Mobile Application Development

Produced by

David Drohan (ddrohan@wit.ie)

Department of Computing & Mathematics
Waterford Institute of Technology
http://www.wit.ie

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Android & Firebase Part 4

Firebase Integration

Agenda

- Firebase history
- The all new Firebase
- Real-time database
- Authentication
- Storage
- Remote config
- Hosting
- Crash reporting
- Test lab
- Firebase cloud messaging
- Dynamic links
- App indexing
- Analytics
- CoffeeMate Highlights & Demos along the way…

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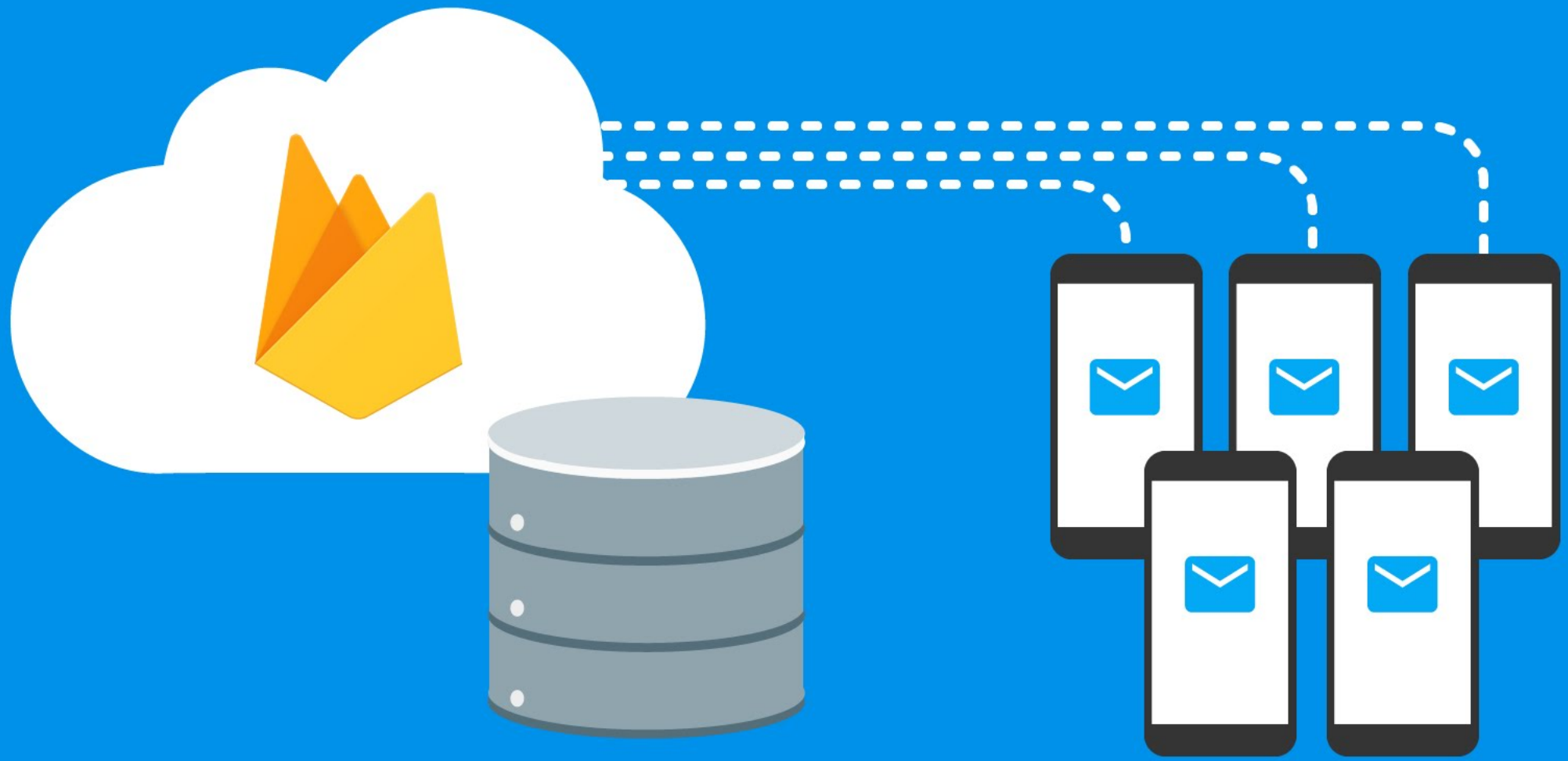


Cloud Messaging

User engagement and more

Firebase Cloud Messaging

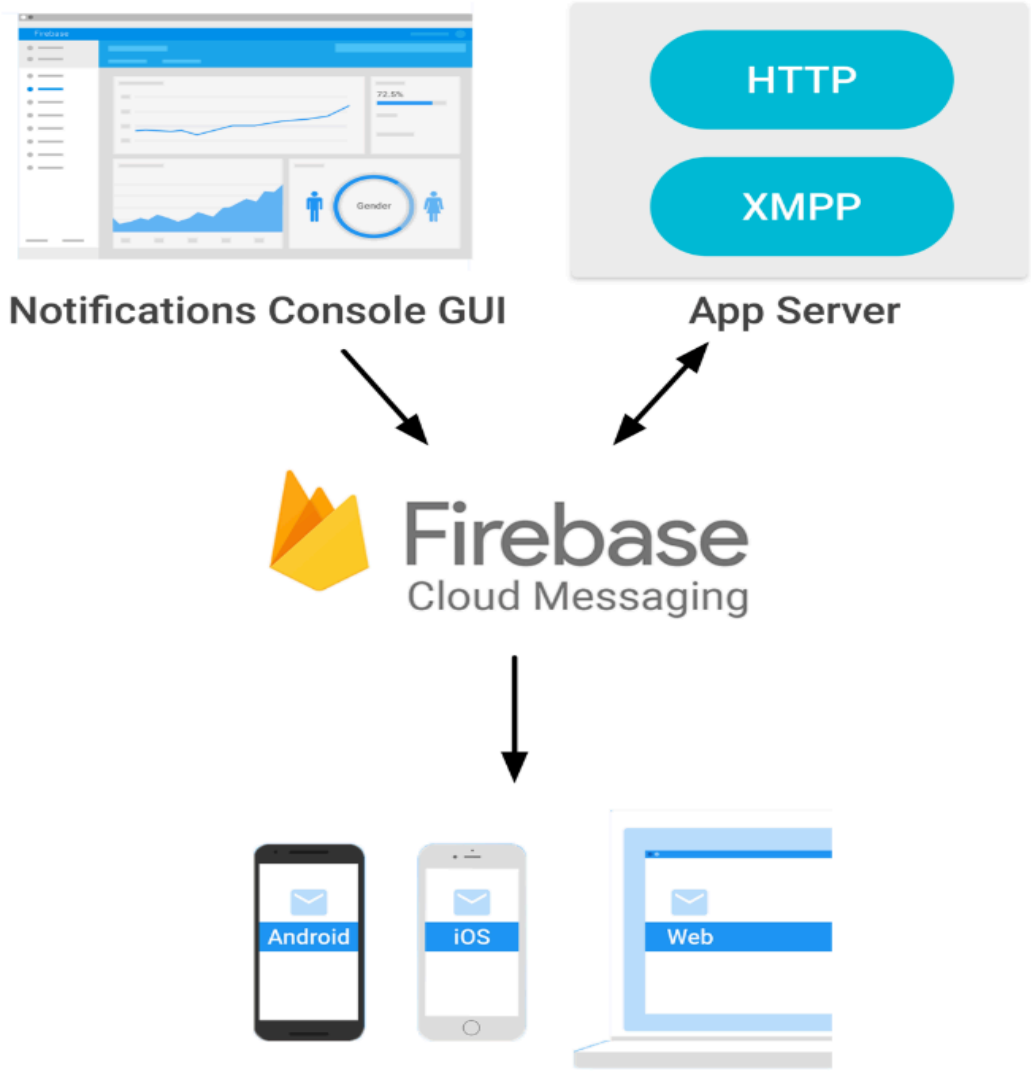
- It is a cross-platform messaging solution that reliably delivers messages at no cost.
- Send notifications that are displayed to your user. Or send data messages which can be consumed by application code.
- Distribute messages to your client app in any of three ways — to single devices, to groups of devices, or to devices subscribed to topics.
- Send acknowledgments from devices back to your server over FCM's reliable and battery-efficient connection channel.
- 95% of the messages delivered in under 250 milliseconds.

How does FCM work?

An FCM implementation includes two main components for sending and receiving:

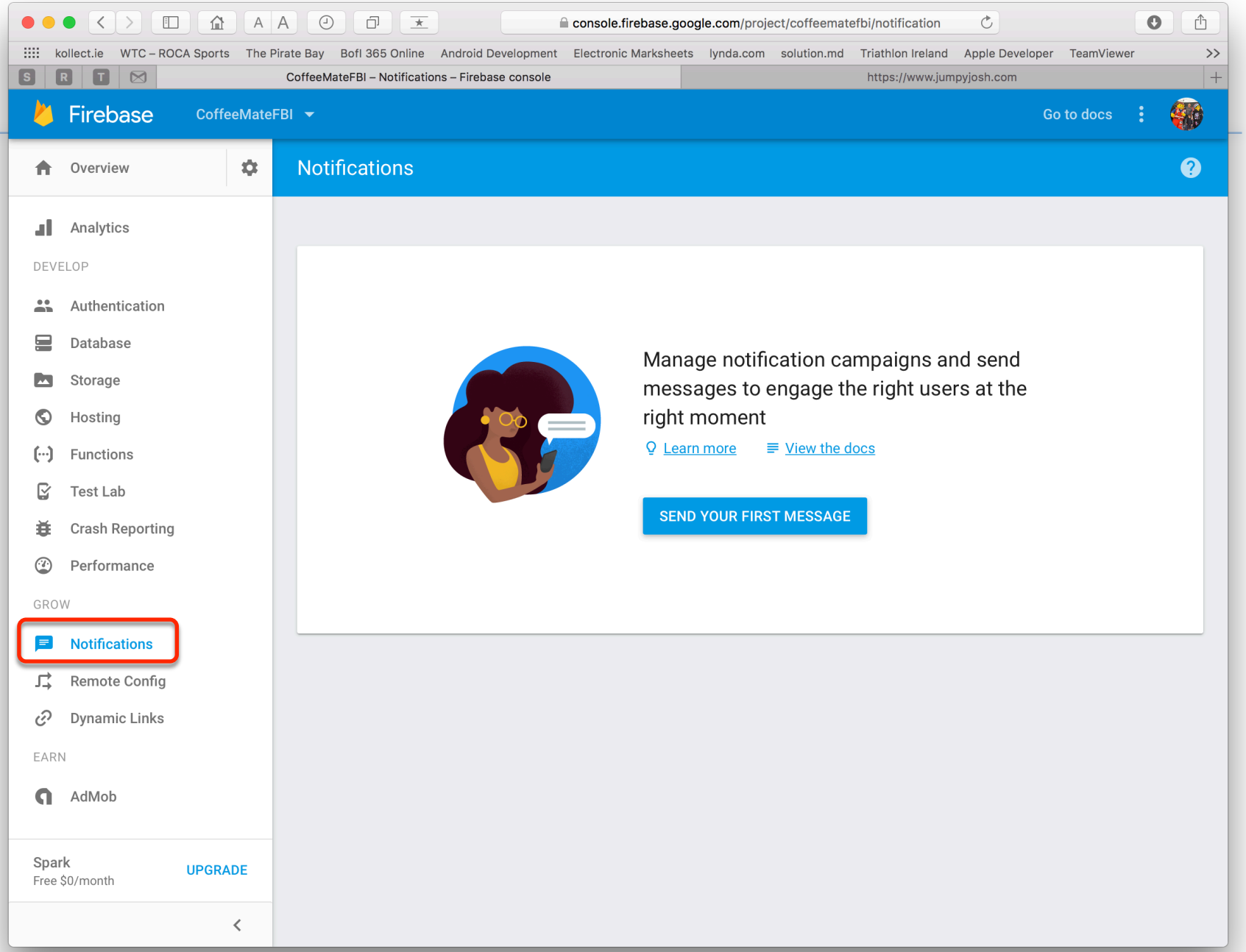
1. A trusted environment such as Cloud Functions for Firebase or an app server on which to build, target and send messages.
2. An iOS, Android, or Web (JavaScript) client app that receives messages.

You can send messages via the Admin SDK or the HTTP and XMPP APIs. For testing or for sending marketing or engagement messages with powerful built-in targeting and analytics, you can also use the Notifications composer.



Send FCM from firebase console

- Open the **Notifications** tab of the Firebase console and select **New Message**.
- Enter the message text.
- Select **Single Device** for the message target.
- In the field labelled **FCM Registration Token**, enter the registration token you obtained previously. (Advanced Options)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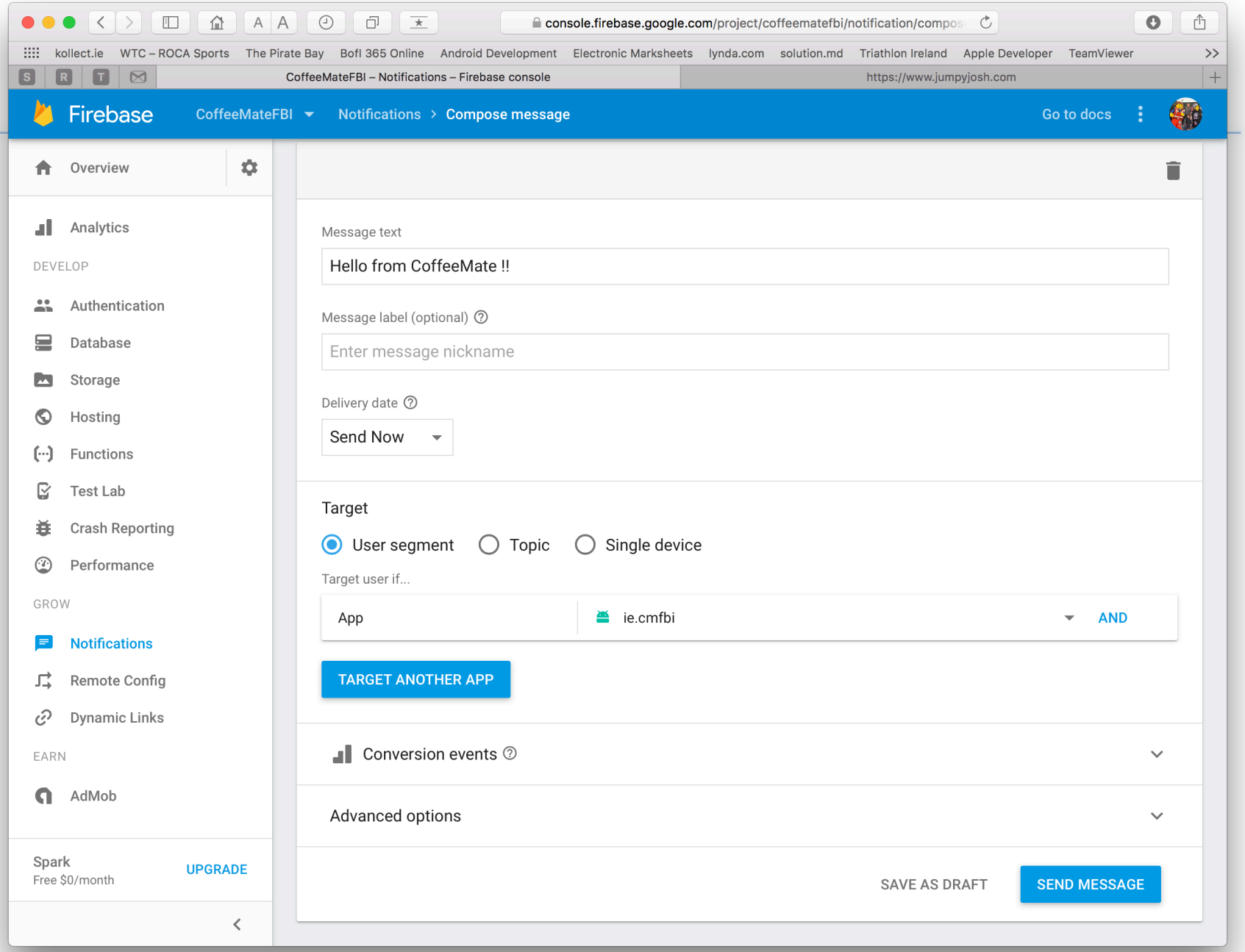
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EARN
AdMob
Spark
Free $0/month
UPGRADE
Message text
Hello from CoffeeMate !!
Message label (optional)
Enter message nickname
Delivery date
Send Now
Target
User segment
Topic
Single device
Target user if...
App
ie.cmfbi
AND
TARGET ANOTHER APP
Conversion events
Advanced options
SAVE AS DRAFT
SEND MESSAGE

You can Also…

- Receive Messages
- Initiate Topic Messaging (via subscription to topic by client)
- Device Group Messaging
- Send an Upstream Message

Thanks!

Some important points though….

- Do not think RDBMS, think JSON. How data should be structured is very important.
- Firebase has a recycler view, that integrates with real time database smoothly without any listeners.
- Test lab which is available in paid plan (Blaze), is an amazing feature for testing your app on different real and virtual devices.
- Set developer mode to true when testing remote config.

References & Links

- Presentation by Kaushal Dhruw & Shakti Moyal 2016
- https://firebase.google.com
- Demo app available at https://goo.gl/WBP5fR

Questions?