# **Tindergram Release Summary**

## **Team members**

Name	Github Id	The number of story points (or ideal hours for tasks) that a member was an author.
Quinn Hogg	Quinn-of-England	51
William Morin-Laberge	WilliamM-L	87
Nikolas Darlas	steamypotato	65
Mark Zalass	mzal98	68
David Rady	DavidRady	30

## **Project summary**

Tindergram is a secure and extremely user friendly application that allows users to share pictures online and view those posted by individuals that interest them while it also allows them to interact with the media since they can leave comments and likes.

Velocity and a list of user stories and non-story tasks for each iteration

Total: 4 Stories, 54 story-related tasks, 28 non-story tasks, 311 points over 13 weeks

<u>Iteration 1</u> (0 stories, 2 non-story tasks, 2 points)

Task #7: Wiki README needs to be updated, 1 point, Status: Done Task #21: Create README for main project, 1 point, Status: Done

<u>Iteration 2</u> (1 story with 1 story-related task, 2 non-story tasks, 15 points)

US#10: US - 00: As a user, I want to be able to post pictures on the app so that other users can see them, 1 task, 5 points, Status: Not Complete, Pushed to 3

Task #20: Integrate login functionality with layout, 9 points, Status: Done

Task #25: Write documentation on how to run the app on a physical phone, 1 point.

Status: Done

<u>Iteration 3</u> (2 stories with 1 story-related task, 5 non-story tasks, 70 points)

US#10: US - 00: As a user, I want to be able to follow other users so that it's easier for me to have access to their content, 2 tasks, 25 points Status: Not Complete, Pushed to 4 US#11: US - 01: As a user, I want to be able to post pictures on the app so that other users can see them, 1 task, 14 points, Status: Not Complete, Pushed to 4

Task #28: Database: A user can login into the app, 9 points, Status: Done Task #29: Database: Registration, 9 points Status: Done

Task #39: Add Ability for User to Change their Username, Password and Email in the App, 7 points, Status: Done

Task #42: Improve Settings UI for Changing Username, Email or Password, 3 points, Status: Done

Task #45: Add Travis CI and get it working, 3 points, Status: Done

<u>Iteration 4</u> (4 stories with 50 story-related tasks, 19 non-story tasks, 224 points)

US#10: US - 00: As a user, I want to be able to follow other users so that it's easier for me to have access to their content, 8 tasks, 47 points Status: Done

US#11: US - 01: As a user, I want to be able to post pictures on the app so that other users can see them, 14 tasks, 44 points, Status: Done

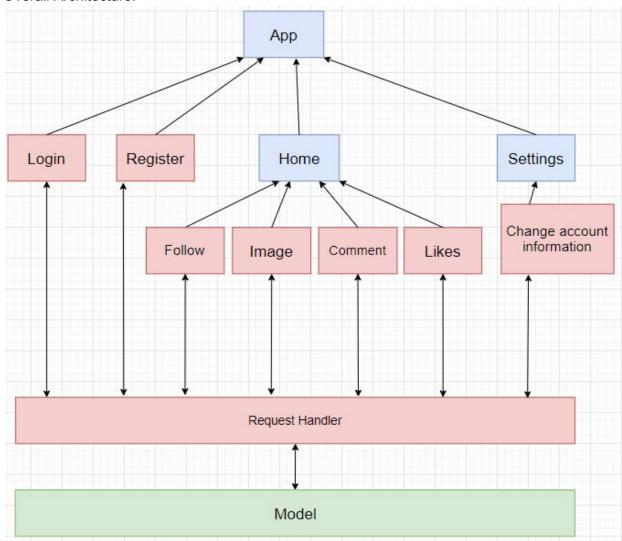
US#13: US - 02: As a user I want to be able to leave a comment on any picture, 8 tasks, 46 points, Status: Done

US#27: US - 03: As a user I want to be able to perform certain actions by swiping while I view pictures, 3 tasks, 20 points, Status: Done

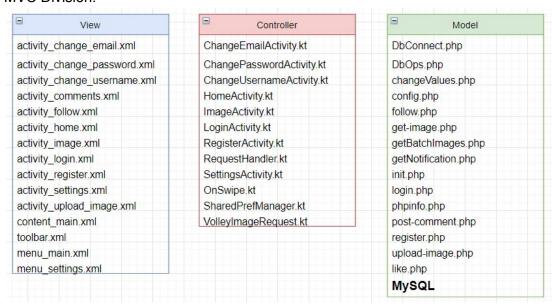
Link to the Sprint 4 Non-Story Related Tasks

# **Overall Architecture and Design**

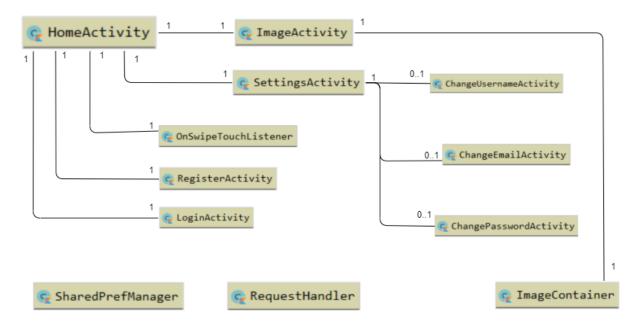
## Overall Architecture:



## MVC Division:



## UML class diagram:



Link to fully-featured UML diagram with all class members included

## Infrastructure

## **PhpMyAdmin**

We are using the software SQL administration tool because it allows us to use php, a language we are moderately familiar with, to write scripts to handle all http requests being sent to the server and then query or update the sql database.

We decided to build our backend this way instead of using some services like AWS or Google Firebase since we wanted to gain some experience working with linux virtual machines, SQL, and handling requests.

### **MySQL**

We use this open-source relational database management system because it interfaces well with php, and it is widely used, making it easier for us to find answers to our questions online.

We could have used noSQL databases, or MariaDB, which is similar to MySQL, but we do not need the extra features provided by other databases given the simplicity of our app. Again, MySQL's history was a deciding factor since we could find much more documentation and many more online resources.

## **Volley**

Volley is a networking library which runs asynchronously on either a caching or network thread. The implicit use of caching threads is what allows Volley to be very fast, as many network requests are simply repeated multiple times within a short period of time. Furthermore, we can give a network request a callback function for the handling asynchronous response, which is extremely useful for testing purposes.

Retrofit is another network library and popular alternative, however Retrofit does not support caching, which would slow down performance tremendously. In addition. Retrofit does not support image loading capabilities which would be a problem since this app uses images as a baseline.

# **Naming Conventions**

#### Kotlin:

https://kotlinlang.org/docs/reference/coding-conventions.html

Spaces(4) are used for indentation.

Class names use CamelCase notation.

Object names use CamelCase notation.

Variable names use CamelCase notation.

Constant names use uppercase underscore-separated names.

Function names use camelCase notation with lowercase first letter.

## PHP:

## https://www.php-fig.org/psr/psr-2/

Spaces(4) are used for indentation.

File names(except if the file only contains a class), method names follow the camelCase format while class names follow the PascalCase format.

Maximum line length: 120 chars.

Opening braces for classes, methods, loops and if statements go on the next line, and closing braces go on the next line after the body.

The PHP constants true, false, and null are in lower case.

#### Code

# Key files: top **5** most important files:

File path with a clickable GitHub link	Purpose (1 line description)
DbOps.php	All methods that interact with the database.
getBatchImages.php	Sends the pictures the user should see to the app.
HomeActivity.kt	Homepage where all pictures are viewed.
<u>SharedPrefManager.kt</u>	Where information about the user is stored.
VolleyImageRequest.kt	What gets images from the backend using http.

# **Testing and Continuous Integration**

## **5** most important unit tests with links:

Test File path with clickable GitHub link	What is it testing (1 line description)
<u>CleanUpTest.kt</u>	Used to delete a test user
FunctionalityTest.kt	Basic functionalities test in correct order
RegisterLoginTest.kt	Tests if test user can register and login
SharedPrefManagerTest.kt	Tests if user can change username, email and logout
<u>TestSuite.kt</u>	Tests all above unit tests

#### **5** most important acceptance tests with links:

Test File path (if you automated the test)	Which user story is it testing (1 line description)
or as comments in Github issues (if it's	
done manually) with clickable GitHub link	
<u>CleanUpTest.kt</u>	Ability to leave a comment on any picture.
<u>FunctionalityTest.kt</u>	Ability to perform actions by swiping while I view pictures.
RegisterLoginTest.kt	As a user I can post pictures for others to see.
<u>SharedPrefManagerTest.kt</u>	As a user, I want to see the content of people I follow first.
<u>TestSuite.kt</u>	Tests all user stories.

# **Continuous Integration Environment**

# Link to the Travis CI Dashboard

The continuous integration environment used is Travis CI which is linked to the GitHub repo. Travis CI is set to produce a build of the app and run all unit tests after each commit is pushed to the repo and again when a pull request is made. The build of the app and the unit tests must pass for Travis CI to pass the build and approve the commit. Travis CI will first install the required Android SDK files and Gradle, which is used to build the android app and run the unit tests. Once the testing environment is set up, it will then execute a build of the android app using the ./gradlew clean build command and once the build is successful, it will run the unit tests using the ./gradlew tests command.

## **Static Analysis Tool**

The static analysis tool used was the Android Studio lint tool. The Android Studio lint tool is an extremely powerful static analysis tool which will give all errors and warnings pertaining to the quality of the Kotlin code and the XML view files, which make up our Android app. The Android Studio lint tool was chosen to produce the static analysis inspection report as it is a built in feature already present in our IDE and is highly regarded for its capabilities. The tool was run by activating it in Android Studio.

Static analysis report included in appendix

## Sample of Issues Found

- 1. file activity\_home.xml WARNING Should use "sp" instead of "dp" for text sizes
  - ◆ This warning indicates that the density independent pixels "dp" unit was used to denote font size for text in the activity\_home.xml file instead of the scale-independent pixels unit "sp".
- file activity\_home.xml WARNING Hardcoded string "Post", should use '@string' resource
  - ◆ This warning indicates that a string was hardcoded in the text of the Post image button instead of referenced from the strings.xml file.
- 3. file FollowTests.kt WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap
  - !! (non-null assertion) indicates that null is not a valid input for the method. MutableMap does not accept null as a valid input so !! is redundant.
- 4. file SharedPrefManager.kt WEAK WARNING Private property name 'PREF\_NAME' should not contain underscores in the middle or the end
  - ◆ Linter flagging variable name as not following naming style guide, although in Kotlin the convention for constants is to be in all caps and underscores.
- 5. file HomeActivity.kt WARNING Explicitly given type is redundant here
  - ◆ MutableMap declared as <String, String>, redundant
- 6. file SharedPrefManager.kt WARNING Unused import directive
  - Library imported that was never used.
- 7. file SharedPrefManager.kt INFO Property 'sharedPref' could be private
  - sharedPref member could be private as only accessed in the class
- 8. file HomeActivity.kt WARNING Variable is never modified and can be declared immutable using 'val'
  - Var variable never modified, could be declared as constant val
- 9. file RequestHandler.kt WEAK WARNING 'rangeTo' or the '..' call should be replaced with 'until'
  - ◆ 0..size-1 in for loop could be replaced with 0 until size
- 10. file HomeActivity.kt WARNING Property "ifLiked" is never used
  - ◆ ifLiked boolean declared but is never used.

# **Android Studio inspection report:**

Inspection tree:	Problem description:
<ul> <li>InspectionViewTree'</li> <li>project 3 errors 174 warnings 44 weak warnings 19 infos 167 typos</li> </ul>	Select a problem element in tree
Android group 3 errors 82 warnings	
• Lint group 82 warnings	
Accessibility group 4 warnings	
■ Image without contentDescription inspection 4 w	varnings
<ul> <li>file activity_home.xml 2 warnings</li> <li>WARNING Missing 'contentDescription' attr</li> <li>WARNING Missing 'contentDescription' attr</li> </ul>	
<ul><li>file activity_upload_image.xml 1 warning</li><li>WARNING Missing 'contentDescription' attr</li></ul>	ribute on image
<ul><li>file content_main.xml 1 warning</li><li>WARNING Missing 'contentDescription' attri</li></ul>	ribute on image
<ul><li>Correctness group 15 warnings</li></ul>	
• Attribute unused on older versions inspection 1	warning
	used in API level 29 and higher (current min is 15)
Obsolete Gradle Dependency inspection 11 warn	ings
<ul> <li>WARNING A newer version of androidx.tes</li> <li>Using dp instead of sp for text sizes inspection</li> <li>file activity_comments.xml 1 warning</li> <li>WARNING Should use "sp" instead of "dp</li> <li>Ifile activity_home.xml 1 warning</li> <li>WARNING Should use "sp" instead of "dp</li> <li>Vector Image Generation inspection 1 warning</li> </ul>	t:runner than 1.1.0 is available: 1.2.0 t:rules than 1.1.0 is available: 1.2.0 t.ext:junit than 1.0.0 is available: 1.1.1 t.ext:truth than 1.0.0 is available: 1.2.0 t.espresso:espresso-core than 3.1.0 is available: 3.2.0 t.espresso:espresso-contrib than 3.1.0 is available: 3.2.0 t.espresso:espresso-intents than 3.1.0 is available: 3.2.0 t.espresso:espresso-accessibility than 3.1.0 is available: 3.2.0 t.espresso:espresso-web than 3.1.0 is available: 3.2.0 t.espresso.idling:idling-concurrent than 3.1.0 is available: 3.2.0 2 warnings
• file ic_wallpaper_black_24dp.xml 1 warning	all and the initial and the state of the state of the ADIOA all all and the state of the ADIOA all all all all all all all all all al
<ul> <li>WARNING Resource references will not wo</li> <li>Internationalization group 9 warnings</li> </ul>	ork correctly in images generated for this vector icon for API 21; check generate
Bidirectional Text group 1 warnings	
Using left/right instead of start/end attributes	inspection 1 warning
• file activity_comments.xml 1 warning	<pre>rout_toStartOf="@+id/post_comment" to better support right-to-left layouts</pre>
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<ul> <li>file activity_comments.xml 2 warnings</li> <li>WARNING Hardcoded string "Write your company was also warning "Post", should</li> </ul>	
<ul> <li>file activity_home.xml 3 warnings</li> <li>WARNING Hardcoded string "Post", should</li> <li>WARNING Hardcoded string "Enter a common WARNING Hardcoded string "10", should utility</li> </ul>	ment", should use '@string' resource
<ul> <li>file activity_upload_image.xml 2 warnings</li> <li>WARNING Hardcoded string "Upload Image WARNING Hardcoded string "Back", should be activity to the string "Back", should be activity to the string "Back".</li> </ul>	
<ul> <li>file content_main.xml 1 warning</li> <li>WARNING Hardcoded string "Button", shout</li> <li>Performance group 31 warnings</li> </ul>	uld use '@string' resource

- Obsolete layout params inspection 1 warning • file activity comments.xml 1 warning WARNING Invalid layout param in a 'LinearLayout': 'layout\_alignParentBottom' Overdraw: Painting regions more than once inspection 1 warning • file toolbar.xml 1 warning ● WARNING Possible overdraw: Root element paints background '#794EF9' with a theme that also paints a background (infe Unused resources inspection 28 warnings • file activity\_comments.xml 1 warning ● WARNING The resource 'R.layout.activity\_comments' appears to be unused • file activity\_follow.xml 1 warning WARNING The resource 'R.layout.activity follow' appears to be unused • file activity upload image.xml 1 warning WARNING The resource 'R.layout.activity upload image' appears to be unused • file colors.xml 1 warning ● WARNING The resource 'R.color.colorTransparent' appears to be unused • file content\_main.xml 1 warning ● WARNING The resource 'R.layout.content main' appears to be unused • file dimens.xml 2 warnings ● WARNING The resource 'R.dimen.fab margin' appears to be unused WARNING The resource 'R.dimen.activity vertical margin' appears to be unused • file **strings.xml** 19 warnings ● WARNING The resource 'R.string.title\_activity\_login\_test' appears to be unused WARNING The resource 'R.string.prompt email' appears to be unused ● WARNING The resource 'R.string.prompt password' appears to be unused ● WARNING The resource 'R.string.action\_sign\_in' appears to be unused ● WARNING The resource 'R.string.action\_sign\_in\_short' appears to be unused ● WARNING The resource 'R.string.welcome' appears to be unused ● WARNING The resource 'R.string.invalid username' appears to be unused WARNING The resource 'R.string.invalid password' appears to be unused ● WARNING The resource 'R.string.login failed' appears to be unused ● WARNING The resource 'R.string.name' appears to be unused WARNING The resource 'R.string.title activity settings' appears to be unused WARNING The resource 'R.string.first fragment label' appears to be unused WARNING The resource 'R.string.second fragment label' appears to be unused WARNING The resource 'R.string.next' appears to be unused WARNING The resource 'R.string.previous' appears to be unused WARNING The resource 'R.string.hello first fragment' appears to be unused WARNING The resource 'R.string.hello second fragment' appears to be unused ● WARNING The resource 'R.string.follow user' appears to be unused ● WARNING The resource 'R.string.write comment' appears to be unused • file styles.xml 2 warnings ● WARNING The resource 'R.style.AppTheme AppBarOverlay' appears to be unused ● WARNING The resource 'R.style.AppTheme PopupOverlay' appears to be unused • Useless parent layout inspection 1 warning • file activity\_comments.xml 1 warning WARNING This 'RelativeLayout' layout or its 'LinearLayout' parent is possibly useless; transfer the 'background' attribute to Security group 1 warning AllowBackup/FullBackupContent Problems inspection 1 warning • file AndroidManifest.xml 1 warning ● WARNING On SDK version 23 and up, your app data will be automatically backed up and restored on app install. Consider • Usability group 22 warnings • Icons group 20 warnings lcon is specified both as .xml file and as a bitmap inspection 20 warnings • file camera\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file camera icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file camera\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file camera\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file camera icon.xml 1 warning
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• file email\_icon.png 1 warning

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• file email icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file email icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file email\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file email icon.xml 1 warning WARNING The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawa • file lock\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file lock\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file lock icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file lock\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file lock\_icon.xml 1 warning WARNING The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawa • file user icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file user\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file user\_icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file user icon.png 1 warning The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawable-anydpi' • file user\_icon.xml 1 warning WARNING The following images appear both as density independent '.xml' files and as bitmap files: src\main\res\drawa Missing inputType or hint inspection 1 warning • file activity\_comments.xml 1 warning WARNING This text field does not specify an 'inputType' • Use Autofill inspection 1 warning • file activity\_comments.xml 1 warning WARNING Missing 'autofillHints' attribute Android Resources Validation inspection 3 errors • file activity follow.xml 1 error ■ ERROR Unresolved class 'FollowActivity' • file activity\_upload\_image.xml 1 error ERROR Unresolved class 'MainActivity' • file content main.xml 1 error ERROR Unresolved class 'MainActivity' • Kotlin group 91 warnings 44 weak warnings 19 infos Java interop issues group 1 weak warning 1 info • Function or property has platform type inspection 1 weak warning • file SharedPrefManager.kt 1 weak warning WARNING Declaration has type inferred from a platform call, which can lead to unchecked nullability issues. Specify type explicitly Package name does not match containing directory inspection 1 info • file VolleyImageRequest.kt 1 info INFO Package directive doesn't match file location Migration group 10 warnings Usage of redundant or deprecated syntax or deprecated symbols inspection 10 warnings • file FollowTests.kt 2 warnings WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap • file ImageTests.kt 2 warnings ● WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap ● WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap • file LikeTests.kt 2 warnings ● WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap ● WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap • file PostCommentTest.kt 1 warning ■ WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap • file RegisterActivityTest.kt 1 warning WARNING Unnecessary non-null assertion (!!) on a non-null receiver of type MutableMap

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Naming conventions group 10 weak warnings
Private property naming convention inspection 7 weak warnings
file SharedPrefManager.kt 7 weak warnings
● WEAK
WARNING Private property name'PREF_NAME' should not contain underscores in the middle or the end
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WARNING Private property name'KEY_USER_ID' should not contain underscores in the middle or the end
● WEAK
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WARNING Private property name'KEY_CURRENTLY_VIEWED_IMAGE_ID' should not contain underscores in the middle or the ε  ■ WEAK
WARNING Private property name'KEY_HAS_LIKED_CURRENT_IMAGE' should not contain underscores in the middle or the end  WEAK
WARNING Private property name'viewed_images' should not contain underscores in the middle or the end
Property naming convention inspection 3 weak warnings
• file HomeActivity.kt 2 weak warnings
● WEAK
WARNING Property name'CHANNEL_ID' should start with a lowercase letter
● WEAK WARNING Property name'CHANNEL_DESC' should start with a lowercase letter
file RequestHandler.kt 1 weak warning
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WARNING Property name'CHANNEL_ID' should start with a lowercase letter
Redundant constructs group 75 warnings 12 weak warnings 1 info
Explicitly given type is redundant here inspection 5 warnings
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Redundant lambda arrow inspection 1 weak warning
file HomeActivity.kt 1 weak warning
WEAK WARNING Redundant lambda arrow
Redundant semicolon inspection 1 warning
• file VolleyImageRequest.kt 1 warning
WARNING Redundant semicolon
Replace empty class body inspection 1 info
• file NotificationTest.kt 1 info
INFO Redundant empty class body
Unnecessary type argument inspection 11 weak warnings
file HomeActivity.kt 1 weak warning     WEAK
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WEAK WARNING Remove explicit type arguments WEAK WARNING Remove explicit type arguments • file SharedPrefManager.kt 1 weak warning WEAK WARNING Remove explicit type arguments • Unused import directive inspection 65 warnings file ChangeEmailActivity.kt 8 warnings WARNING Unused import directive • file ChangePasswordActivity.kt 6 warnings WARNING Unused import directive • file ChangeUsernameActivity.kt 6 warnings WARNING Unused import directive • file HomeActivity.kt 2 warnings WARNING Unused import directive WARNING Unused import directive • file ImageActivity.kt 1 warning WARNING Unused import directive • file LoginActivity.kt 5 warnings WARNING Unused import directive • file LoginActivityTest.kt 6 warnings WARNING Unused import directive • file NotificationTest.kt 3 warnings WARNING Unused import directive WARNING Unused import directive WARNING Unused import directive • file RegisterActivity.kt 7 warnings WARNING Unused import directive • file RegisterActivityTest.kt 5 warnings WARNING Unused import directive • file RequestHandler.kt 11 warnings WARNING Unused import directive

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  - INFO Property 'CHANNEL ID' could be private

■ INFO Property 'textTitle' could be private	
INFO Property 'pendingIntent' could be private	
■ INFO Property 'requestQueue' could be private	
INFO Function 'addToRequestQueue' could be private	
• file SharedPrefManager.kt 4 infos	
■ INFO Property 'sharedPref' could be private	
INFO Function 'updateViewedImages' could be private	
■ INFO Property 'imageData' could be private	
■ INFO Property 'commentArray' could be private	
● Local 'var' is never modified and can be declared as 'val' inspection 5 warnings	
• file HomeActivity.kt 3 warnings	
WARNING Variable is never modified and can be declared immutable using 'val'	
<ul> <li>WARNING Variable is never modified and can be declared immutable using 'val'</li> </ul>	
WARNING Variable is never modified and can be declared immutable using 'val'	
• file RequestHandler.kt 1 warning	
WARNING Variable is never modified and can be declared immutable using 'val'	
file SharedPrefManager.kt 1 warning	
WARNING Variable is never modified and can be declared immutable using 'val'	
map.put() can be converted to assignment inspection 2 weak warnings	
file RegisterActivityTest.kt 1 weak warning	
● WEAK	
WARNING map.put() should be converted to assignment	
file SharedPrefManager.kt 1 weak warning	
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Might be 'const' inspection 4 weak warnings	
file ImageActivity.kt 2 weak warnings	
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WEAK WARNING Might be 'const'  Solution Touch Listen and the Construction as the Construction and the Constructio	
<ul><li>file OnSwipeTouchListener.kt 2 weak warnings</li><li>WEAK WARNING Might be 'const'</li></ul>	
WEAK WARNING Might be 'const'  WEAK WARNING Might be 'const'	
• 'rangeTo' or the '' call can be replaced with 'until' inspection 2 weak warnings	
<ul><li>file RequestHandler.kt 1 weak warning</li><li>WEAK</li></ul>	
WARNING 'rangeTo' or the '' call should be replaced with 'until'	
file SharedPrefManager.kt 1 weak warning	
● WEAK	
WARNING 'rangeTo' or the '' call should be replaced with 'until'	
Kotlin Gradle and IDE plugins versions are different inspection 1 warning	
file <b>build.gradle</b> 1 warning	
WARNING Kotlin version that is used for building with Gradle (1.3.50) differs from the one bund	ed into the IDE plugin (1.3.71
Spelling group 167 typos	1 3 (
Typo inspection 167 typos  Typo inspection 167 typos	
file activity_image.xml 1 typo     TYPO Type in word image.yieuri	
TYPO Typo: In word 'imageview'  file activity_login.xml 1 typo	
TYPO Typo: In word 'tindergram'  TYPO Typo: In word 'tindergram'	
file AndroidManifest.xml 3 typos	
TYPO Typo: In word 'soen'	
TYPO Typo: In word 'stitile'  TYPO Typo: In word 'titile'	
TYPO Typo: In word 'tindergram'  TYPO Typo: In word 'tindergram'	
file changeValues.php 1 typo	
TYPO Typo: In word 'isset'	
• file config.php 1 typo	
TYPO Typo: In word 'burgersteak'	
file <b>DbConnect.php</b> 1 typo	
TYPO Typo: In word 'mysqli'  TYPO Typo: In word 'mysqli'	
file <b>DbOps.php</b> 7 typos	
TYPO Typo: In word 'encr'  TYPO Typo: In word 'encr'	
TYPO Typo: In word 'notif'	
TYPO Typo: In word 'usernames'	
TYPO Typo: In word 'formattedfollower'	
TYPO Typo: In word 'formattedimage'  TYPO Typo: In word 'formattedimage'	
TYPO Typo: In word 'preg'	
TYPO Typo: In word 'lked'	
● file follow.php 1 typo	

- TYPO Typo: In word 'isset'
- file FollowTests.kt 2 typos
  - TYPO Typo: In word 'vladputin'
  - TYPO Typo: In word 'vladputin'
- file font\_certs.xml 110 typos
  - TYPO Typo: In word 'DCCA'
  - TYPO Typo: In word 'IJANW'
  - TYPO Typo: In word 'DQEBBAUAMIGUM'
  - TYPO Typo: In word 'CQYDVQQG'
  - TYPO Typo: In word 'ETMBEGA'
  - TYPO Typo: In word 'UECBMKQ'
  - TYPO Typo: In word 'Zvcm'
  - TYPO Typo: In word 'YTEWMBQGA'
  - TYPO Typo: In word 'MNTW'
  - TYPO Typo: In word 'Vmlldz'
  - TYPO Typo: In word 'MHQW'
  - TYPO Typo: In word 'ZDEQMA'
  - TYPO Typo: In word 'MCAGC'
  - TYPO Typo: In word 'DQEJARYTYW'
  - TYPO Typo: In word 'Bhbm'
  - TYPO Typo: In word 'MIGUM'
  - TYPO Typo: In word 'Ihvc'
  - TYPO Typo: In word 'Thvbb'
  - TYPO Typo: In word 'BPWW'
  - TYPO Typo: In word 'Hxajt'
  - TYPO Typo: In word 'Wfna'
  - TYPO Typo: In word 'Bujb'
  - TYPO Typo: In word 'Nvac'
  - TYPO Typo: In word 'Wynw'
  - TYPO Typo: In word 'Uigq'
  - TYPO Typo: In word 'Pmvm'
  - TYPO Typo: In word 'Ddex'
  - TYPO Typo: In word 'Bapcavl'
  - TYPO Typo: In word 'nmzh'
  - TYPO Typo: In word 'Ojgfwwgfkw'
  - TYPO Typo: In word 'OBBYEFI'
  - TYPO Typo: In word 'VTEM'
  - TYPO Typo: In word 'Ewgb'
  - TYPO Typo: In word 'IGXMIGUM'
  - TYPO Typo: In word 'YIJANW'
  - TYPO Typo: In word 'QFMAMB'
  - TYPO Typo: In word 'Alnr'
  - TYPO Typo: In word 'Xxun'
  - TYPO Typo: In word 'Xcla'
  - TYPO Typo: In word 'Ojvlba' TYPO Typo: In word 'fvugn'
  - TYPO Typo: In word 'lsky'

  - TYPO Typo: In word 'Kfqf'
  - TYPO Typo: In word 'Qiml'
  - TYPO Typo: In word 'ITEI'
  - TYPO Typo: In word 'jkbqxbsh'
  - TYPO Typo: In word 'Uapf'
  - TYPO Typo: In word 'eidpwq'
  - TYPO Typo: In word 'Ayug'
  - TYPO Typo: In word 'CNMA'
  - TYPO Typo: In word 'DQEBBAUAMH'
  - TYPO Typo: In word 'NVBAYT'
  - TYPO Typo: In word 'VTMR'
  - TYPO Typo: In word 'EQYDVQQI'
  - TYPO Typo: In word 'ybmlh'
  - TYPO Typo: In word 'Fpbi'
  - TYPO Typo: In word 'YDVQQK'
  - TYPO Typo: In word 'EQMA'
  - TYPO Typo: In word 'MHQW' TYPO Typo: In word 'ZDEQMA'
  - TYPO Typo: In word 'Ihvc'
  - TYPO Typo: In word 'Irgq'
  - TYPO Typo: In word 'Apxsdyx'
  - TYPO Typo: In word 'Rland'

- TYPO Typo: In word 'Kkedxi'
- TYPO Typo: In word 'Cbdxgx'
- TYPO Typo: In word 'Rczfey'
- TYPO Typo: In word 'BVKZF'
- TYPO Typo: In word 'Fdpuz'
- TYPO Typo: In word 'Tcfi'
- TYPO Typo: In word 'idkyugwf'
- TYPO Typo: In word 'Cwkk'
- TYPO Typo: In word 'Gfvj'
- TYPO Typo: In word 'Gazv'
- TYPO Typo: In word 'Yvtw'
- TYPO Typo: In word 'Xtqw'
- TYPO Typo: In word 'Ftqo'
- TYPO Typo: In word 'Fjnk'
- TYPO Typo: In word 'Ojgdkwgd'
- TYPO Typo: In word 'OBBYEF'
- TYPO Typo: In word 'Ylmn'
- TYPO Typo: In word 'NVHSM'
- TYPO Typo: In word 'Xikdj'
- TYPO Typo: In word 'CQYDVQQG'
- TYPO Typo: In word 'ETMBEGA'
- TYPO Typo: In word 'UECBMKQ'
- TYPO Typo: In word 'Zvcm'
- TYPO Typo: In word 'YTEWMBQGA'
- TYPO Typo: In word 'MNTW'
- TYPO Typo: In word 'Vmlldz'
- TYPO Typo: In word 'EDAO'
- TYPO Typo: In word 'NVBAMTB'
- TYPO Typo: In word 'WSCCQDC'
- TYPO Typo: In word 'Eowj'
- TYPO Typo: In word 'DQEBBAUAA'
- TYPO Typo: In word 'IBAQ'
- TYPO Typo: In word 'rkaym'
- TYPO Typo: In word 'Yjzm'
- TYPO Typo: In word 'gjwyx'
- TYPO Typo: In word 'Hvkiaai'
- TYPO Typo: In word 'Nmgjmyy'
- TYPO Typo: In word 'Bqpkn'TYPO Typo: In word 'SKMX'
- TYPO Typo: In word 'CTMQ'
- TYPO Typo: In word 'Mvcy'
- TYPO Typo: In word 'Qcaf'
- TYPO Typo: In word 'Actif'
- TYPO Typo: In word 'Nyvz'
- TYPO Typo: In word 'BYHJ'
- TYPO Typo: In word 'UGGM'
- file getBatchImages.php 2 typos
  - TYPO Typo: In word 'isset'
  - TYPO Typo: In word 'preg'
- file **getImage.php** 1 typo
  - TVDO Type: In word
    - TYPO Typo: In word 'isset'
- file getNotification.php 2 typos
  - TYPO Typo: In word 'isset'
  - TYPO Typo: In word 'strlen'
- file **HomeActivity.kt** 1 typo
  - TYPO Typo: In word 'soen'
- file ic\_launcher.xml 1 typo
  - TYPO Typo: In word 'whatshot'
- file ic\_launcher\_round.xml 1 typo
  - TYPO Typo: In word 'whatshot'
- file ImageActivity.kt 2 typos
  - TYPO Typo: In word 'dont'TYPO Typo: In word 'explicitely'
- file init.php 1 typo
  - TYPO Typo: In word 'phpinfo'
- file like.php 1 typo
  - TYPO Typo: In word 'isset'
- file login.php 1 typo
  - TYPO Typo: In word 'isset'

- file menu main.xml 1 typo
  - TYPO Typo: In word 'soen'
- file paytone\_one.xml 1 typo
  - TYPO Typo: In word 'Paytone'
- file phpinfo.php 1 typo
  - TYPO Typo: In word 'phpinfo'
- file postComment.php 1 typo
  - TYPO Typo: In word 'isset'
- file preloaded\_fonts.xml 1 typo
  - TYPO Typo: In word 'paytone'
- file **README.md** 11 typos
  - TYPO Typo: In word 'SOEN'
  - TYPO Typo: In word 'Instagram'
  - TYPO Typo: In word 'instagram'
  - TYPO Typo: In word 'possibilites'
  - TYPO Typo: In word 'Zalass'

  - TYPO Typo: In word 'mzal'
  - TYPO Typo: In word 'Rady'
  - TYPO Typo: In word 'Hogg'
  - TYPO Typo: In word 'Laberge'
  - TYPO Typo: In word 'Darlas' TYPO Typo: In word 'steamypotato'
- file register.php 1 typo
  - TYPO Typo: In word 'isset'
- file RequestHandler.kt 2 typos
  - TYPO Typo: In word 'soen'
  - TYPO Typo: In word 'aleady'
- file **strings.xml** 4 typos
  - TYPO Typo: In word 'tindergram'
  - TYPO Typo: In word 'Tindergram'
  - TYPO Typo: In word 'tindergram'
  - TYPO Typo: In word 'titile'
- file uploadImage.php 2 typos
  - TYPO Typo: In word 'isset'
  - TYPO Typo: In word 'bssis'
- file VolleyImageRequest.kt 1 typo
  - TYPO Typo: In word 'automically'
- XML group 1 warning
  - Unused XML schema declaration inspection 1 warning
    - file activity\_follow.xml 1 warning
      - WARNING Namespace declaration is never used