

# Constructing Push Notifications

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## Source Code



**`“module_5\start\TabianConsulting”`**



# Displaying Notifications

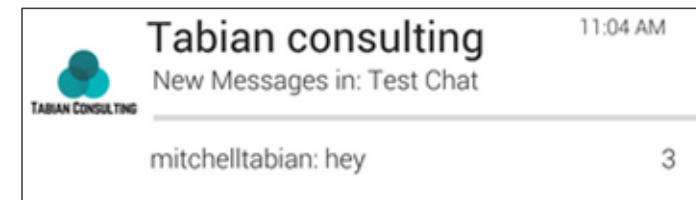
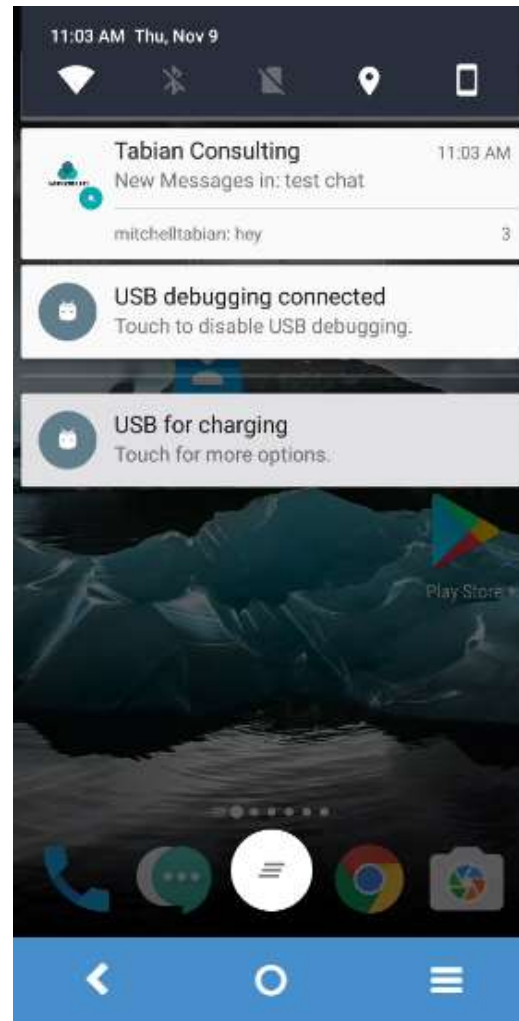
## **Admin broadcast**

- Foreground
- Background
- Closed

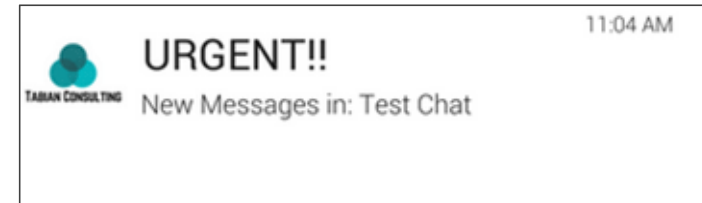
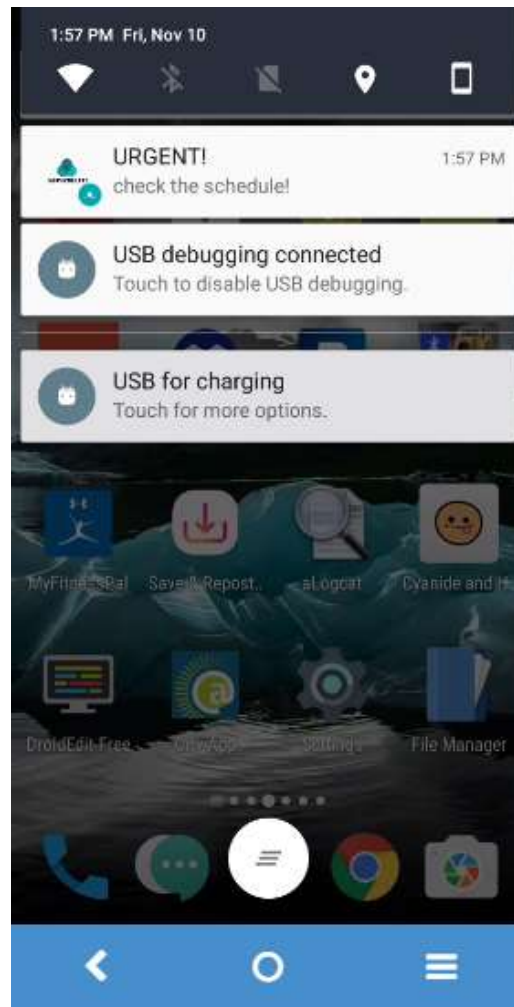
## **Chatroom message**



# Chatroom Notification



# Broadcast Notification



## Notification Specifics

**Only make noise if no pending notifications**

**If it's a chatroom notification**

- App will open to chatroom when clicked



MyFirebaseMessagingService

**data\_type field:**

- data\_type\_admin\_broadcast
- data\_type\_chat\_message



# Determining the Application State

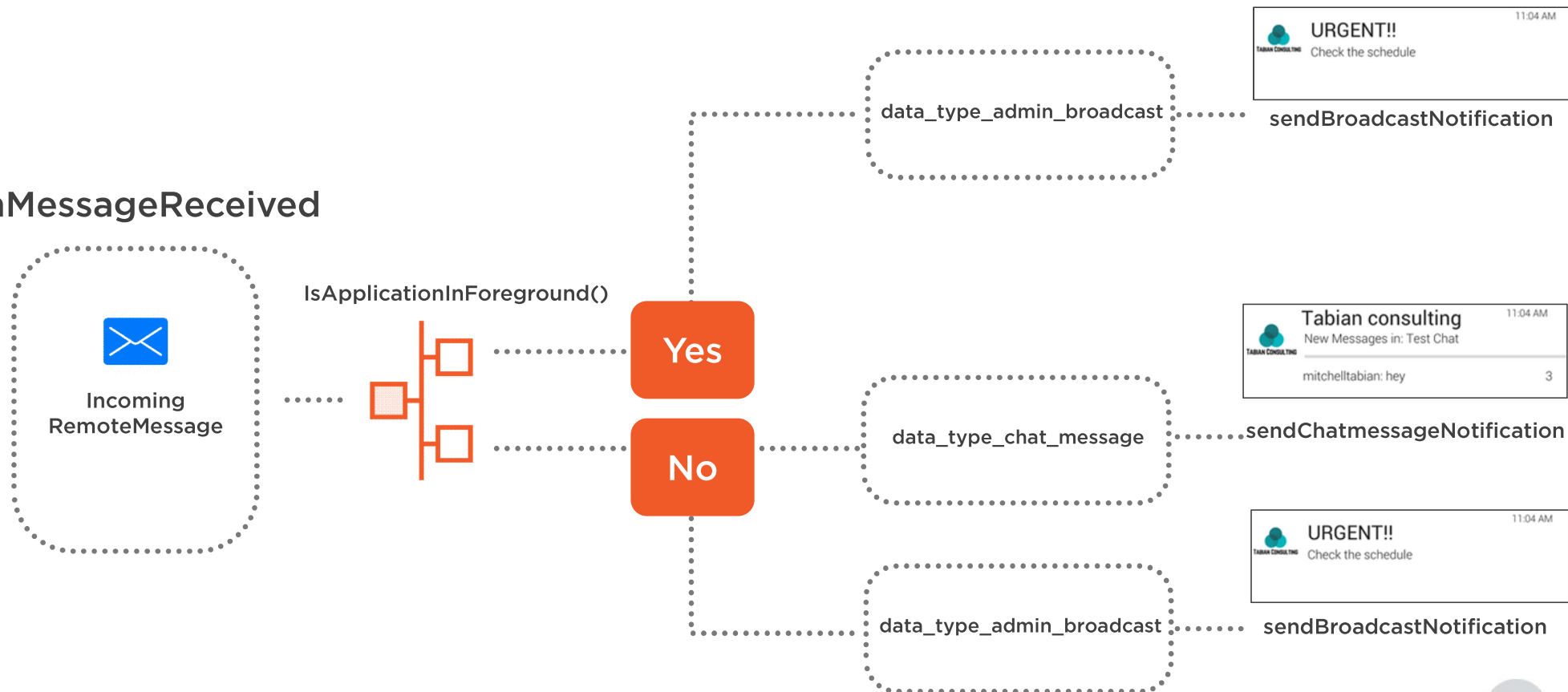
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# MyFirebaseMessagingService

## onMessageReceived



# Building an Admin Broadcast Notification

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# Building a Chatroom Message Notification

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# Module Review

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## Two Scenarios

**Admin broadcast**

**New chatroom messages**



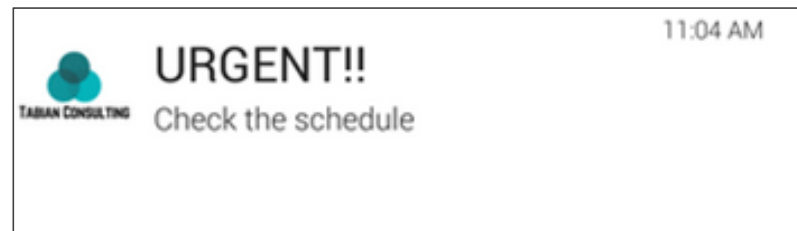
# Broadcast Notification

<https://fcm.googleapis.com/fcm/send>

Content-Type:application/json

Authorization:key=<Server Key>

```
{  
  "to" : "<user FCM token>",  
  "data" : {  
    "message" : "Check the schedule",  
    "title" : "URGENT!!",  
    "data_type" : "data_type_admin_broadcast"  
  }  
}
```

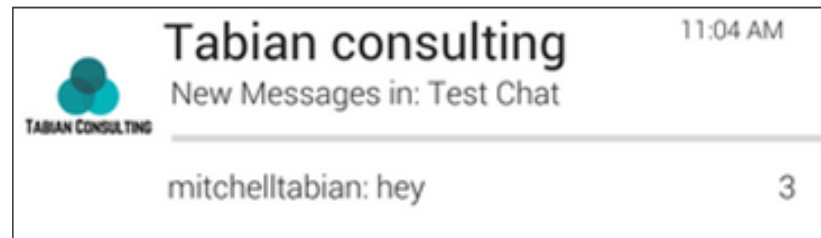


# Chatroom Notification

<https://fcm.googleapis.com/fcm/send>

Content-Type:application/json

```
{  Authorization:key=<Server Key>
  "to" : "<user FCM token>",
  "data" : {
    "message" : "Check the schedule",
    "title" : "URGENT!!",
    "data_type" : "data_type_chat_message",
    "chatroom_id" : "-Kz6XzAIPxL9pXNPEB9t"
  }
}
```



# Determining the Application State

```
private boolean isApplicationInForeground(){
    //check all the activities to see if any of them are running
    boolean isActivityRunning = SignedInActivity.isActivityRunning
    || ChatActivity.isActivityRunning || AdminActivity.isActivityRunning
    || ChatroomActivity.isActivityRunning || LoginActivity.isActivityRunning
    || RegisterActivity.isActivityRunning || SettingsActivity.isActivityRunning;
    if(isActivityRunning) {
        Log.d(TAG, "isApplicationInForeground: application is in foreground.");
        return true;
    }
    Log.d(TAG, "isApplicationInForeground: application is in background or closed.");
    return false;
}
```





# Logic Outline

```
//SITUATION: Application is in foreground then only send priority notifications such as an admin broadcast
if (isApplicationInForeground()) {
    if (identifyDataType.equals("data_type_admin_broadcast")){
        //Create an admin broadcast notification
    }
}

//SITUATION: Application is in background or closed.
else if (!isApplicationInForeground()) {

    if (identifyDataType.equals("data_type_admin_broadcast")){
        //Create an admin broadcast notification
    }
    else if (identifyDataType.equals("data_type_chat_message")) {
        //Create a chat message notification
    }
}
```



# MyFirebaseMessagingService

## onMessageReceived

