F-Droid

- F-Droid is an App Store
- F-Droid is an installable catalogue of FOSS applications for the Android platform
- Modeled after Debian
- F-Droid is an App Store Toolkit
Mastercom Workbook
View school marks, documents and topics

New in version 3.2
Bugs fixed:
- Make subject activity layout scrollable, to fix problems arising when the keyboard is opened or on small/landscape screens.
- In statistics activity fix "NaN" shown as average when no subject has a valid average in the current term.

This is an unofficial client for the Mastercom Workbook, a tool for school students.

Features:
- Login support for many schools.
- Subjects: calculates averages and needed marks, creates graphs and shows topics.
- Marks: shows all marks in a list or in a graph, and calculates the overall average.
- Documents: find and download documents.

- This app has features you may not like.
How does F-Droid work?

Adding a New App

Request for Packaging (rfp): https://gitlab.com/fdroid/rfp

Checking for:

- Inclusion Criteria
  - nonfree Dependencies
  - License compatibility
  - Is the app compatible with the values of F-Droid
- Antifeatures

Working with upstream to include screenshots, changelogs, etc.
Adding an app (cont.)

Writing a build recipe/metadata file.

- most apps are easy to build
- some are incredibly hard :-(
- often there are small patches necessary to make it build within the F-Droid infrastructure, or remove nonfree dependencies
Metadata

```yaml
$ cat metadata/org.schabi.newpipe.yml
AntiFeatures:
  - NonFreeNet
Categories:
  - Multimedia
  - Internet
License: GPL-3.0-or-later
AuthorName: Team NewPipe
AuthorEmail: tnp@schabi.org
WebSite: https://newpipe.schabi.org
SourceCode: https://github.com/TeamNewPipe/NewPipe
IssueTracker: https://github.com/TeamNewPipe/NewPipe/issues
Translation: https://hosted.weblate.org/projects/newpipe/
Changelog: https://github.com/TeamNewPipe/NewPipe/releases
LiberapayID: '34969'
Bitcoin: 16A9J59ahMRqkLSZjhYj33n9j3fMztFxnh

AutoName: NewPipe
Description: |-
  Lightweight YouTube frontend that's supposed to be used without
the proprietary YouTube-API or any of Google's (proprietary)
play-services. NewPipe only parses the YouTube website in order to
gain the information it needs.
```
Metadata (cont.)

[...]
RepoType: git
Repo: https://github.com/TeamNewPipe/NewPipe

Builds:
- versionName: 0.18.1  
  versionCode: 810  
  commit: v0.18.1  
  subdir: app  
  submodules: true  
  gradle:  
    - yes

- versionName: 0.18.2  
  versionCode: 820  
  commit: v0.18.2  
  subdir: app  
  submodules: true  
  gradle:  
    - yes

AutoUpdateMode: Version v%v
UpdateCheckMode: Tags .*[0-9]$
CurrentVersion: 0.18.2
CurrentVersionCode: 820
How does F-Droid work?

Building

Builds are performed by fdroidserver tools A build cycle consists of:

- fdroid checkupdates - checks for new versions of an app and updates metadata
- fdroid build - builds an apk
- fdroid publish - signs an apk
- fdroid update - builds and signs the package index
- fdroid deploy - pushes everything out to the webservers
What's New

- Nearby Feature expanded
- Metadata converted to YAML
- Mirror Support
- Summaries of All Apps are now Localized
- 2 Apps were banned for their "content"
- Antifeature Icons
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Anti-Features
This app has features you may not like. Learn more!

- This app promotes non-free network services
- The upstream source code is not entirely Free
- This app contains advertising
- This app tracks and reports your activity
- This app contains non-free assets
- This app contains a known security vulnerability
- The source code is no longer available, no updates possible
- This app promotes non-free add-ons
- This app depends on other non-free apps
Going Forward

- Expanding Reproducible Builds Support
  - Providing a Rebuilder Tool
  - Aggregating Reproducibility Status
- Tracking the Trackers Project
  - Using Machine Learning Technology to help Packagers
  - Improved fdroid scanner for detecting Tracking in Apps[1]
- OpenCollective, Funding, etc.
  - Looking into gaining more sustainable funding for F-Droid

Statistics

Since Jan 2019

- Repository grew by 316 apps
- Published 192 Index updates (avg. ~every 2 days)
- Published 5662 apks (~14 apks per day)
- Currently 2086 apps in main
## F-Droid-Data Commits

<table>
<thead>
<tr>
<th>Number of Commits</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>5542</td>
<td>F-Droid Builder</td>
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<tr>
<td>939</td>
<td>Licaon_Kter</td>
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<td>836</td>
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<td>449</td>
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<td>Marcus Hoffmann</td>
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<tr>
<td>351</td>
<td>Ciaran Gultnieks</td>
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<tr>
<td>237</td>
<td>Hans-Christoph Steiner</td>
</tr>
<tr>
<td>207</td>
<td>Michael Pöhn</td>
</tr>
</tbody>
</table>
Stats (continued)

Across the whole project:

- 1258 open issues
- 198 open merge requests
- 199 apps we know need updating...
- ...
Help Wanted!

- Become a Maintainer: Adopt an App!
- Add screenshots, localized descriptions, what’s new texts to upstream repos
- Help with translations (In F-Droid or Upstream)
- Help with client development (especially UX)
- Help with website dev (ruby/jekyll)
- Help with Repomaker (Python Django App)
Talk to us

IRC: #fdroid / #fdroid-dev (freenode)
Matrix: #fdroid:f-droid.org / #fdroid-dev:f-droid.org
Mastodon: @fdroidorg@mastoton.technology
https://gitlab.com/fdroid
https://forum.f-droid.org