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Project Report

SEPT

Participants:
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Vision Statement

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Vision:

The vision of the product is to allow for a seamless user experience in booking people and services. The main interest of this application was to allow for a modern, sleek design, where the user would be able to book a specific service and employee based from an interactive calendar and simple to use drop down multi select tools. To allow for a dynamic experience, the user has the ability to select, confirm and cancel their bookings. Each customer also has their own dashboard to manage their user information and booking history. To allow for easy administration, the project implemented an administrator dashboard, where each task was separated into simple, easy to follow templates. An important feature of this project was to implement a mobile and tablet friendly interface, as the team understands that most users would access the site via mobile devices, since most users access applications via smaller devices in comparison to desktops. This allows the site to be visited "on the go" which in turn allows for larger traffic as users would revisit the site more often due to it's mobile friendly interface. The visual appearance of the product is of a modern, simple design with hues of dark blue contrasted with greys and whites. The overall vision of the product is that it is simple, easy to use and efficient in completing the task of booking services that users want. At BookMe, we want the user to have a quick and simple experience on the website, one that is efficient and simple enough so that they return when they require more services.

System Architecture/Design:
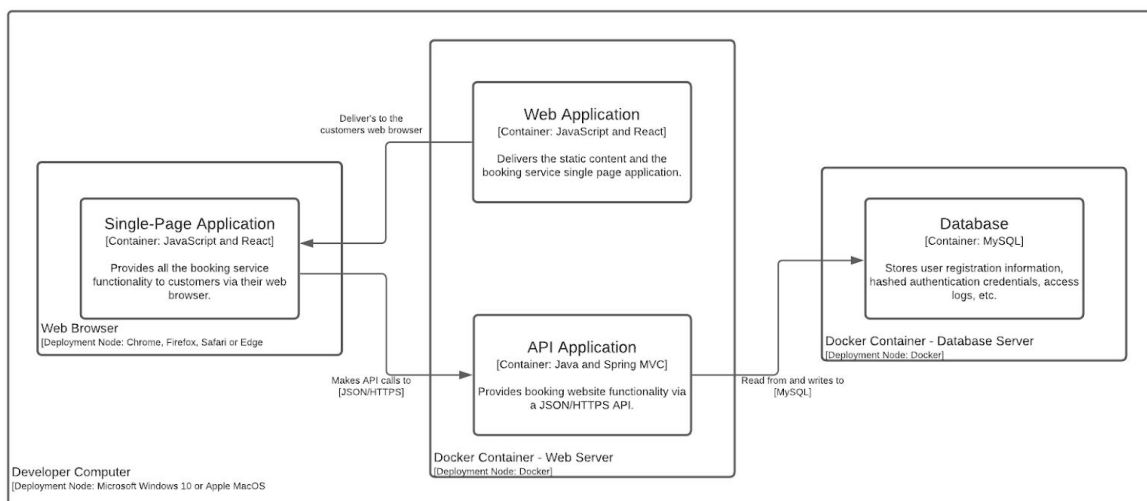
The screenshot above shows our system architecture/design that we implemented for our web-based booking application project. There are 4 containers, 2 of which are web servers, one of which is a database and the other one the web browser. Our system consists of a single-page application, a web application made with ReactJS, an API application implemented using Java/Spring and a database created with MySQL. The web application delivers to the customers web browser while the web browser makes API calls to JSON/HTTPS. The API application then reads and writes from MySQL, which is the database.

Refactoring Report:

To structure the back-end, we followed an appropriate REST API structure consisting of a controller-entity-service-dao formation.

In terms of refactoring, to properly introduce the use of JWT's and Spring Security, we were required to implement the UserDetails and UserDetailsService interfaces in order to provide roles and proper authentication. However, initially we implemented Employees, Customers and the Admin all in separate classes, meaning implementing these interfaces was not possible for all user types. This acted as quite a large roadblock for the development of the back-end and required a lot of refactoring.
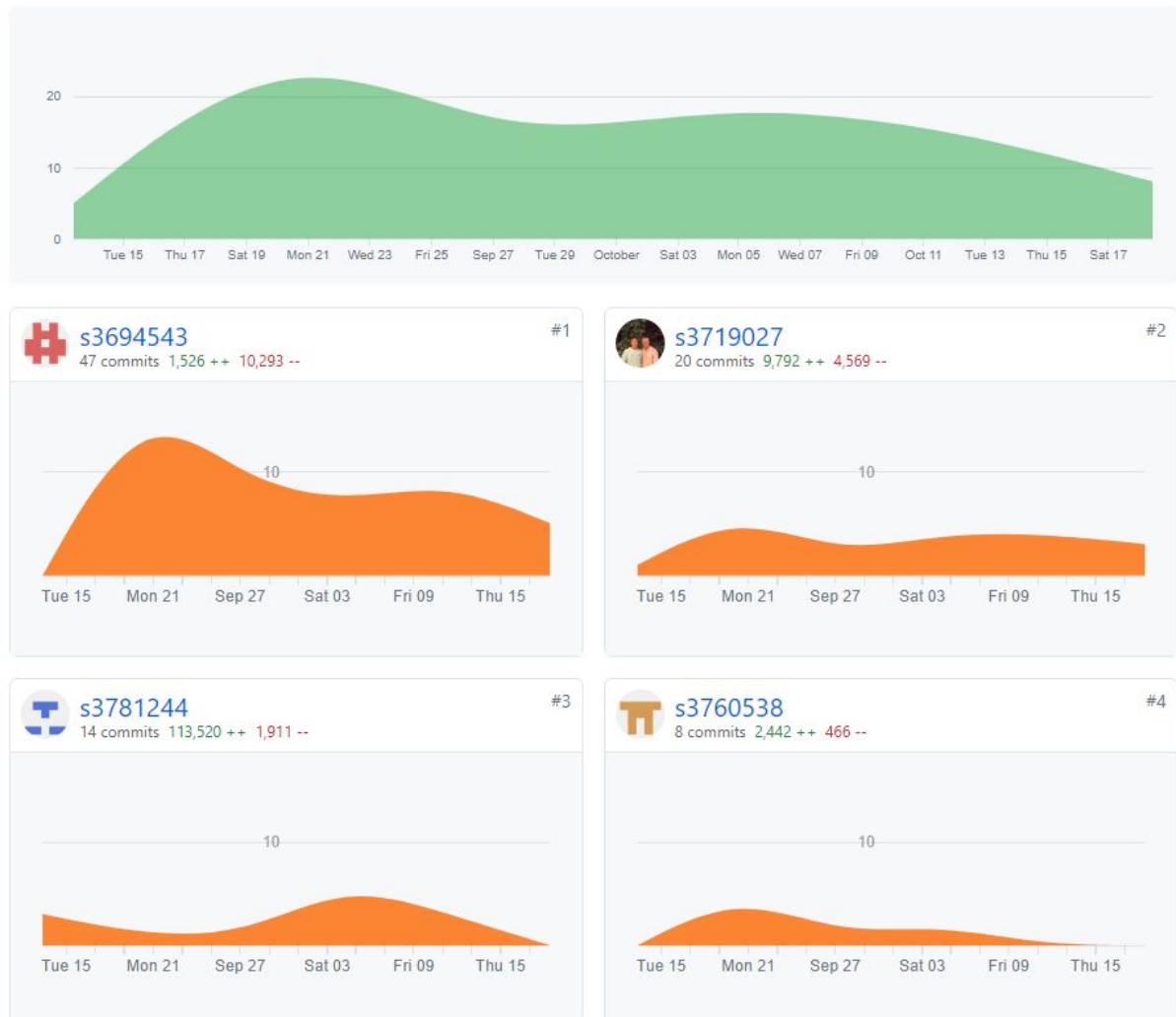
As for the front-end, there were a number of changes that were during this sprint. First of all, in terms of Redux, since we implemented JWT during this sprint, all the the return dispatch function in the actions were required to have the header this due to the fact that JWT limit the access of some resource depending on the user type, so if there were no header or the header was wrong api couldn't be accessed. In terms of refactoring on the react side of things, we were required to implement the route guarding for some pages again due to the fact that implementing JWT meant that we were gonna have different user types who have different access privileges.

GitFlow Organisation:

Sep 13, 2020 – Oct 18, 2020

Contributions to master, excluding merge commits

s3694543 #1
47 commits 1,526 ++ 10,293 --

s3719027 #2
20 commits 9,792 ++ 4,569 --

s3781244 #3
14 commits 113,520 ++ 1,911 --

s3760538 #4
8 commits 2,442 ++ 466 --

The screenshot above shows how often each member of the group committed, since we moved from an old repository to this new one. The commit history includes commits made after Milestone 2 but not the commits made before Milestone 2. As shown in the screenshot, each member contributed regularly and usually at least a few times a week.

Network graph

Timeline of the most recent commits to this repository and its network ordered by most recently pushed to.
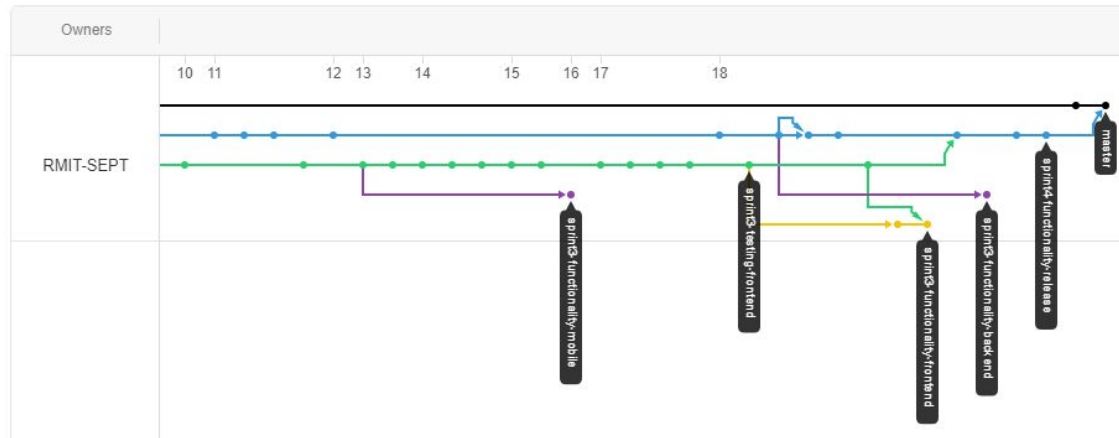

The screenshot above shows the different branches of our GitHub repository and shows how we have merged our branches to the master branch in the end. Each of us worked off of different branches so that we could review our commits when we merged them together. Gleb and Alex mainly worked on front-end functionality while Daniel worked on the back-end functionality, Alana worked on styling the front-end code and helped out where needed.

Scrum Process:

The team consisted of four developers, with Alana Tobgui being the scrum master for the duration of the project. For each sprint, daily standups were implemented for most days of the sprint, estimating to roughly ¾ of the total number of days of the sprints. Each of these daily standups commenced at 6pm and mostly ran under 15 minutes. The sprints were implemented with a sprint planning session, where main tasks were set and the product backlog defined. At the end of the sprint a review was carried out, and the retro and review typed up. The main tools used to complete sprints and align with scrum processes were as follows:

1. Microsoft Teams: Microsoft teams was used for all voice and video meetings given the limitations of in person contact due to regional coronavirus restrictions.

2. Clickup: Clickup was implemented to keep track of the product backlog as well as the task management

3. Excel: due to the limitations of free users on clickup, excel was used to create each burndown chart

4. Google Docs: google docs were used to create all slides and documents that needed input from each project participant.

5. Github: used for uploading all code branches and merging them into a master branch.

Deployment:
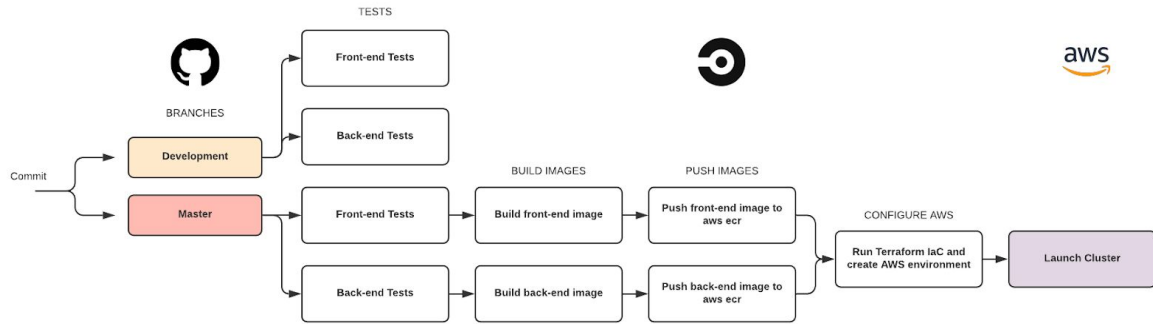
Test Documentation:

Back-end

TEST ID	TEST NAME	FEATURE	EXPECTED RESULT	3/8/20	17/8/20	31/8/20	13/9/20	3/10/20	18/10/20
1	validAddBookingReturn201	Add booking	CREATED	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
2	invalidAddBookingReturn400_invalidDate	Add booking	BAD REQUEST	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
3	invalidAddBookingReturn400_invalidTime	Add booking	BAD REQUEST	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
4	invalidAddBookingReturn404_invalidService	Add booking	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
5	invalidAddBookingReturn404_invalidEmployee	Add booking	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
6	invalidAddBookingReturn400_existingBooking	Add booking	BAD REQUEST	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
7	invalidAddBookingReturn400_concurrentBookingsSameEmployee	Add booking	BAD REQUEST	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
8	validCancelBookingReturn200	Cancel Booking	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
9	invalidCancelBookingReturn404_customerNotFound	Cancel Booking	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
10	validGetVacantBookingsReturn200	Get vacant bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
11	validGetVacantBookingsByServiceIdReturn200	Get vacant bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
12	invalidGetVacantBookingsByServiceIdReturn404_notFound	Get vacant bookings	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
13	invalidGetVacantBookingsByServiceIdReturn404_invalidServiceId	Get vacant bookings	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
14	validGetOccupiedBookingsReturn200	Get occupied bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
15	validGetOccupiedBookingsByUsernameReturn200	Get occupied bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
16	invalidGetOccupiedBookingsByUsernameReturn404_notFound	Get occupied bookings	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
17	validGetPastBookingsReturn200	Get past bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
18	validGetPastBookingsByUsernameReturn200	Get past bookings	OK	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
19	validGetPastBookingsByUsernameReturn404_notFound	Get past bookings	NOT FOUND	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
20	validCustomerRegisterReturn201	Add customer	CREATED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
21	invalidCustomerRegisterReturn400_missingField	Add customer	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
22	invalidCustomerRegisterReturn400_existingUsername	Add customer	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
23	validCustomerLoginReturn200	Login customer	OK	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
24	invalidCustomerLoginReturn400_wrongUsername	Login customer	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
25	invalidCustomerLoginReturn400_wrongPassword	Login customer	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
26	validCustomerGetReturn200	Get customer	OK	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
27	invalidCustomerGetReturn404	Get customer	NOT FOUND	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
28	validCustomerUpdateReturn200	Update customer	OK	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
29	invalidCustomerUpdateReturn404_notFound	Update customer	NOT FOUND	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
30	validAddEmployeeReturn201	Add employee	CREATED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
31	invalidAddEmployeeReturn400_missingField	Add employee	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
32	invalidAddEmployeeReturn400_existingUsername	Add employee	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
33	validEmployeeLoginReturn200	Login employee	OK	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
34	invalidEmployeeLoginReturn400_wrongUsername	Login employee	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
35	invalidEmployeeLoginReturn400_wrongPassword	Login employee	BAD REQUEST	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED
36	validEmployeeGetReturn200	Get employee	OK	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
37	invalidEmployeeGetReturn404	Get employee	NOT FOUND	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
38	invalidEmployeeAddAvailabilityReturn200	Add employee availability	OK	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
39	invalidEmployeeAddAvailabilityReturn400_existingDay	Add employee availability	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
40	invalidEmployeeAddAvailabilityReturn400_invalidDay	Add employee availability	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
41	invalidEmployeeAddAvailabilityReturn404_invalidEmployee	Add employee availability	NOT FOUND	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
42	validEmployeeRemoveAvailabilityReturn200	Remove Availability	OK	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
43	invalidEmployeeRemoveAvailabilityReturn404_notFound	Remove Availability	NOT FOUND	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
44	invalidEmployeeRemoveAvailabilityReturn400_invalidDay	Remove Availability	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
45	invalidEmployeeRemoveAvailabilityReturn404_invalidEmployee	Remove Availability	NOT FOUND	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
46	validEmployeeAddServiceReturn200	Add service to employee	OK	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
47	invalidEmployeeAddServiceReturn400_invalidService	Add service to employee	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
48	invalidEmployeeAddServiceReturn400_existingService	Add service to employee	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
49	validEmployeeUpdatePasswordReturn200	Update password employee	OK	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
50	invalidEmployeeUpdatePasswordReturn404_notFound	Update password employee	NOT FOUND	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
51	invalidEmployeeUpdatePasswordReturn400_wrongPassword	Update password employee	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
52	validAddServiceReturn201	Add service	CREATED	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
53	invalidAddServiceReturn400_missingField	Add service	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
54	invalidAddServiceReturn400_existingName	Add service	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
55	validGetServiceReturn200	Get service	OK	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
56	invalidGetServiceReturn404_notFound	Get service	NOT FOUND	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
57	invalidGetServiceReturn400_invalidServiceId	Get service	BAD REQUEST	FAILED	PASSED	PASSED	PASSED	PASSED	PASSED
58	validAddShiftReturn200	Add shift	OK	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
59	invalidAddShiftReturn400_existingShift	Add shift	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
60	invalidAddShiftReturn400_outsideOfAvailability	Add shift	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
61	invalidAddShiftReturn404_invalidUsername	Add shift	NOT FOUND	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
62	invalidAddShiftReturn400_invalidDateFormat	Add shift	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
63	invalidAddShiftReturn400_invalidFutureDate	Add shift	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
64	invalidAddShiftReturn400_invalidPastDate	Add shift	BAD REQUEST	FAILED	FAILED	PASSED	PASSED	PASSED	PASSED
65	authorizedAdminAccessReturn200	Authorisation	OK	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
66	forbiddenAdminAccessReturn403_forbidden	Authorisation	FORBIDDEN	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
67	authorizedEmployeeAccessReturn200	Authorisation	OK	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
68	forbiddenEmployeeAccessReturn403_forbidden	Authorisation	FORBIDDEN	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
69	authorizedCustomerAccessReturn200	Authorisation	OK	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
70	forbiddenCustomerAccessReturn403_forbidden	Authorisation	FORBIDDEN	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
71	unauthorizedUserAccessReturn401	Authorisation	UNAUTHORIZED	FAILED	FAILED	FAILED	FAILED	PASSED	PASSED
72	isBookingCancellableTest_valid	Booking helper method	TRUE	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED
73	isBookingCancellableTest_invalid	Booking helper method	FALSE	FAILED	FAILED	FAILED	PASSED	PASSED	PASSED