Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"

  xmlns:app="http://schemas.android.com/apk/res-auto"

  xmlns:tools="http://schemas.android.com/tools"

  android:layout_width="match_parent"

  android:layout_height="match_parent"

  tools:context=".MainActivity">


  <ToggleButton


    android:id="@+id/alarmToggle"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:textOff="@string/alarm_off_toast"

    android:textOn="@string/alarm_on_toast"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Mainactivity.java

```java
package com.example.standup;


import androidx.appcompat.app.AppCompatActivity;

import androidx.core.app.NotificationCompat;


import android.app.AlarmManager;

import android.app.NotificationChannel;

import android.app.NotificationManager;

import android.app.PendingIntent;

import android.content.Context;

import android.content.Intent;

import android.graphics.Color;

import android.os.Bundle;

import android.os.SystemClock;

import android.widget.CompoundButton;

import android.widget.Toast;

import android.widget.ToggleButton;


public  class MainActivity extends AppCompatActivity {


    // Notification ID.

    private static final int NOTIFICATION_ID = 0;

    // Notification channel ID.

    private static final String PRIMARY_CHANNEL_ID =
```

```
        "primary_notification_channel";

    private NotificationManager mNotificationManager;



    /**

     * Initializes the activity.

     *

     * @param savedInstanceState The current state data.

     */

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);



        mNotificationManager = (NotificationManager)

            getSystemService(NOTIFICATION_SERVICE);



        ToggleButton alarmToggle = findViewById(R.id.alarmToggle);



        // Set up the Notification Broadcast Intent.

        Intent notifyIntent = new Intent(this, AlarmReceiver.class);



        boolean alarmUp = (PendingIntent.getBroadcast(this, NOTIFICATION_ID,

            notifyIntent, PendingIntent.FLAG_NO_CREATE) != null);

        alarmToggle.setChecked(alarmUp);
```

```
final PendingIntent notifyPendingIntent = PendingIntent.getBroadcast

    (this, NOTIFICATION_ID, notifyIntent,

        PendingIntent.FLAG_UPDATE_CURRENT);


final AlarmManager alarmManager = (AlarmManager) getSystemService

    (ALARM_SERVICE);


// Set the click listener for the toggle button.

alarmToggle.setOnCheckedChangeListener

    (new CompoundButton.OnCheckedChangeListener() {

      @Override

      public void onCheckedChanged

          (CompoundButton buttonView, boolean isChecked) {

        String toastMessage;

        if (isChecked) {


            long repeatInterval = AlarmManager.INTERVAL_FIFTEEN_MINUTES/15;


            long triggerTime = SystemClock.elapsedRealtime()

                + repeatInterval;


            // If the Toggle is turned on, set the repeating alarm with

            // a 15 minute interval.

            if (alarmManager != null) {

              alarmManager.setInexactRepeating
```

```
                        (AlarmManager.ELAPSED_REALTIME_WAKEUP,

                triggerTime, repeatInterval,

                notifyPendingIntent);

        }
        // Set the toast message for the "on" case.

        toastMessage = getString(R.string.alarm_on_toast);


      } else {

        // Cancel notification if the alarm is turned off.

        mNotificationManager.cancelAll();


        if (alarmManager != null) {

            alarmManager.cancel(notifyPendingIntent);

        }
        // Set the toast message for the "off" case.

        toastMessage = getString(R.string.alarm_off_toast);


      }


      // Show a toast to say the alarm is turned on or off.

      Toast.makeText(MainActivity.this, toastMessage,

          Toast.LENGTH_SHORT).show();
    }
  });
```

```
    // Create the notification channel.

    createNotificationChannel();

}




/**

 * Creates a Notification channel, for OREO and higher.

 */

public void createNotificationChannel() {


    // Create a notification manager object.

    mNotificationManager =

        (NotificationManager) getSystemService(NOTIFICATION_SERVICE);


    // Notification channels are only available in OREO and higher.

    // So, add a check on SDK version.

    if (android.os.Build.VERSION.SDK_INT >=

        android.os.Build.VERSION_CODES.O) {


      // Create the NotificationChannel with all the parameters.

      NotificationChannel notificationChannel = new NotificationChannel

          (PRIMARY_CHANNEL_ID,

              "Stand up notification",

              NotificationManager.IMPORTANCE_HIGH);
```

```
        notificationChannel.enableLights(true);

        notificationChannel.setLightColor(Color.RED);

        notificationChannel.enableVibration(true);

        notificationChannel.setDescription("Notifies every 15 minutes to " +

            "stand up and walk");

        mNotificationManager.createNotificationChannel(notificationChannel);

    }

  }

}
```

AlarmReciver.java

package com.example.standup;

import android.app.NotificationManager;

import android.app.PendingIntent;

import android.content.BroadcastReceiver;

import android.content.Context;

import android.content.Intent;

import androidx.core.app.NotificationCompat;


```java
public class AlarmReceiver extends BroadcastReceiver {

    private NotificationManager mNotificationManager;

    private static final int NOTIFICATION_ID = 0;


    // Notification channel ID.

    private static final String PRIMARY_CHANNEL_ID =

        "primary_notification_channel";

    @Override

    public void onReceive(Context context, Intent intent) {

        mNotificationManager = (NotificationManager)

            context.getSystemService(Context.NOTIFICATION_SERVICE);

        deliverNotification(context);

    }

    private void deliverNotification(Context context) {
```

```
    Intent contentIntent = new Intent(context, MainActivity.class);

    PendingIntent contentPendingIntent = PendingIntent.getActivity

        (context, NOTIFICATION_ID, contentIntent, PendingIntent.FLAG_UPDATE_CURRENT);

    NotificationCompat.Builder builder = new NotificationCompat.Builder(context,
PRIMARY_CHANNEL_ID)

        .setSmallIcon(R.drawable.ic_launcher_foreground)

        .setContentTitle("Stand Up Alert")

        .setContentText("You should stand up and walk around now!")

        .setContentIntent(contentPendingIntent)

        .setPriority(NotificationCompat.PRIORITY_HIGH)

        .setAutoCancel(true)

        .setDefaults(NotificationCompat.DEFAULT_ALL);

    mNotificationManager.notify(NOTIFICATION_ID, builder.build());


    }
}
```