

# QA Automation Task: Nomo Fintech

## Introduction

Dears, Hope you all doing well.

Pleasures to provide this document as part of my task its explains every step that I made for finish your automation task.

## Tools

**Framework:** Appium, Browserstack

**Platform:** Android, IOS

**Tested Device:**

- Android:  
Samsung Galaxy S22 Ultra | Android 12.0
- IOS  
iPhone 14 Pro | IOS 16

## Step 1: Upload Apk,IPA Then retrieve bsID

The screenshot displays the BrowserStack web interface. At the top, there's a navigation bar with links like 'Live', 'Automate', 'App Live', 'Products', 'Invite team', 'Plans and pricing', and user avatars. Below this, a header section shows 'ACCESS KEY', 'UPLOADED' status, and 'PARALLEL THREADS: Running 0/1'. The main content area features a table with details for an uploaded app: 'BStack android test' (BrowserStack Samples). The table includes fields for OS (Android 12.0), Device (Samsung Galaxy S22 Ultra), Duration (30s), User (Ahmed Zakaria), and Session ID (d5494d7...). A red box highlights the 'REST API Reason: Some elements failed to load' message. A modal window is open, showing the app name 'iOS-Real-Device-MyRNDemoApp.1.3.0-162.i' and a 'bs://' URL. Below the modal, there's a video player showing a dark screen. To the right, a table lists 'App' and 'Input Capabilities' with values for 'id' and 'appName'.

App	Input Capabilities
id	bs://1fc0801752b0a8ba5...
appName	org.wikiped

mate Live Automate App Live Products ▾ Invite team Plans and pricing ? 1

or Projects, Builds or Sessions ACCESS KEY ▾ **UPLOADED** PARALLEL THREADS: Running 0/1

**Build** > BStack android test  
BrowserStack Samples

OS	Android 12.0	Status	
Device	Samsung Galaxy S22 Ultra	REST API	
Duration	30s	Started At	28 Nov 2024 14:21 UTC
User	Ahmed Zakaria	Session ID	d5494d7...

REST API Reason: Some elements failed to load

Android-MyDemoAppRN.1.3.0.build-244.apk

bs://c924b6a468935f88ba5e8d135b425d33fc85ef29

Upload another app

**App** Input Capabilities

id	bs://1fc0801752b0a8ba5...
appName	org.wikiped...

Step 2:

Check required flow and get xpath

I used live mode testing for two apps (app,ipa) and I retrieved xPaths via Appium inspector

Enable Local Testing browserstack/node- appium and cucumber Samsung Galaxy S22 Appium BrowserStack SDK

app-live.browserstack.com/appium-inspector/?remoteHost=devtools-euc1a-mobile.browserstack.com&remotePort=443&remotePath=wd/mobile-2...

Source Commands Gestures Recorder Session Information

15:53 MYDEMOAPP

**Products**

Sauce Labs Backpack \$29.99

Sauce Labs Bike Light \$9.99

Sauce Labs Bolt T-Shirt \$15.99

Sauce Labs Fleece Jacket \$49.99

**App Source**

```

<android.widget.FrameLayout>
  <android.widget.LinearLayout>
    <android.widget.FrameLayout>
      <android.widget.LinearLayout resource-id="com.saucelabs.mydemoapp.rn.id:action_bar_root">
        <android.widget.FrameLayout resource-id="android:id/content">
          <android.view.ViewGroup>
            <android.view.ViewGroup>
              <android.view.ViewGroup>
                <android.view.ViewGroup>
                  <android.widget.FrameLayout>
                    <android.view.ViewGroup>
                      <android.view.ViewGroup>
                        <android.widget.FrameLayout>
                          <android.view.ViewGroup>

```

**Selected Element**

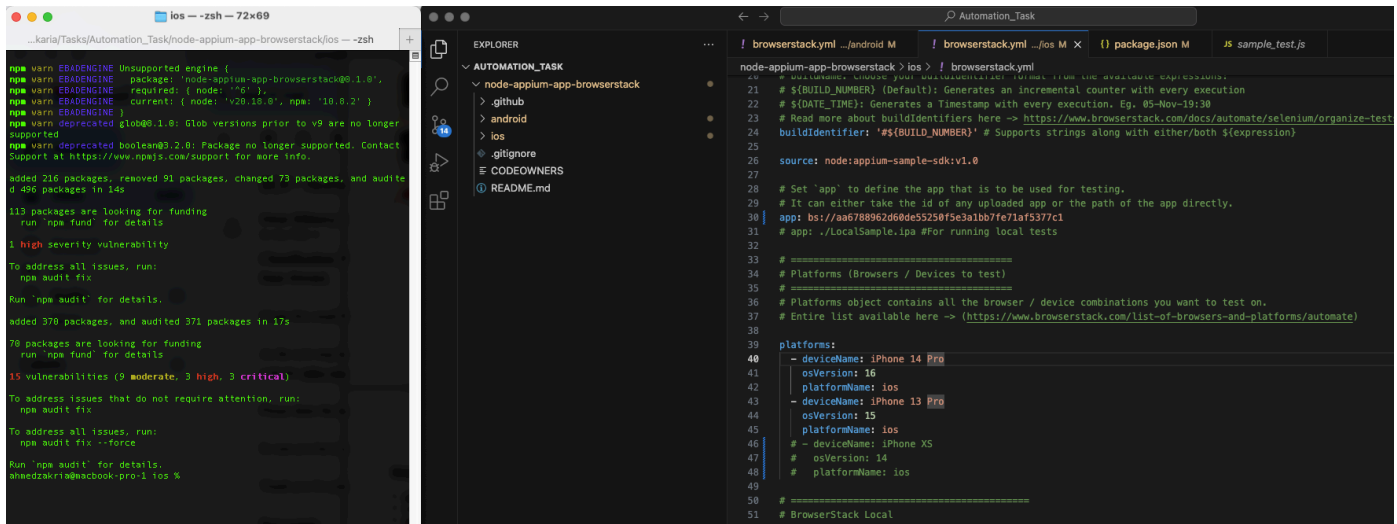
Enter Keys to Send

Find By	Selector
-android uiautomator (docs)	new UiSelector().className("android.widget.ImageView").instance()
xpath	//android.view.ViewGroup[@content-desc="open menu"]/android.view.ViewGroup

Attribute	Value
elementId	9307dada-9a56-478f-937f-c1118a96bfdb
index	0
package	com.saucelabs.mydemoapp.rn
class	android.widget.ImageView
text	
checkable	false

### Step 3: Clone SDK, and install node packages

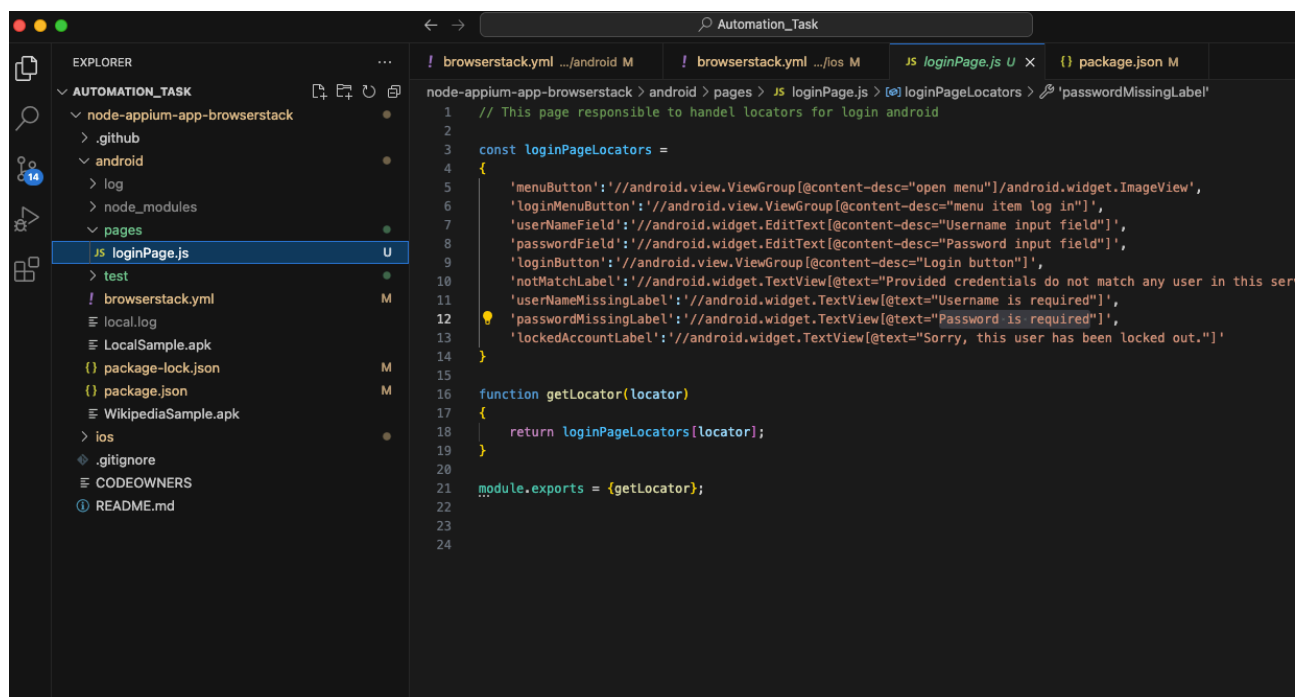
- git clone <https://github.com/browserstack/node-appium-app-browserstack>
- cd android
- npm i
- cd ..
- cd ios
- npm i



```
npm warn EBADENGINE Unsupported engine {
  package: 'node-appium-app-browserstack@1.0.0',
  required: { node: '^16' },
  current: { node: 'v20.10.0', npm: '10.8.2' }
}
npm warn EBADENGINE
npm warn deprecated glob@8.1.0: Glob versions prior to v9 are no longer supported
npm warn deprecated boolean@3.2.0: Package no longer supported. Contact Support at https://www.npmjs.com/support for more info.
added 216 packages, removed 91 packages, changed 73 packages, and audited 4496 packages in 14s
113 packages are looking for funding
  run `npm fund` for details
1 high severity vulnerability
To address all issues, run:
  npm audit fix
Run `npm audit` for details.
added 370 packages, and audited 371 packages in 17s
10 packages are looking for funding
  run `npm fund` for details
15 vulnerabilities (9 moderate, 3 high, 3 critical)
To address issues that do not require attention, run:
  npm audit fix
To address all issues, run:
  npm audit fix --force
Run `npm audit` for details.
shmedzakr@macbook-pro-1 ios %
```

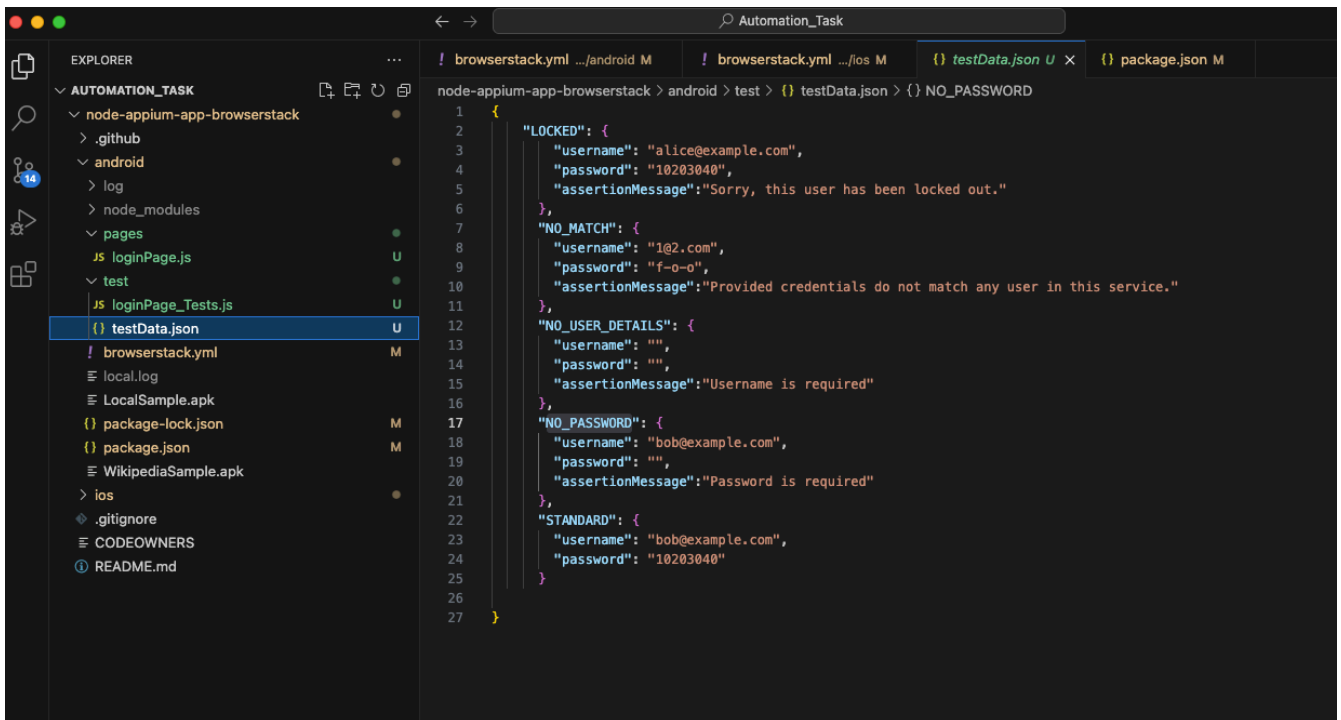
```
! browserstack.yml .../android M ! browserstack.yml .../ios M X {} package.json M JS sample_test.js
node-appium-app-browserstack > ios > ! browserstack.yml
20 # BuildIdentifier: Generates an incremental counter with every execution
21 # $(BUILD_NUMBER) (Default): Generates an incremental counter with every execution
22 # $(DATE_TIME): Generates a Timestamp with every execution. Eg. 05-Nov-19:30
23 # Read more about buildIdentifiers here -> https://www.browserstack.com/docs/automate/selenium/organize-tests
24 buildIdentifier: '$(BUILD_NUMBER)' # Supports strings along with either/both $(expression)
25
26 source: node:appium-sample-sdk:v1.0
27
28 # Set 'app' to define the app that is to be used for testing.
29 # It can either take the id of any uploaded app or the path of the app directly.
30 app: bs://a6788862d604e5250f5e3ab071e71af15377c1
31 # app: ./LocalSample.ipa #For running local tests
32
33 # =====
34 # Platforms (Browsers / Devices to test)
35 # =====
36 # Platforms object contains all the browser / device combinations you want to test on.
37 # Entire list available here -> (https://www.browserstack.com/list-of-browsers-and-platforms/automate)
38
39 platforms:
40 - deviceName: iPhone 14 Pro
41   osVersion: 16
42   platformName: ios
43 - deviceName: iPhone 13 Pro
44   osVersion: 15
45   platformName: ios
46 # - deviceName: iPhone XS
47 #   osVersion: 14
48 #   platformName: ios
49
50 # =====
51 # BrowserStack Local
52 # (For localhost -> chrome://devtools://devtools)
```

### Step 4: Create pages dir, then create loginPage.js that will hold all locators for android app, also same file will be created at IOS dir but with different values for xPaths



```
node-appium-app-browserstack > android > pages > JS loginPage.js > loginPageLocators > 'passwordMissingLabel'
1 // This page responsible to handel locators for login android
2
3
4
5 const loginPageLocators =
6
7   'menuButton': '//android.view.ViewGroup[@content-desc="open menu"]/android.widget.ImageView',
8   'loginMenuButton': '//android.view.ViewGroup[@content-desc="menu item log in"]',
9   'userNameField': '//android.widget.EditText[@content-desc="Username input field"]',
10  'passwordField': '//android.widget.EditText[@content-desc="Password input field"]',
11  'loginButton': '//android.view.ViewGroup[@content-desc="Login button"]',
12  'notMatchLabel': '//android.widget.TextView[@text="Provided credentials do not match any user in this ser',
13  'userNameMissingLabel': '//android.widget.TextView[@text="Username is required"]',
14  'passwordMissingLabel': '//android.widget.TextView[@text="Password is required"]',
15  'lockedAccountLabel': '//android.widget.TextView[@text="Sorry, this user has been locked out."]'
16
17 }
18
19 function getLocator(locator)
20 {
21   return loginPageLocators[locator];
22 }
23
24 module.exports = {getLocator};
```

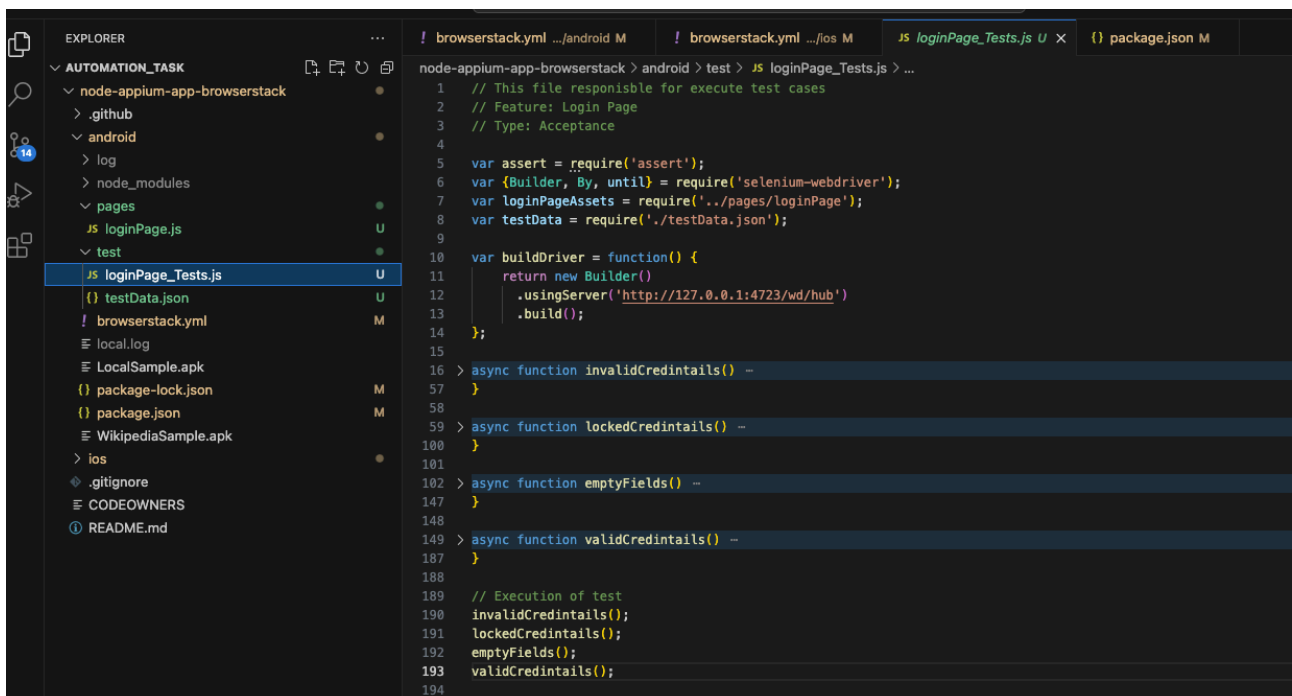
**Step 5: Create testData.json at test dir, that will hold all required test data also I add a new value related to message assertion.**



The screenshot shows the VS Code interface with the Explorer panel on the left and the Editor panel on the right. The Explorer panel shows the project structure for 'AUTOMATION\_TASK', with the 'test' directory expanded. The 'testData.json' file is highlighted in the Explorer. The Editor panel shows the content of 'testData.json', which is a JSON object with five test cases: 'LOCKED', 'NO\_MATCH', 'NO\_USER\_DETAILS', 'NO\_PASSWORD', and 'STANDARD'. Each test case contains 'username', 'password', and 'assertionMessage' fields.

```
1 {
2   "LOCKED": {
3     "username": "alice@example.com",
4     "password": "10203040",
5     "assertionMessage": "Sorry, this user has been locked out."
6   },
7   "NO_MATCH": {
8     "username": "1@2.com",
9     "password": "f-o-o",
10    "assertionMessage": "Provided credentials do not match any user in this service."
11  },
12  "NO_USER_DETAILS": {
13    "username": "",
14    "password": "",
15    "assertionMessage": "Username is required"
16  },
17  "NO_PASSWORD": {
18    "username": "bob@example.com",
19    "password": "",
20    "assertionMessage": "Password is required"
21  },
22  "STANDARD": {
23    "username": "bob@example.com",
24    "password": "10203040"
25  }
26 }
27 }
```

**Step 5: Write test cases at loginPage\_Tests.js**



The screenshot shows the VS Code interface with the Explorer panel on the left and the Editor panel on the right. The Explorer panel shows the project structure for 'AUTOMATION\_TASK', with the 'test' directory expanded. The 'loginPage\_Tests.js' file is highlighted in the Explorer. The Editor panel shows the content of 'loginPage\_Tests.js', which is a JavaScript file that defines test cases for the login page. It includes imports for 'assert', 'selenium-webdriver', and 'loginPageAssets', and defines a 'buildDriver' function and several test functions: 'invalidCredintails', 'lockedCredintails', 'emptyFields', and 'validCredintails'.

```
1 // This file responsible for execute test cases
2 // Feature: Login Page
3 // Type: Acceptance
4
5 var assert = require('assert');
6 var {Builder, By, until} = require('selenium-webdriver');
7 var loginPageAssets = require('../pages/loginPage');
8 var testData = require('../testData.json');
9
10 var buildDriver = function() {
11   return new Builder()
12     .usingServer('http://127.0.0.1:4723/wd/hub')
13     .build();
14 };
15
16 > async function invalidCredintails() -
17 }
18
19 > async function lockedCredintails() -
20 }
21
22 > async function emptyFields() -
23 }
24
25 > async function validCredintails() -
26 }
27
28 // Execution of test
29 invalidCredintails();
30 lockedCredintails();
31 emptyFields();
32 validCredintails();
33
```

Step 6: Run and output

To run android tests:

- cd android
- npm run android-test

To run iOS tests:

- cd ios
- npm run ios-test

Android Report: [link](#)

Ios Report: [link](#)

DASHBOARD

Search for Projects, Builds or Sessions

ACCESS KEY

UPLOAD APP

PARALLEL THREADS: Running 0/1 Queued 0/5

All Builds

TX1\_TEST\_Android 1

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST\_IOS 1

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 31

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 30

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 29

1/1 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST\_Android 1

BrowserStack Samples

Sessions 4 PASSED

Last Updated 28 Nov 2024 20:53 UTC

Duration 2m 17s

User Ahmed Zakaria

Build Status COMPLETED

Build ID 9d7dd5a...

Public Link

Copy Link

ALL SESSIONS (4)

PASSED (4)

TIMED OUT (0)

ERROR (0)

Sort

Filter

Search

Session Name	Duration	Status
<input type="checkbox"/> Login Via Locked User	32s	PASSED
Samsung Galaxy S22 Ultra Android 12.0 Last updated a few secs ago		
<input type="checkbox"/> Empty Fields	34s	PASSED
Samsung Galaxy S22 Ultra Android 12.0 Last updated a min ago		
<input type="checkbox"/> Valid Credentials	--	PASSED

All Builds

TX1\_TEST\_Android 1

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST\_IOS 1

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 31

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 30

4/4 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 29

1/1 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST 28

1/1 PASSED

a few secs ago

BrowserStack Samples

TX1\_TEST\_IOS 1

BrowserStack Samples

Device iPhone 14 Pro

Duration 30s

User Ahmed Zakaria

REST API PASSED

Started At 28 Nov 2024 20:14 UTC

Session ID adbff4f...

Public Link

Copy Link

App

Input Capabilities

Device Capabilities

id bs://aa6788962d60de55250f5e3a1bb7fe71af5377c1

appName com.sauce.labs.mydemoapp.rn

bundleId com.sauce.labs.mydemoapp.rn

version 1.3.0

customId null

20:14

MYDEMOAPP

Login

Select a username and password from the list below, or click on the usernames to automatically populate the username and password.

Username

Password

Login

Usernames Password

bob@example.com 50203040

alice@example.com Locked out!

Catalog Cart Menu