

Design Patterns

MSc in Computer Science

Produced
by

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Waterford Institute of Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRCE

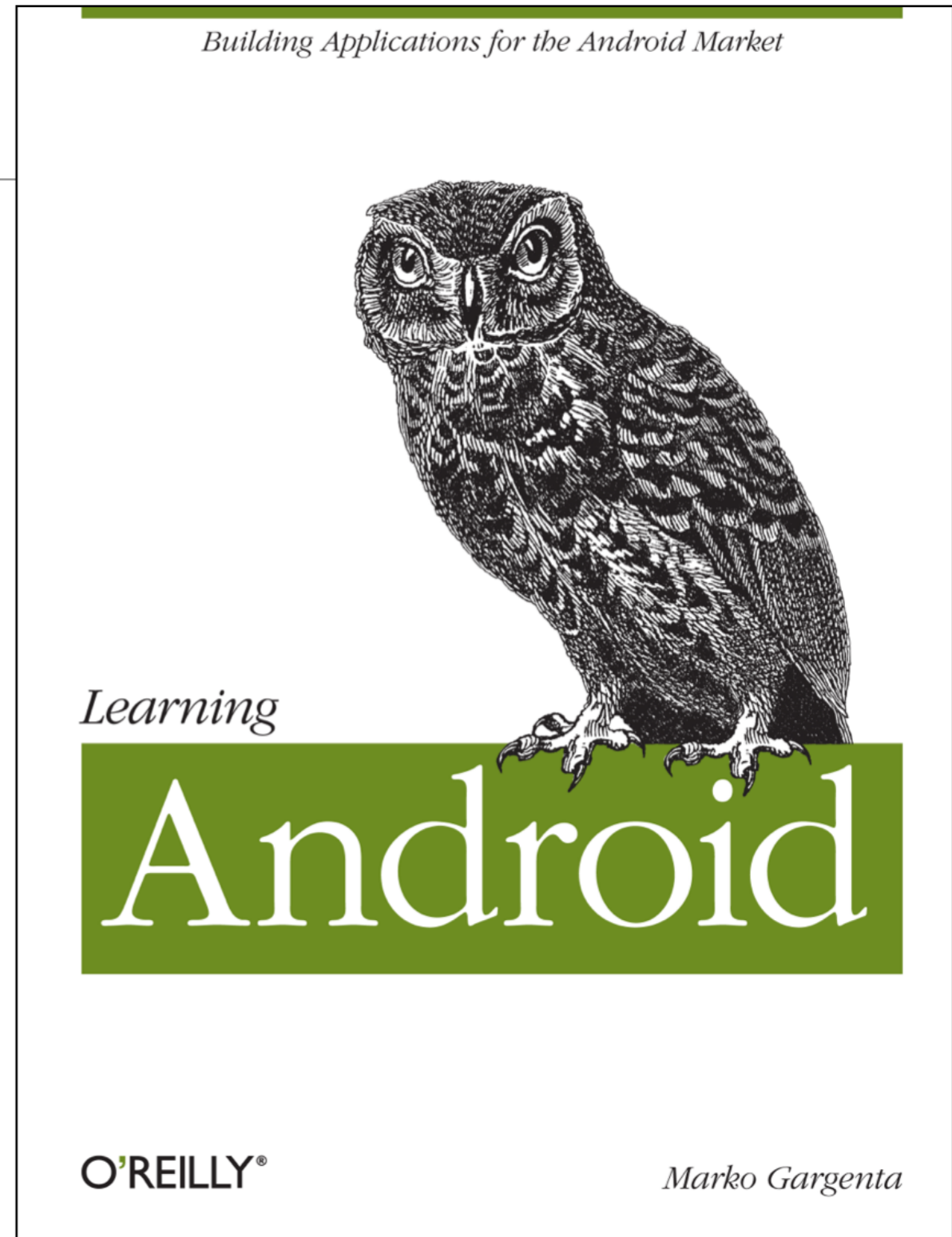


Yamba


Useful text for exploring Sync & related uses

- Get an overview of the Android platform and discover how it fits into the mobile ecosystem
- Learn about the Android stack, including its application framework and the structure and distribution of application packages (APK)
- Set up your Android development environment and get started with simple programs
- Learn how to build basic Android user interfaces and organize UI elements in Views and Layouts
- Build a service that uses a background process to update data in your application
- Get an introduction to Android Interface Definition Language (AIDL) and the Native Development Kit (NDK)

- Text constructs an application called 'Yamba'
- A twitter client enabling:
 - tweets
 - Reading timeline



Status

 Yamba X

Status Update

hello sync!

hello sync!

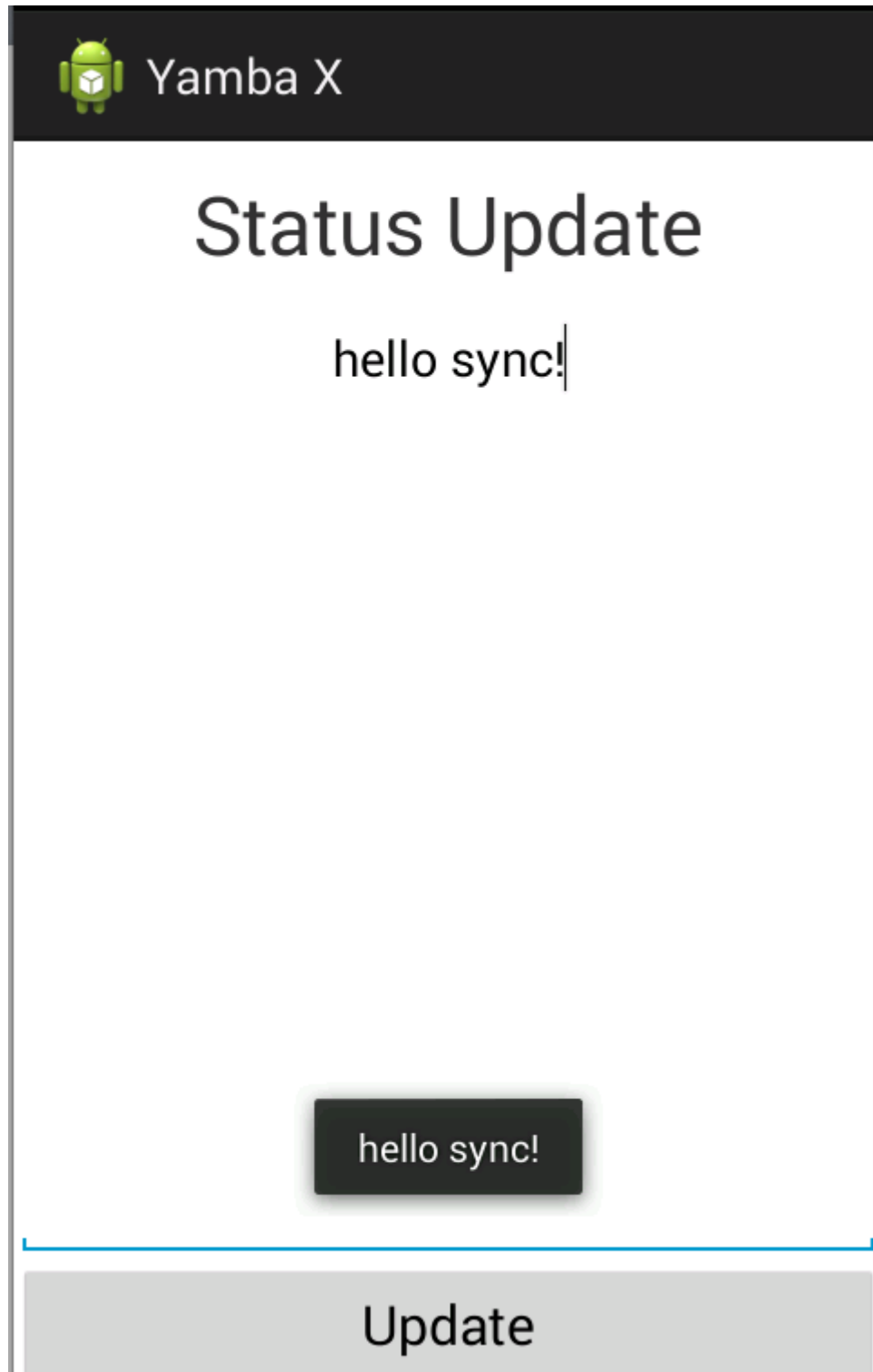
Update

Status

 Timeline

Marakana Student	05/06/2014 06:42:35
hello sync!	
Marakana Student	05/06/2014 06:38:41
hello sync!	
Marakana Student	05/06/2014 06:10:30
hi baby	
Marakana Student	05/06/2014 05:58:57
aergaer	
Marakana Student	05/06/2014 05:03:34
qwefqwe	
Marakana Student	05/06/2014 05:03:40
gggg	
Marakana Student	05/06/2014 05:12:35
ak4	
Marakana Student	05/06/2014 05:16:33
Hello	
Marakana Student	05/06/2014 05:16:58
coucou	
Marakana Student	05/06/2014 05:19:00
Yamba rocks !	

- Tweets appear on yamba.marakana.com



- Timeline from yamba.marakana.com appears on Yamba

Public timeline - Yamba

yamba.marakana.com

Yamba

Login Help Search

This site was created to support Yamba Android app in [Learning Android](#) book. Notices older than 12 hours are automatically removed. Create an account by inviting yourself as "student".

This is Yamba, a [micro-blogging](#) service based on the Free Software [StatusNet](#) tool.

Public timeline

Marakanstudent Student hello sync!
a few seconds ago from jtwitter-yamba

Marakanstudent Student hello sync!
about 4 minutes ago from jtwitter-yamba

Marakanstudent Student hi baby
about 32 minutes ago from api

Marakanstudent Student aergaer
about 44 minutes ago from web

Marakanstudent Student afds
about 46 minutes ago from jtwitter-yamba

Public

Groups

Recent tags

Popular

Popular notices

Groups with most members

Featured users

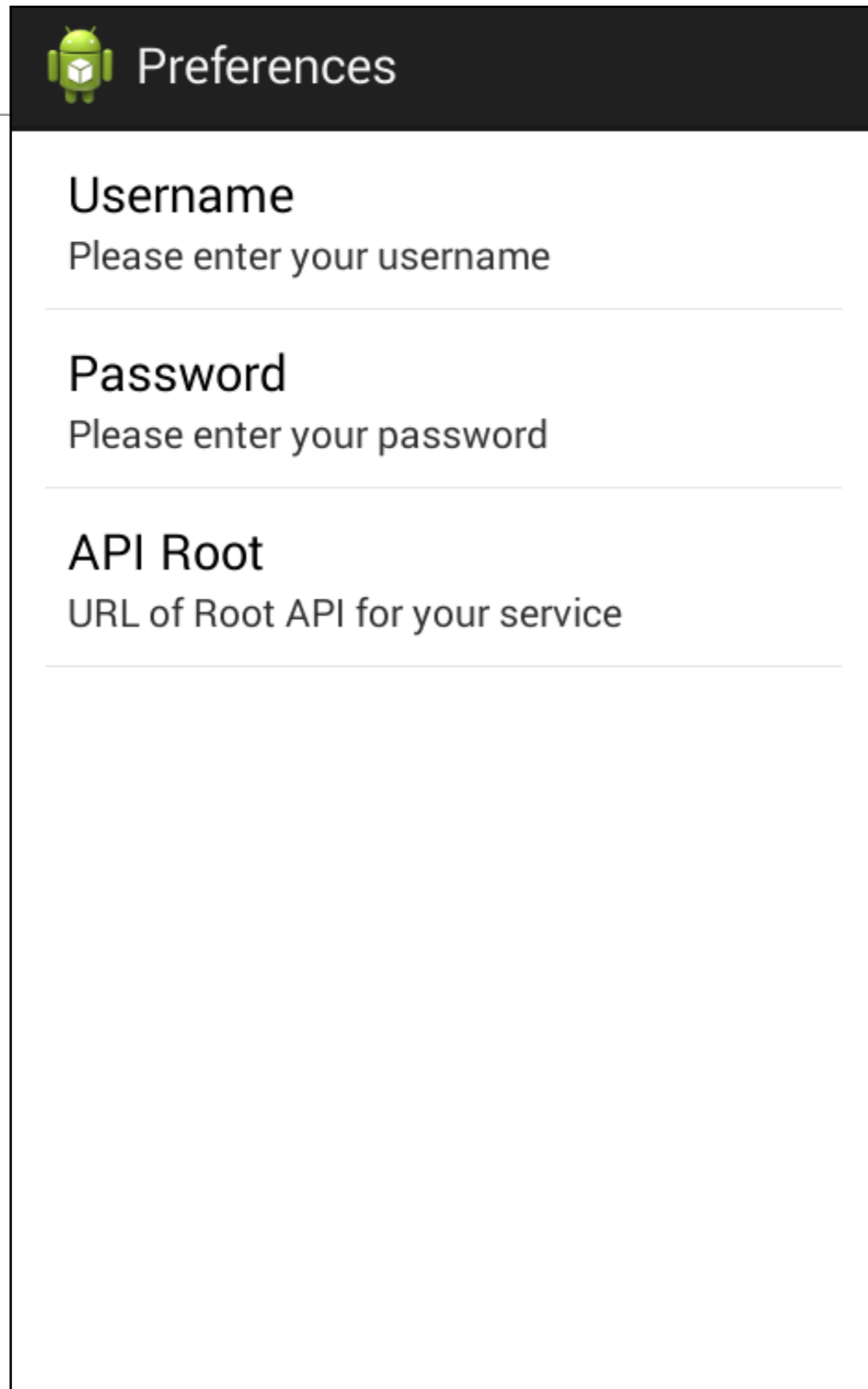
Feeds


RSS 1.0 RSS 2.0 Atom

Timeline

Marakana Student	05/06/2014 06:42:35
hello sync!	
Marakana Student	05/06/2014 06:38:41
hello sync!	
Marakana Student	05/06/2014 06:10:30
hi baby	
Marakana Student	05/06/2014 05:58:57
aergaer	
Marakana Student	05/06/2014 05:03:34
qwefqwe	
Marakana Student	05/06/2014 05:03:40
gggg	
Marakana Student	05/06/2014 05:12:35
ak4	
Marakana Student	05/06/2014 05:16:33
Hello	
Marakana Student	05/06/2014 05:16:58
COUCOU	
Marakana Student	05/06/2014 05:19:00
Yamba rocks !	

Preferences



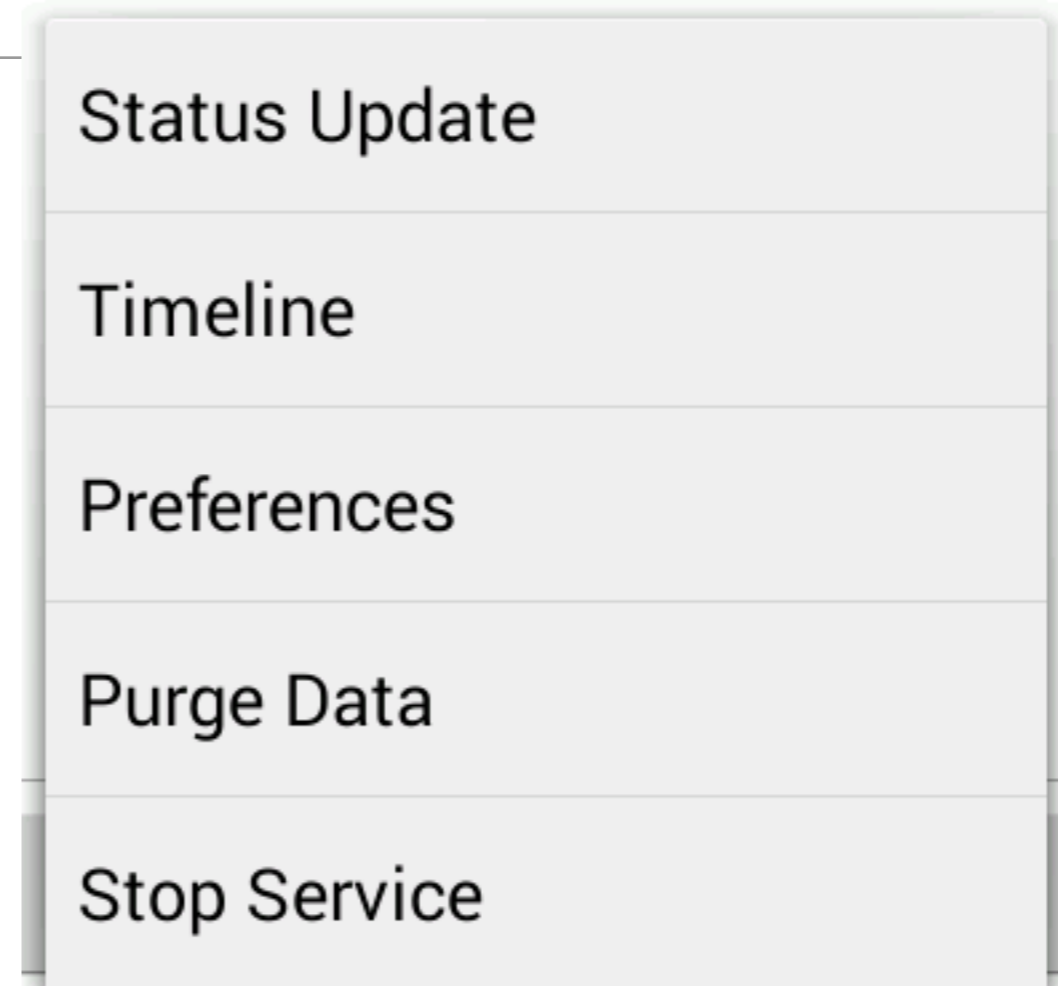
 Preferences

Username
Please enter your username

Password
Please enter your password

API Root
URL of Root API for your service

Menu



Status Update

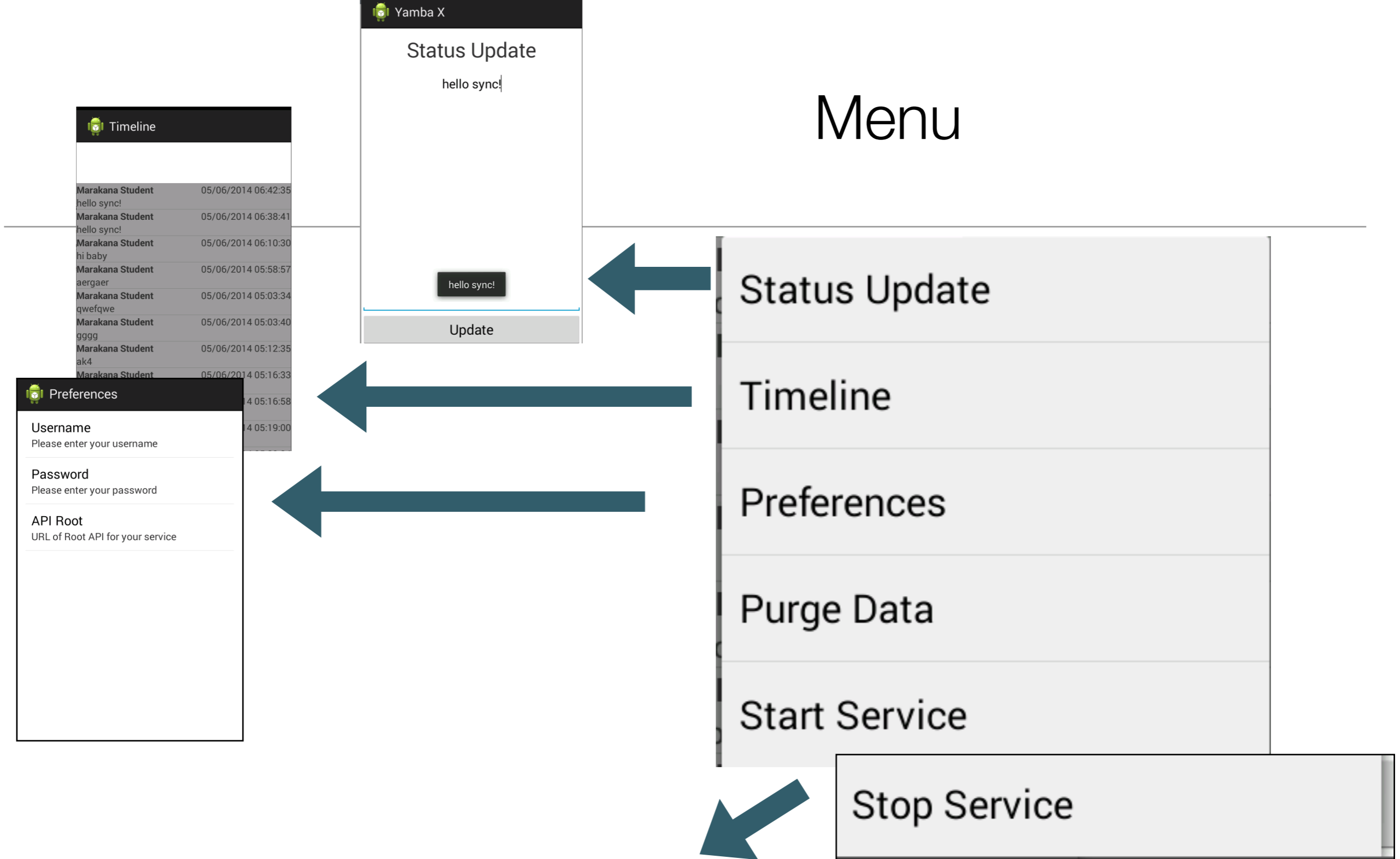
Timeline

Preferences

Purge Data

Stop Service

- Create free account, or
 - use 'student', 'password'

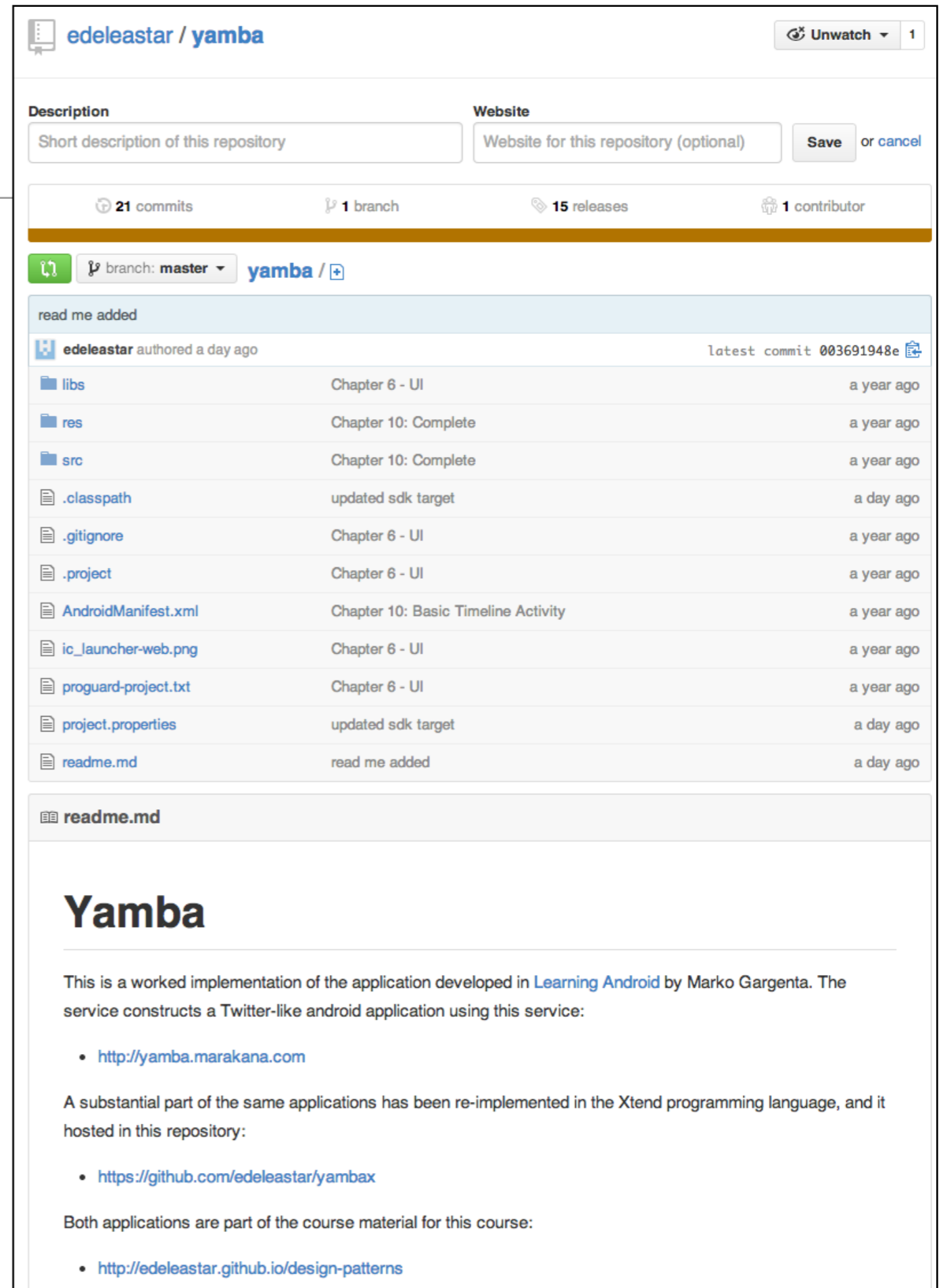


Start / Stop background service listening for updates from yamba.marakana.com

- <https://github.com/edeleestar/yamba>

Sources

- Java Version of the application



edeleestar / yamba

Unwatch 1

Description: Short description of this repository

Website: Website for this repository (optional)

Save or cancel

21 commits 1 branch 15 releases 1 contributor

branch: master yamba / +

read me added

edeleestar authored a day ago latest commit 003691948e

libs	Chapter 6 - UI	a year ago
res	Chapter 10: Complete	a year ago
src	Chapter 10: Complete	a year ago
.classpath	updated sdk target	a day ago
.gitignore	Chapter 6 - UI	a year ago
.project	Chapter 6 - UI	a year ago
AndroidManifest.xml	Chapter 10: Basic Timeline Activity	a year ago
ic_launcher-web.png	Chapter 6 - UI	a year ago
proguard-project.txt	Chapter 6 - UI	a year ago
project.properties	updated sdk target	a day ago
readme.md	read me added	a day ago

readme.md

Yamba

This is a worked implementation of the application developed in [Learning Android](#) by Marko Gargenta. The service constructs a Twitter-like android application using this service:

- <http://yamba.marakana.com>

A substantial part of the same applications has been re-implemented in the Xtend programming language, and it hosted in this repository:














- <https://github.com/edeleestar/yambax>

Both applications are part of the course material for this course:

- <http://edeleestar.github.io/design-patterns>

Java Version

- Complete commit history of application
- From simple UI to complete app in 21 'Commits'
- Includes local Database support

Jan 23, 2013		
 Chapter 8: Pulling Data from Twitter edeleastar authored a year ago	9572d44ed8	Browse code
 Chapter 8: Looping in the Service edeleastar authored a year ago	e96489ba0d	Browse code
 Chapter 8: Updater Service edeleastar authored a year ago	d23f38e33d	Browse code
 Chapter 7: Yamba Application Object edeleastar authored a year ago	541082df04	Browse code
 Chapter 7: Shared Preferences edeleastar authored a year ago	5c88953cc3	Browse code
 Minor code tidy up edeleastar authored a year ago	6f8aba1321	Browse code
 Chapter 7: Preferences Activity edeleastar authored a year ago	33e3b29810	Browse code
 Chapter 6: Adding Color and Graphics edeleastar authored a year ago	e37c49b86e	Browse code
 Chapter 6: Other UI Events edeleastar authored a year ago	8da3d0bce7	Browse code
 Another code tidy up edeleastar authored a year ago	29cdba880a	Browse code
 Chapter 6: Threading edeleastar authored a year ago	0b5b3c16b0	Browse code
 Minor code tidy up edeleastar authored a year ago	431d522601	Browse code
 Chapter 6 - UI edeleastar authored a year ago	4d5d34cf98	Browse code

XTend Version

- Complete rewrite in Xtend
- Simplified structure
- Database removed

Description **Website** or

18 commits 1 branch 0 releases 1 contributor

branch: master yambax / +

Make 'serviceRunning' static, to better keep track of service status in ...

edeleastar authored an hour ago latest commit 0a3dc09d6d

libs	First xtend version	2 days ago
res	Replace custom status listener with Android Broadcast Receiver	2 hours ago
src	Make 'serviceRunning' static, to better keep track of service status in	an hour ago
.classpath	Started Java Version	2 days ago
.gitignore	Started Java Version	2 days ago
.project	First xtend version	2 days ago
AndroidManifest.xml	Stop updater service when network unavailable	2 hours ago
ic_launcher-web.png	Started Java Version	2 days ago
proguard-project.txt	Started Java Version	2 days ago
project.properties	Started Java Version	2 days ago
readme.md	updated read me	a day ago

readme.md

YambaX

This is a worked implementation of the application developed in [Learning Android](#) by Marko Gargenta. The service constructs a Twitter-like android application using this service:

- <http://yamba.marakana.com>

A guided tour of the application is available here:



















- <http://edeleastar.github.io/design-patterns/topic12/index.html>

The application is part of the supporting material for this course:

- <http://edeleastar.github.io/design-patterns>

18 Commits

- From creating skeleton starter application
- ... to background service + broadcast Receivers + + cleaner, general purpose design

May 06, 2014		
 Make 'serviceRunning' static, to better keep track of service status in ...	edeleastar authored an hour ago	0a3dc09d6d + Browse code →
 Stop updater service when network unavailable	edeleastar authored 2 hours ago	ee36cb4611 + Browse code →
 Replace custom status listener with Android Broadcast Receiver	edeleastar authored 2 hours ago	7e3b107c6d + Browse code →
 Boot broadcast receiver starts UpdaterService	edeleastar authored 3 hours ago	18e01fd949 + Browse code →
May 05, 2014		
 updated read me	edeleastar authored a day ago	02eb740b54 + Browse code →
 read me added	edeleastar authored a day ago	b403c48757 + Browse code →
May 04, 2014		
 Revised to incorporate BaseActivity + 2 derived Activities	edeleastar authored 2 days ago	dc1a6072d6 + Browse code →
 Resources for Timeline Activity + new Menu options	edeleastar authored 2 days ago	474c01dd71 + Browse code →
 Simple Database introduced	edeleastar authored 2 days ago	a810a7fae3 + Browse code →
 Factor out BackgroundService util class. Simplify UpdaterService	edeleastar authored 2 days ago	b636669097 + Browse code →
 Log timeline periodically to console	edeleastar authored 2 days ago	e509c23f52 + Browse code →
 Refactor Thread as a lambda	edeleastar authored 2 days ago	dfa6cbbc9e + Browse code →
 Initial UpdaterService, including menu for start/stop	edeleastar authored 2 days ago	a4bf40e023 + Browse code →
 Introduce ApplicationObject. Move Preferences and API object to this ...	edeleastar authored 2 days ago	e65748e112 + Browse code →
 preferences menu + activity	edeleastar authored 2 days ago	6cc742a437 + Browse code →
 TwitterAPI class to encapsulate background access ...	edeleastar authored 2 days ago	b5d3d142bd + Browse code →
 First xtend version	edeleastar authored 2 days ago	7bc6b7b67d + Browse code →
 Started Java Version	edeleastar authored 2 days ago	2598f03c03 + Browse code →

Xtend version Encapsulated as 3 Labs

- A - Enable Simple Tweet + timeline update on background thread
- B - Move background thread to an Android Service + restructure application to use Lambdas + Command pattern
- C - replace custom event mechanism with generic Broadcast Receivers

Lab

START

Objectives

- Develop an application in Android using the Xtend language
- Base the application on a twitter-like service hosted here:
 - <http://yamba.marakana.com>
- The structure of the application is derived from [Learning Android](#)

Lab

START

Objectives

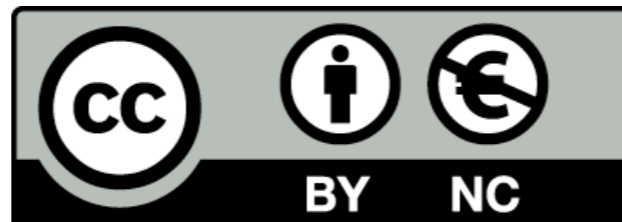
- Introduce Services into the Xtend YambaX application
- Implement a background service to periodically update the twitter timeline

Lab

START

Objectives

- Incorporate Broadcast Event Senders/Receivers into the application
- Use BroadcastReceiver to receive boot event to start application service on launch
- Use BroadcastReceiver to stop/start service when network is starting/stopping
- Use Broadcast Events for status updates from background service to TimelineActivity



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