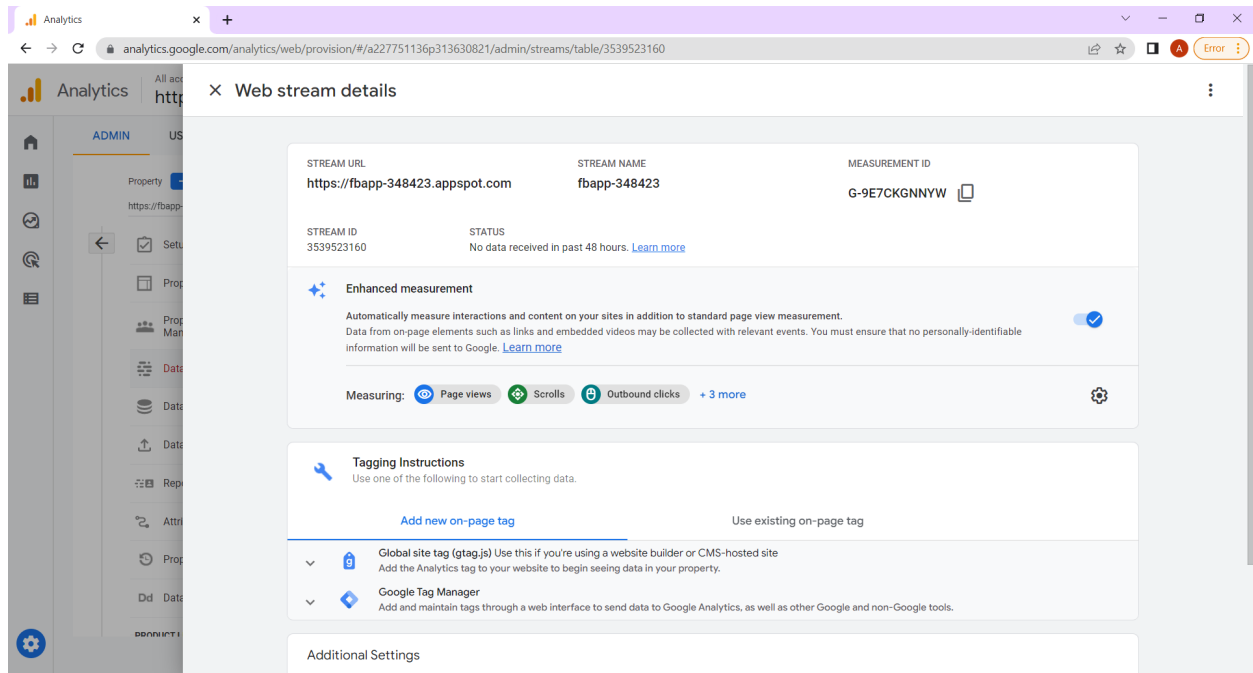


Analytics Implementation:

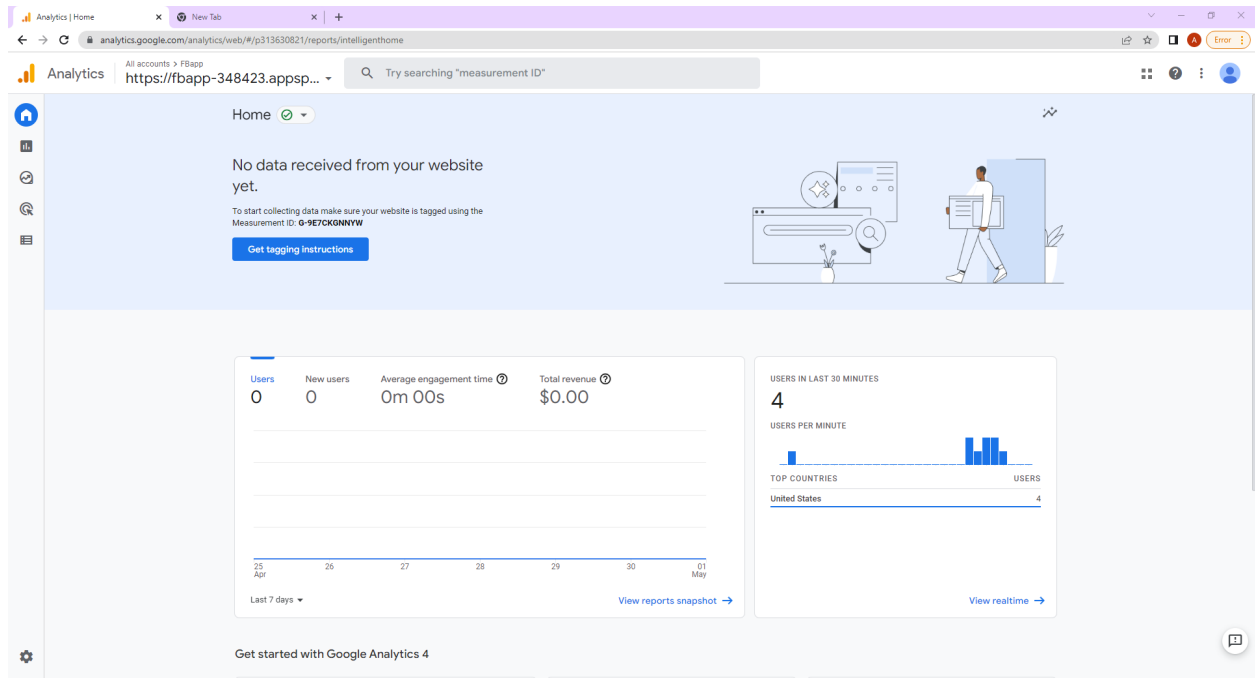
section 1= Google Analytics.

Step 1: Create Analytics Account by providing the account name and configuring the data-sharing setting. Add data stream with website URL and stream name.

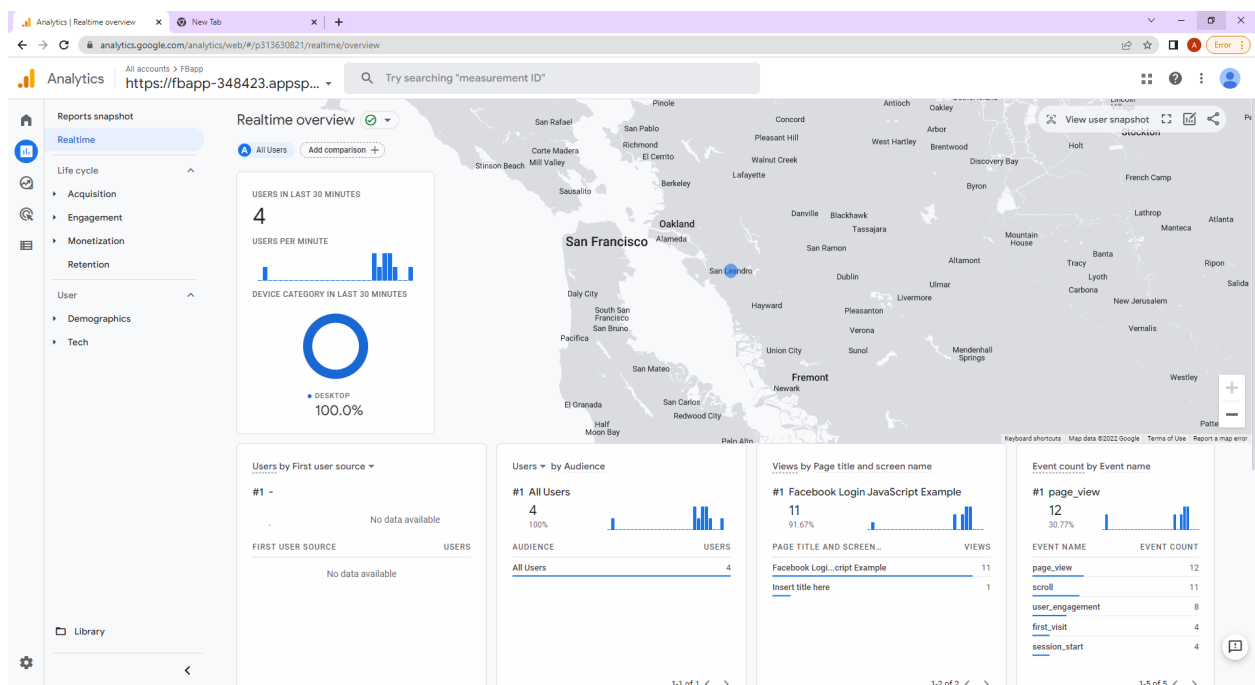


Add the auto-generated JS code in all the JSP files of the app to stream analytics data from the browser to google analytics.

Google Analytics shows users in last 30 mins:



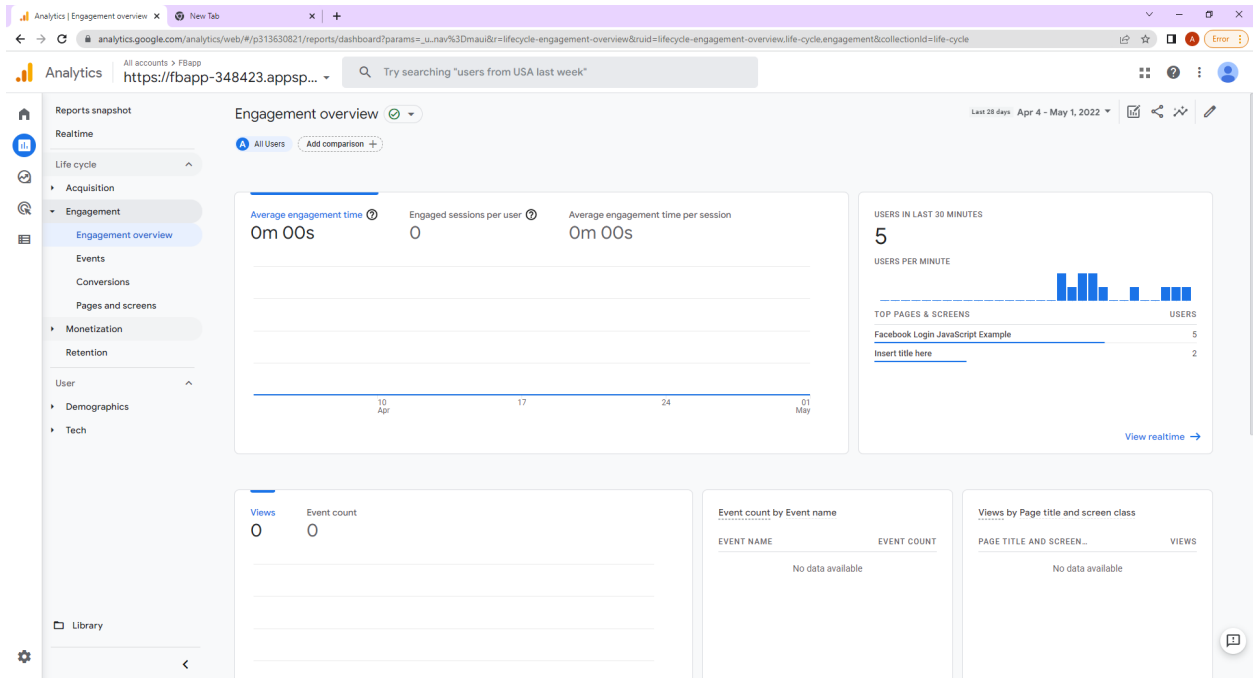
1.1.a: metric 1- provide a graphs/plots/visualizations:



1.1.b: Interpret the metric 1's trends: This shows the number of users that have used the web app. It show the view by Pages title and screen name, Event count and many more and it can be customized to show more information.

1.1.c: limitations of metric 1: Google Analytics works by loading a snippet of javascript code on each page of the web app. When the page is loaded, the code sends a string of data back. Google Analytics uses cookies to track information from a user's browser. Cookies can be blocked by the browser which will result in not all users being tracked.

1.2.a: metric 2- provide a graphs/plots/visualizations:

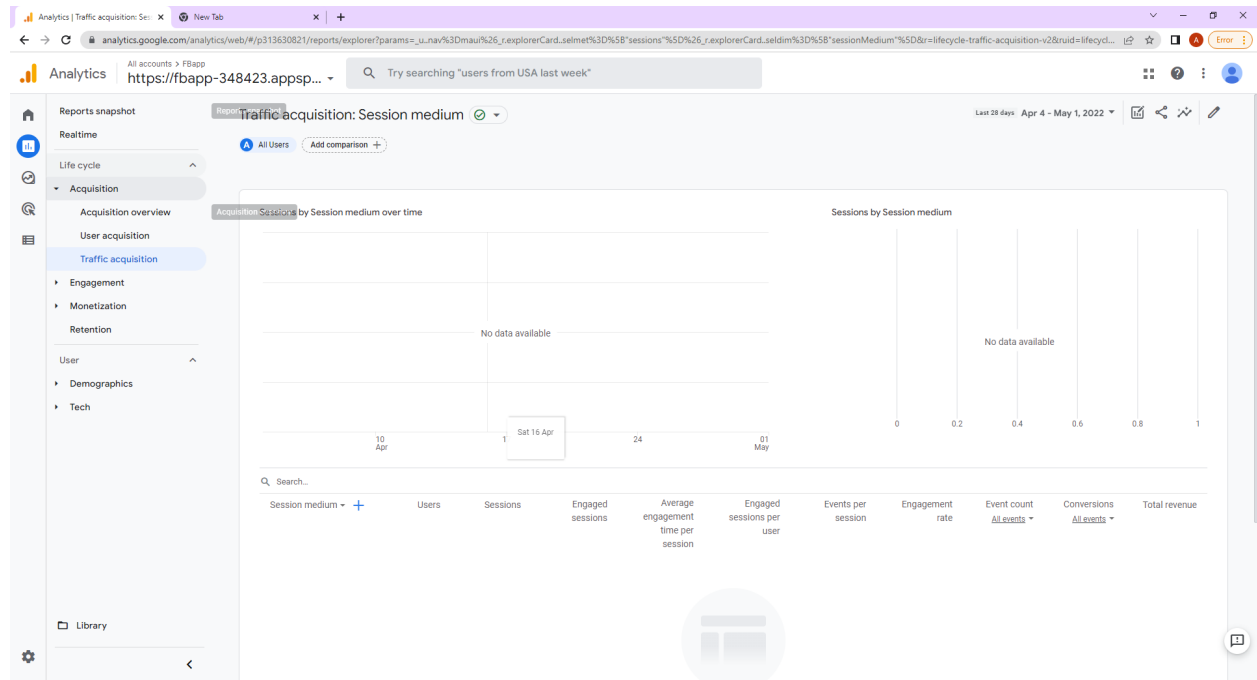


Engagement overview:

1.2.b: Interpret the metric 2's trends: This measures the time users have spent in the application. This is useful to check the engagement of uses. It also shows the number of users in the last 30 minutes along with events and page titles.

1.2.c: limitations of metric 2: Tracking is done with the cookies and the cookies can be blocked with will result in some users not being tracked. Many advanced analytics features are missing in this.

1.3.a: metric 3- provide a graphs/plots/visualizations:



1.3.b: Interpret the metric 3's trends: This shows the traffic acquisition. This helps users analyze the content that works well for uses and identify the source of high traffic. This helps in maintaining the acquired users and also help in acquiring new users and trying to get to as many users as possible.

1.3.c: limitations of metric 3: The result that is shown is not accurate and might become a problem to detect if there is something wrong. We might not be able to provide the correct analysis for the application.

section 2= Facebook Analytics. : Facebook Analytics is no longer available. The service has been discontinued since July 1st, 2021.