Test Monkey es una herramienta que nos permite realizar test de estrés en nuestra aplicación de Android. Estos test consisten en una serie de eventos aleatorios que se ejecutan en la aplicación, estos eventos van desde simples clicks en la pantalla, hasta modificar el volumen.

Esta herramienta se ejecuta con el siguiente comando estando en la carpeta C:\Users\Usuario\AppData\Local\Android\Sdk\platform-tools:

adb -e(simulador)/-d(dispositivo conectado) shell monkey -p [package de la app] -v(para obtener más información de cómo ha ido la ejecución) [Número de eventos aleatorios].

A continuación, voy a mostrar un ejemplo de una salida con 1000 eventos, y ejecutado en un dispositivo:

Comando: adb -d shell monkey -p com.example.avc -v 1000 > test.txt

Salida:

bash arg: -p

bash arg: com.example.avc

bash arg: -v

bash arg: 1000

:Monkey: seed=1555776673439 count=1000

:AllowPackage: com.example.avc

:IncludeCategory: android.intent.category.LAUNCHER

:IncludeCategory: android.intent.category.MONKEY

// Event percentages:

// 0: 15.0%

// 1: 10.0%

// 2: 2.0%

// 3: 15.0%

// 4: -0.0%

// 5: -0.0%

// 6: 25.0%

// 7: 15.0%

// 8: 2.0%

// 9: 2.0%

// 10: 1.0%

// 11: 13.0%

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Touch (ACTION\_DOWN): 0:(101.0,993.0)

:Sending Touch (ACTION\_UP): 0:(100.819496,981.914)

:Sending Touch (ACTION\_DOWN): 0:(277.0,255.0)

:Sending Touch (ACTION\_UP): 0:(269.9296,251.26567)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,2.0)

:Sending Touch (ACTION\_DOWN): 0:(254.0,730.0)

:Sending Touch (ACTION\_UP): 0:(251.34764,716.17865)

:Sending Trackball (ACTION\_MOVE): 0:(1.0,-1.0)

:Sending Trackball (ACTION\_MOVE): 0:(-4.0,-4.0)

:Sending Touch (ACTION\_DOWN): 0:(228.0,679.0)

:Sending Touch (ACTION\_UP): 0:(226.56265,680.2861)

:Sending Touch (ACTION\_DOWN): 0:(485.0,212.0)

:Sending Touch (ACTION\_UP): 0:(488.08356,199.22647)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Touch (ACTION\_DOWN): 0:(618.0,432.0)

:Sending Touch (ACTION\_UP): 0:(618.20844,457.04697)

:Sending Touch (ACTION\_DOWN): 0:(415.0,1177.0)

:Sending Touch (ACTION\_UP): 0:(414.12164,1164.3978)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

// Allowing start of Intent { cmp=com.example.avc/.OpcionesActivity } in package com.example.avc

:Sending Touch (ACTION\_DOWN): 0:(305.0,695.0)

:Sending Touch (ACTION\_UP): 0:(304.5832,689.3856)

:Sending Touch (ACTION\_DOWN): 0:(586.0,1171.0)

:Sending Touch (ACTION\_UP): 0:(562.62573,1180.7097)

:Sending Touch (ACTION\_DOWN): 0:(74.0,322.0)

:Sending Touch (ACTION\_UP): 0:(64.792,323.7414)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,1.0)

:Sending Trackball (ACTION\_MOVE): 0:(-3.0,-1.0)

//[calendar\_time:2019-04-19 19:35:53.327 system\_uptime:1494750130]

// Sending event #100

// activityResuming(com.example.avc)

:Sending Touch (ACTION\_DOWN): 0:(368.0,240.0)

:Sending Touch (ACTION\_UP): 0:(357.86835,259.26688)

:Sending Trackball (ACTION\_MOVE): 0:(-4.0,-3.0)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,4.0)

:Sending Touch (ACTION\_DOWN): 0:(372.0,772.0)

:Sending Touch (ACTION\_UP): 0:(371.9618,769.83844)

:Sending Trackball (ACTION\_MOVE): 0:(-4.0,-5.0)

:Sending Touch (ACTION\_DOWN): 0:(482.0,32.0)

:Sending Touch (ACTION\_UP): 0:(482.54807,32.63513)

// Allowing start of Intent { cmp=com.example.avc/.InterpretarActivity } in package com.example.avc

:Sending Touch (ACTION\_DOWN): 0:(349.0,179.0)

:Sending Touch (ACTION\_UP): 0:(337.89368,142.89995)

:Sending Touch (ACTION\_DOWN): 0:(342.0,970.0)

:Sending Touch (ACTION\_UP): 0:(328.47922,949.2443)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Touch (ACTION\_DOWN): 0:(261.0,653.0)

:Sending Touch (ACTION\_UP): 0:(280.60312,664.744)

:Sending Touch (ACTION\_DOWN): 0:(218.0,14.0)

:Sending Touch (ACTION\_UP): 0:(216.74063,7.8056507)

:Sending Touch (ACTION\_DOWN): 0:(65.0,1007.0)

:Sending Touch (ACTION\_UP): 0:(67.627266,1010.9373)

:Sending Touch (ACTION\_DOWN): 0:(110.0,740.0)

:Sending Touch (ACTION\_UP): 0:(111.32509,739.6446)

:Sending Trackball (ACTION\_MOVE): 0:(-2.0,-1.0)

:Sending Touch (ACTION\_DOWN): 0:(240.0,517.0)

:Sending Touch (ACTION\_UP): 0:(216.10963,476.34125)

//[calendar\_time:2019-04-19 19:35:54.191 system\_uptime:1494750993]

// Sending event #200

//[calendar\_time:2019-04-19 19:35:54.191 system\_uptime:1494750993]

// Sending event #200

:Sending Touch (ACTION\_DOWN): 0:(83.0,672.0)

:Sending Touch (ACTION\_UP): 0:(118.93448,760.125)

:Sending Trackball (ACTION\_MOVE): 0:(4.0,2.0)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,4.0)

:Sending Touch (ACTION\_DOWN): 0:(679.0,107.0)

:Sending Touch (ACTION\_UP): 0:(716.06934,208.2822)

:Sending Touch (ACTION\_DOWN): 0:(529.0,206.0)

:Sending Touch (ACTION\_UP): 0:(539.4114,220.64485)

:Sending Trackball (ACTION\_MOVE): 0:(-2.0,1.0)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,1.0)

:Sending Trackball (ACTION\_MOVE): 0:(-1.0,3.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

:Sending Touch (ACTION\_DOWN): 0:(639.0,1215.0)

:Sending Touch (ACTION\_UP): 0:(639.2817,1212.4121)

:Sending Touch (ACTION\_DOWN): 0:(373.0,554.0)

:Sending Touch (ACTION\_UP): 0:(374.818,554.54474)

:Sending Trackball (ACTION\_MOVE): 0:(4.0,0.0)

//[calendar\_time:2019-04-19 19:35:54.622 system\_uptime:1494751424]

// Sending event #300

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,-2.0)

:Sending Touch (ACTION\_DOWN): 0:(306.0,729.0)

:Sending Touch (ACTION\_UP): 0:(305.2389,741.3113)

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,0.0)

:Sending Touch (ACTION\_DOWN): 0:(69.0,1127.0)

// Rejecting start of Intent { act=com.sec.android.app.myfiles.RUN\_OPTIMIZE\_STORAGE cmp=com.sec.android.app.myfiles/.activity.GetMoreSpaceActivity } in package com.sec.android.app.myfiles

:Sending Touch (ACTION\_UP): 0:(37.12538,1135.3845)

:Sending Trackball (ACTION\_MOVE): 0:(-3.0,2.0)

:Sending Trackball (ACTION\_MOVE): 0:(0.0,1.0)

:Sending Trackball (ACTION\_MOVE): 0:(-1.0,2.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

:Sending Trackball (ACTION\_MOVE): 0:(2.0,-4.0)

//[calendar\_time:2019-04-19 19:35:54.857 system\_uptime:1494751660]

// Sending event #400

:Sending Touch (ACTION\_DOWN): 0:(266.0,605.0)

:Sending Touch (ACTION\_UP): 0:(202.83987,532.4858)

:Sending Touch (ACTION\_DOWN): 0:(576.0,714.0)

:Sending Touch (ACTION\_UP): 0:(469.52426,698.0459)

:Sending Trackball (ACTION\_MOVE): 0:(2.0,-2.0)

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,1.0)

:Sending Touch (ACTION\_DOWN): 0:(372.0,1022.0)

:Sending Touch (ACTION\_UP): 0:(389.48346,1024.6825)

:Sending Trackball (ACTION\_MOVE): 0:(-3.0,-1.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

:Sending Touch (ACTION\_DOWN): 0:(139.0,1162.0)

:Sending Touch (ACTION\_UP): 0:(165.40335,1243.299)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Trackball (ACTION\_MOVE): 0:(-1.0,1.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,-3.0)

//[calendar\_time:2019-04-19 19:35:55.074 system\_uptime:1494751876]

// Sending event #500

:Sending Touch (ACTION\_DOWN): 0:(174.0,775.0)

:Sending Touch (ACTION\_UP): 0:(180.07634,770.042)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,-2.0)

:Sending Touch (ACTION\_DOWN): 0:(311.0,930.0)

:Sending Touch (ACTION\_UP): 0:(289.84137,957.09125)

:Sending Trackball (ACTION\_MOVE): 0:(2.0,0.0)

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,-4.0)

:Sending Touch (ACTION\_DOWN): 0:(605.0,1186.0)

:Sending Touch (ACTION\_UP): 0:(599.17175,1182.6581)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,4.0)

:Sending Touch (ACTION\_DOWN): 0:(580.0,303.0)

:Sending Touch (ACTION\_UP): 0:(563.692,318.3301)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,-4.0)

:Sending Trackball (ACTION\_MOVE): 0:(1.0,-5.0)

//[calendar\_time:2019-04-19 19:35:55.521 system\_uptime:1494752323]

// Sending event #600

//[calendar\_time:2019-04-19 19:35:55.521 system\_uptime:1494752324]

// Sending event #600

:Sending Touch (ACTION\_DOWN): 0:(45.0,29.0)

:Sending Touch (ACTION\_UP): 0:(52.934113,16.407808)

:Sending Touch (ACTION\_DOWN): 0:(442.0,161.0)

:Sending Touch (ACTION\_UP): 0:(422.4413,109.340775)

:Sending Touch (ACTION\_DOWN): 0:(640.0,671.0)

:Sending Touch (ACTION\_UP): 0:(642.6889,666.01886)

:Sending Touch (ACTION\_DOWN): 0:(536.0,826.0)

:Sending Touch (ACTION\_UP): 0:(539.178,824.7551)

:Sending Touch (ACTION\_DOWN): 0:(239.0,878.0)

:Sending Touch (ACTION\_UP): 0:(225.58192,862.44775)

:Sending Touch (ACTION\_DOWN): 0:(273.0,862.0)

:Sending Touch (ACTION\_UP): 0:(271.31586,859.28577)

:Sending Touch (ACTION\_DOWN): 0:(169.0,68.0)

:Sending Touch (ACTION\_UP): 0:(57.969643,41.018044)

:Sending Touch (ACTION\_DOWN): 0:(372.0,105.0)

:Sending Touch (ACTION\_UP): 0:(353.7838,108.68587)

:Sending Touch (ACTION\_DOWN): 0:(10.0,590.0)

:Sending Touch (ACTION\_UP): 0:(103.13158,505.89905)

:Sending Trackball (ACTION\_MOVE): 0:(4.0,3.0)

:Sending Touch (ACTION\_DOWN): 0:(708.0,242.0)

:Sending Touch (ACTION\_UP): 0:(720.0,228.90991)

:Sending Trackball (ACTION\_MOVE): 0:(2.0,2.0)

:Sending Touch (ACTION\_DOWN): 0:(582.0,1143.0)

:Sending Touch (ACTION\_UP): 0:(575.7065,1137.9497)

:Sending Touch (ACTION\_DOWN): 0:(241.0,129.0)

:Sending Touch (ACTION\_UP): 0:(238.25223,123.95276)

//[calendar\_time:2019-04-19 19:35:55.697 system\_uptime:1494752499]

// Sending event #700

:Sending Trackball (ACTION\_MOVE): 0:(-5.0,3.0)

:Sending Trackball (ACTION\_MOVE): 0:(-3.0,2.0)

:Sending Touch (ACTION\_DOWN): 0:(18.0,315.0)

:Sending Touch (ACTION\_UP): 0:(22.12718,327.45306)

:Sending Touch (ACTION\_DOWN): 0:(428.0,85.0)

:Sending Touch (ACTION\_UP): 0:(382.02188,159.44044)

:Sending Trackball (ACTION\_MOVE): 0:(-2.0,-4.0)

:Sending Trackball (ACTION\_MOVE): 0:(0.0,0.0)

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.HOME] cmp=com.sec.android.app.launcher/.activities.LauncherActivity } in package com.sec.android.app.launcher

:Sending Trackball (ACTION\_MOVE): 0:(2.0,-4.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

:Sending Trackball (ACTION\_MOVE): 0:(0.0,-2.0)

//[calendar\_time:2019-04-19 19:35:55.973 system\_uptime:1494752775]

// Sending event #800

//[calendar\_time:2019-04-19 19:35:55.973 system\_uptime:1494752775]

// Sending event #800

:Sending Touch (ACTION\_DOWN): 0:(474.0,785.0)

:Sending Touch (ACTION\_UP): 0:(474.1238,786.62274)

// Rejecting start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.spotify.music/.MainActivity } in package com.spotify.music

:Sending Trackball (ACTION\_MOVE): 0:(0.0,4.0)

// Rejecting start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.instagram.android/.activity.MainTabActivity } in package com.instagram.android

// Rejecting start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.spotify.music/.MainActivity } in package com.spotify.music

:Sending Touch (ACTION\_DOWN): 0:(397.0,276.0)

:Sending Touch (ACTION\_UP): 0:(546.7037,165.53915)

:Sending Touch (ACTION\_DOWN): 0:(287.0,244.0)

:Sending Touch (ACTION\_UP): 0:(278.36823,244.00658)

// Injection Failed

:Sending Touch (ACTION\_DOWN): 0:(115.0,507.0)

:Sending Touch (ACTION\_UP): 0:(124.195114,519.7011)

:Sending Trackball (ACTION\_MOVE): 0:(3.0,-1.0)

:Sending Touch (ACTION\_DOWN): 0:(485.0,624.0)

:Sending Touch (ACTION\_UP): 0:(486.0018,624.6346)

:Sending Touch (ACTION\_DOWN): 0:(40.0,1256.0)

:Sending Touch (ACTION\_UP): 0:(37.47855,1255.3228)

:Sending Trackball (ACTION\_MOVE): 0:(1.0,4.0)

:Sending Trackball (ACTION\_UP): 0:(0.0,0.0)

// Rejecting start of Intent { cmp=com.samsung.android.app.galaxyfinder/.GalaxyFinderActivity } in package com.samsung.android.app.galaxyfinder

// Rejecting start of Intent { cmp=com.samsung.android.app.galaxyfinder/.GalaxyFinderActivity } in package com.samsung.android.app.galaxyfinder

:Sending Touch (ACTION\_DOWN): 0:(594.0,604.0)

:Sending Touch (ACTION\_UP): 0:(572.0593,567.9917)

:Sending Touch (ACTION\_DOWN): 0:(474.0,520.0)

:Sending Touch (ACTION\_UP): 0:(405.0997,456.22363)

//[calendar\_time:2019-04-19 19:35:56.702 system\_uptime:1494753505]

// Sending event #900

:Sending Touch (ACTION\_DOWN): 0:(637.0,857.0)

:Sending Touch (ACTION\_UP): 0:(642.1218,873.32904)

:Switch: #Intent;action=android.intent.action.MAIN;category=android.intent.category.LAUNCHER;launchFlags=0x10200000;component=com.example.avc/.MainActivity;end

// Allowing start of Intent { act=android.intent.action.MAIN cat=[android.intent.category.LAUNCHER] cmp=com.example.avc/.MainActivity } in package com.example.avc

:Sending Trackball (ACTION\_MOVE): 0:(3.0,0.0)

:Sending Touch (ACTION\_DOWN): 0:(230.0,187.0)

:Sending Touch (ACTION\_UP): 0:(246.6142,188.03847)

:Sending Touch (ACTION\_DOWN): 0:(468.0,1234.0)

:Sending Touch (ACTION\_UP): 0:(514.35205,1258.1573)

// activityResuming(com.example.avc)

:Sending Touch (ACTION\_DOWN): 0:(471.0,364.0)

:Sending Touch (ACTION\_UP): 0:(398.57562,327.43222)

:Sending Touch (ACTION\_DOWN): 0:(36.0,526.0)

:Sending Touch (ACTION\_UP): 0:(37.02804,530.27454)

:Sending Touch (ACTION\_DOWN): 0:(216.0,1259.0)

:Sending Touch (ACTION\_UP): 0:(222.09756,1254.3949)

:Sending Trackball (ACTION\_MOVE): 0:(-3.0,0.0)

:Sending Touch (ACTION\_DOWN): 0:(548.0,708.0)

:Sending Touch (ACTION\_UP): 0:(544.49585,704.4029)

// Allowing start of Intent { cmp=com.example.avc/.ResultadoActivity } in package com.example.avc

:Sending Trackball (ACTION\_MOVE): 0:(4.0,-3.0)

:Sending Touch (ACTION\_DOWN): 0:(61.0,513.0)

:Sending Touch (ACTION\_UP): 0:(33.54954,456.76373)

:Sending Touch (ACTION\_DOWN): 0:(149.0,1068.0)

:Sending Touch (ACTION\_UP): 0:(140.67989,1081.4099)

:Sending Touch (ACTION\_DOWN): 0:(43.0,1254.0)

:Sending Touch (ACTION\_UP): 0:(42.539062,1247.0009)

:Sending Touch (ACTION\_DOWN): 0:(523.0,701.0)

Events injected: 1000

:Sending rotation degree=0, persist=false

:Dropped: keys=1 pointers=0 trackballs=0 flips=0 rotations=0

## Network stats: elapsed time=7496ms (0ms mobile, 0ms wifi, 7496ms not connected)

// Monkey finished

En este tipo de test podemos comprobar como se comporta la aplicación ante situaciones de relativo estrés o largas ejecuciones (con gran número de eventos).

Cabe comentar que existe una opción dentro del comando de ejecución de Monkey Test donde podemos poner que ignore los crasheos de la aplicación. En las pruebas con esta herramienta no he visto necesario usar esta opción debido a que una de las cosas que quiero probar con esta herramienta y con este tipo de test es la robustez de la aplicación y comprobar que esta no crashee ante situaciones de muchos eventos.

A parte de esta prueba he realizado más con muchos más eventos para comprobar lo que se ha comentado anteriormente.

COMENTAR LOS PORCENTAJES DE CADA TIPO DE EVENTO QUE SE VEN EN EL COMIENZO DE LA SALIDA.