompatible to the required format needed to set the event dates	1	For months, add 1 to the month number. If the day or month number was less than 10, concatenate a "0" to the front of the number for proper formatting
4	Html formatting was wrong	3	Corrected the indentation
5	If events have additional information about the location, there was no way to add it.	2	A variable with Type 'String' was added to the Event type
6	User is able to submit even when the email and password are empty	3	A [disabled] attribute was added to help with validation
7	Users aren't able to see what time their events are at on the calendar monthly view	2	A custom provider was injected to change the default text in the template.
8	When receiving the token in the URL, an attacker could easily intercept the token.	3	Created an extra component that immediately redirects to the calendar component after setting the token
9	Javascript already has an Object type called Event	2	Our own declared ObjectType is Evento/UEvent

3. Unit Testing Defects

Specify whether you automated the unit testing. If yes, give a brief description of your automation framework/strategy.

Our system contains the following modules:

Backend:

- User Endpoints
- Group Endpoints
- Friend Endpoints
- Calendar Endpoints
- Event Endpoints

Frontend:

- AppModule
- CalendarComponent
- AppRoutingModule
- AuthService
- AuthGuardService
- GroupComponent
- LoginComponent
- NavBarComponent
- LoginSuccessComponent
- SettingsComponent
- TokenHandlerService

For our Front-End, we used a karma task runner with the language jasmine to test our angular code.

For Back-end we used a karma-runner with the language mocha to test our express server endpoints.

User Endpoints

The User Endpoint module is the set of all the routes that directly involve users and their account, such as account creation. The front end will use these routes to access and update user data in the database.

Product	uCal		
Module	User Endpoints		
Date	10 February		
Author	Andrew Bostock		
Defect #	Description	Severity	How Corrected
1	Emails are not checked for proper formatting.	2	Added check for formatting in route.

2	When creating a user if fields are unspecified the server still responds with success	2	Added check to make sure all required fields are present
3	Calling GET for a user does not return the email of the user	1	Added the email field to the GET route for users

Group Endpoints

The Group Endpoint module is the set of all the routes that directly involve groups like their creation, deletion, and modification. The front end will use these routes to access and update group data in the database.

Product	uCal		
Module	Group Endpoints		
Date	10 February		
Author	Eli Scherrer		
Defect #	Description	Severity	How Corrected
1	Accepting an invite to a group does not work	2	Fixed the mongoDB update calls to work as intended
2	Groups were being removed from the database but their ids were staying with the users who were in them	2	Looped through the users and pulled out the id for the deleted group

Friend Endpoints

The friend endpoints are the set of routes that allow for friends to be requested, declined, and accepted in the database. The routes will be called by the frontend to create requests to the database.

Product	uCal		
Module	Friend Endpoints		
Date	10 February		
Author	Andrew Bostock		

Defect #	Description	Severity	How Corrected
1	Sending a friend request to a user that does not exist returns the wrong response	1	Changed response value to the appropriate response
2	Creates a friend request even when no request currently exists between users	2	Changed the query to make sure that there exists a request between the users.
3	If not accept value is specified it will decline the friend request when it should return an error	2	Added check for to see if the required field was specified

Calendar Endpoints

The Calendar Endpoint module is the set of all the routes that directly involve calendars and their creation, deletion, and modification as well as routes for adding users/ groups/ events to calendars. The front end will use these routes to access and update calendar data in the database.

Product	uCal		
Module	Calendar Endpoints		
Date	10 February		
Author	Eli Scherrer		
Defect #	Description	Severity	How Corrected
1	When trying to create a calendar the if statement for the description was saying that "description" was undefined	2	Changed the line to set the description as what's sent by the user, or "" if that value does not exist
2	The create calendar for group endpoint was not adding the groupID to the calendar object	2	Added the calendarID to the object before saving it
3	The calendar update endpoint returned the old calendar object instead of the updated version	3	Changed the options on the mongoDB request so that it returns the new one

Event Endpoints

The Event Endpoint module is the set of all the routes that directly involve events like their creation, deletion, and modification. The front end will use these routes to access and update event data in the database.

Product	uCal		
Module	Event Endpoints		
Date	10 February		
Author	Matt Kramer		
Defect #	Description	Severity	How Corrected
1	FindById fails with passed id value	1	Cast it as ObjectId first instead of string
2	Finding event would fail with correct _id value, output would be 404 not found	1	findById would succeed by getting the owner value was incorrectly formatted, changed to correct value

AuthGuardService

“Guards” routes and checks whether user can access that page with/without the token.

Product	uCal		
Module	AuthGuardService		
Date	10 February		
Author	Maneesh Tewani		
Defect #	Description	Severity	How Corrected
1	When token is ‘undefined’ JwtTokenService throws an error that breaks the Angular application	3	Added an if(token) to check if the token was correctly passed in in our AuthGuardService

CalendarComponent

Module that displays calendar and event information on the calendar. Deals with adding and removing event information to the calendar.

Product	uCal		
Module	CalendarComponent		
Date	10 February		
Author	Maneesh Tewani		
Defect #	Description	Severity	How Corrected
1	If an invalid date is sent to addDates, the defaultStartDate and defaultEndDate become invalid	3	addDates returns a boolean on whether the date is valid or not
2	If an undefined date is sent to addDates, an error is returned, rather than responding with false	2	addDates checks if date is defined

LoginComponent

Handles validation and logging in of users through email/password and Google OAuth Login.

Product	uCal		
Module	CalendarComponent		
Date	10 February		
Author	Maneesh Tewani		
Defect #	Description	Severity	How Corrected
1	Validation for the form uses required, but doesn't check if the email is actually an email	3	Added Validation.email to the Validation array
2	HTTP request sends email as "username" field instead of "email"	2	Change form information to email instead of username

AppModule*

Container for other components to make sure parts of the application are separated. Crucial part of the application that bootstraps other components.

AppRoutingModule*

Encompasses logic for client-side routing of the angular application.

AuthService*

Checks if the user is authenticated by checking JWT and if it has expired.

GroupComponent*

Displays group information.

LoginSuccessComponent*

Intercepts the token credentials and stores them in localStorage.

NavBarComponent*

Displays navbar and handles navigating to different client-side routes.

SettingsComponent*

Manages settings of user profile and group information.

TokenHandlerService*

Sets and clears tokens for JWT authentication and interception of HTTP Requests.

‘*’ Indicates that unit tests were written, but no defects were found after running the unit tests.