移动应用开发课程设计

破工具箱

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目录

Introduction

何晨泽 100%

- General development
- Build structure
- Slides & Report
- Document

冯小羽 95%

- Testing
- Document
- Access papers and open source projects.

李欢欢 96%

- Artworks
- Demand analysis
- Feasibility analysis

Overview

This app 破工具箱 is a collection of efficiency tools. Including:

- Weather forecast

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Innovation

All-in-one
Access daily-use function with only one app.

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Lightweight
Small size, user-friendly interface with no background service.

Methodology

CardView

A FrameLayout with a rounded corner background and shadow.
Cards provide an easy way to contain a group of views while providing a consistent style for the container.

---

[1]A circular seekbar for Android

Interface (Material Design)

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FAB are is a circular button that triggers the primary action from ImageView.

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SeekBar

A SeekBar is an extension of ProgressBar that adds a draggable thumb.
In this project, we use Croller[1].

[1]A circular seekbar for Android

API

Weather forecast

Get address code (Prov.+City+Dist.) $\Rightarrow$ Get weather info.

JSON[2] format.

Exam.:Prov: 浙江省

→City: 绍兴市

→Dist: 市辖区

→id:CN101210501

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[2]Google GSON library

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Short link

Original URL $\Rightarrow$ Short URL.

TXT format.

[2]Google GSON library

Service provided by:

- 和风天气
- 缩我短链接 suowo.cn

Generate QR code

ZXing[3]

In ZXing ("zebra crossing"), using BitMatrix which looks like a bool array to describe QR code.
And in Android, we use Bitmap to convert it to photos.

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[3]A multi-format 1D/2D barcode image processing library.

DisplayMetrics

A structure from util describing general information about a display, such as its size, density, and font scaling. With these information, you can calculate the width and height of your phone screen.

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[4]Square's meticulous HTTP client for the JVM, Android, and GraalVM.

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OkHttp[4]

OkHttp is an HTTP client that's efficient. You can use it to downloads a URL and prints its contents as a string.

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[4]Square's meticulous HTTP client for the JVM, Android, and GraalVM.

Demo

DEMO

Conclusion

Summary

破工具箱 is a collection of efficiency tools and fully open-sourced.
We consulted a part of Material Design principle and make it easy to use.
You should notice that this project is licensed under a Creative Commons
Attribution-ShareAlike 4.0 International License.

Questions?

Thanks for your attention.