

5G智能物联网

卫星定位工程实例 之GPS定位

广和通大学计划项目组

2023Q2



目录

1、卫星定位之GPS定位的开发步骤

2、卫星定位工程代码详解

3、卫星定位工程运行演示

1

卫星定位之GPS定位的开发 步骤

卫星定位之GPS定位的开发步骤

1

• 布局界面-----activity_main文件下

2

• 定位权限检查-----ACCESS_COARSE_LOCATION权限

3

• 搜寻卫星-----getSatelliteCount()

4

• 获取卫星信噪比-----getCn0DbHz()

5

• 获取时钟-----getTime()

6

• 获取经度、纬度、高度、速度、方向、精度

2

卫星定位工程代码详解

卫星工程代码详解

工程源代码链接: https://bbs.elecfans.com/jishu_2344443_1_1.html

The screenshot displays the Android Studio interface for editing the `activity_main.xml` file. The code editor on the left shows the following XML structure:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/provider"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:padding="1dp"
        android:textSize="15sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.004"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.668"
        tools:ignore="MissingConstraints" />
    <TextView
```

The design preview on the right shows a dark-themed mobile interface with a white text box at the bottom. The text box is connected to the `android:textSize="15sp"` attribute in the code editor. The interface includes a top navigation bar, a main content area, and a bottom navigation bar.

3

卫星工程运行演示

卫星工程运行演示

演示效果



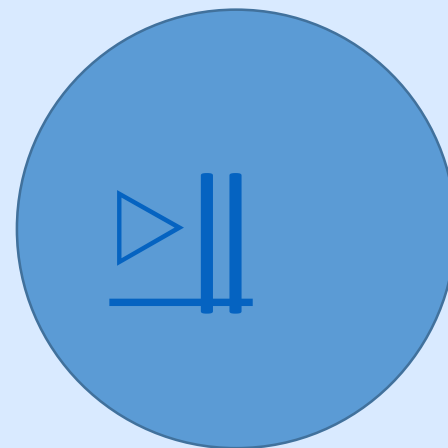
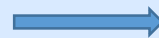
定位信息

时钟: 2023/03/28 16:59:05
经度: 113.94206308°
纬度: 22.5761107°
高度: 226.20361328125m
速度: 0.0m/s
方向: 0.0°
精度: 17.153212m

卫星数: 46
前10颗卫星信噪比

第1颗:	30.4dB
第2颗:	39.1dB
第3颗:	25.8dB
第4颗:	25.3dB
第5颗:	41.0dB
第6颗:	37.9dB
第7颗:	34.2dB
第8颗:	36.7dB
第9颗:	0.0dB
第10颗:	0.0dB

演示视频



完美无线体验

广和通致力于将可靠、便捷、安全、智能的无线通信解决方案普及至每一个物联网应用场景，为用户带来完美无线体验，丰富智慧生活。

We are committed to enabling industries with reliable, accessible, secure, and intelligent IoT wireless solutions and wireless module products to maximize their value, providing a perfect wireless experience to people and enriching smart life of the whole society.

Copyright©2023 Fibocom Wireless Inc. All Rights Reserved.
The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Fibocom may change the information at any time without notice.

深圳市广和通无线股份有限公司



☎ 0755-26733555

🏢 深圳市南山区西丽街道打石一路深圳国际创新谷六栋A座10-14层

🌐 www.fibocom.com

Fibocom 广和通