



ICT Department

របៀបប្រើ Push Notification នៅក្នុង Firebase

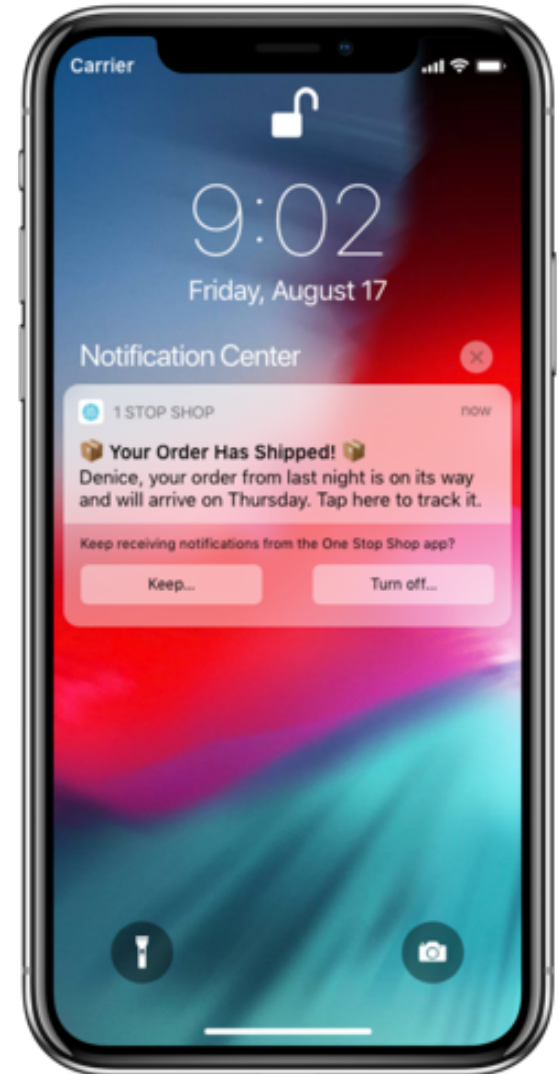
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របៀបប្រើ Push Notification នៅក្នុង Firebase

- គ្រប់ App ទាំងអស់គឺសុទ្ធតែប្រើ Push Notification សំរាប់ផ្តល់ជាដំណឹងអោយអ្នកប្រើ ឃើញព័ត៌មានអ្វីមួយ ហើយក៏ជាយានន្តមួយដែលទាក់ទាញអ្នកប្រើអោយចូលប្រើកម្មវិធីរបស់យើងកាន់តែញឹកញាប់ផងដែរ។
- ក្នុង Firebase យើងអាចប្រើ Firebase Cloud Messaging (FCM) សំរាប់ Push Notification បាន។ គួរបញ្ជាក់ផងដែរថា សេវានេះគឺផ្តល់អោយយើងប្រើដោយមិនគិតថ្លៃ (ក្នុងចំនួនកំណត់ដំបូង)។



1. ដាក់ firebase_messaging dependency៖

dependencies:

firebase_messaging: ^5.1.8

2. សំរាប់ Android, គឺដាក់កូដខាងក្រោមចូលក្នុងAndroidManifest.xml៖

```
<intent-filter>
  <action android:name="FLUTTER_NOTIFICATION_CLICK" />
  <category android:name="android.intent.category.DEFAULT" />
</intent-filter>
```

```
15 <application
16   android:name="io.flutter.app.FlutterApplication"
17   android:label="fcm_notifications"
18   android:icon="@mipmap/ic_launcher">
19   <activity
20     android:name=".MainActivity"
21     android:launchMode="singleTop"
22     android:theme="@style/LaunchTheme"
23     android:configChanges="orientation|keyboardHidden|keyboard|screenSize|locale|lay
24     android:hardwareAccelerated="true"
25     android:windowSoftInputMode="adjustResize">
26     <!-- This keeps the window background of the activity showing
27          until Flutter renders its first frame. It can be removed if
28          there is no splash screen (such as the default splash screen
29          defined in @style/LaunchTheme). -->
30     <meta-data
31       android:name="io.flutter.app.android.SplashScreenUntilFirstFrame"
32       android:value="true" />
33     <intent-filter>
34       <action android:name="android.intent.action.MAIN"/>
35       <category android:name="android.intent.category.LAUNCHER"/>
36     </intent-filter>
37     <intent-filter>
38       <action android:name="FLUTTER_NOTIFICATION_CLICK" />
39       <category android:name="android.intent.category.DEFAULT" />
40     </intent-filter>
41   </activity>
42 </application>
43 </manifest>
```

3. បង្កើត Application.java ជាក្នុង folder android/src/main/java៖

```
package io.flutter.plugins.firebaseessagingexample;

import io.flutter.app.FlutterApplication;
import io.flutter.plugin.common.PluginRegistry;
import io.flutter.plugin.common.PluginRegistry.PluginRegistrantCallback;
import io.flutter.plugins.GeneratedPluginRegistrant;
import io.flutter.plugins.firebaseessaging.FlutterFirebaseMessagingService;

public class Application extends FlutterApplication implements PluginRegistrantCallback {
    @Override
    public void onCreate() {
        super.onCreate();
        FlutterFirebaseMessagingService.setPluginRegistrant(this);
    }

    @Override
    public void registerWith(PluginRegistry registry) {
        GeneratedPluginRegistrant.registerWith(registry);
    }
}
```

4. រួចដាក់កូដខាងក្រោមក្នុង AndroidManifest.xml៖

```
<application android:name=".Application" ...>
```

5. import៖

```
import 'dart:io';  
import 'package:firebase_messaging/firebase_messaging.dart';
```

6. ក្នុងកូដ Dart របស់យើង ចូរបង្កើត method មួយខាងក្រោម៖

```
Future<dynamic> myBackgroundMessageHandler(Map<String, dynamic> message) {  
  if (message.containsKey('data')) {  
    // Handle data message  
    final dynamic data = message['data'];  
  }  
  
  if (message.containsKey('notification')) {  
    // Handle notification message  
    final dynamic notification = message['notification'];  
  }  
  
  // Or do other work.  
}
```

7. ដាក់ខាងក្រោម៖

```
FirebaseMessaging _firebaseMessaging = FirebaseMessaging();

@Override
void initState() {
  super.initState();
  firebaseCloudMessaging_Listeners();
}
void firebaseCloudMessaging_Listeners() {
  if (Platform.isIOS) iOS_Permission();

  _firebaseMessaging.getToken().then((token){
    print(token);
  });

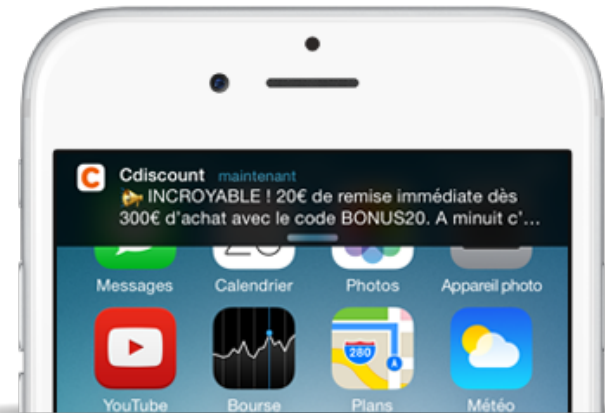
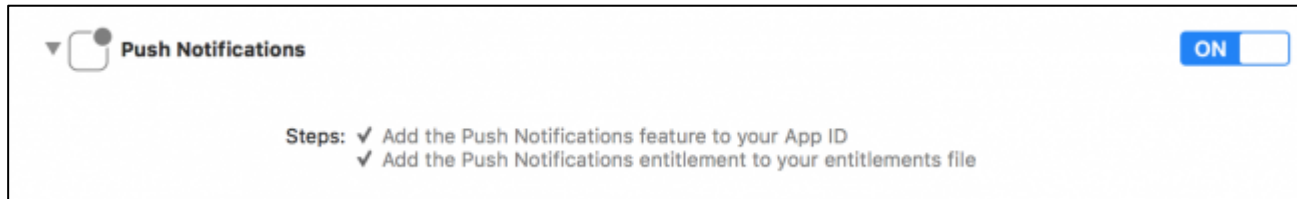
  _firebaseMessaging.configure(
    onMessage: (Map<String, dynamic> message) async {
      print('on message $message');
    },
    onResume: (Map<String, dynamic> message) async {
      print('on resume $message');
    },
    onLaunch: (Map<String, dynamic> message) async {
      print('on launch $message');
    },
  );
}
```

8. នឹងកូដខាងក្រោម៖

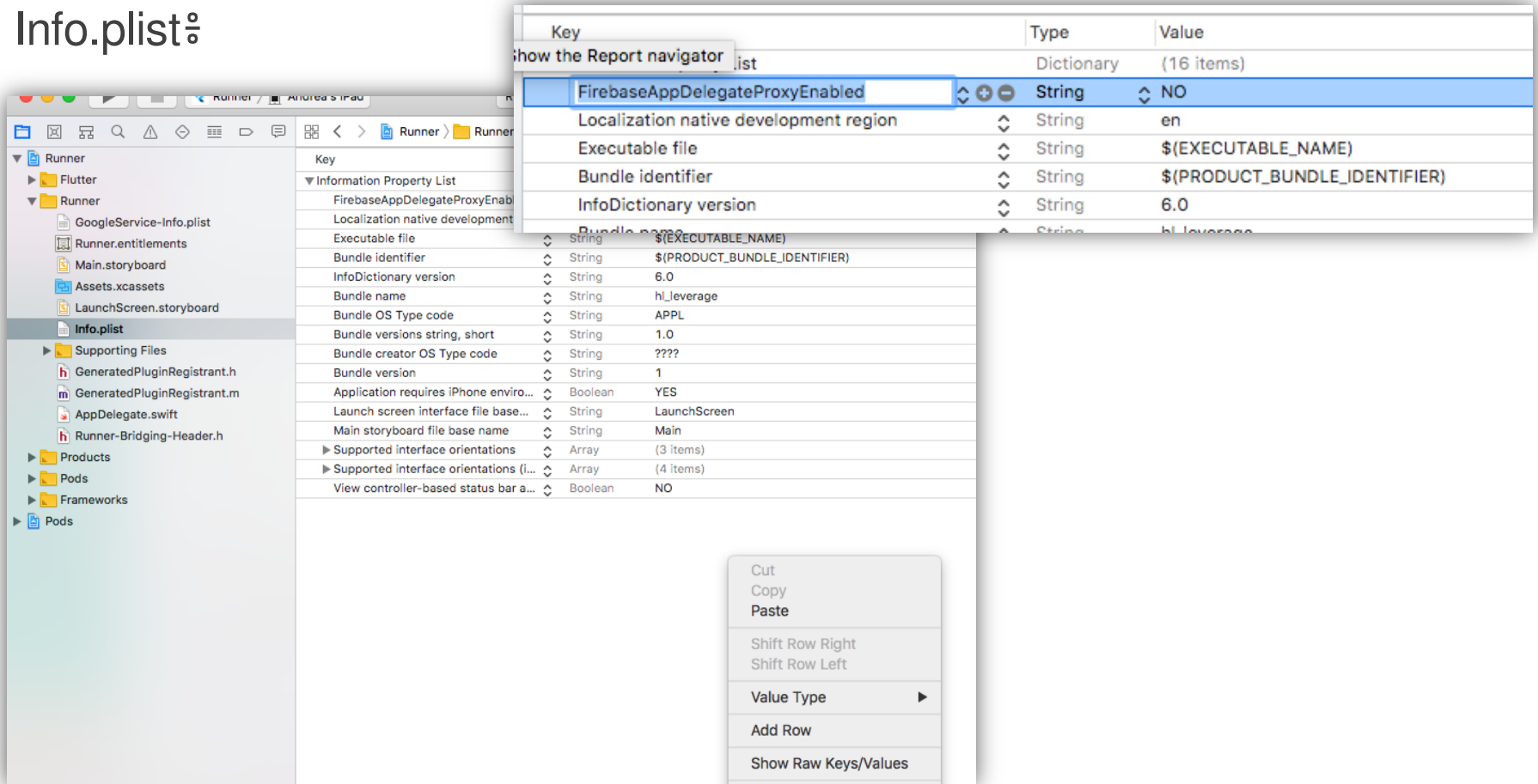
```
void iOS_Permission() {  
    _firebaseMessaging.requestNotificationPermissions(  
        IosNotificationSettings(sound: true, badge: true, alert: true)  
    );  
    _firebaseMessaging.onIosSettingsRegistered  
        .listen((IosNotificationSettings settings)  
        {  
            print("Settings registered: $settings");  
        });  
}
```

ការ Push Notification សំរាប់ iOS វិញ គឺមានការកែប្រែសំរាប់ XCode ចាប់ពី version 11 ឡើងទៅ។ វាទាមទារអោយយើងត្រូវតែទិញ Developer Account 99\$ សិន ទើបវាអោយមាន Push Notification។

9. ឧបមាថាយើងទិញ Developer Account ហើយ គឺគ្រាន់តែចូល XCode ហើយចុចយក Capacities -> Push Notification៖

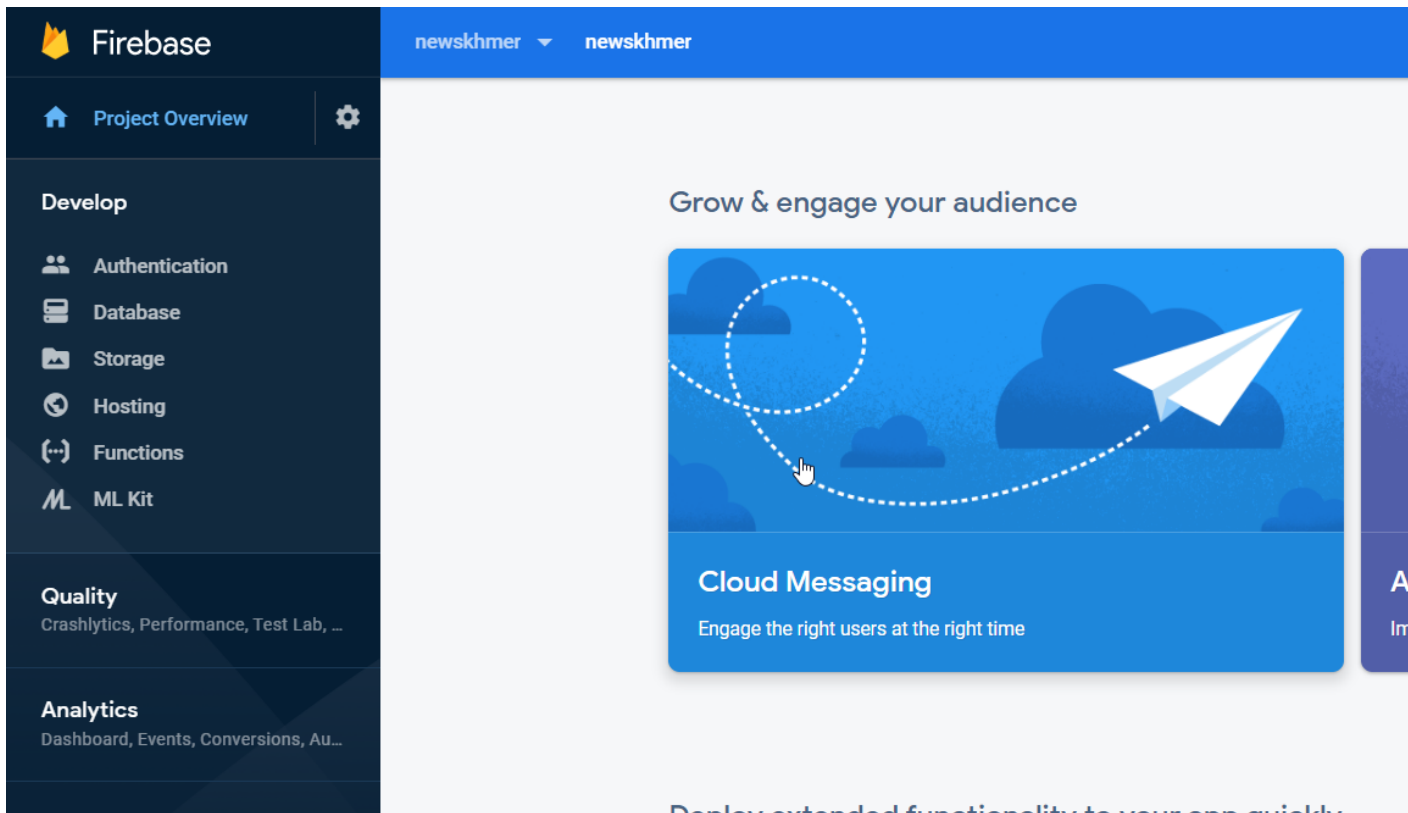


10. យើងដាក់បន្ថែម FirebaseAppDelegateProxyEnabled តំលៃ No នៅក្នុង Info.plist៖

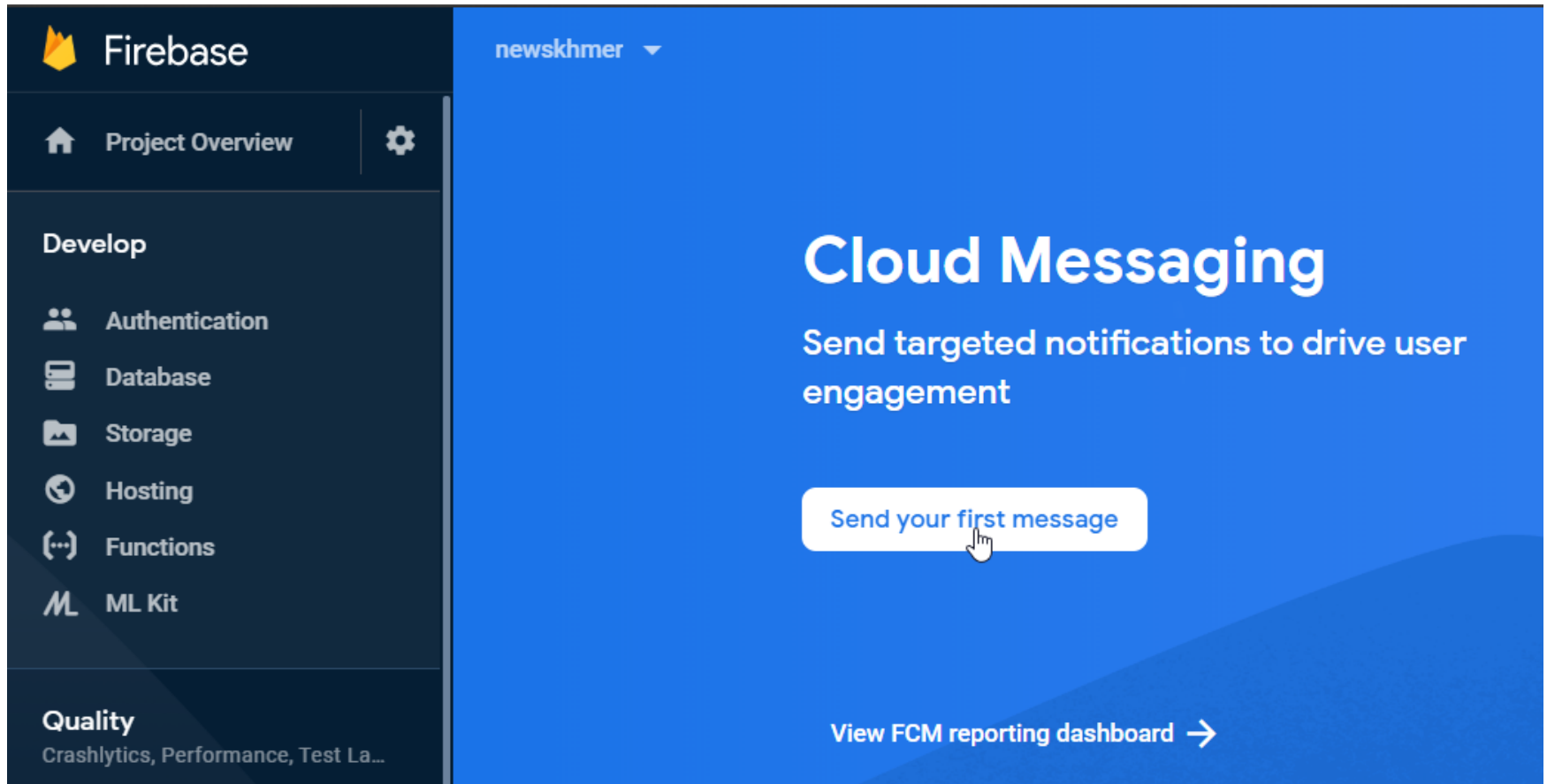


| Key | Type | Value |
|--|------------|-------------------------------|
| show the Report navigator | Dictionary | (16 items) |
| FirebaseAppDelegateProxyEnabled | String | NO |
| Localization native development region | String | en |
| Executable file | String | \$(EXECUTABLE_NAME) |
| Bundle identifier | String | \$(PRODUCT_BUNDLE_IDENTIFIER) |
| InfoDictionary version | String | 6.0 |
| Bundle name | String | hl_leverage |
| Bundle OS Type code | String | APPL |
| Bundle versions string, short | String | 1.0 |
| Bundle creator OS Type code | String | ???? |
| Bundle version | String | 1 |
| Application requires iPhone enviro... | Boolean | YES |
| Launch screen interface file base... | String | LaunchScreen |
| Main storyboard file base name | String | Main |
| Supported interface orientations | Array | (3 items) |
| Supported interface orientations (i... | Array | (4 items) |
| View controller-based status bar a... | Boolean | NO |

11. យើងចូលក្នុង Firebase ហើយចុចចូល Cloud Messanding៖



12. បន្ទាប់មក យើងចុច send your first message៖



13. បំពេញអក្ខរដើម្បីសាកល្បងផ្ញើ៖

1 Notification

Notification title ?

first hello

Notification text

first hello from firebase

Notification image (optional) ?

Example: <https://yourapp.com/image.png>

Notification name (optional) ?

Enter optional name

Next

Device preview

This preview provides a general idea of how your message will appear on a mobile device. Actual message rendering will vary depending on the device. Test with a real device for actual results.

Send test message

Initial state

Expanded view

first hello

first hello from firebase

Android

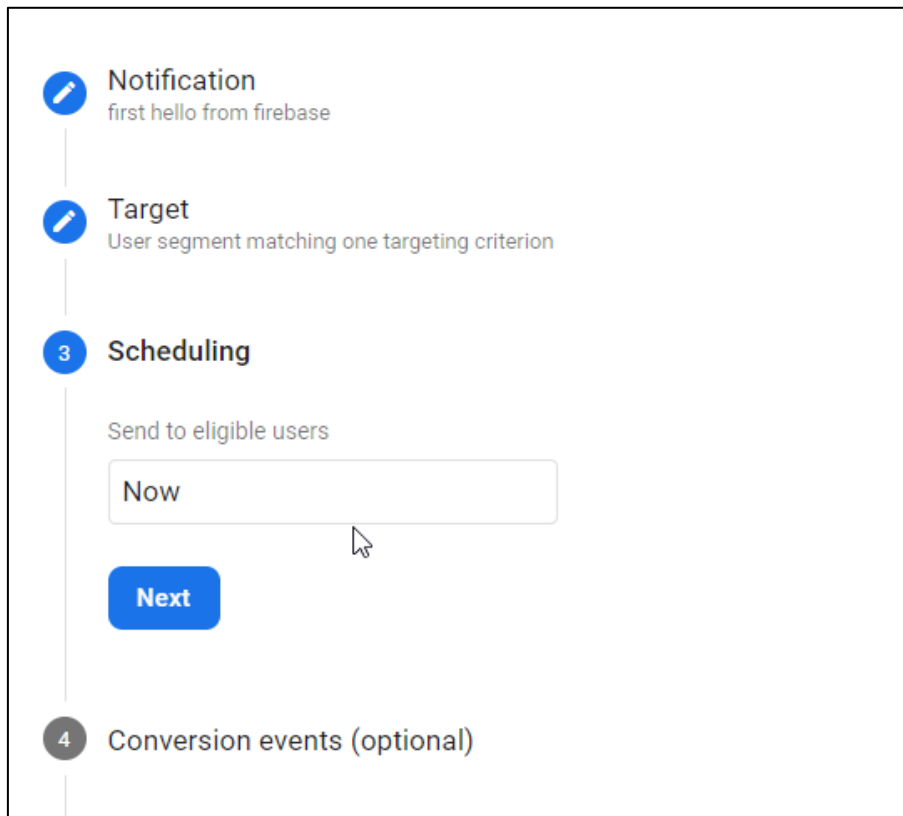
first hello

first hello from firebase

iOS

13

15. វីស៊ីយ៉ា schedule: Now

A screenshot of a web interface for scheduling a notification. It features a vertical timeline with four steps: 1. Notification (first hello from firebase), 2. Target (User segment matching one targeting criterion), 3. Scheduling (Send to eligible users, with a dropdown menu showing "Now" and a "Next" button), and 4. Conversion events (optional).


Notification
first hello from firebase

Target
User segment matching one targeting criterion


3 Scheduling
Send to eligible users
Now
Next

4 Conversion events (optional)

16. ហើយចុច Review

 Notification

first hello from firebase

 Target


User segment matching one targeting criterion


3

Scheduling

Send to eligible users

Next

 Conversion events (optional)

 Additional options (optional)

Save as draft


Review

17. រួចចុច Publish


first hello from firebase

Review message


Notification content

 first hello from firebase

Target

 User segment matching one targeting criterion

Scheduling

 Send now

Cancel **Publish**




18. វានឹងផ្ទាំងនេះ៖


newskhmer ▾

Cloud Messaging

[Notifications](#) [Reports](#)

[Create experiment](#) [New notification](#)

| Notification | Status ? | Platform | Start / Send | End | Sends | Opens |
|--|-------------|---|-------------------------|-----|-------|-------|
|  first hello from firebase | ✓ Completed |  | Nov 12, 2019 7:55 PM | — | <1000 | 0% |
|  0/10 Recurring notifications ? | | | | | | |

 View and analyze detailed FCM message data in BigQuery [Link BigQuery](#)