# F-Droid The place for your FOSS Apps

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#### **About me**

- Enjoying FOSS since 2013
- Amateur game developer since 2018
- libGDX 2018 2020
  - Color Shooter, WhatColor, Sn4k3
- Godot Engine 2020 Today
  - Pocket Broomball, Ball2Box, FutsalManager?

#### **F-Droid**

- App catalogue for Android
- Open Source Apps only
- Community-run
- Free to use
- Free to publish
  - Play Store 25\$ once
  - App Store 99\$/year



## **Notable (Anti) Features**

- Everything is build from source
  - All dependencies and libraries...
- Strict Inclusion Policy [1]
- Anti Features [2]



This app promotes or depends entirely on a non-free network service



This app contains non-free assets



This app contains a known security vulnerability

[1] https://f-droid.org/en/docs/Inclusion\_Policy/ [2] https://f-droid.org/en/docs/Anti-Features/

## **Visibility**

- Play Store ~2.500.000 Apps [1]
- Apple App Store ~4.800.000 Apps [2]
- F-Droid **5083** Apps in 2023
- fossdroid.com
- awesome lists
- ...other open source communities

<sup>[1]</sup> https://www.statista.com/statistics/266210/number-of-available-applications-in-the-google-play-store

<sup>[2]</sup> https://www.statista.com/statistics/268251/number-of-apps-in-the-itunes-app-store-since-2008

#### **Before F-Droid**

- **5** published games
- 0 issues
- 0 pull requests
- 0 Github stars
- 0 emails
- **0** Mastodon posts about my games
- 2€ donations

#### **After F-Droid**

- 2 published games
- 33 issues
- 4 pull requests
- **35** github stars
- 15 emails with feedbacks, issues, bugs...
- 3 Mastodon posts about my games
- **12€** donations

## F-Droid publishing in a nutshell

- 1. Fork fdroiddata repo on Gitlab [1]
- 2. Create your Build Metadata file
- 3. Add some metadata to your App repo
- 4. Create Merge Request
- 5. Hope that it builds ;-)
- 6. If not, very kind people will help you!
- 7. Create new FOSS App; Goto step 1

#### **Build Metadata – General Info**

```
metadata > ! com.simondalvai.pocketbroomball.yml
      AntiFeatures:
        - NonFreeAssets
      Categories:
        - Games
      License: AGPL-3.0-or-later
     AuthorName: Simon Dalvai
      AuthorEmail: info@simondalvai.org
      AuthorWebSite: https://simondalvai.org
      WebSite: https://simondalvai.org/games/pocket-broomball/
      SourceCode: https://github.com/dulvui/pocket-broomball/
 10
      IssueTracker: https://github.com/dulvui/pocket-broomball/issues
 11
      Donate: https://simondalvai.org/donate
 12
 13
      Name: Pocket Broomball
 14
      AutoName: Pocket Broomball
 15
 16
 17
      RepoType: git
      Repo: https://github.com/dulvui/pocket-broomball.git
```

https://gitlab.com/fdroid/fdroiddata/-/blob/master/metadata/com.simondalvai.pocketbroomball.yml

#### **Build Metadata – Build recipe**

```
20 ∨ Builds:
       - versionName: 5.0.2
         versionCode: 85
22
23
         commit: da4a5ac7c67f3f72e26213b225bf468ff04abc23
24 V
         sudo:

    apt-det update

26
           - apt-get install -y clang gettext pkg-config scons
         output: game/PocketBroomball.apk
         srclibs:
28 ~
           - Godot@6fed1ffa313c6760fa88b368ae580378daaef0f0
29
         prebuild:
30 \
           - mv fdroid/export presets.cfg game/export presets.cfg
31
           - sed -i 's/FDROID = false/FDROID = true/g' game/src/global/Global.gd
32
         build:
33 \
           - export HOME=$PWD
34
           - cp -R $$Godot$$ godot
           - keytool -genkey -v -keystore debug.keystore -storepass android -alias
36 ~
            -keypass android -dname "CN=Android Debug, O=Android, C=US"
37
           - mkdir -p ./.config/godot/
38
           - export SDK PATH="export/android/android sdk path = \"$$SDK$$\""
```

https://gitlab.com/fdroid/fdroiddata/-/blob/master/metadata/com.simondalvai.pocketbroomball.yml

## **Build Metadata – Update Check mode**

- Fully automated updates possible
  - Static, Tags, HTTP... [1]

```
AutoUpdateMode: Version

UpdateCheckMode: Tags

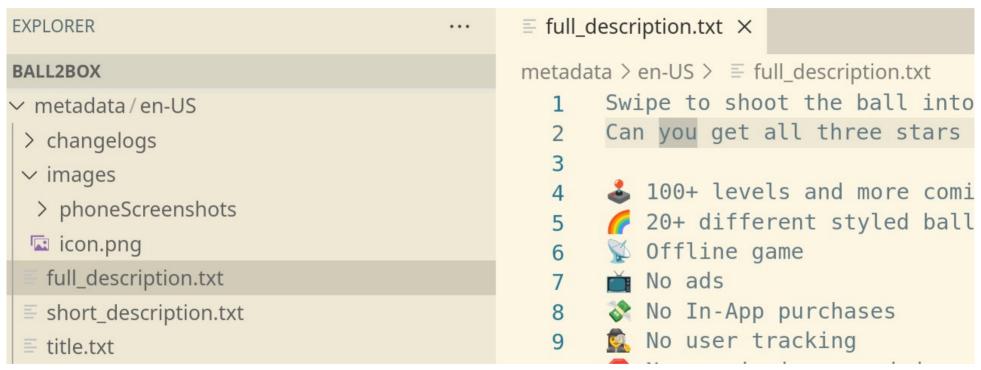
UpdateCheckData: fdroid/export_presets.cfg|version/code=(\d+)|.|version/name="([\d.]+)"

CurrentVersion: 5.0.6

CurrentVersionCode: 89
```

https://gitlab.com/fdroid/fdroiddata/-/blob/master/metadata/com.simondalvai.pocketbroomball.yml

### Metadata in your repository



https://github.com/dulvui/ball2box/tree/main/metadata/en-US

## THANK YOU



simondalvai.org | s9i.org