

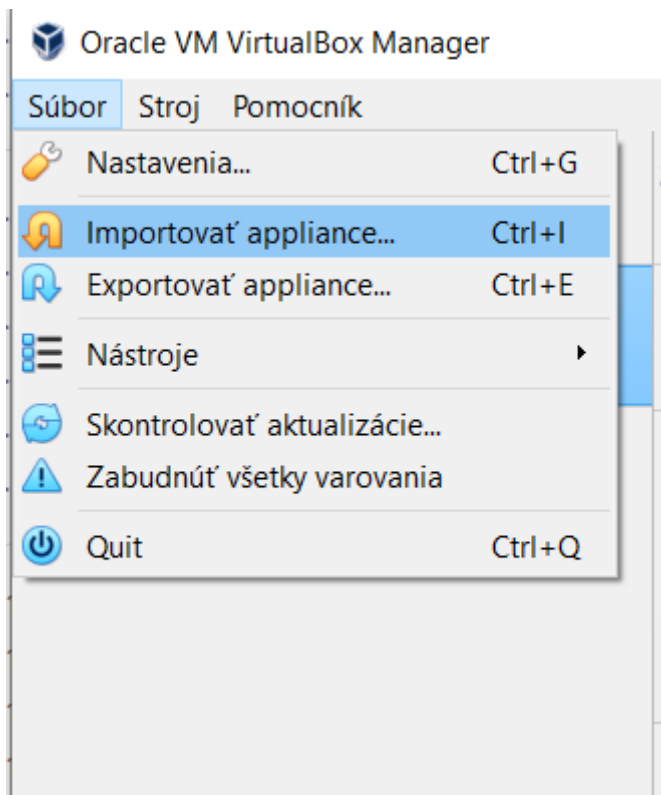
Kompilácia

Stiahnuť a nainštalovať virtualbox.

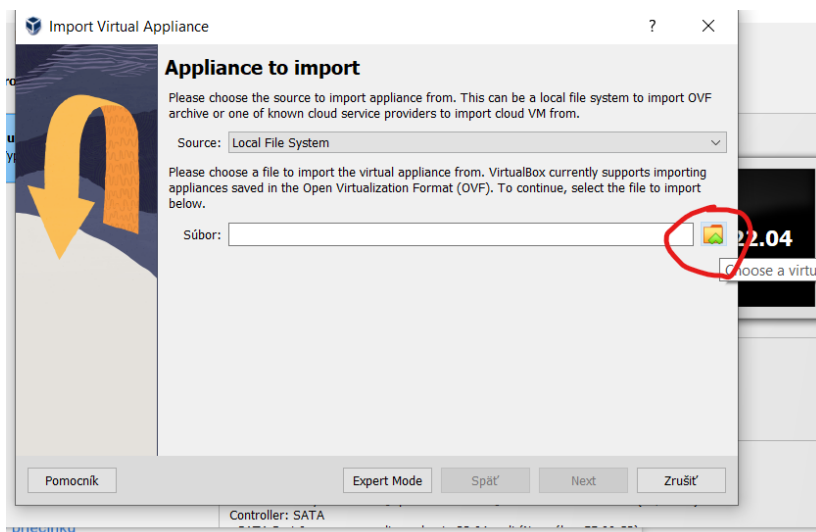
Stiahnuť image (<https://www.sendbig.com/en/view-files/?Id=caf1cb47-9c95-f667-6e94-7814daa2cc36>) – validne cca do 11. januára.2023) <https://uloz.to/file/J8amuTlJx538/ubuntu-tis-ova#!ZGuxMwR2ZGSyA2AvZJVkZGx4ZGx0MQtmAKu4pJ14Fz52GQtkAN==> (navždy ale pomaly)

Otvor virtual box

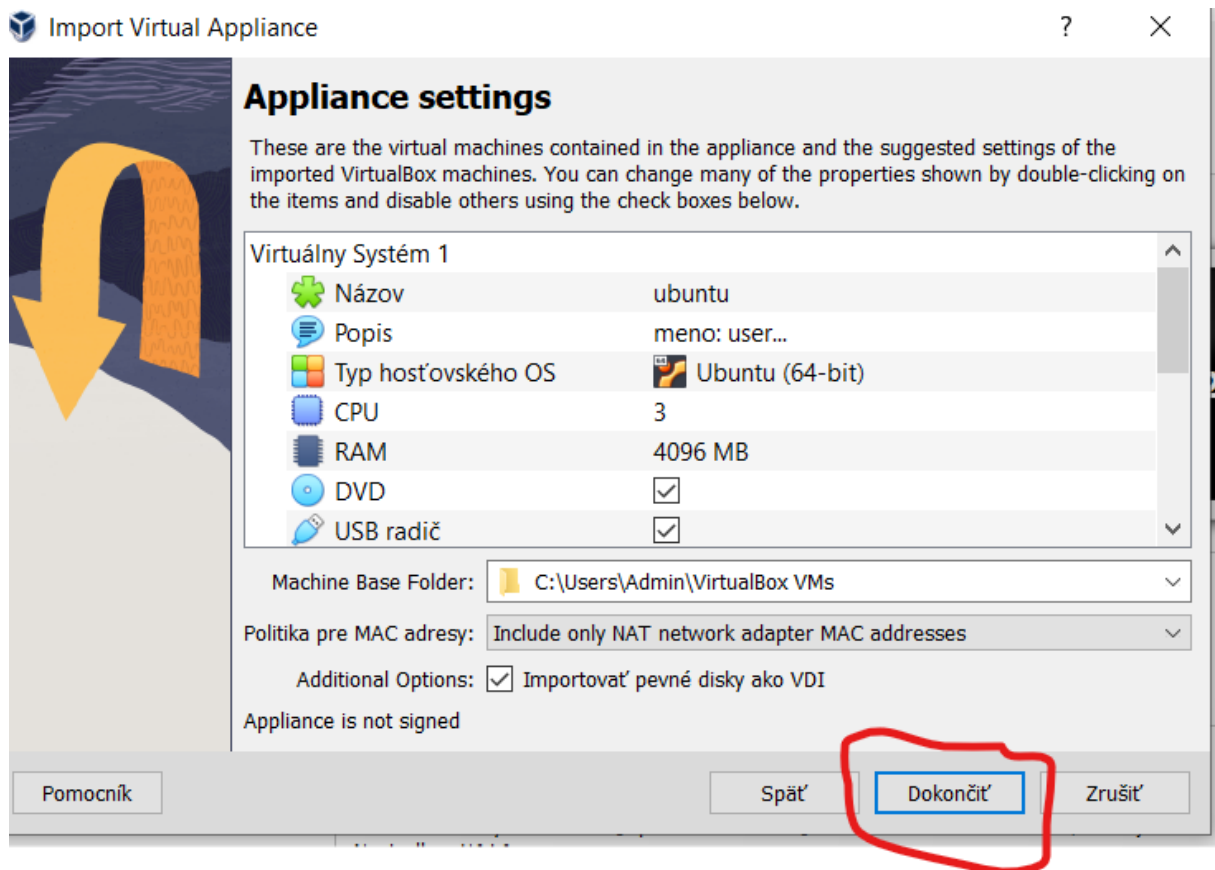
Klikni na importovať



Vyber obraz



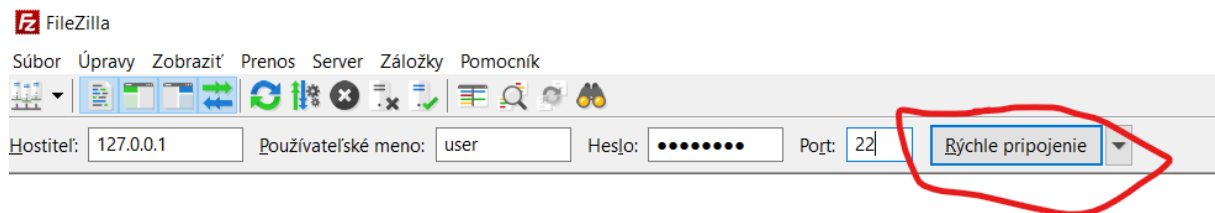
Ničoho sa nechytaj a len odklikaj formou „next next finish“



Spusti importovanú virtuálku (tu obrázok snád' byť nemusí)

Počkaj dokým sa naštartuje (prihlasuje sa automaticky)

Stiahni si Filezilla client alebo akýkoľvek iný ftp prehliadač:



Prihlás sa:

Meno: user

Heslo: gefco123

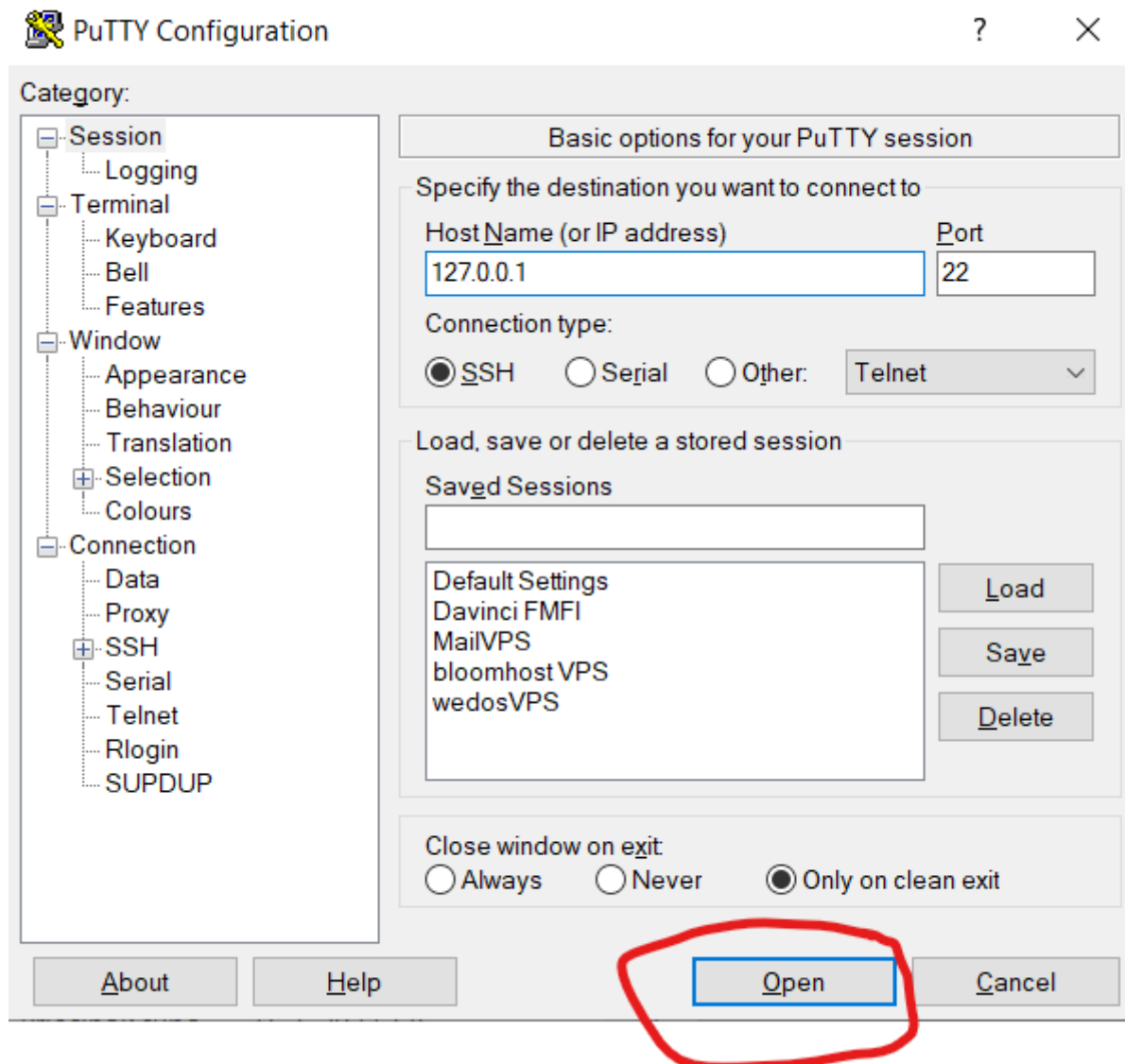
Mal by si sa nachádzať na /home/user

Sem si nacápeš celý projekt. Hlavný .py súbor (ten, ktorým spúšťaš celú apku) sa musí volať main.py.

Ak používaš nejakú knižnicu (ktorá nie je build in v pythone) (import cudzi_predmet) tak ju musíš spomenúť v requirements v súbore buildozer.spec

```
# (list) Application requirements
# comma separated e.g. requirements = sqlite3,kivy
requirements = python3,Kivy==2.1.0,android,numpy,opencv,pyzbar,pillow,bottom,requests,urllib3,chardet,python-dateutil,idna
```

Teraz si treba otvoriť putty (alebo akýkoľvek ssh client) a prihlásiť sa



Prihlás sa:

Meno: user

Heslo: gefco123

Pre započatie kompilácie napíš buildozer android debug

```
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-53-generic x86_64)

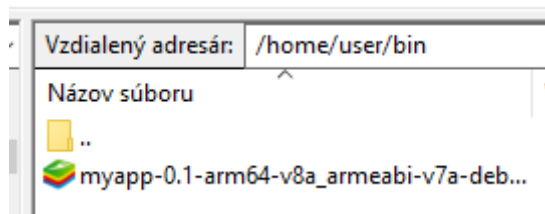
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage

44 updates can be applied immediately.
5 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

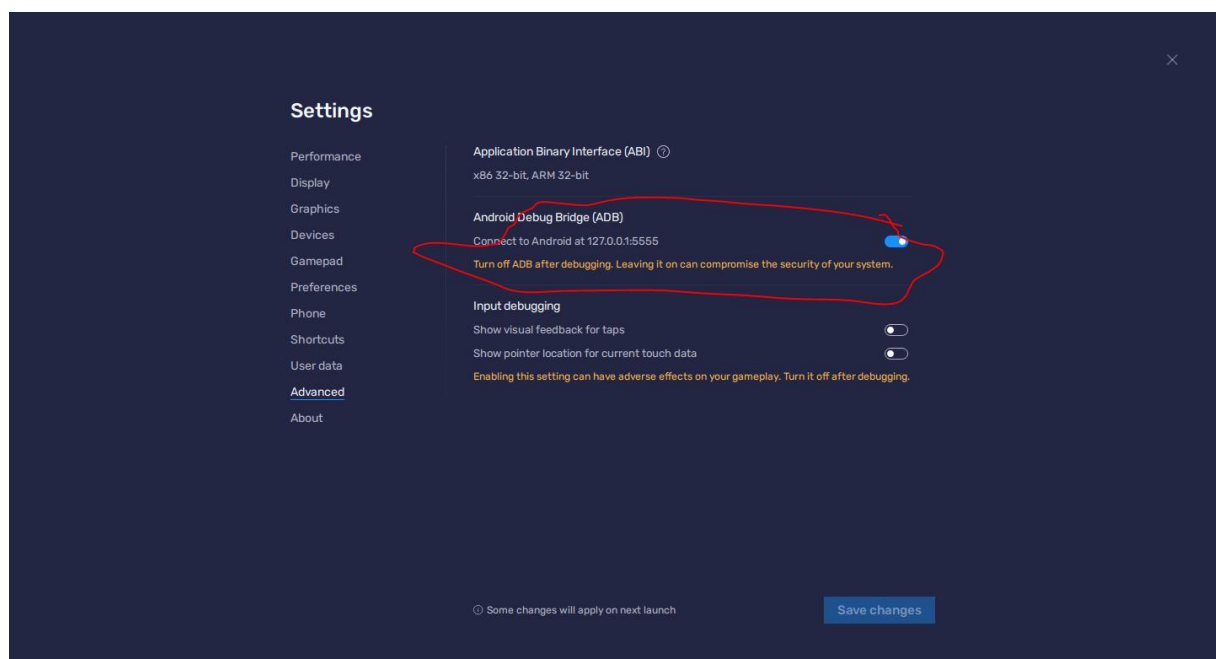
Last login: Mon Dec 12 13:29:04 2022 from 10.0.2.2
user@user-VirtualBox:~$ buildozer android debug
```

Keď kompilácia skončí (úspešne) .apk súbor sa bude nachádzať v /home/user/bin

```
user@user-VirtualBox: ~  
nts:UG]:  
[INFO]:      myapp: min API 21, includes recipes (freetype, hostpython3, jpeg  
, libffi, libiconv, openssl, png, sdl2_image, sdl2_mixer, sdl2_ttf, sqlite3, lib  
zbar, python3, sdl2, setuptools, cython, pillow, pyzbar, six, numpy, pyjnius, an  
droid, kivy, opencv, idna, chardet, certifi, bottom, requests, urllib3, python-d  
ateutil), built for archs (armeabi-v7a, arm64-v8a)  
[INFO]:      myapp has compatible recipes, using this one  
[INFO]:      # Copying android package to current directory  
[INFO]:      # Android package filename not found in build output. Guessing...  
[INFO]:      # Found android package file: /home/user/.buildozer/android/platform/  
build-arm64-v8a_armeabi-v7a/dists/myapp/build/outputs/apk/debug/myapp-debug.apk  
[INFO]:      # Add version number to android package  
[INFO]:      # Android package renamed to myapp-debug-0.1.apk  
[DEBUG]: -> running cp /home/user/.buildozer/android/platform/build-arm64-v8a_  
armeabi-v7a/dists/myapp/build/outputs/apk/debug/myapp-debug.apk myapp-debug-0.1.  
apk  
WARNING: Received a --sdk argument, but this argument is deprecated and does not  
ning.  
No setup.py/pyproject.toml used, copying full private data into .apk.  
Applying Java source code patches...  
Applying patch: src/patches/SDLActivity.java.patch  
# Android packaging done!  
# APK myapp-0.1-arm64-v8a_armeabi-v7a-debug.apk available in the bin directory  
user@user-VirtualBox:~$
```



Teraz je fajn aplikáciu otestovať. Pred tým, ako ju vložíš do telefonu, si odporúčam radšej ju skúsiť v emulátore. Osobne používam Bluestack. Takže stiahnuť a nainštalovať blue stack a do neho nahráť aplikáciu. Nezabudni zapnúť debug



Ak aplikácia bude padať, adb bude tvoj verný kamarát. Stiahni adb. Pre pripojenie použi adb connect localhost:5555 (niekedy tento príkaz nie je potreba, ba je až nežiadúci, treba si len skúsiť)

```
C:\> Príkazový riadok
Microsoft Windows [Version 10.0.19045.2251]
(c) Microsoft Corporation. Všetky práva vyhradené.

C:\Users\Admin>d:

D:\>cd adb

D:\adb>adb connect localhost:5555
* daemon not running; starting now at tcp:5037
* daemon started successfully
connected to localhost:5555

D:\adb>
D:\adb>
```

Teraz spusti adb logcat

Spusti padajúcu aplikáciu

Doskroluj sa k python výstupu

```
12-12 14:03:44.941 4497 4519 I python : Android kivy bootstrap done. __name__ is __main__
12-12 14:03:44.941 4497 4519 I python : AND: Run string
12-12 14:03:44.941 4497 4519 I python : Run user program, change dir and execute entrypoint
12-12 14:03:44.967 1800 1821 I WindowManager: Screen frozen for +461ms due to Window(9db960a u0 Starting org.test.myapplication)
12-12 14:03:45.285 1800 1821 D WindowManager: sendOrientationToHostAsync: calling BstHostCallManagerService.onOrientationChange method, orientation: 1
12-12 14:03:45.285 1800 1821 D WindowManager: sendOrientationToHostAsync: BstHostCallManagerService.onOrientationChange method returned: 0
12-12 14:03:45.285 1800 1830 I HCALL : hcallOnOrientationChangedRsp(1)
12-12 14:03:45.285 1800 1830 I VMSG : void *VmsgGuestClient::getHostBoundBuffer(uint32_t):94 called for hcal
12-12 14:03:45.285 1800 1830 I VMSG : void *VmsgGuestClient::processRequest(void *, uint32_t):104 called for hcal
12-12 14:03:46.982 1800 1821 I art : Starting a blocking GC Explicit
12-12 14:03:47.000 1800 1821 I art : Explicit concurrent mark sweep GC freed 10647(448K) AllocSpace objects, 0(0B) LOS objects, 33% free, 8MB/12MB, paused 226us total 18.531ms
12-12 14:03:47.288 4497 4519 I python : [INFO ] [Logger ] Record log in /data/user/0/org.test.myapplication/files/app/.kivy/logs/kivy_22-12-12_0.txt
12-12 14:03:47.289 4497 4519 I python : [INFO ] [Kivy ] v2.1.0
12-12 14:03:47.290 4497 4519 I python : [INFO ] [Kivy ] Installed at "/data/user/0/org.test.myapplication/files/app/.python_bundle/site-packages/kivy/___init___pyc"
12-12 14:03:47.292 4497 4519 I python : [INFO ] [Python ] v3.9.9 (main, Dec 6 2022, 21:35:50)
12-12 14:03:47.292 4497 4519 I python : [Clang 12.0.8 (https://android.googlesource.com/toolchain/llvm-project c935d99d)
12-12 14:03:47.293 4497 4519 I python : [INFO ] [Python ] Interpreter at ""
12-12 14:03:47.294 4497 4519 I python : [INFO ] [Logger ] Purge log fired. Processing...
12-12 14:03:47.296 4497 4519 I python : [INFO ] [Logger ] Purge finished!
12-12 14:03:47.468 4497 4519 I python : [INFO ] [Factory ] 189 symbols loaded
12-12 14:03:47.980 4497 4519 I python : [INFO ] [Image ] Providers: img_tex, img_dds, img_sdl2, img_pil (img_ffpyplayer ignored)
12-12 14:03:48.338 4497 4519 I python : [INFO ] [Camera ] Provider: android
12-12 14:03:48.357 4497 4519 I python : [INFO ] [Text ] Provider: sdl2
12-12 14:03:48.418 4497 4519 I python : [INFO ] [Window ] Provider: sdl2
12-12 14:03:48.446 4497 4519 E libEGL : validate_display:99 error 3008 (EGL_BAD_DISPLAY)
12-12 14:03:48.446 4497 4519 V SDL : setOrientation() orientation=-1 width=800 height=600 resizable=true hint=
12-12 14:03:48.449 4497 4519 I PGA : hstInit: opened /dev/bstpgalpc: fd = 55
12-12 14:03:48.449 4497 4519 I PGA : Attempting to create new SOCKET connection pid = 4497, tid = 4519
12-12 14:03:48.450 4497 4519 I PGA : hstInitClientPgalpc: Attempting to get GROUND2 cid
12-12 14:03:48.454 4497 4519 I PGA : hstInitClientPgalpc: data mapped to 0xa5200000 with size 4194304
12-12 14:03:48.454 4497 4519 I PGA : New SOCKET connection: org.test.myapplication (pid 4497, tid 4519)
12-12 14:03:48.458 4497 4519 I python : [INFO ] [GL ] Using the "OpenGL ES 2" graphics system
12-12 14:03:48.501 4497 4519 I python : [INFO ] [GL ] Backend used cxd12
12-12 14:03:48.505 4497 4519 I PGA : tid 4519: glGetString GL_VENDOR = Qualcomm
12-12 14:03:48.508 4497 4519 I python : [INFO ] [GL ] OpenGL version <0'OpenGL ES 3.0'>
12-12 14:03:48.509 4497 4519 I python : [INFO ] [GL ] OpenGL vendor <0'Qualcomm'>
12-12 14:03:48.510 4497 4519 I python : [INFO ] [GL ] OpenGL renderer <0'Adreno (TM) 540'>
12-12 14:03:48.513 4497 4519 I python : [INFO ] [GL ] OpenGL parsed version: 3, 0
12-12 14:03:48.515 4497 4519 I python : [INFO ] [GL ] Texture max size <0'32768'>
12-12 14:03:48.516 4497 4519 I python : [INFO ] [GL ] Texture max units <0'32'>
12-12 14:03:48.561 4497 4519 I python : [INFO ] [Window ] auto add sdl2 input provider
12-12 14:03:48.566 4497 4519 I python : [INFO ] [Window ] virtual keyboard not allowed, single mode, not docked
12-12 14:03:49.213 4497 4519 I python : [INFO ] [GL ] NPOT texture support is available
12-12 14:03:54.502 4088 4140 W CCTBackstopTask: Backstop checks have failed.
```

V mojom prípade je všetko ok, ale ak padá bude tu niekde error

Odporúčam po každom kompilovaní reštartovať virtualbox. Ak buildozer padá, google je Váš verný kamarát.