

Ticketr

(North Park Innovations - Take home Assignment)



Code link : <https://github.com/vazbloke/ticketr>

Video demo link: <https://youtu.be/HT4ltiowiSc>

Details :

I used Vue.js for the client. Flask (Python based microframework) is used as the backend, which connects to the database (MongoDB). The client communicates with the backend server via API calls to endpoints exposed on the server.

Additional libraries such as vue-chartjs, bootstrap-vue, axios were used.

Instructions to run are mentioned with the code on Github.

Overview of features :

Login screen

Data display (Paginated)

Sort by category (Including date)

Search/Filter by attribute (Intelligently picks between dropdown/text field)

View ticket as a card (All attributes)

Delete ticket

Intuitive charting and basic data analysis.

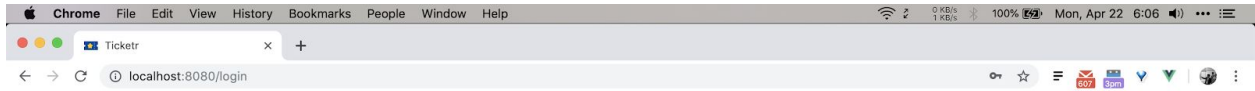
Distribution of time spent :

Task	Time	Details
Reading about Vue	2 hours	Npm documentation, Vue documentation,

principles and structure		Vue directives (v-model, v-bind etc)
Building a basic CRUD app with Vue and Flask	2 hours	Following a tutorial online to populate static data in a Vue app, hands on experience.
Adding database and pagination, APIs	3 hours	Processing JSON files into database, Writing API endpoints to deliver data to the client based on multiple parameters.
Sort and search	2 hours	Adding additional functionality to API endpoints, handling edge cases.
Updating to use Bootstrap-vue elements, Modals	1 hour	Using b-table, implementing pop-up to view data, adding delete functionality.
Login screen and state storing	1 hour 30 minutes	Learning and implementing state management, writing a login screen
Learning and implementing vue-chart.js	3 hours 30 minutes	Chartjs, vue-chartjs documentation, rendering charts or different types
Content and text for charts	2 hours	Additional endpoints to get data formatted to requirements, choosing visual representation
Icons, styling and alignment	3 hours 30 minutes	Styling elements of all pages, finding a suitable favicon, picking a color scheme, modifying existing bootstrap styles with hex colors, overall aesthetic coherence
Refactoring and code cleanup	1 hour 30 minutes	Removing duplicate code, optimizing functions
Misc bug fixes	2 hours	Bug fixes throughout the project, optimising API endpoint.
Total	24 hours	

The above tasks were not worked on continuously, hence the time taken listed are approximate.

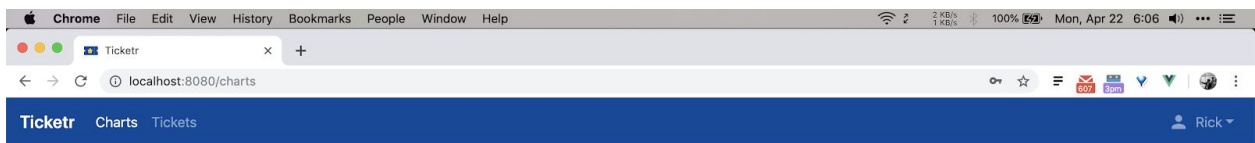
Screenshots :



Ticketr

Sign In

You have been logged out.



Analytics report

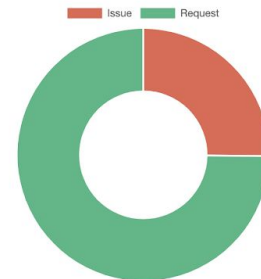
General information

There are a total of 25628 records.

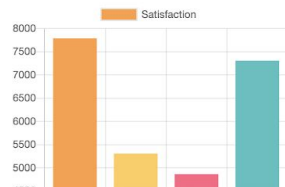
A majority of the tickets are of type Request (74%).

The numbers and plot points can be seen by hovering over the graph

Tickets can be viewed grouped by this or any other attribute in the Tickets tab



Satisfaction



The graph on the left shows the tickets grouped by Satisfaction.

A majority of the tickets are of unknown satisfaction (31%)

Aside from those unknown, over 41% of the remaining tickets are highly satisfied. (28% of the whole data)

Days open



The above plot shows the number of tickets grouped by the Days Open attribute.

47% of the tickets have been open for over 5 days. The rest (53%) are between 0 and 5 days.

24% of the tickets have been open for zero days.

Additional

The graph on the right shows the priorities of tickets grouped by Ticket type.



Ticket list

Sort By	Date	Desc	Sort	Filter by	None	Select Value	Search
Ticket ID	Date	Type	Priority	Days Open	Filed Against	Severity	Satisfaction
25268	2019-01-20T00:00:00	Request	1 - Low	0	Access/Login	3 - Major	2 - Satisfied
25267	2019-01-19T00:00:00	Request	3 - High	5	Software	2 - Normal	3 - Highly satisfied
25266	2019-01-18T00:00:00	Request	3 - High	3	Software	2 - Normal	3 - Highly satisfied
25265	2019-01-17T00:00:00	Request	3 - High	8	Systems	2 - Normal	0 - Unknown
25264	2019-01-16T00:00:00	Issue	0 - Unassigned	4	Systems	2 - Normal	0 - Unknown
25263	2019-01-15T00:00:00	Request	0 - Unassigned	18	Systems	2 - Normal	0 - Unknown
25262	2019-01-14T00:00:00	Issue	3 - High	1	Access/Login	2 - Normal	0 - Unknown
25261	2019-01-13T00:00:00	Request	0 - Unassigned	0	Access/Login	1 - Minor	2 - Satisfied
25260	2019-01-12T00:00:00	Request	3 - High	0	Access/Login	2 - Normal	0 - Unknown
25259	2019-01-11T00:00:00	Request	0 - Unassigned	0	Access/Login	2 - Normal	2 - Satisfied
25258	2019-01-10T00:00:00	Request	1 - Low	1	Access/Login	2 - Normal	2 - Satisfied

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Ticket list

Sort By: Date | Desc

Ticket ID	Date
25268	2019-01-20T00:00:00
25267	2019-01-19T00:00:00
25266	2019-01-18T00:00:00
25265	2019-01-17T00:00:00
25264	2019-01-16T00:00:00
25263	2019-01-15T00:00:00
25262	2019-01-14T00:00:00
25261	2019-01-13T00:00:00
25260	2019-01-12T00:00:00
25259	2019-01-11T00:00:00
25258	2019-01-10T00:00:00

Ticket details

Attribute	Value
Ticket ID	25268
Type	Request
Priority	1 - Low
Date created	1/20/2019
Days Open	0
Filed Against	Access/Login
Severity	3 - Major
Satisfaction	2 - Satisfied
Requestor Employee	348
Requestor Seniority	1 - Junior
IT Owner	42

Delete Ticket

Severity	Satisfaction
3 - Major	2 - Satisfied
2 - Normal	3 - Highly satisfied
2 - Normal	3 - Highly satisfied
2 - Normal	0 - Unknown
2 - Normal	0 - Unknown
2 - Normal	0 - Unknown
2 - Normal	0 - Unknown
2 - Normal	0 - Unknown
1 - Minor	2 - Satisfied
2 - Normal	0 - Unknown
2 - Normal	2 - Satisfied
2 - Normal	2 - Satisfied

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Ticket list

Sort By: Date | Desc | Sort

Filter by: Ticket ID | 5532 | Search

Ticket deleted!

Ticket ID	Date	Type	Priority	Days Open	Filed Against	Severity	Satisfaction
5532	2004-04-25T00:00:00	Issue	3 - High	3	Systems	2 - Normal	3 - Highly satisfied

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