import 'dart:async';

import 'package:flutter/material.dart';

void main() => runApp(MaterialApp(home: StopwatchApp()));

class StopwatchApp extends StatefulWidget {

@override

State createState() => \_StopwatchAppState();

}

class \_StopwatchAppState extends State<StopwatchApp> {

Stopwatch sw = Stopwatch();

Timer? t;

String time = '00:00:00';

@override

void initState() {

super.initState();

t = Timer.periodic(Duration(milliseconds: 100), (\_) {

if (sw.isRunning) {

final ms = sw.elapsedMilliseconds;

final h = ms ~/ 3600000;

final m = (ms ~/ 60000) % 60;

final s = (ms ~/ 1000) % 60;

setState(() => time = "$h:${m.toString().padLeft(2, '0')}:${s.toString().padLeft(2, '0')}");

}

});

}

@override

void dispose() {

t?.cancel();

super.dispose();

}

@override

Widget build(BuildContext c) => Scaffold(

appBar: AppBar(title: Text('Stopwatch')),

body: Center(

child: Column(mainAxisAlignment: MainAxisAlignment.center, children: [

Text(time, style: TextStyle(fontSize: 48)),

Row(mainAxisAlignment: MainAxisAlignment.center, children: [

ElevatedButton(onPressed: sw.isRunning ? null : () => setState(() => sw.start()), child: Text('Start')),

SizedBox(width: 10),

ElevatedButton(onPressed: sw.isRunning ? () => setState(() => sw.stop()) : null, child: Text('Stop')),

SizedBox(width: 10),

ElevatedButton(

onPressed: () => setState(() {

sw.reset();

time = '00:00:00';

}),

child: Text('Reset')),

]),

])),

);

}