Neurograph Code Explanation

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Code Explanation for Neurograph Version 1.1

2018.06

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0. Neurograph Version 1.1 Amendments

Please note that in the updated version 1.1, the test type names have been changed.

Previous Test Type Name	Corresponding New Test Type Name
Parallel Line Test	**Parallel Lines**
Circular Motion Test	**Circle Drawing**
Static Full Background Test	**Static Tracing**
Static Corner Background Test	**Copying**
Dynamic Blank Background Test	**Memory Tracing**
Dynamic Seasonal Background Test	**Dynamic Tracing**

For instance, CircularMotionTestActivity.java previously controlled CircularMotionTest, but now the test has been renamed as Circle Drawing.

1. Introduction

This file is an explanation of the Neurograph project. You will find the explanation of all the project files in this document.

2. Android Manifest

This is the place you can find the registration of all the activities, receivers etc. You can also find all the uses permissions for this app.

3. Gradle Script Files

3.1 Build.gradle (Project: Neurograph)

This file contains the configuration of the gradle for this project.

3.2 Build.gradle (Module: app)

This file contains the app SDK version information, including the minSdkVersion, targetSdkVersion, the app version information, including the versionCode, versionName, and also all the dependencies information.

3.2.1 Application ID

```
applicationId = "com.neurograph.usydjiashuwu.neurograph"
```

3.2.2 minSdkVersion

```
MinSdkVersion = 15
```

3.2.3 targetSdkVersion

```
TargetSdkVersion = 26
```

3.2.4 VersionCode

```
VersionCode = 3
```

3.2.5 VersionName

```
VersionName = "1.0"
```

4. Android Activities

4.1 AccountCentreActivity

AccountCentreActivity is the place where new user can choose to register and old user can enter the registration code.

4.2 CircularMotionTestActivity (Circle Drawing)

CircularMotionTestActivity is the place where user do the drawing of Circular Motion Test. (Drawing a circle around a dot in the centre of the screen)

4.3 CopyrightInformationActivity

CopyrightInformationActivity is used to display the copyright information of the app.

4.4 DataListActivity

DataListActivity is the activity which shows the data list, provide the entrance for user to delete data, view data, send data email, store data file etc.

4.5 DeviceInformationActivity

DeviceInformationActivity is used to display the device information.

4.6 DisplayCalculatingActivity

DisplayCalculatingActivity is a transfer activity between the ParallelLinePracticeActivity and ParallelLinePracticeResultActivity. After the user finish the ParallelLinePractice and before the app finish calculating the practice result, this activity will be displayed.

4.7 DisplayLoadingActivity

DisplayLoadingActivity is a transfer activity between DataListActivity and TestDetailScrollingActivity. After the user clicks one of the test and before the test detail information is ready to be showed on the TestDetailScrollingActivity, this activity will be displayed.

4.8 DisplayProgressActivity

DisplayProgressActivity shows the data file generating progress. After the user confirms to generate data files, and before the data files have been successfully generated, this activity will be displayed to show the file generating progress.

4.9 DisplaySendingActivity

DisplaySendingActivity shows the data email sending progress. After the user confirms to send the data email, and before the data email has been successfully sent, this activity will be displayed to show the data email sending progress.

4.10 DurationSelectionActivity

DurationSelectionActivity is used to let the user to choose some information of the test, and display the test instruction. For all the dynamic tests, user need to choose the interval duration and the painter width in this activity, for all the static tests, parallel line practice and parallel line test, user need to choose the painter width in this activity, and for these tests since they don't need an interval duration, therefore for these test the DurationSelectionActivity will not display the interval duration seekbar.

4.11 DynamicBlankBackgroundTestActivity (Memory Tracing)

DynamicBlankBackgroundTestActivity is used for user to do the dynamic blank background test. (The test which show the background image for a specified time interval, and then the background disappears. The user needs to remember the background image pattern and draw it on the canvas in DynamicBlankBackgroundTestActivity)

4.12 DynamicSeasonalBackgroundTestActivity (Dynamic Tracing)

DynamicSeasonalBackgroundTestActivity is used for user to do the dynamic seasonal background test. (The test in which the background image keeps appearing and disappearing for a specified time interval. The user needs to follow the background image and draw the required shape on the canvas in DynamicSeasonalBackgroundTestActivity)

4.13 DynamicShowBackgroundActivity

DynamicShowBackgroundActivity is used to show background image for the DynamicBlankBackgroundTest. Once the user starts dynamic blank background test, we first show this activity for certain time interval, then go to DynamicBlankBackgroundTestActivity.

4.14 FeedbackActivity

This is a feature still under planning. The idea is user can provide feedback on the app and send their feedback to the developer.

4.15 FullHeightActivity

This is a testing activity which is not used in this app. This activity is only for testing purposes. It is used to get the full height of the screen of the testing device.

4.16 ImageSelectionActivity

ImageSelectionActivity is used for user to choose the testing image for static full background test, static corner background test, dynamic blank background test and dynamic seasonal background test. It has two bottom navigation tabs, one for Spiral, and one for Pentagon.

4.17 ImageSelectionForCircularMotionActivity

ImageSelectionForCircularMotionActivity is used for user to choose the testing image for circular motion test.

4.18 InfoActivity

InfoActivity is used to display the application information.

4.19 InformationCollectionActivity

InformationCollectionActivity is used for user to do the registration, they need to fill in some personal information in this activity.

4.20 IntroductionContentActivity

IntroductionContentActivity is used to display the introduction content of this app. This activity will be displayed after the IntruductionPageActivity has finished.

4.21 IntroductionPageActivity

IntroductionPageActivity is used to display the greeting messages before displaying the introduction content. This activity is displayed once the user clicks the introduction button on the SettingPageActivity, after this activity finished, the IntroductionContentActivity will be used to display the introduction content.

4.22 ParallelLinePracticeActivity

ParallelLinePracticeActivity is used for user to do the parallel line practice. (Parallel line practice is a test in which user needs to draw two lines as parallel as possible. After this practice, the practice result will be calculated and displayed to user in ParallelLinePracticeResultActivity)

4.23 ParallelLinePracticeResultActivity

ParallelLinePracticeResultActivity is used to display the parallel line practice result. This activity will be displayed after the DisplayCalculatingActivity has finished.

4.24 ParallelLineTestActivity

ParallelLineTestActivity is used for user to do the parallel line test. (Parallel line test is where user needs to draw three parallel lines following the background image)

4.25 PersonalInformationActivity

PersonalInformationActivity displays the personal information of the current user. It also contains the entry for user to edit their personal information.

4.26 PersonalInformationEditPageActivity

PersonalInformationEditPageActivity is used for user to edit their personal information.

4.27 SendDataEmailActivity

SendDataEmailActivity is used for user to send data email.

4.28 SettingPageActivity

SettingPageActivity is the home page of this app. User can go to the account centre, view data list, view app introduction, view tutorials, change language and font size setting, clean cache, go to InfoActivity etc.

4.29 StaticBackgroundTestActivity (Static Tracing)

StaticBackgroundTestActivity is used for user to do the static background test. This is a static test in which the background image keeps showing on the whole screen, and the user needs to follow the background image to draw required shapes.

4.30 StaticBackgroundTestNewActivity

This is a testing activity and is not used in the final app. Instead of drawing on a SurfaceView, this activity tests drawing shapes on an ImageView with some background images as the background of the ImageView.

4.31 StaticCornerBackgroundTestActivity (Copying)

StaticCornerBackgroundTestActivity is used for user to do the static corner background test. This is a test in which the background image will be displayed at the top right corner of the screen, and the user needs to follow the background image to draw the required shapes.

4.32 StoreDataFileActivity

StoreDataFileActivity is used for user to store data file. After the user click generate, the app will go to DisplayProgressActivity to display the data file generating progress.

4.33 TestDetailScrollingActivity

TestDetailScrollingActivity displays the test detail information. User can view the detailed information of tests.

4.34 TestSelectionActivity

TestSelectionActivity is used for user to select tests. It contains three bottom navigation tabs, the first one is “Line and Dot”, which contains parallel line practice, parallel line test and circular motion test, the second one is “Static Test”, which contains the static background test and static corner

background test, and the third one is “Dynamic Test”, which contains the dynamic blank background test and dynamic seasonal background test.

4.35 ThankYouActivity

ThankYouActivity is used to display the thank you message after user finish a test except parallel line practice. After displaying the thank you message for a few seconds, the app will automatically go to the TestSelectionActivity.

4.36 ThankYouParallelActivity

ThankYouParallelActivity is used to display the thank you message after user finish the parallel line practice. After displaying the thank you message for a few seconds, the app will automatically go to the ParallelLinePracticeResultActivity.

4.37 TransferActivity

This activity is used to do the transfer after user switch the language or font size.

4.38 TransferTestSelectionActivity

This activity is used to do the transfer after user change language setting or font size setting in the TestSelectionActivity.

4.39 TutorialActivity

TutorialActivity is used to show the tutorials of this app. User can view tutorials in TutorialActivity. It contains a navigation bar which is used to let the user to select tutorials they want to see.

4.40 WelcomeActivity

WelcomeActivity is the launcher activity for this app. This activity displays the icon, and the copyright notice of this app when the app starts.

5. Java Files

5.1 AccountCentreActivity.java

This file contains all the implementation of AccountCentreActivity.

5.2 calculateParallelLinePracticeResult.java

This file contains the implementation which is used to calculate the practice result of the ParallelLinePractice.

5.3 CircularMotionTestActivity.java

This file contains the implementation of the CircularMotionTestActivity drawing part.

5.4 CopyrightInformationActivity.java

This file contains all the implementation of the CopyrightInformationActivity.

5.5 DatabaseInformation.java

This file contains the information of the SQLite Database, including databaseName and databaseVersion.

5.6 DataListActivity.java

This file contains the implementation of the DataListActivity.

5.7 DeviceInformationActivity.java

This file contains the implementation of DeviceInformationActivity.

5.8 DisplayCalculatingActivity.java

This file contains the implementation of DisplayCalculatingActivity.

5.9 DisplayLoadingActivity.java

This file contains the implementation of DisplayLoadingActivity.

5.10 DisplayProgressActivity.java

This file contains the implementation of DisplayProgressActivity.

5.11 DisplaySendingActivity.java

This file contains the implementation of DisplaySendingActivity.

5.12 DurationSelectionActivity.java

This file contains the implementation of DurationSelectionActivity.

5.13 DynamicBlankBackgroundTestActivity.java

This file contains the implementation of DynamicBlankBackgroundTestActivity.

5.14 DynamicSeasonalBackgroundTestActivity.java

This file contains the implementation of DynamicSeasonalBackgroundTestActivity.

5.15 DynamicShowBackgorundActivity.java

This file contains the implementation of DynamicShowBackgorundActivity.

5.16 EmailSender.java

This is a self-defined class which is in charge of sending email. This file uses some external jar files, they are activation.jar, mail.jar and additional.jar.

5.17 FeedbackActivity.java

This is a TODO feature of this app. Currently this haven't been implemented, but the idea is user can provide feedback of the app to the developer.

5.18 FullHeightActivity.java

This is a testing activity which is used to detect the screen's full height. This is for testing only, not included in the final release version.

5.19 ImageSelectionActivity.java

This file contains the implementation of ImageSelectionActivity.

5.20 ImageSelectionActivityForCircularMotionActivity.java

This file contains the implementation of ImageSelectionActivityForCircularMotionActivity.

5.21 InfoActivity.java

This file contains the implementation of InfoActivity.

5.22 InformationCollectionActivity.java

This file contains the implementation of InformationCollectionActivity.

5.23 IntroductionContentActivity.java

This file contains the implementation of the second part of the introduction functionality, the IntroductionContentActivity is used to display the introduction content.

5.24 IntroductionPageActivity.java

This file contains the implementation of the first part of the introduction functionality, the IntroductionPageActivity is used to display the greeting messages.

5.25 MyAuthenticator.java

This is a self-defined class which is used to provide the authenticator functionality, which will be used to send emails.

5.26 MyDatabaseHelper.java

This class contains the definition of the SQLite database, database onCreate() method and database onUpgrade() method and upgradeDatabase() method.

There are three tables in this app, which are User table, Test table and Data table.

The onCreate() method is used to initialise the database.

The upgradeDatabase() method is used to re-initialise the database.

5.27 MyReceiver.java

This class defines a BroadcastReceiver which is used to receive a broadcast message when the data processing process has been finished.

5.28 MySurfaceViewForCircularMotionTest.java

This class contains the definition of the SurfaceView used in the CircularMotionTest.

5.29 MySurfaceViewForDynamicBlankBackground.java

This class contains the definition of the SurfaceView used in the DynamicBlankBackgroundTest.

5.30 MySurfaceViewForDynamicSeasonalBackground.java

This class contains the definition of the SurfaceView used in the DynamicSeasonaBackgroundTest.

5.31 MySurfaceViewForParallelLinePractice.java

This class contains the definition of the SurfaceView used in the ParallelLinePractice.

5.32 MySurfaceViewForParallelLineTest.java

This class contains the definition of the SurfaceView used in the ParallelLineTest.

5.33 MySurfaceViewForStaticBackground.java

This class contains the definition of the SurfaceView used in the StaticBackgroundTest.

5.34 MySurfaceViewForStaticCornerBackground.java

This class contains the definition of the SurfaceView used in the StaticCornerBackgroundTest.

5.35 NotificationTool.java

This is a helper class which helps to display the notification. Currently the app doesn't use this class.

5.36 OutputCsvStringGenerator.java

This is a helper class which is used to generate the string needed for csv files. Currently this method is implemented in the SendingDataEmailActivity and StoreDataFileActivity separately, and this class is not used currently.

5.37 OutputStringGenerator.java

This is a helper class which is used to generate the string needed for txt files and the email content. Currently this method is implemented in the SendingDataEmailActivity and StoreDataFileActivity separately, and this class is currently not used.

5.38 ParallelLinePracticeActivity.java

This file contains the implementation for ParallelLinePracticeActivity.

5.39 ParallelLinePracticeResultActivity.java

This file contains the implementation for ParallelLinePracticeResultActivity.

5.40 ParallelLineTestActivity.java

This file contains the implementation for ParallelLineTestActivity.

5.41 PersonalInformationActivity.java

This file contains the implementation for PersonalInformationActivity.

5.42 PersonalInformationEditPageActivity.java

This file contains the implementation for PersonalInformationEditPageActivity.

5.43 SendDataEmailActivity.java

This file contains the implementation for SendDataEmailActivity.

5.44 SettingPageActivity.java

This file contains the implementation for SettingPageActivity.

5.45 Sharing.java

This class contains some variables which will be used or shared between multiple activities.

5.46 SharingCopyright.java

This self-defined class contains the texts for the copyright information.

5.47 SharingIntroduction.java

This self-defined class contains the texts for the introduction of the app.

5.48 SharingReadMe.java

This class contains the texts for the ReadMe information.

5.49 StaticBackgroundTestActivity.java

This file contains the implementation for the StaticBackgroundTestActivity.

5.50 StaticBackgroundTestNewActivity.java

This file is for testing only, and is not used in the app. This file contains some testing on drawing on an ImageView with image background.

5.51 StaticCornerBackgroundTestActivity.java

This file contains the implementation for StaticCornerBackgroundTestActivity.

5.52 StoreDataFileActivity.java

This file contains the implementation for StoreDataFileActivity.

5.53 TestDetailScrollingActivity.java

This file contains the implementation for TestDetailScrollingActivity.

5.54 TestSelectionActivity.java

This file contains the implementations for TestSelectionActivity.

5.55 TestScaleUtils.java

This file is used to change the app font size setting on Android O operating system or higher. This class cannot be used to change the app font size setting if the system version is lower than Android O.

5.56 TestScaleUtilsLower.java

This file is used to change the app font size setting on the system version lower than Android O. This class cannot be used to change the app font size setting if the system version is equal or higher than Android O.

5.57 ThankYouActivity.java

This file contains the implementations for ThankYouActivity.

5.58 ThankYouParallelActivity.java

This file contains the implementation for ThankYouParallelActivity.

5.59 TransferActivity.java

This file contains the implementation for TransferActivity.

5.60 TransferTestSelectionActivity.java

This file contains the implementation for TransferTestSelectionActivity.

5.61 TutorialActivity.java

This file contains the implementation for TutorialActivity.

5.62 WelcomeActivity.java

This file contains the implementation for WelcomeActivity.

6. External Jar Files

6.1 Sending Emails

The following three files are used to send email.

Activition.jar

Mail.jar

Additional.jar

7. Layout XML Files

7.1 Activity_account_centre.xml

This file contains the AppBarLayout, toolbar layout implementation of AccountCentreActivity. The content layout of AccountCentreActivity is in content_account_centre.xml.

7.2 Activity_circular_motion_test.xml

This file contains the layout implementation of CircularMotionTestActivity.

7.3 Activity_copyright_information.xml

This file contains the AppBarLayout, toolbar layout implementations for CopyrightInformationActivity. The content layout of CopyrightInformationActivity is in content_copyright_information.xml

7.4 Activity_data_list.xml

This file contains the AppBarLayout, toolbar layout implementations for DataListActivity. The content layout of DataListActivity is in content_data_list.xml

7.5 Activity_data_list_delete_date_alertdialog.xml

This file contains the layout implementation for the alertdialog which let user select the delete date.

7.6 Activity_data_list_delete_option_alertdialog.xml

This file contains the layout implementation for the alertdialog which ask user for the delete option.

7.7 Activity_device_information.xml

This file contains the AppBarLayout, toolbar layout implementations for DeviceInformationActivity. The content layout of DeviceInformationActivity is in content_device_information.xml

7.8 Activity_display_calculating.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementation for DisplayCalculatingActivity.

7.9 Activity_display_loading.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementation for DisplayLoadingActivity.

7.10 Activity_display_progress.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementations for DisplayProgressActivity.

7.11 Activity_display_sending.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementations for DisplaySendingActivity.

7.12 Activity_duration_selection_with_seekbar.xml

This file contains the layout implementation for DurationSelectionActivity. This layout will be used if the user wants to do a test which requires the interval duration such as a dynamic blank background test or dynamic seasonal background test. This layout contains a seekbar which is used to choose the duration interval. The only difference between activity_duration_selection_with_seekbar.xml and activity_selection_without_seekbar.xml is that whether there is a seekbar which is used for getting the interval duration.

7.13 Activity_duration_selection_without_seekbar.xml

This file contains the layout implementation for DurationSelectionActivity. This layout will be used if the user wants to do a test which doesn't require the interval duration such as a static test or parallel line test. This layout doesn't contain the seekbar which is used to choose the duration interval.

7.14 Activity_dynamic_blank_background_test.xml

This file contains the layout implementation for DynamicBlankBackgroundTestActivity.

7.15 Activity_dynamic_seasonal_background_test.xml

This file contains the layout implementation for DynamicSeasonalBackgroundTestActivity.

7.16 Activity_dynamic_show_backgorund.xml

This file contains the layout implementation for DynamicShowBackgroundActivity.

7.17 Activity_feedback.xml

This file contains the AppBarLayout, toolbar and FloatingActionButton layout for FeedbackActivity.

7.18 Activity_full_height.xml

This file contains the layout implementation for FullHeightActivity.

7.19 Activity_image_selection.xml

This file contains the AppBarLayout, toolbar layout, ViewPager configuration and BottomNavigationView configuration for ImageSelectionActivity.

7.20 Activity_image_selection_for_circular_motion.xml

This file contains the AppBarLayout, toolbar layout and main content layout for ImageSelectionForCircularMotionActivity.

7.21 Activity_info.xml

This file contains the AppBarLayout and toolbar layout implementation for InfoActivity. For the main content layout of InfoActivity, go to content_info.xml

7.22 Activity_information_collection.xml

This file contains the AppBarLayout, toolbar layout and CollapsingToolbarLayout for InformationCollectionActivity. The main content layout for InformationCollectionActivity is in content_information_collection.xml

7.23 Activity_information_collection_rating_score_alertdialog.xml

This file contains the main content layout for Information_Collection_Rating_Score_Alertdialog which is used to ask the user to provide their previous rating score or re-confirm that they don't have a previous rating score if they didn't provide it during the information collection process. This alertdialog is currently not used in the app.

7.24 Activity_introduction_content.xml

This file contains the AppBarLayout and toolbar layout for IntroductionContentActivity. The main content layout for IntroductionContentActivity is in content_introduction_content.xml.

7.25 Activity_introduction_page.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementation for IntroductionPageActivity.

7.26 Activity_parallel_line_practice.xml

This file contains the layout implementation for ParallelLinePracticeActivity.

7.27 Activity_parallel_line_practice_result.xml

This file contains the AppBarLayout, toolbar layout and main content layout implementation for ParallelLinePracticeResultActivity.

7.28 Activity_parallel_line_test.xml

This file contains the layout implementation for ParallelLineTestActivity.

7.29 Activity_personal_information.xml

This file contains the AppBarLayout and toolbar layout implementation for PersonalInformationActivity. For the main content layout of PersonalInformationActivity, go to content_personal_information.xml

7.30 Activity_personal_information_edit_page.xml

This file contains the AppBarLayout, CollapsingToolbarLayout and toolbar layout implementation for PersonalInformationEditPage. The main content layout implementation for PersonalInformationEditPage is in content_personal_information_edit_page.xml.

7.31 Activity_send_data_email.xml

This file contains the AppBarLayout, toolbar Layout and main content layout for SendDataEmailActivity.

7.32 Activity_setting_page.xml

This file contains the AppBarLayout, toolbar layout and main content layout for SettingPageActivity.

7.33 Activity_static_background_test.xml

This file contains the layout implementations for StaticBackgroundTestActivity.

7.34 Activity_static_background_test_new.xml

This file contains the layout implementation for StaticBackgroundTestNewActivity, which is a testing activity, this activity is only for testing purposes, and will not be used in the final application.

7.35 Activity_static_corner_background_test.xml

This file contains the layout implementation for StaticCornerBackgroundTestActivity.

7.36 Activity_store_data_file.xml

This file contains the AppBarLayout, toolbar layout and the main content layout for StoreDataFileActivity.

7.37 Activity_test_detail_scrolling.xml

This file contains the AppBarLayout and toolbar layout implementations for TestDetailScrollingActivity. The main content layout implementation is in content_test_detail_scrolling.xml.

7.38 Activity_test_selection.xml

This file contains the AppBarLayout, toolbar layout, ViewPager configuration and BottomNavigationView configuration for TestSelectionActivity.

7.39 Activity_test_selection_page_setting_alertdialog.xml

This file contains the layout implementation for Test_Selection_Page_Setting_Alertdialog, which is used for user to change the language and font size setting in TestSelectionActivity.

7.40 Activity_thank_you.xml

This file contains the AppBarLayout, toolbar layout and the main content layout implementation for ThankYouActivity.

7.41 Activity_thank_you_parallel.xml

This file contains the AppBarLayout, toolbar layout and the main content layout implementation for ThankYouParallelActivity

7.42 Activity_transfer.xml

This file contains the layout implementation for TransferActivity.

7.43 Activity_transfer_test_selection.xml

This file contains the layout implementation for TransferTestSelectionActivity.

7.44 Activity_tutorial.xml

This file contains a general layout for TutorialActivity.

7.45 Activity_tutorial_activity_tutorial_alertdialog.xml

This file contains the layout implementation for Tutorial_activity_tutorial_alertdialog, which is used to show the tutorial content and information in TutorialActivity.

7.46 Activity_welcome.xml

This file contains the layout implementation for WelcomeActivity.

7.47 App_bar_tutorial.xml

This file contains the AppBarLayout and toolbar layout of TutorialActivity. The main content layout implementation of the TutorialActivity is in the content_tutorial.xml

7.48 Change_colour_alertdialog.xml

This file contains the layout implementation for change_colour_alertdialog, this alertdialog is used to let the user to choose the colour theme.

7.49 Choose_data_detail_number_alertdialog.xml

This file contains the layout implementation for Data_detail_number_alertdialog, which is used to let the user choose how many entries they want to show on each page in the TestDetailScrollingActivity.

7.50 Content_account_centre.xml

This file contains the main content layout implementation of AccountCentreActivity.

7.51 Content_copyright_information.xml

This file contains the main content layout implementation for CopyrightInformationActivity.

7.52 Content_data_list.xml

This file contains the main content layout implementation for DataListActivity.

7.53 Content_device_information.xml

This file contains the main content layout implementation for DeviceInformationActivity.

7.54 Content_feedback.xml

This file contains the main content layout implementation for FeedbackActivity.

7.55 Content_info.xml

This file contains the main content layout implementation for InfoActivity.

7.56 Content_information_collection.xml

This file contains the main content layout implementation for InformationCollectionActivity.

7.57 Content_intruduction_content.xml

This file contains the main content layout implementation for the content part of IntroductionContentActivity.

7.58 Content_personal_information.xml

This file contains the main content layout implementation of PersonalInformationActivity.

7.59 Content_personal_information_edit_page.xml

This file contains the main content layout implementation of PersonalInformationEditPageActivity.

7.60 Content_test_detail_scrolling.xml

This file contains the main content layout implementation of TestDetailScrollingActivity.

7.61 Content_tutorial.xml

This file contains the main content layout implementation of TutorialActivity.

7.62 Image_selection_page1_layout.xml

This file contains the main content layout implementation of the first tab in ImageSelectionActivity, which is the “Spiral” tab.

7.63 Image_selection_page2_layout.xml

This file contains the main content layout implementation of the second tab in ImageSelectionActivity, which is the “Pentagon” tab.

7.64 Listview_item.xml

This file defines the layout of each entries in the listview in the DataListActivity.

7.65 Nav_header_tutorial.xml

This file contains the layout implementation of the header of the navigation bar in the TutorialActivity.

7.66 Store_file_option_alertdialog.xml

This file contains the layout implementation of store_file_option_alertdialog, which is used to ask the user whether to store data files and clean data before switching user.

7.67 Test_selection_page0_layout.xml

This file contains the main content layout implementation of the first tab in TestSelectionActivity, which is the “Dot and Line” tab.

7.68 Test_selection_page1_layout.xml

This file contains the main content layout implementation of the second tab in TestSelectionActivity, which is the “Static Tests” tab.

7.69 Test_selection_page2_layout.xml

This file contains the main content layout implementation of the third tab in TestSelectionActivity, which is the “Dynamic Tests” tab.

8. Menu XML Files

8.1 Activity_tutorial_drawer.xml

Configuration file of the navigation drawer layout on TutorialActivity.

8.2 Menu_data_list_activity.xml

Layout configuration of the top menubar on DataListActivity.

8.3 Menu_display_progress_page.xml

Layout configuration of the top menubar on DisplayProgressActivity.

8.4 Menu_display_sending_page.xml

Layout configuration of the top menubar on DisplaySendingActivity.

8.5 Menu_info_page_activity.xml

Layout configuration of the top menubar on InfoPageActivity.

8.6 Menu_information_collection.xml

Layout configuration of the top menubar on InformationCollectionActivity.

8.7 Menu_personal_information.xml

Layout configuration of the top menubar on PersonalInformationActivity.

8.8 Menu_personal_information_edit.xml

Layout configuration of the top menubar on PersonalInformationEditActivity.

8.9 Menu_setting_page_activity.xml

Layout configuration of the top menubar on SettingPageActivity.

8.10 Menu_test_detail_scrolling.xml

Default layout configuration, currently the app doesn't use this file.

8.11 Menu_test_detail_scrolling_activity.xml

Layout configuration of the top menubar on TestDetailScrollingActivity.

8.12 Menu_test_selection.xml

Layout configuration of the top menubar on TestSelectionActivity.

8.13 Navigation.xml

Layout configuration of the buttonNavigationBar on TestSelectionActivity.

8.14 Navigation_image_selection.xml

Layout configuration of the buttonNavigationBar on ImageSelectionActivity.

8.15 Tutorial.xml

Layout configuration of the top menubar on TutorialActivity, currently the app doesn't use this file.

9. String XML Files

9.1 Strings.xml

This file contains all the texts needed for this app. If no language setting specified, this file will be used as the default file.

9.2 String.xml (de-rDE)

This file contains the German (Germany) translation of all the texts.

9.3 String.xml (en-rAU)

This file contains the English (Australia) translation of all the texts.

9.4 String.xml (en-rGB)

This file contains the English (Great Britain) translation of all the texts.

9.5 String.xml (es-rES)

This file contains the Spanish (Spain) translation of all the texts.

9.6 String.xml(fr-rFR)

This file contains the French (France) translation of all texts.

9.7 String.xml(it-rIT)

This file contains the Italian (Italy) translation of all texts.

9.8 String.xml(ja-rJP)

This file contains the Japanese (Japan) translation of all texts.

9.9 String.xml(nl-rNL)

This file contains the Dutch (Netherland) translation of all texts.

9.10 String.xml(pt-rPT)

This file contains the Portuguese (Portugal) translation of all texts.

9.11 String.xml(ru-rRU)

This file contains the Russian (Russia) translation of all texts.

9.12 String.xml(zh-rCN)

This file contains the Simplified Chinese translation of all texts.

9.13 String.xml(zh-rTW)

This file contains the Traditional Chinese translation of all texts.

10. Colour XML File

10.1 Colors.xml

This file contains all the definition of the colours that's needed for this application.

11. Style XML File

11.1 Styles.xml

This file contains definitions of all the themes.

12. Dimension XML Files

12.1 Dimens.xml

This file contains all the information related to dimensions, such as app_bar_height, text_margin, appbar_padding_top, nav_header_vertical_spacing etc.

13. Mipmap

This folder contains some of the image or icon resources needed for this app.

14. Drawable

This folder contains the image and icon resources needed for this app.

15. Extra Information about Database Configuration

15.1 Database Name

DatabaseName = “information.db”

15.2 Database Version

DatabaseVersion = 7

15.3 Definition of the database tables

The definition of each table can be found in file MyDatabaseHelper.java

15.4 Table User

```
CREATE TABLE User (
    user_id INTEGER PRIMARY KEY AUTOINCREMENT,
    name VARCHAR(600) NOT NULL,
    age INTEGER NOT NULL,
    gender VARCHAR(10) NOT NULL,
    education VARCHAR(100) NOT NULL,
    rating_score REAL,
    current_receiving_treatment VARCHAR(100),
    registration_code VARCHAR(100)
)
```

15.5 Table Test

```
1.  CREATE TABLE Test (
2.      test_id INTEGER PRIMARY KEY AUTOINCREMENT,
3.      user_id INTEGER REFERENCES User (user_id) ON UPDATE CASCADE ON DELETE CASCADE,
4.      test_starting_time TEXT NOT NULL,
5.      test_ending_time TEXT NOT NULL,
6.      test_type TEXT NOT NULL,
7.      image_type TEXT NOT NULL,
8.      interval_duration INTEGER,
9.      number_of_points INTEGER,
10.     painter_width INTEGER,
11.     language_during_test TEXT,
12.     is_scale_during_test TEXT
13. )
```

15.6 Table Data

```
1.  CREATE TABLE Data (
2.      data_id INTEGER PRIMARY KEY AUTOINCREMENT,
3.      test_id INTEGER REFERENCES Test (test_id) ON UPDATE CASCADE ON DELETE CASCADE,
4.      timestamp_of_point TEXT NOT NULL,
5.      x REAL NOT NULL,
6.      y REAL NOT NULL,
7.      pressure REAL,
8.      touch_point_size REAL,
9.      point_serial_number INTEGER,
10.     tool_type INTEGER
11. )
```