

Firestore Analytics

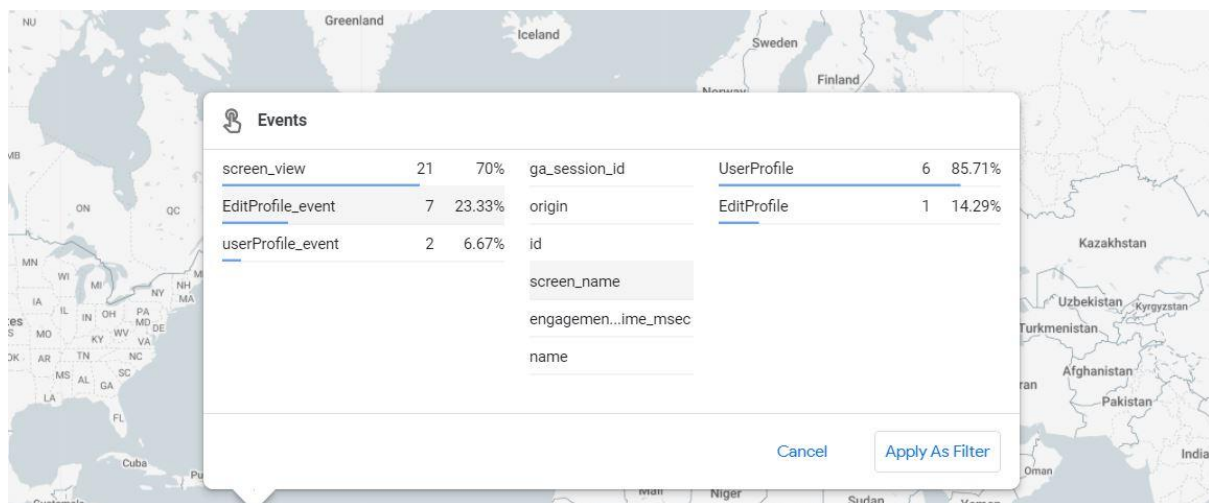
We implemented Firestore Analytics into our project before user testing in order for us to analyse how the users' navigate through our app. This was really beneficial as we logged events in pages and buttons.

This was really beneficial to implement as we got analytics in regards to when a person pressed a button or visited a certain page. We logged events in each page in the application to get analytics of which page was most visited, how the user got to that specific page etc.

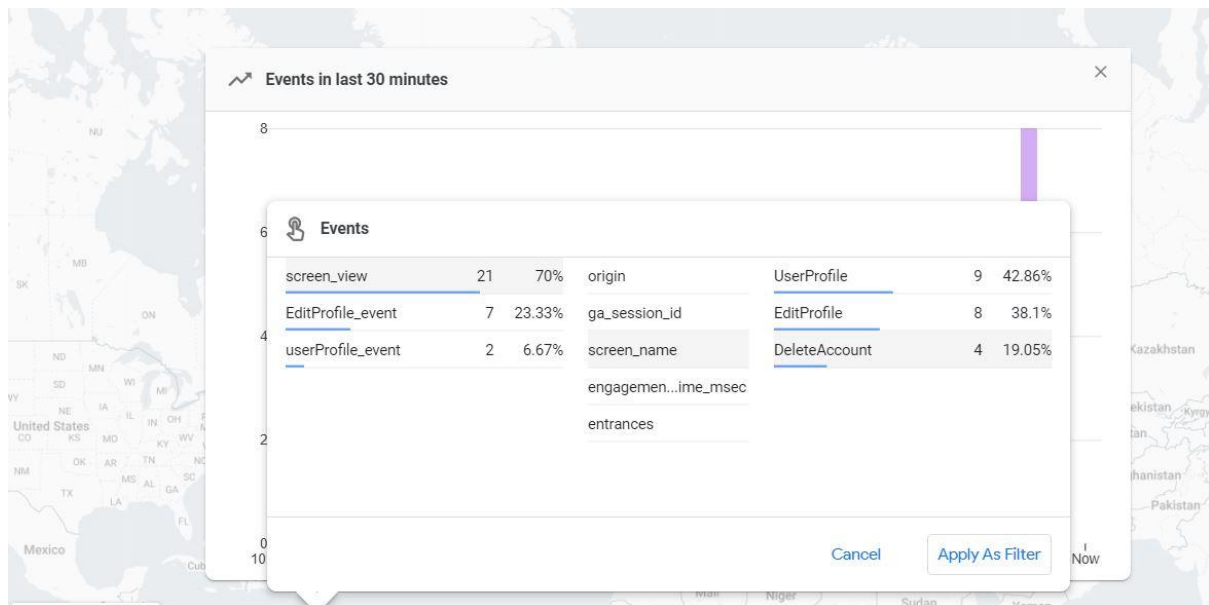
This was really important to us to implement as we got to see what pages users weren't visiting as much which actually led to us improving some pages in the applications in regards to if some buttons were not clear etc.

This was a useful way of testing behaviour within the application as we could not see the users testing in person due to the pandemic. We still did it via social media and this was useful to see how a user was navigating throughout the application by themselves.

Below are some screenshots of the user Analytics that we implemented in the application.

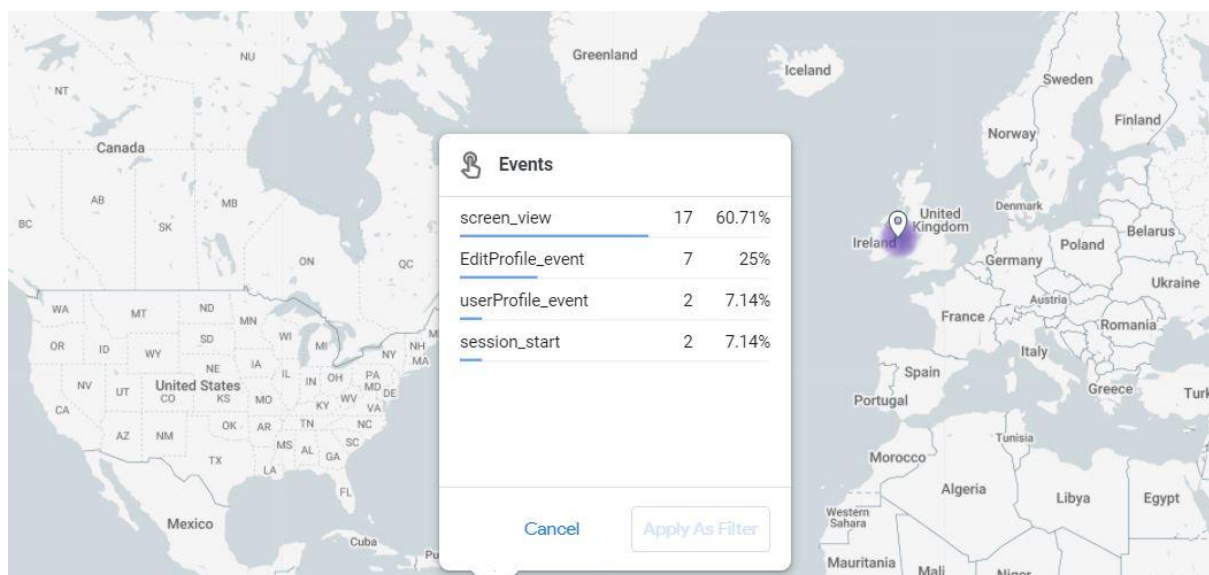


Above is a screenshot of the events that occurred in the application during some of the user testing. We can see the number of times a user visited a specific page and if they navigated to the edit profile page from the user profile.

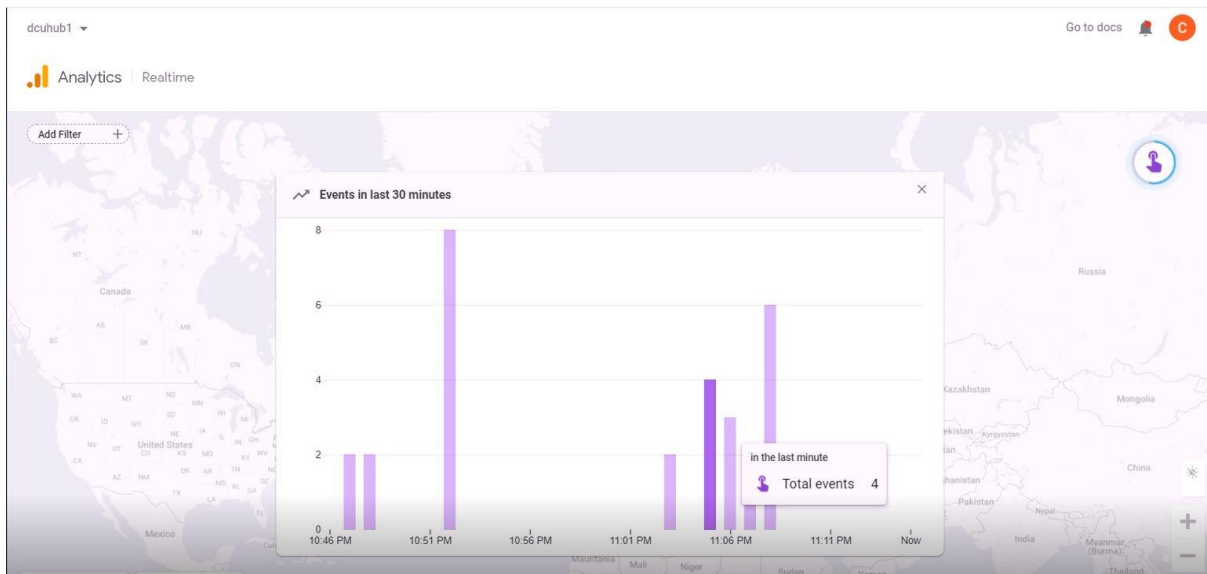


From the figure above, we can see if some of the users navigated to the Delete Account page. This was done while testing was taking place so all users did navigate to each page.

We also implemented the analytic codes into the delete account button to see how many users decided to delete their account. It was interesting to see that people didn't click this button but many did navigate to the Delete Account page. We also implemented these analytics in the Change Password page button and many other buttons and pages throughout the application.



From the figure above, we have the list of most events that occurred in the application. Screen_view is a Firebase Analytics event in regards to all screens, whereas EditProfile_event are events that we implemented to get an accurate description of users interacting.



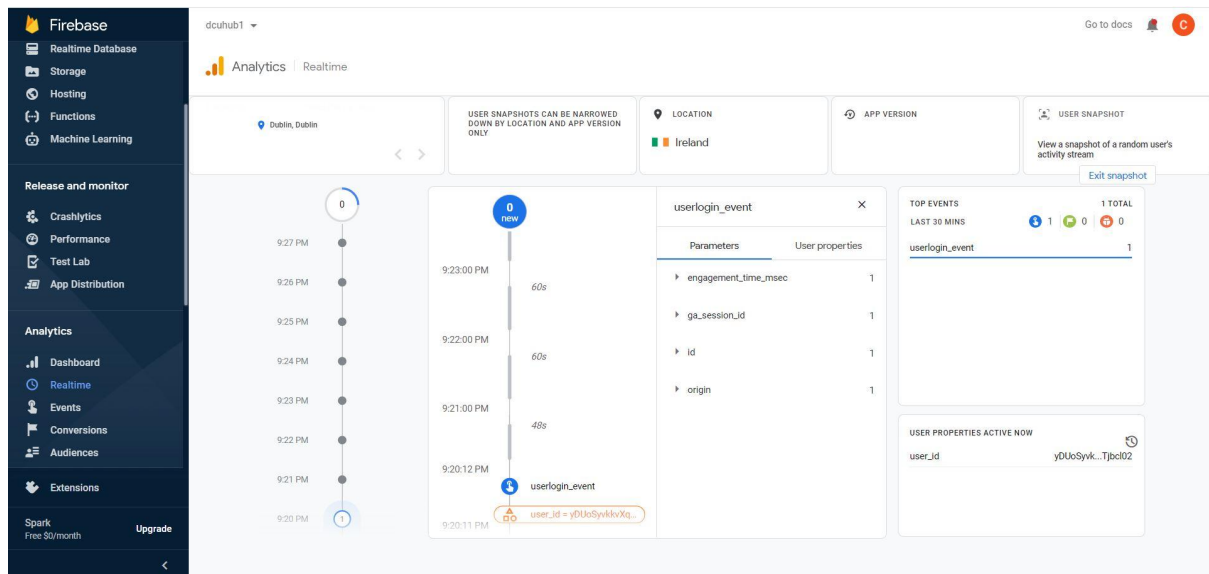
From the figure above, we have a bar chart of the events in the last 30 minutes that occurred in the application. This was really useful during user testing as we got to actively see that users were interacting with the application.

The screenshot shows an 'Events' modal window with a list of events and their details. The events are listed in a table with columns for event name, count, and percentage. The details for each event are shown in a separate section below the table.

Event Name	Count	Percentage
screen_view	17	51.52%
OpenMessages_event	10	30.3%
TimetableHome_event	5	15.15%
userProfile_event	1	3.03%

Event Name	Count	Percentage
ga_session_id	10	100%
id		
origin		
screen_name		
engagement_time_msec		

From the figure above, is an event that we implemented when a user opens a chat in the application. This allowed us to see that users were actually looking inside the chats and not just viewing the chat list page.



The figure above is a snapshot of a random users login stream when they just login to the application. As you can see when a user clicks the login button we implemented an event when this button was clicked which shows up on the user login stream.

This Firebase Testing Analytics can be seen in the **firebase-testing** branch of the project's gitlab repository.