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Screenshots of crash file

Note: Zoom-in the document to see the screenshots more clearly

{"share_with_app_devs":0,"app_version":"","bug_type":"202","timestamp":"2022-08-02 14:33:44.00 -0700","os_version":"iPhone OS 15.6 (19G71)","slice_uuid":"CBA8C210-D7A6-3A5C-A292-73386C4CFE53","is_first_party":1,"build_version":"","incident_id":"CCBD9DAD-1888-475B-B34C-BAEE1487D6CE","app_name":"apfs_iosd","name":"apfs_iosd"}
```
Date/Time:        2022-08-02 14:29:36.609 -0700
End time:         2022-08-02 14:32:22.942 -0700
OS Version:       iPhone OS 15.6 (Build 19G71)
Architecture:     arm64e
Report Version:   35.1
Incident Identifier: CCBD9DAD-1888-475B-B34C-BAEE1487D6CE

Data Source:      Microstackshots
Shared Cache:     D1AF4C3C-8AB7-33DA-92CC-3E62D7CCE66D slid base address 0x1d0134000, slide 0x50134000

Command:          apfs_iosd
Path:             /System/Library/Filesystems/apfs.fs/apfs_iosd
Architecture:     arm64e
Parent:           UNKNOWN [1]
PID:              28170

Event:            cpu usage
Action taken:     none
CPU:              90 seconds cpu time over 166 seconds (54% cpu average), exceeding limit of 50% cpu over 180 seconds
CPU limit:        90s
Limit duration:   180s
CPU used:         90s
CPU duration:     166s
Duration:         166.33s
Duration Sampled: 164.20s
Steps:            56

Hardware model:   iPhone13,2
Active cpus:      6
HW page size:     16384
VM page size:     16384

Advisory levels:  Battery -> 3, User -> 3, ThermalPressure -> 0, Combined -> 3
Free disk space:  6757.42 MB/119.09 GB, low space threshold 150 MB

Heaviest stack for the target process:
  33  ??? (libsystem_pthread.dylib + 3676) [0x241e80e5c]
  33  ??? (libsystem_pthread.dylib + 4284) [0x241e810bc]
  33  ??? (libdispatch.dylib + 91392) [0x1d019b500]
  33  ??? (libdispatch.dylib + 48256) [0x1d0190c80]
  33  ??? (libdispatch.dylib + 45348) [0x1d0190124]
  33  ??? (libdispatch.dylib + 14896) [0x1d0188a30]
  33  ??? (libdispatch.dylib + 7788) [0x1d0186e6c]
  33  ??? (apfs_iosd + 29944) [0x10277b4f8]
  33  ??? (apfs_iosd + 137124) [0x1027957a4]
  32  ??? (apfs_iosd + 136456) [0x102795508]
  32  ??? (apfs_iosd + 30512) [0x10277b730]
  25  ??? (apfs_iosd + 19708) [0x102778cfc]
  25  ??? (AppleFSCompression + 18584) [0x214252898]
  24  ??? (AppleFSCompression + 43264) [0x214258900]
  17  ??? (AppleFSCompression + 44388) [0x214258d64]
   3  ??? (libz.1.dylib + 21760) [0x2419a6500]


Powerstats for:   apfs_iosd [28170]
UUID:             CBA8C210-D7A6-3A5C-A292-73386C4CFE53
Path:             /System/Library/Filesystems/apfs.fs/apfs_iosd
Architecture:     arm64e
Parent:           UNKNOWN [1]
UID:              0
Sudden Term:      Tracked (allows idle exit)
Footprint:        1984 KB -> 2848 KB (+864 KB)
Start time:       2022-08-02 14:29:38.010 -0700
```

```
            1   ??? (AppleFSCompression + 43328) [0x214258940]
              1   ??? (libz.1.dylib + 14660) [0x2419a4944]
                1   ??? (libsystem_malloc.dylib + 7584) [0x1e27d5da0]
                  1   ??? (libsystem_malloc.dylib + 36492) [0x1e27dce8c]
          5   ??? (apfs_iosd + 20008) [0x102778e28]
            5   ??? (apfs_iosd + 36884) [0x10277d014]
              5   ??? (libsystem_kernel.dylib + 10008) [0x208117718]
                2   <Kernel mode>
          1   ??? (apfs_iosd + 20612) [0x102779084]
            1   ??? (apfs_iosd + 153096) [0x102799608]
              1   ??? (libsystem_malloc.dylib + 24272) [0x1e27d9ed0]
                1   ??? (libsystem_kernel.dylib + 5076) [0x2081163d4]
          1   ??? (apfs_iosd + 20112) [0x102778e90]
            1   ??? (libcorecrypto.dylib + 4348) [0x1f07160fc]
              1   ??? (libcorecrypto.dylib + 22388) [0x1f071a774]
                1   <Kernel mode>
        1   ??? (apfs_iosd + 136488) [0x102795528]
          1   ??? (apfs_iosd + 85928) [0x102788fa8]
            1   ??? (apfs_iosd + 83788) [0x10278874c]
              1   ??? (apfs_iosd + 53488) [0x1027810f0]
                1   ??? (apfs_iosd + 53832) [0x102781248]
                  1   ??? (apfs_iosd + 232672) [0x1027acce0]


  Binary Images:
        0x102774000 -             ??? apfs_iosd              <CBA8C210-D7A6-3A5C-A292-73386C4CFE53>  /System/Library/Filesystems/apfs.fs/apfs_iosd
        0x1d0185000 -     0x1d01cafff libdispatch.dylib       <E3EA4F63-5D11-342A-AF19-9F58DBC8E259>  /usr/lib/system/libdispatch.dylib
        0x1e27d4000 -     0x1e27f5fff libsystem_malloc.dylib  <2A5621A9-337E-32C3-A429-66D35F417B14>  /usr/lib/system/libsystem_malloc.dylib
        0x1f0715000 -     0x1f070efff libcorecrypto.dylib     <A1C6B0F2-5426-3E98-BCBA-7BD3B59DBB6F>  /usr/lib/system/libcorecrypto.dylib
        0x208115000 -     0x20814afff libsystem_kernel.dylib  <9AB02AD0-348C-30CB-99F4-0979C2D47515>  /usr/lib/system/libsystem_kernel.dylib
        0x21424e000 -     0x21425dfff AppleFSCompression      <A36D3916-0696-3324-BADB-DFEA743BDCF3>  /System/Library/PrivateFrameworks/AppleFSCompression.framework/AppleFSCompression
        0x2419a1000 -     0x2419b2fff libz.1.dylib            <0D1D218A-E728-3744-987E-476AEA8139A4>  /usr/lib/libz.1.dylib
        0x241e78000 -     0x241e7efff libsystem_platform.dylib <E44B288B-8DF0-3923-A311-837535B6A7E9> /usr/lib/system/libsystem_platform.dylib
        0x241e80000 -     0x241e8bfff libsystem_pthread.dylib <A8989FFB-1414-39DC-A1A8-1534F21923FE>  /usr/lib/system/libsystem_pthread.dylib
```

```
Powerstats for:   backboardd
UUID:             50D0C72E-F2FA-3C26-A9C1-BE8FC873DCC9
Path:             /usr/libexec/backboardd
Architecture:     arm64e
Start time:       2022-08-02 14:31:48.148 -0700
End time:         2022-08-02 14:32:20.212 -0700
Num samples:      9 (16%)
Primary state:    5 samples Non-Frontmost App, Non-Suppressed, Kernel mode, Effective Thread QoS Unspecified, Requested Thread QoS Unspecified, Override Thread QoS Unspecified
User Activity:    0 samples Idle, 9 samples Active
Power Source:     0 samples on Battery, 9 samples on AC
 4   ??? (libsystem_pthread.dylib + 3688) [0x241e80e68]
   4   ??? (libsystem_pthread.dylib + 6572) [0x241e819ac]
     4   ??? (QuartzCore + 2548084) [0x1d4438174]
       4   ??? (QuartzCore + 2516608) [0x1d4430680]
         4   ??? (CoreFoundation + 654760) [0x1d0527da8]
           4   ??? (CoreFoundation + 125896) [0x1d04a6bc8]
             3   ??? (CoreFoundation + 45500) [0x1d04931bc]
               2   ??? (CoreFoundation + 27952) [0x1d048ed30]
                 2   ??? (libsystem_kernel.dylib + 5280) [0x2081164a0]
                 1   ??? (libsystem_kernel.dylib + 11024) [0x208117b10]
                   1   <User mode>
             1   ??? (CoreFoundation + 46692) [0x1d0493664]
               1   ??? (CoreFoundation + 117580) [0x1d04a4b4c]
                 1   <User mode>
 3   ??? (libsystem_pthread.dylib + 3676) [0x241e80e5c]
   3   ??? (libsystem_pthread.dylib + 4284) [0x241e810bc]
     3   ??? (libdispatch.dylib + 91392) [0x1d019b500]
       3   ??? (libdispatch.dylib + 53120) [0x1d0191f80]
         2   ??? (libdispatch.dylib + 48308) [0x1d0190cb4]
           2   ??? (libdispatch.dylib + 45056) [0x1d0190000]
```

```
                              1  ??? (ProactiveSupport + 34224) [0x1ee9a55b0]
                             1  ??? (ProactiveSupport + 77476) [0x1ee9afea4]
                            1  ??? (ProactiveSupport + 61984) [0x1ee9ac220]
                           1  ??? (ProactiveSupport + 18008) [0x1ee9a1658]
                          1  ??? (libsqlite3.dylib + 279112) [0x1ef41f248]
                         1  ??? (libsqlite3.dylib + 284536) [0x1ef420778]
                        1  ??? (libsqlite3.dylib + 839160) [0x1ef4a7df8]
                       1  ??? (libsqlite3.dylib + 349296) [0x1ef430470]
                      1  ??? (libsqlite3.dylib + 835580) [0x1ef4a6ffc]
                     1  ??? (libsqlite3.dylib + 789332) [0x1ef49bb54]
                    1  ??? (libsqlite3.dylib + 177604) [0x1ef4065c4]
                   1  ??? (libsqlite3.dylib + 33728) [0x1ef3e33c0]
                  1  ??? (libsystem_kernel.dylib + 10008) [0x208117718]
 1  ??? (PersonalizationPortraitInternals + 1285728) [0x201519e60]
  1  ??? (PersonalizationPortraitInternals + 1286660) [0x20151a204]
   1  ??? (PersonalizationPortraitInternals + 1830732) [0x20159ef4c]
    1  ??? (PersonalizationPortraitInternals + 1833564) [0x20159fa5c]
     1  ??? (PersonalizationPortraitInternals + 1681076) [0x20157a6b4]
      1  ??? (PersonalizationPortraitInternals + 112060) [0x2013fb5bc]
       1  ??? (PersonalizationPortraitInternals + 95372) [0x2013f748c]
        1  ??? (ProactiveSupport + 21024) [0x1ee9a2220]
         1  ??? (ProactiveSupport + 21284) [0x1ee9a2324]
          1  ??? (ProactiveSupport + 113176) [0x1ee9b8a18]
           1  ??? (ProactiveSupport + 61984) [0x1ee9ac220]
            1  ??? (ProactiveSupport + 19732) [0x1ee9a1d14]
             1  ??? (ProactiveSupport + 96780) [0x1ee9b4a0c]
              1  ??? (ProactiveSupport + 84452) [0x1ee9b19e4]
               1  ??? (PersonalizationPortraitInternals + 43780) [0x2013eab04]
                1  ??? (PersonalizationPortraitInternals + 1682460) [0x20157ac1c]
                 1  ??? (ProactiveSupport + 19212) [0x1ee9a1b0c]
                  1  ??? (ProactiveSupport + 54992) [0x1ee9aa6d0]
                   1  ??? (ProactiveSupport + 61984) [0x1ee9ac220]
                    1  ??? (ProactiveSupport + 23848) [0x1ee9a2d28]
                     1  ??? (ProactiveSupport + 34224) [0x1ee9a55b0]
                      1  ??? (ProactiveSupport + 77476) [0x1ee9afea4]
                       1  ??? (ProactiveSupport + 61984) [0x1ee9ac220]
                        1  ??? (ProactiveSupport + 18008) [0x1ee9a1658]
                         1  ??? (libsqlite3.dylib + 279112) [0x1ef41f248]
                          1  ??? (libsqlite3.dylib + 291308) [0x1ef4221ec]
                           1  ??? (libsqlite3.dylib + 826012) [0x1ef4a4a9c]
                            1  ??? (libsqlite3.dylib + 822380) [0x1ef4a3c6c]
                             1  ??? (libsqlite3.dylib + 839160) [0x1ef4a7df8]
                              1  ??? (libsqlite3.dylib + 349296) [0x1ef430470]
                               1  ??? (libsqlite3.dylib + 835580) [0x1ef4a6ffc]
                                1  ??? (libsqlite3.dylib + 789332) [0x1ef49bb54]
                                 1  ??? (libsqlite3.dylib + 177604) [0x1ef4065c4]
                                  1  ??? (libsqlite3.dylib + 33728) [0x1ef3e33c0]
                                   1  ??? (libsystem_kernel.dylib + 10008) [0x208117718]
 1  ??? (PersonalizationPortraitInternals + 1265124) [0x201514de4]
  1  ??? (PersonalizationPortraitInternals + 1265824) [0x2015150a0]
   1  ??? (PersonalizationPortraitInternals + 1597768) [0x201566148]
    1  ??? (ProactiveSupport + 9572) [0x1ee99f564]
     1  ??? (PersonalizationPortraitInternals + 1598464) [0x201566400]
      1  ??? (BiomeStreams + 387956) [0x1f6c0fb74]
       1  ??? (BiomeStreams + 385916) [0x1f6c0f37c]
        1  ??? (BiomeStreams + 386140) [0x1f6c0f45c]
         1  ??? (BiomeStorage + 26076) [0x1ea0a95dc]
          1  ??? (BiomeStorage + 71412) [0x1ea0b46f4]
           1  ??? (BiomeStorage + 79012) [0x1ea0b64a4]
            1  ??? (BiomeStorage + 72236) [0x1ea0b4a2c]
             1  ??? (BiomeStorage + 11080) [0x1ea0a5b48]
              1  ??? (BiomeStorage + 73136) [0x1ea0b4db0]
               1  ??? (BiomeStorage + 95464) [0x1ea0ba4e8]
                1  ??? (BiomeStorage + 96344) [0x1ea0ba858]
                 1  ??? (BiomeStorage + 95888) [0x1ea0ba690]
```

```
    1 ??? (BiomeStorage + 90408) [0x1ea0b9128]
        1 ??? (BiomeStorage + 6124) [0x1ea0a47ec]
            1 ??? (ProactiveSupport + 9572) [0x1ee99f564]
            1 ??? (BiomeStorage + 29240) [0x1ea0aa238]
                1 ??? (BiomeStorage + 33948) [0x1ea0ab49c]
                    1 ??? (BiomeStorage + 13164) [0x1ea0a636c]
                        1 ??? (CoreFoundation + 283156) [0x1d04cd214]
                            1 ??? (Foundation + 332920) [0x1d1cd1478]
                                1 ??? (CoreServicesInternal + 8240) [0x1eb3d0030]
                                    1 ??? (libsystem_kernel.dylib + 7412) [0x208116cf4]
  2 ??? (libdispatch.dylib + 48308) [0x1d0190cb4]
    2 ??? (libdispatch.dylib + 45348) [0x1d0190124]
      2 ??? (libdispatch.dylib + 14896) [0x1d0188a30]
        2 ??? (libdispatch.dylib + 7788) [0x1d0186e6c]
          2 ??? (PersonalizationPortraitInternals + 691596) [0x201488d8c]
            2 ??? (PersonalizationPortraitInternals + 689876) [0x2014886d4]
              2 ??? (PersonalizationPortraitInternals + 694120) [0x201489768]
                2 ??? (PersonalizationPortraitInternals + 357792) [0x2014375a0]
                  2 ??? (PersonalizationPortraitInternals + 457612) [0x20144fb8c]
                    2 ??? (ProactiveSupport + 9572) [0x1ee99f564]
                      2 ??? (PersonalizationPortraitInternals + 458200) [0x20144fdd8]
                        1 ??? (PersonalizationPortraitInternals + 425840) [0x201447f70]
                          1 ??? (libobjc.A.dylib + 12664) [0x1e923d178]
                            1 <User mode>
                        1 ??? (PersonalizationPortraitInternals + 425440) [0x201447de0]
                          1 ??? (PersonalizationPortraitInternals + 426752) [0x201448300]
                            1 <User mode>
  1 ??? (libdispatch.dylib + 133196) [0x1d01a584c]
    1 ??? (libdispatch.dylib + 45056) [0x1d0190000]
      1 ??? (libdispatch.dylib + 129836) [0x1d01a4b2c]
        1 ??? (libdispatch.dylib + 15088) [0x1d0188af0]
          1 ??? (libxpc.dylib + 65328) [0x241eaaf30]
            1 ??? (libxpc.dylib + 63464) [0x241eaa7e8]
              1 ??? (libxpc.dylib + 40536) [0x241ea4e58]
                1 ??? (libobjc.A.dylib + 16428) [0x1e923e02c]
                  1 <User mode, Effective Thread QoS Default, Requested Thread QoS Default>


Binary Images:
       0x102534000 -            ??? suggestd                      <CD7F70D3-E89E-3417-A40B-6D1A50B33893>  /System/Library/PrivateFrameworks/CoreSuggestions.framework/suggestd
       0x1d0185000 -    0x1d01cafff libdispatch.dylib             <E3EA4F63-5D11-342A-AF19-9F58D8C8E259>  /usr/lib/system/libdispatch.dylib
       0x1d0488000 -    0x1d08ddfff CoreFoundation                <6B22DD81-3585-3BE6-BC77-BA19810EC0F2>  /System/Library/Frameworks/CoreFoundation.framework/CoreFoundation
       0x1d1c80000 -    0x1d1f8afff Foundation                    <EE1ABAF2-3D71-37FB-9067-15AA79528619>  /System/Library/Frameworks/Foundation.framework/Foundation
       0x1e923a000 -    0x1e9276fff libobjc.A.dylib               <F6368BE9-109B-3405-B282-624040529AFD>  /usr/lib/libobjc.A.dylib
       0x1ea0a3000 -    0x1ea0c6fff BiomeStorage                  <ECC2E9F3-B3A4-3A42-BBE4-C8BDDA8A978B>  /System/Library/PrivateFrameworks/BiomeStorage.framework/BiomeStorage
       0x1eb3ce000 -    0x1eb3fffff CoreServicesInternal          <CB824750-0DEB-3CB1-91AA-9C71E7544229>  /System/Library/PrivateFrameworks/CoreServicesInternal.framework/CoreServicesInternal
       0x1ee99d000 -    0x1eea1dfff ProactiveSupport              <B732B76B-F1F7-341E-89EF-44418D056D1F>  /System/Library/PrivateFrameworks/ProactiveSupport.framework/ProactiveSupport
       0x1ef3db000 -    0x1ef573fff libsqlite3.dylib              <F9AFCADA-4DB3-3C15-985E-EDB2DAC7B25C>  /usr/lib/libsqlite3.dylib
       0x1f6bb1000 -    0x1f6cd7fff BiomeStreams                  <42A0E7FB-48B7-3810-AE19-3C1E5D902E1B>  /System/Library/PrivateFrameworks/BiomeStreams.framework/BiomeStreams
       0x2013e0000 -    0x20161afff PersonalizationPortraitInternals <3E723153-22C5-379C-B80F-B5999FE58046>  /System/Library/PrivateFrameworks/PersonalizationPortraitInternals.framework/
PersonalizationPortraitInternals
       0x208115000 -    0x20814afff libsystem_kernel.dylib        <9AB02AD0-348C-30CB-99F4-0979C2D47515>  /usr/lib/system/libsystem_kernel.dylib
       0x241e80000 -    0x241e8bfff libsystem_pthread.dylib       <A8989FFB-1414-39DC-A1A8-1534F21923FE>  /usr/lib/system/libsystem_pthread.dylib
       0x241e9b000 -    0x241ed7fff libxpc.dylib                  <B1832133-79DC-3E42-B704-EF71F75A577E>  /usr/lib/system/libxpc.dylib
```
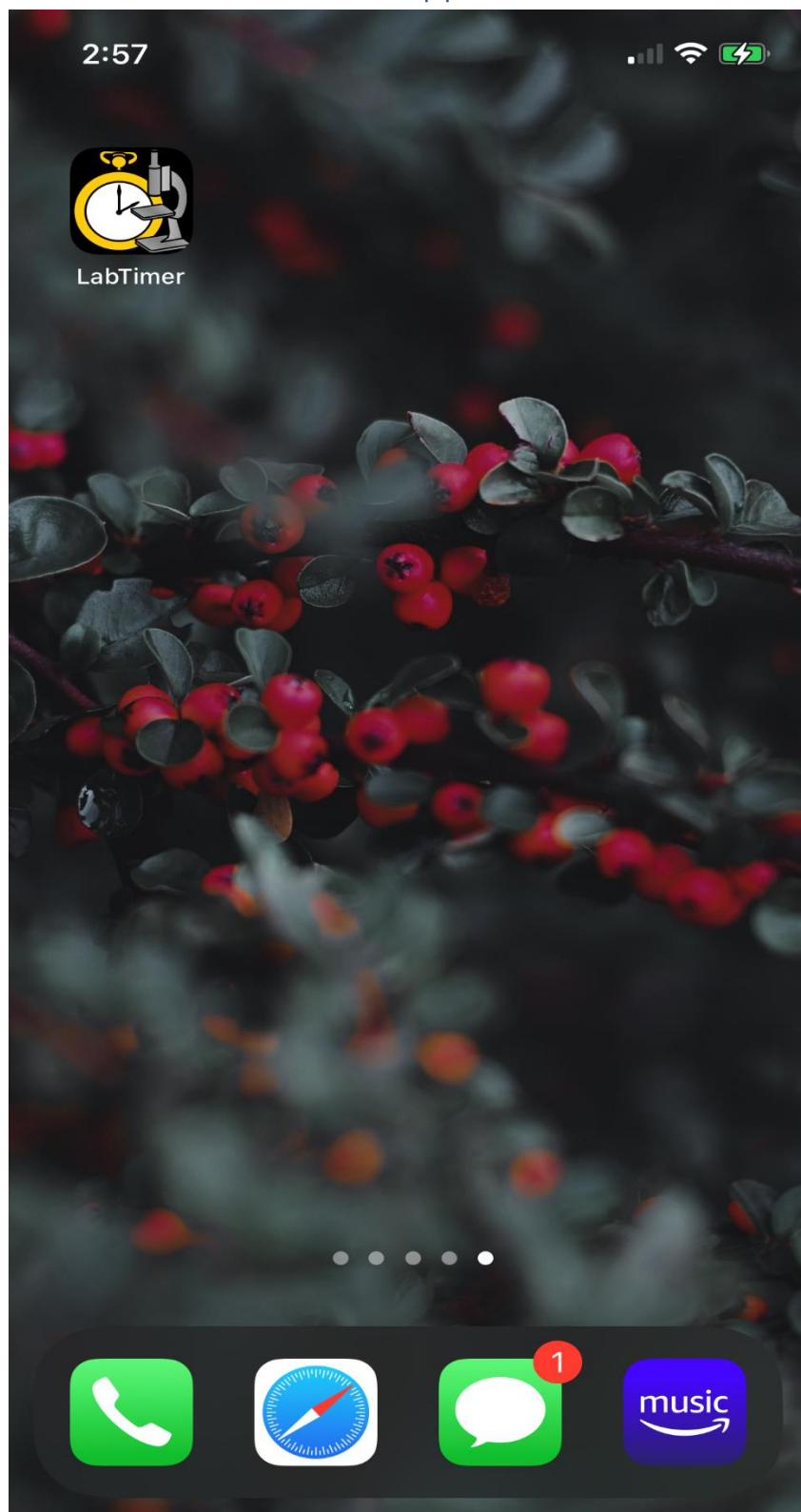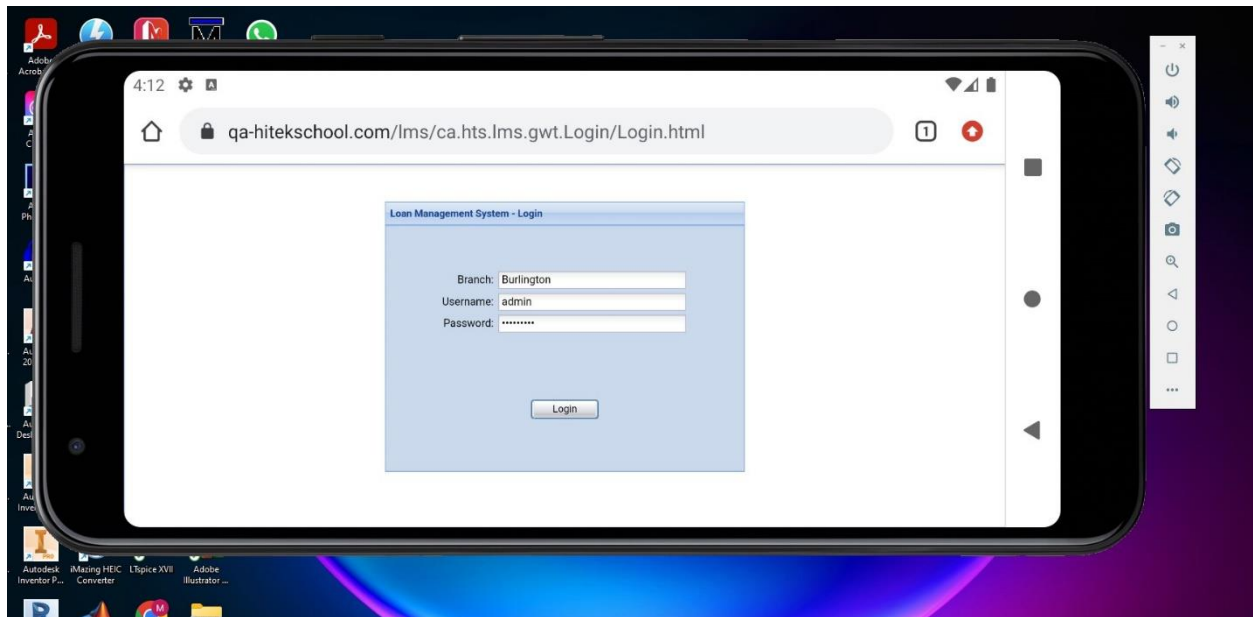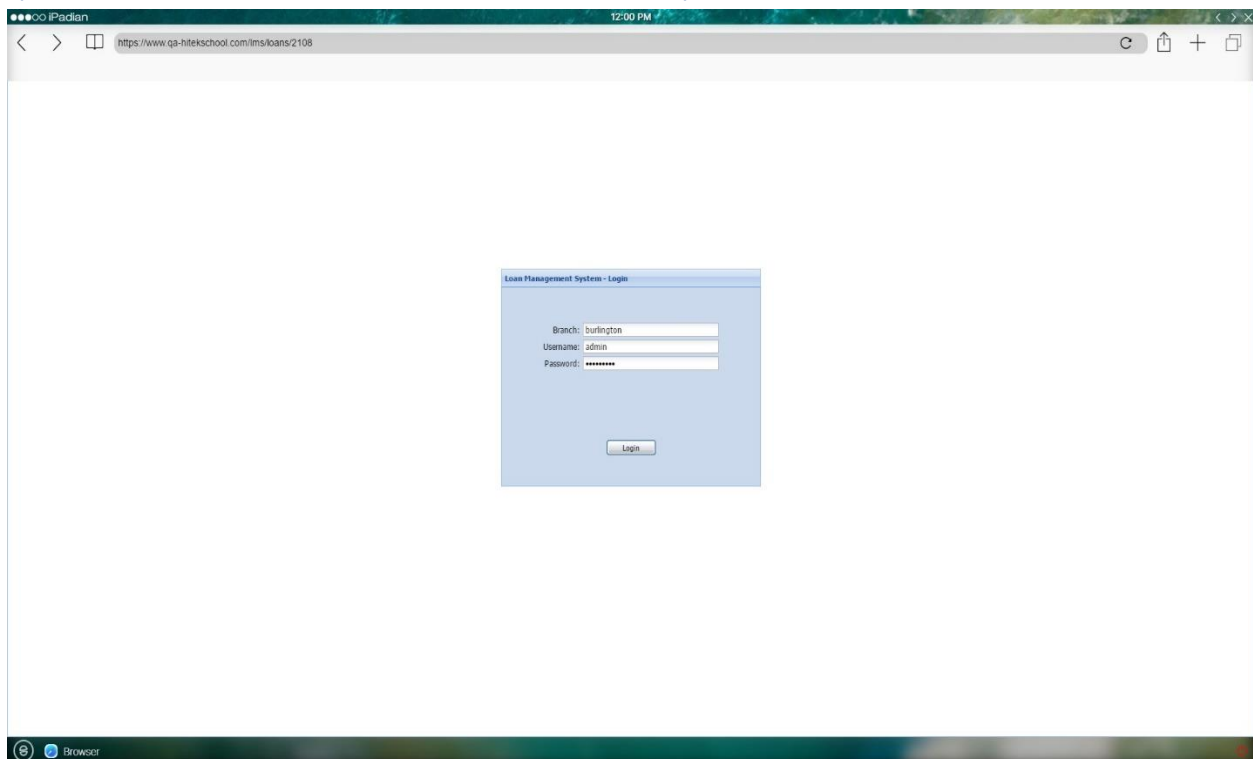
Screenshot of LabTimer app installed on ios

Android Studio Emulator Screenshot in Landscape mode


Ipadian Emulator Screenshot in landscape mode

Google Chrome Emulator

Testings such as multi-touch sensors are impossible to conduct without actually testing on real devices themselves, which is why we cannot test them. However, the screenshots are added on the document to show how they would be displayed on those devices.
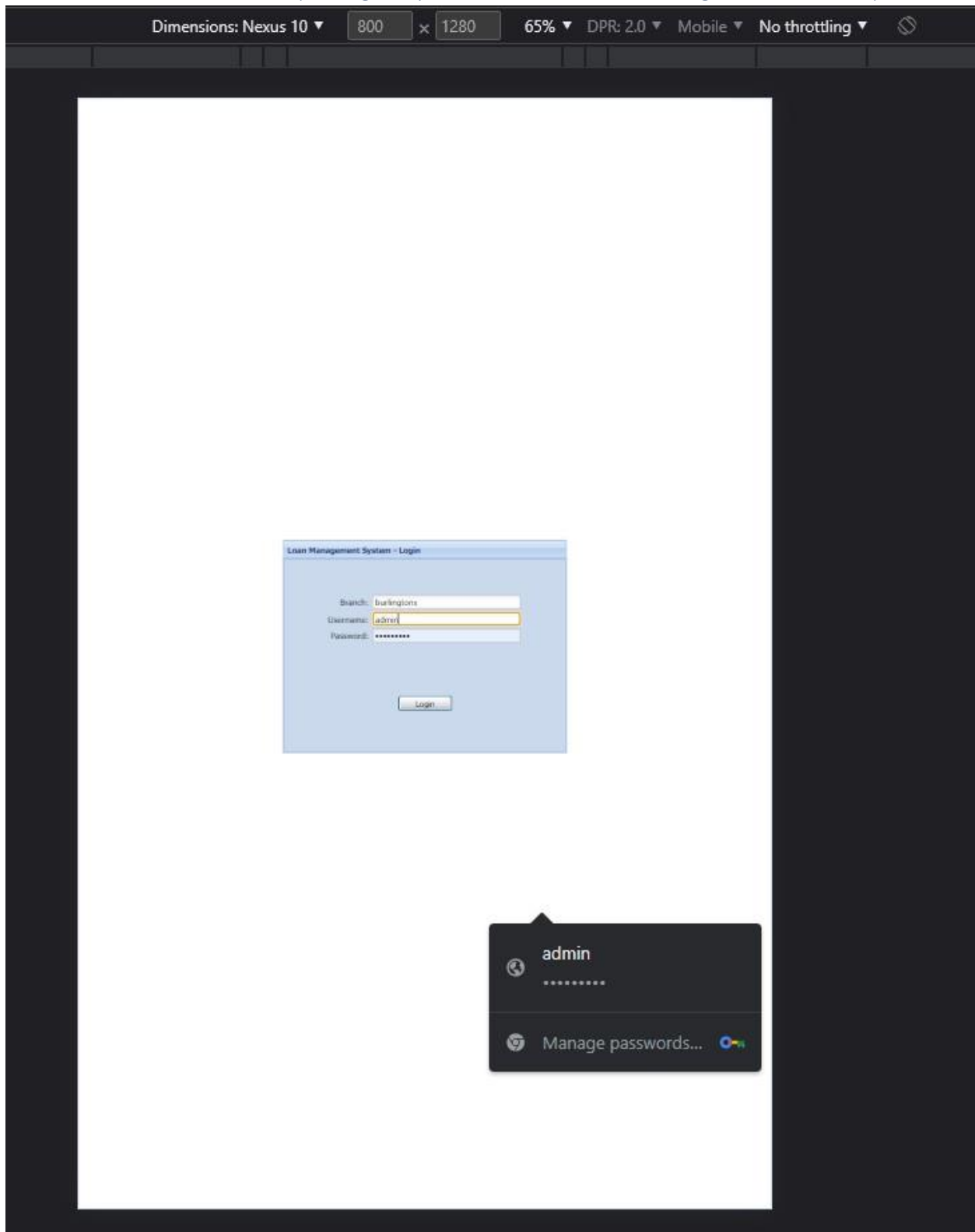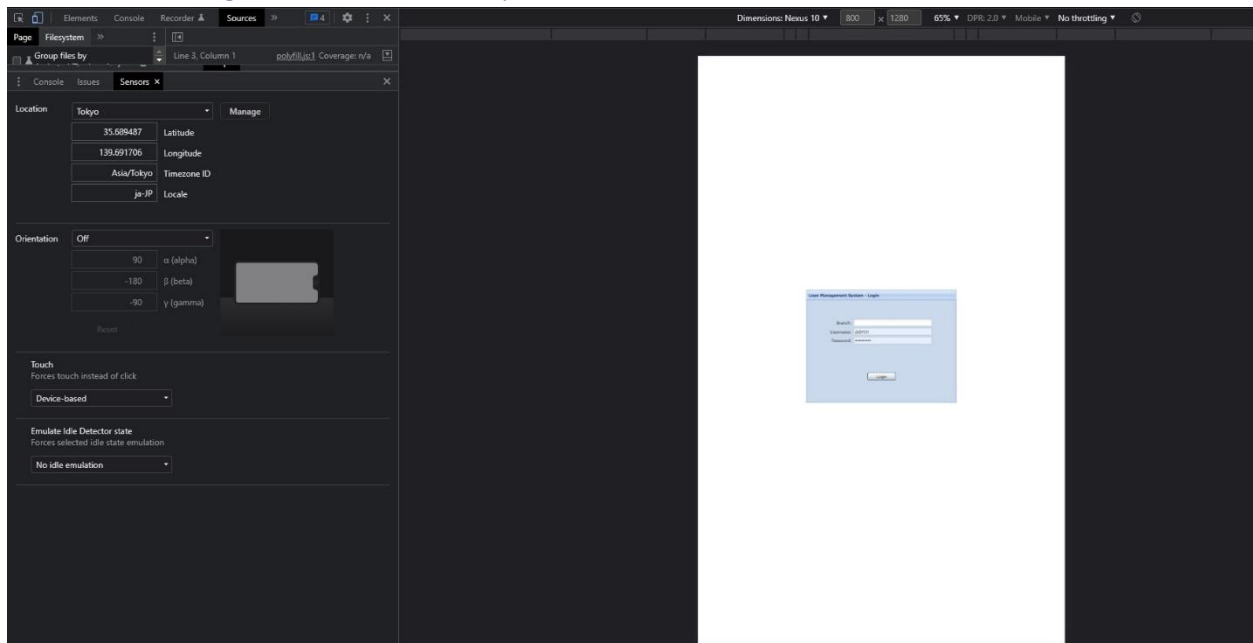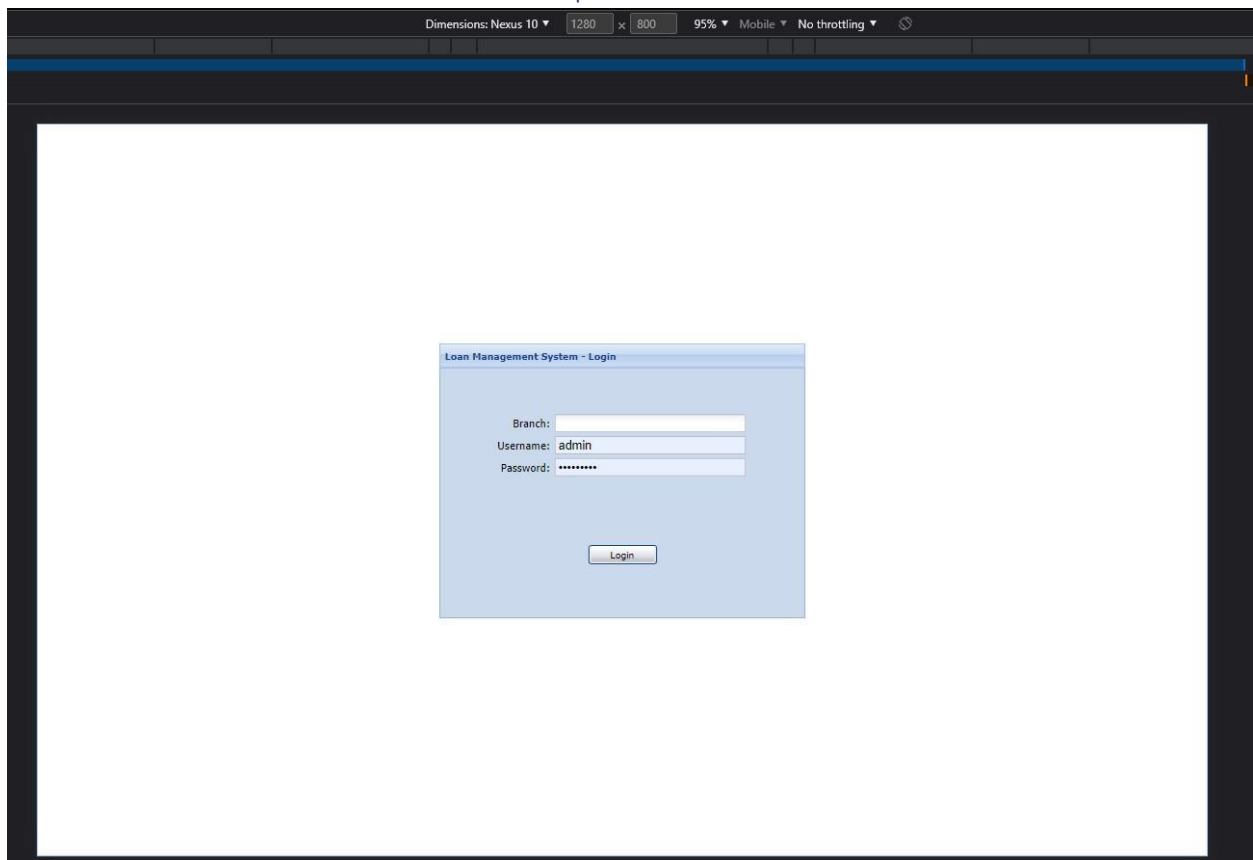
Google Nexus mode Testing:

    a.   Enable touch emulation
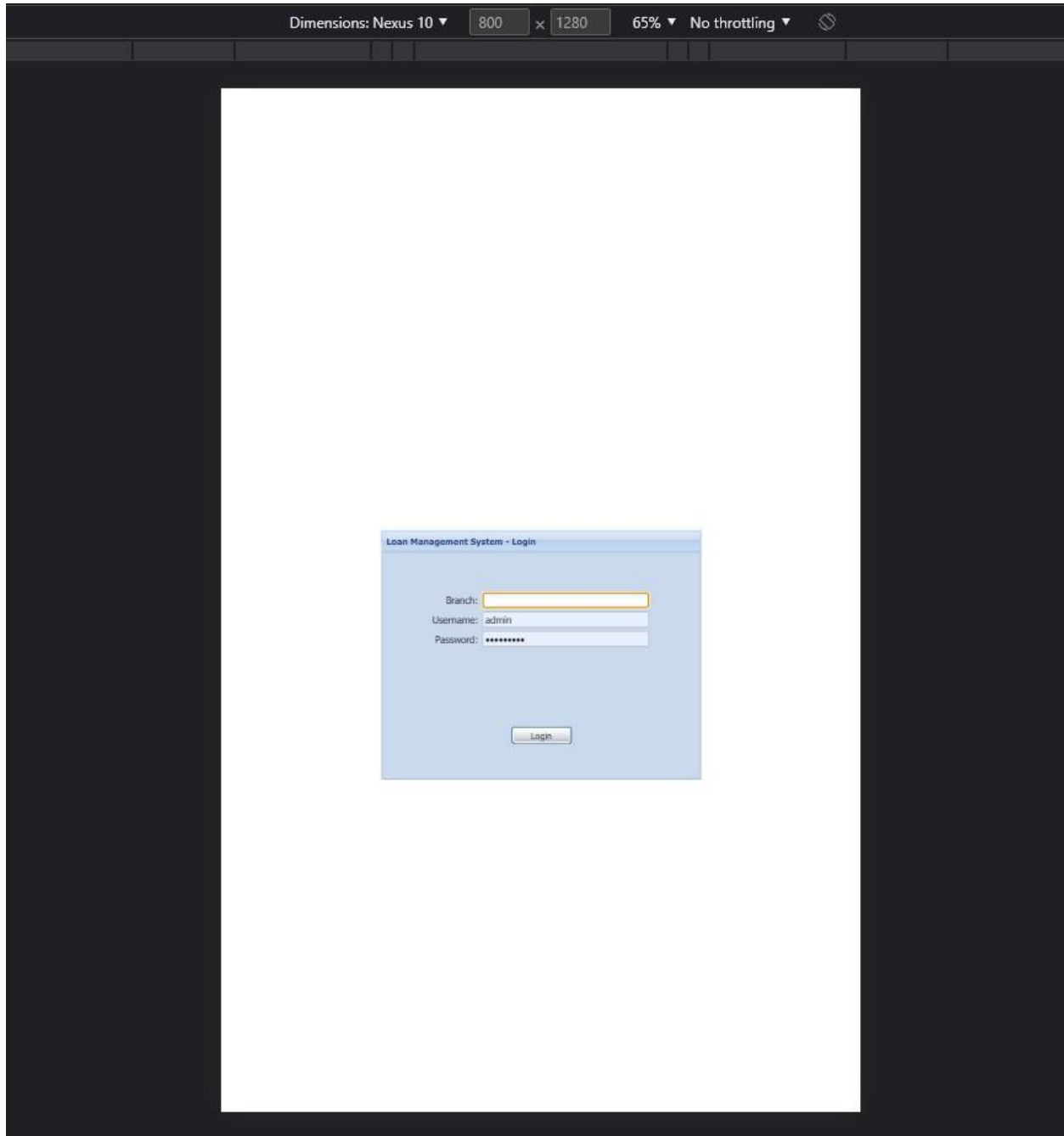
b. Simulate multi-touch (testing not possible to conduct-no change in screenshots)

c. Override geolocation data: Tokyo

d. Simulate device orientation: Landscape

iPhone mode Testing

    a) Enable touch emulation
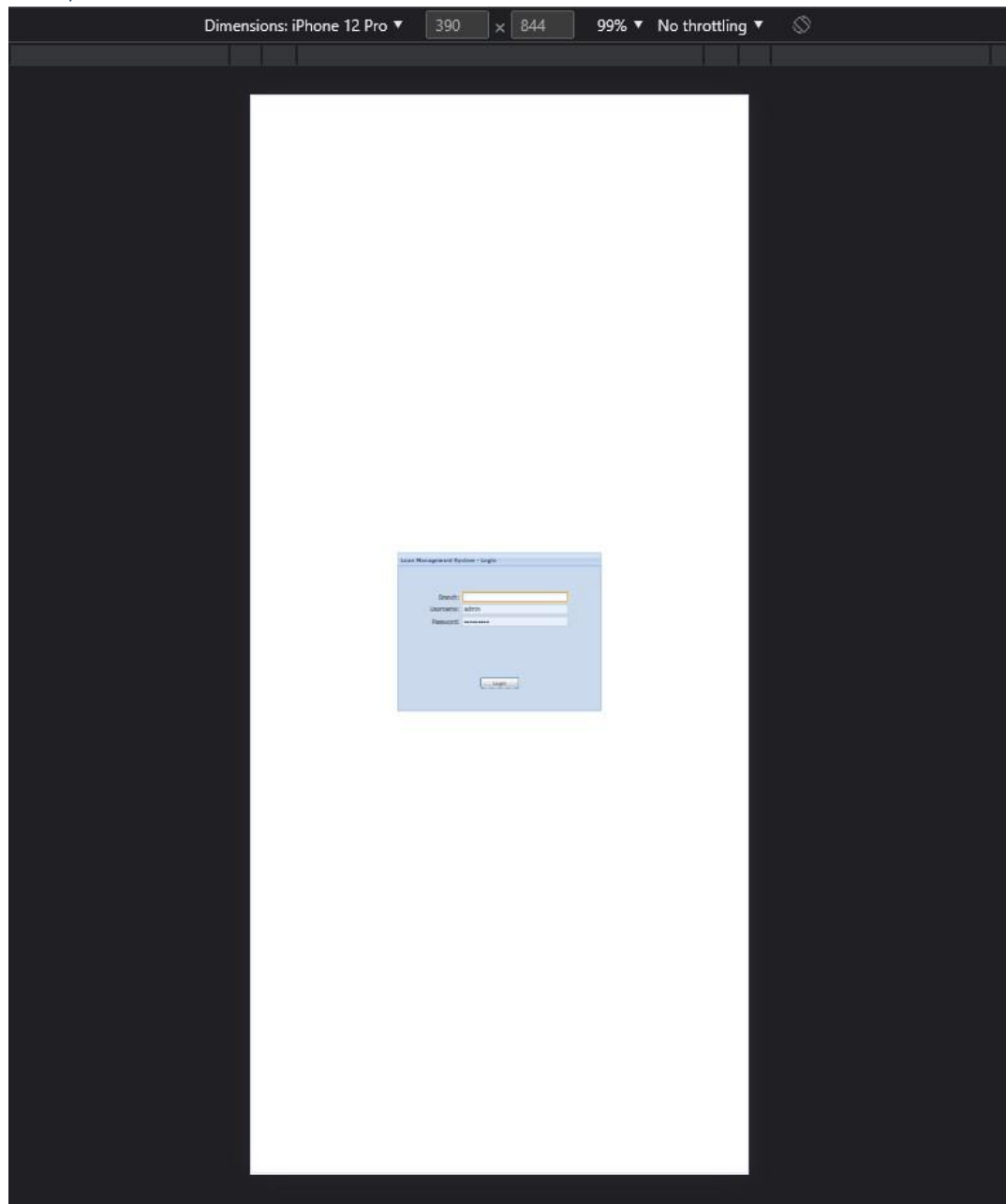
b) Simulate multi-touch (testing not possible to conduct-no change in screenshots)
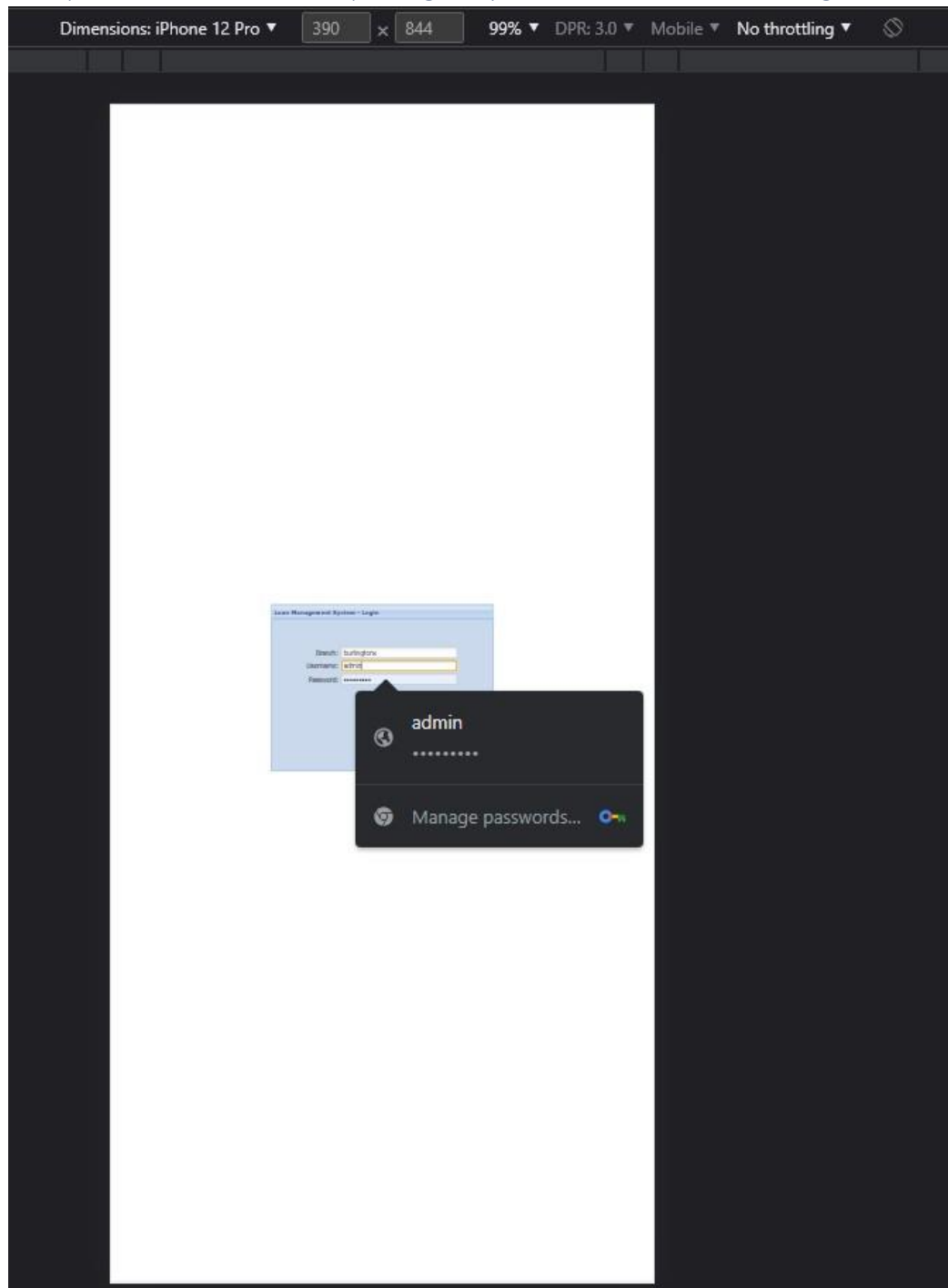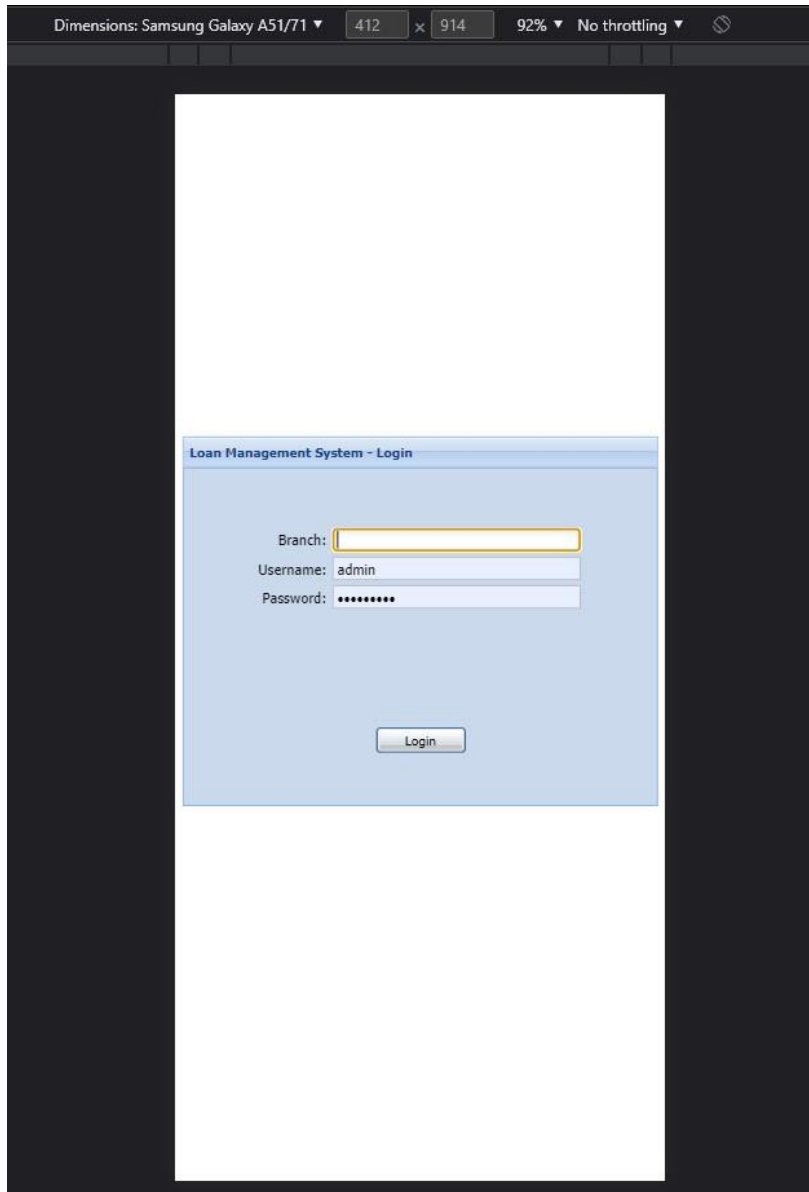
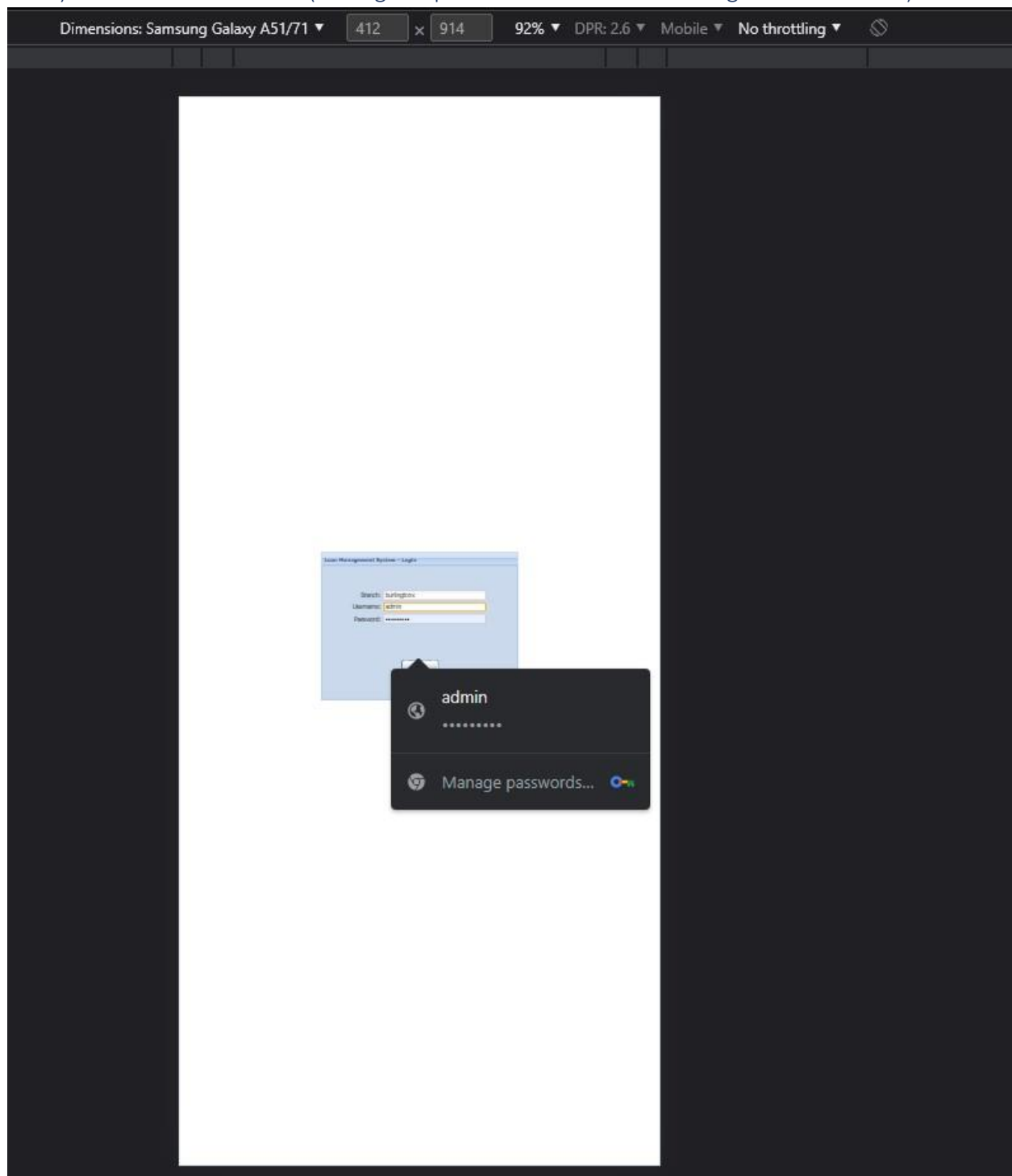c) Override geolocation data
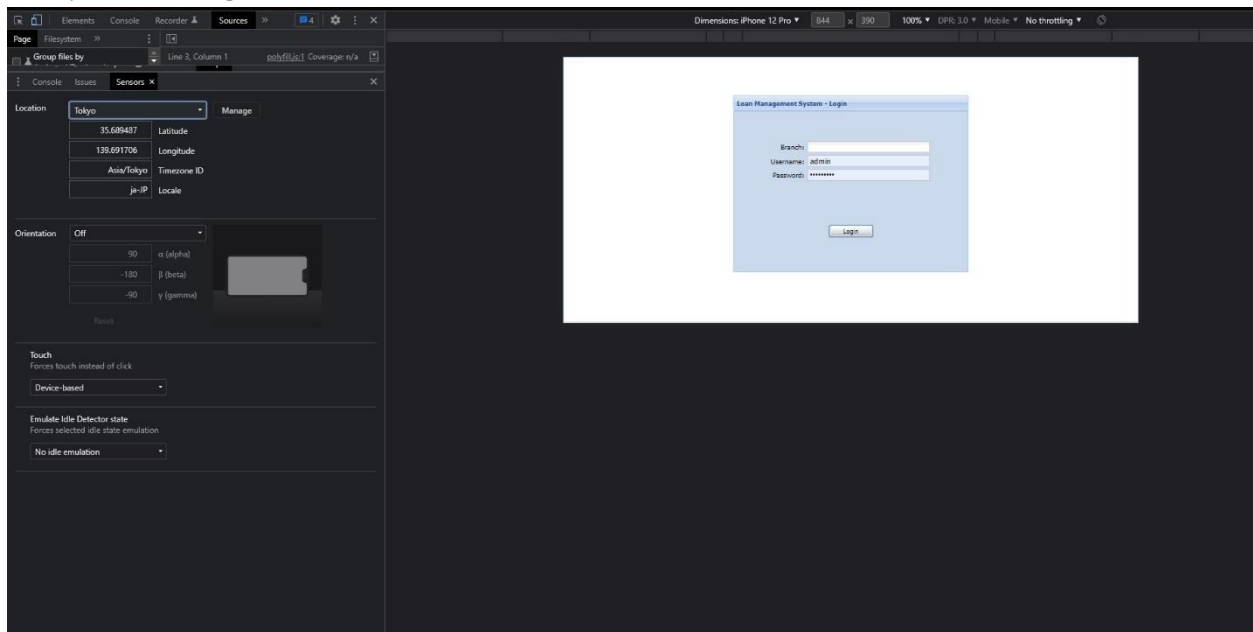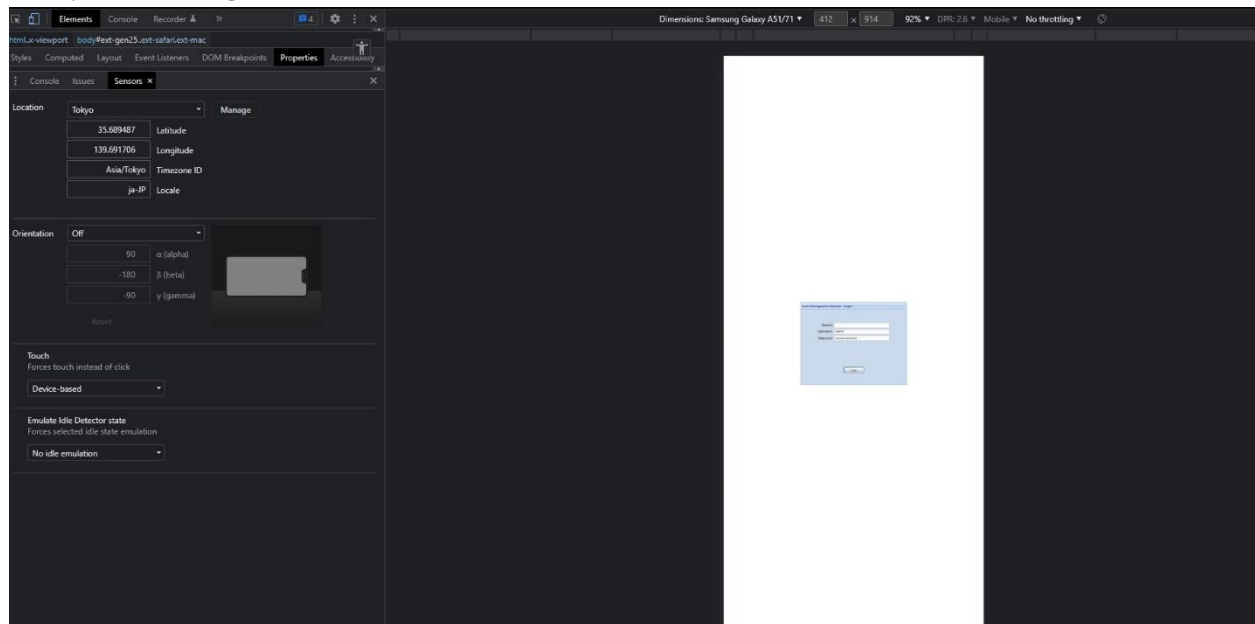

d) Simulate device orientation
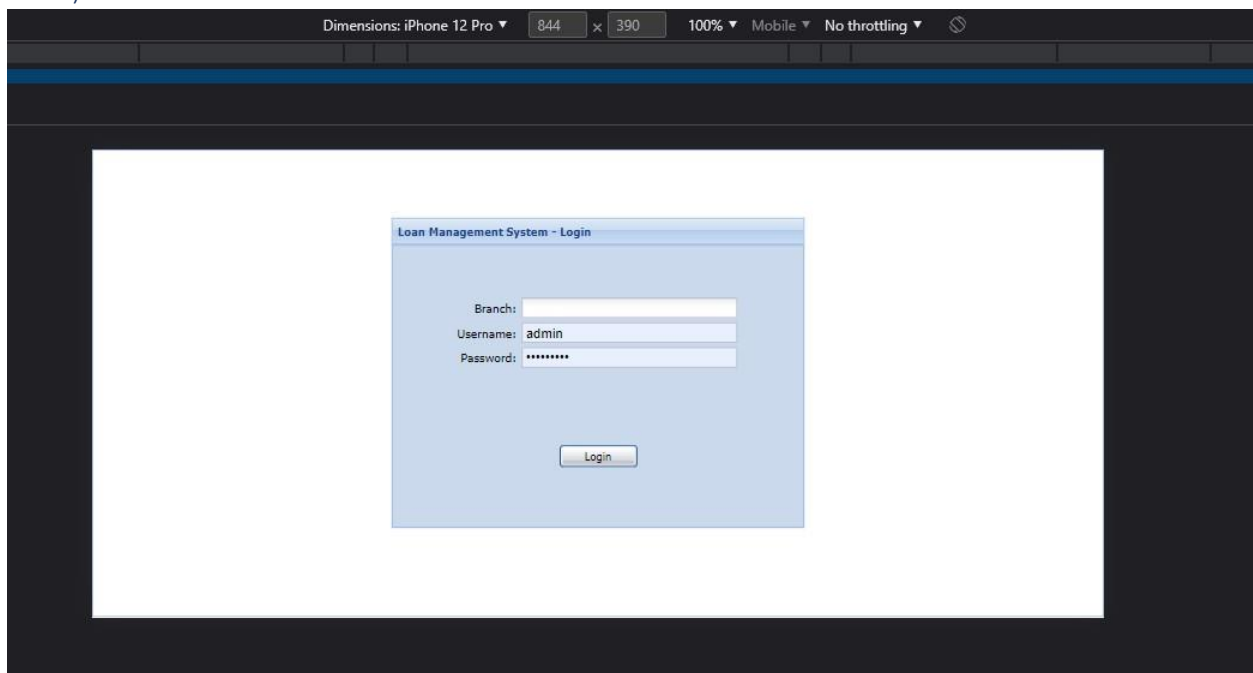
Samsung mode Testing

a) Enable touch emulation

b) Simulate multi-touch (testing not possible to conduct-no change in screenshots)

c) Override geolocation data

d) Simulate device orientation