

## **G1ANT RPA INTERNSHIP 2020**

PROJECT -> DIGITAL MARKETING

WEBSITES USED -> WWW.LINKEDIN.COM,  
FACEBOOK.COM,WWW.TWITTER.COM,  
WWW.INSTAGRAM.COM

SOFTWARE -> VISUAL STUDIO, G1ANT

### **PROJECT CONTRIBUTORS**

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### **PROJECT LEAD**

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## DIGITAL MARKETING

### Description



The process of the code is to simulate a real-time process automation strategy in supporting Digital Marketing in Social Media platforms. To help carry out the process better, an eclectic range of social media platforms are selected such as LinkedIn, Facebook, WhatsApp, Twitter, and have also given preference for the user to select his platform of interest. The method of recording responses is done through a google form with defined questionnaire pertinent to the platforms to align data ensuring the right content is posted.

Google sheet Link:

[https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-utPtzJzXISuRTt7oJaffA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-utPtzJzXISuRTt7oJaffA/viewform?usp=sf_link)

Spreadsheet ID : 13i1DHjxRHyENDTLS-B02-X8E3JQNxpRvwRkoW7HECU

| Argument | Type | Required | Default Value | Description   |
|----------|------|----------|---------------|---|
| type     | Text | Yes      |               | Enter the default browser for opening the webpage [Chrome, Firefox] |

|         |          |     |  |   |
|---------|----------|-----|--|---|
| email   | Text     | Yes |  | Enter the operator's email here   |
| pword   | Text     | Yes |  | Enter the operator's password here  |
| to      | Text     | Yes |  | Enter the email of the user to whom the message is to be sent                           |
| subject | Text     | Yes |  | Enter the title of the message  |
| message | Text     | Yes |  | Draft your email  |
| Id      | Text     | Yes |  | Opens up the required google spreadsheet with the required id for performing operations |
| result  | Text     | No  |  result | Name of a variable where the command's result will be stored                            |
| if      | Bool     | No  | true   | Executes the command if the expected condition is true                                  |
| timeout | Timespan | No  |         | Specifies time in milliseconds for G1ANT.Robot to                                       |

|                  |               |    |                    |  |
|------------------|---------------|----|--------------------|--|
|                  |               |    | timeoutcomm<br>and | wait for the<br>command to be<br>executed  |
| errorcall        | Proced<br>ure | No |                    | Name of the<br>procedure to be<br>called if an<br>exception is<br>called or timeout<br>has occurred                                      |
| errorjump        | label         | No |                    | Name of the<br>label to jump to<br>when the<br>command<br>throws an<br>exception or<br>when a<br>given timeout ex<br>pires               |
| errormess<br>age | Text          | No |                    | Message to be<br>shown if an<br>error occurs or<br>timeout exceeds   |
| errorresult      | Variable      | No |                    | Name of a<br>variable that will<br>store the<br>returned<br>exception. The<br>variable will be<br>of <a href="#">error</a> structur<br>e |

|        |      |     |  |  |
|--------|------|-----|--|--|
| search | Text | Yes |  | Indicate the program to search with the necessity arguments (xpath, id, class, etc...) |
| by     | Text | Yes |  | Gives the program a mode to look for the id for the desired search option              |

## Standard Operating Procedure

The below mentioned steps indicate the standard protocol for which the program runs:

- The operator first sends a mail to the company/start-up/organization/an external agency requesting for which platforms are to be posted. The responses are collected on a google form which is linked with an inbuilt googledocs spreadsheet. This spreadsheet will be the source of parsing in the values to the robot.

Permission to post applications on your platform

name@company.com

Permission to post applications on your platform

Sir,I introduce myself as XYZ. We wish to promote your product in platforms. Kindly fill the google form and wait about 6 hours to around 1 business day to ensure your product advertisements published.(Google Form:  
[https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-utPtzJzXISuRTt7oJaffA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-utPtzJzXISuRTt7oJaffA/viewform?usp=sf_link)  
Thank You,  
Best Regards  
Team XYZ

Sans Serif
B
I
U
A

Send

A
🔗
😊
📎
📷
🕒
✍️

- Using the googlesheet.find option, the robot detects the platforms for which the advertisements are meant to be posted. For multiple platforms, the user has to click for more than one option to ensure accurate reading of all the platforms

## GOOGLE DOCUMENT

Digital Marketing your Advertisements

This google form allows the user to select options to ensure on which platforms their advertisements must be posted. Note the posting of these advertisements would take a minimum of 6 hours to around 1 business working day depending on the number of platforms

\* Required

Name of the company \*

Your answer

Platforms in which advertisements have to be posted \*

☐ LinkedIn

☐ Instagram

☐ WhatsApp

☐ Facebook


☐ Twitter

☐ Others


- For the detected platform, the robot starts with performing all the pre-requisite operations starting from posting to adding connections. In an event of adding pictures, the user must provide URL of the ID which will be parsed in with the robot as a picture URL for posting the same on any of the social media website.
- On account of the ID, based on the row and column of the spreadsheet, the robot can detect the content and will post accordingly to minimize errors.
- For generating advertisements, Facebook business ID is being used for which any amount transaction (if any) is done through the mode of payment : PayPal or PayTM. Note: For any unsuccessful transaction, we have ensured the user gets intimated the same, and the necessary steps would be done to ensure a smooth process.
- The cycle then periodically repeats itself to traverse through the google form for the entire day. In order to reduce complexity, once the process is completed, the google spreadsheet will close to erase previous data and creates a new spreadsheet to begin a new process.
- In case of a failure in the internet connection, the delay period mentioned would take care of any unnecessary interruptions during the execution process ensuring simplicity.


PICTURES TO DEMONSTRATE THE WORKING







## FACEBOOK POST

 Public ▼

What's on your mind, Tanish?



 Add to Your Post



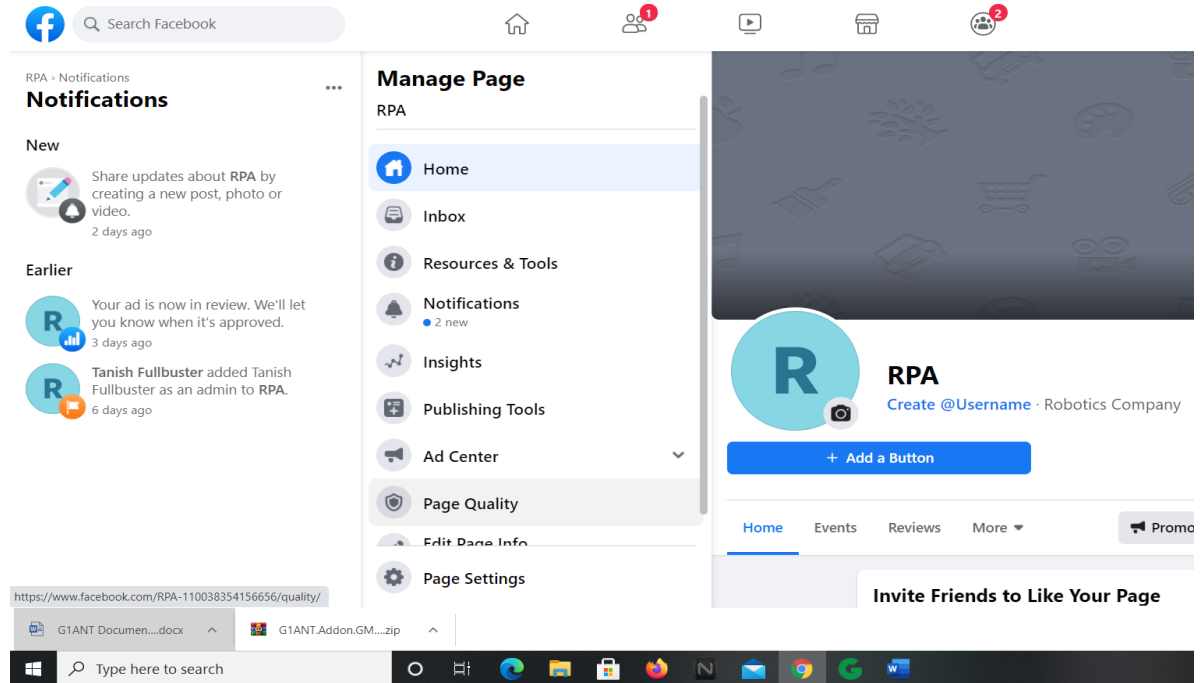
Post

## PAGE

[illegible]



## ADVERTISING



The screenshot displays the Facebook interface for managing the 'RPA' page. At the top, the navigation bar includes the Facebook logo, a search bar, and icons for home, notifications (with a red badge), video, and a page icon. The left sidebar features the 'Notifications' section for the 'RPA' page, showing three items: a general update about creating new content (2 days ago), an ad review notification (3 days ago), and an admin addition notification (6 days ago). The 'Manage Page' sidebar lists various tools: Home, Inbox, Resources & Tools, Notifications (2 new), Insights, Publishing Tools, Ad Center, Page Quality, Edit Page Info, and Page Settings. The main content area shows the 'RPA' page profile with a blue 'R' logo, the name 'RPA', and the description 'Create @Username · Robotics Company'. Below the profile is a blue 'Add a Button' button and a navigation bar with 'Home', 'Events', 'Reviews', and 'More'. A 'Promo' button is also visible. At the bottom, a taskbar shows the Windows search bar and several application icons, including Edge, File Explorer, and various productivity apps.

## LINKEDIN POST

What do you want to talk about?

[Add hashtag](#) Help the right people see your post



Post

Celebrate an occasion

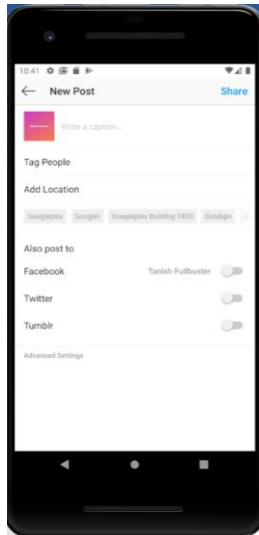
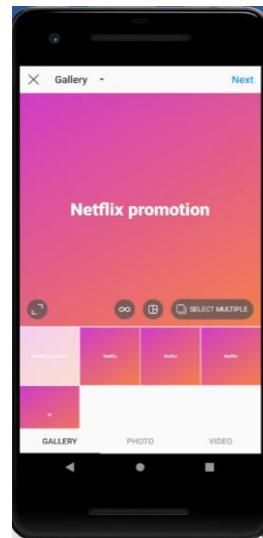
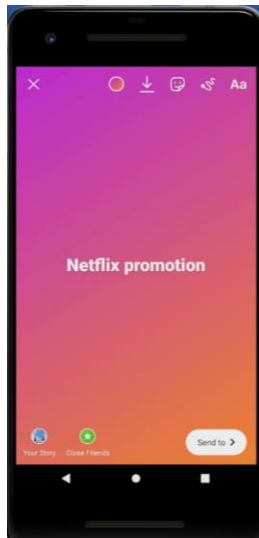
Find an expert

Create a poll

Share a profile

Offer help

## INSTAGRAM POST



## CODE

The code for promoting the product is given below:-

addon selenium version 4.104.0.0

addon googledocs version 4.103.0.0

addon gmail version 1.0.0.0

addon core version 4.107.0.0

addon language version 4.106.1.0

gmail.open type chrome search

♥ login = ♥ credential[[gmail:login]]

♥ password = ♥ credential[[gmail:password]]

delay 10

gmail.login email ♥ login pword ♥ password search

delay 20

gmail.sendmails to "name@company.com" subject

"Permission to post applications on your platform" message "

Sir,I introduce myself as XYZ. We wish to promote your product in platforms. Kindly fill the google form and wait about 6 hours to around 1 business day to ensure your product advertisements published.(Google Form:

[https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-](https://docs.google.com/forms/d/e/1FAIpQLSdS6o8mqikXUX1Q7MjLVv8uzP2h-utPtzJzXISuRTt7oJaffA/viewform?usp=sf_link)

utPtzJzXISuRTt7oJaffA/viewform?usp=sf\_link<<<enter>>>Thank You,<<<enter>>>Best Regards<<<enter>>>Team XYZ" search

googlesheet.open 13i1DHjxRHyENDTLS-B02-

X8E3JQNXxpRvwRkoW7HECU result ♥ id

googlesheet.getvalue C5:C8 result ♥ values

dialog ♥ values

♥ i=1

for ♥ i from 1 to 3

if ♥ values[[♥ i]]=="F"

♥ i = ♥ i + 9

♥ login = ♥ credential[[facebook:login]]

♥ pword = ♥ credential[[facebook:password]]

--post

selenium.open chrome url

https://www.facebook.com/?stype=lo&jlou=Afdgr0DRe0cYT8Mp  
pLqH4vFkKyFM5A6ZWa7Z7Mco-CslDTHYzmESJZQdHWi7Q--  
\_6h-0q2uRCoQxkux1pdSTH2b-  
cmVKT4Aq1tieQGSpK26hJw&smuh=4398&lh=Ac9mPzSsD86Dz  
e6x

delay 5

selenium.type ♥ login search //\*[@id="email"] by xpath

delay 5

selenium.type ♥ pword search //\*[@id="pass"] by xpath

delay 5

selenium.click search //\*[@id="u\_0\_b"] by xpath

delay 15

selenium.click search

//\*[@id="mount\_0\_0"]/div/div[1]/div[1]/div[2]/div[4]/div[1]/div[3]/  
span/div/i by xpath

delay 5

selenium.click search

//\*[@id="mount\_0\_0"]/div/div[1]/div[1]/div[2]/div[4]/div[2]/div/div  
/div[1]/div[1]/div/div/div/div/div/div/div/div[2]/div[1]/div/div[1]/di  
v[1]/div by xpath

delay 10

keyboard "advertising the product for post...."

selenium.click search

```
//*[@id="facebook"]/body/div[11]/div[1]/div/div[2]/div/div/div/form/div/div[1]/div/div[2]/div[3]/div[2]/div by xpath
```

--page

delay 15

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[2]/div[4]/div[1]/div[3]/span/div/i by xpath
```

delay 15

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[2]/div[4]/div[2]/div/div/div[1]/div[1]/div/div/div/div/div/div/div/div[2]/div[4]/a/div[1]/div[1]/div/i by xpath
```

delay 5

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[3]/div/div/div[1]/div[1]/div[1]/div/div[2]/div[1]/div[2]/div/div/div[1]/div/div[2]/label/div/div by xpath
```

keyboard "Page name"

delay 5

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[3]/div/div/div[1]/div[1]/div[1]/div/div[2]/div[1]/div[2]/div/div/div[2]/div/div[1]/label/div/div/div/div by xpath
```

keyboard "Category<<<ENTER>>>"

delay 5

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[3]/div/div/div[1]/div[1]/div[1]/div/div[2]/div[1]/div[2]/div/div/div[3]/div/div/label/div/div by xpath
```

keyboard "Description"

delay 5

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[3]/div/div/div[1]/div[1]/div[1]/div/div[3]/div[2]/div/div/div[2] by xpath
```

--fb advertising

selenium.newtab chrome url

<https://www.facebook.com/business/ads> timeout 10000

delay 10

selenium.click search

```
//*[@id="u_0_g9"]/div[3]/div[1]/div[2]/div by xpath timeout 10000
```

delay 20

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[3]/div/div/div[1]/div[1]/div[2]/div/div/div/div/div[2]/div[1]/div/div/a/div[1]/div[1]/div by xpath timeout 10000
```

delay 10

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[1]/div/div[3]/div[2]/div/div/div[3]/div/div[3]/div/div[1]/span[1]/div/div/div/div/div/div[2]/div[1]/div/div/label/div/div by xpath timeout 10000
```

keyboard "<<<enter>>>Hi"

-run ad continuously

-selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[1]/div/div[3]/div[2]/div/div/div[3]/div/div[3]/div/div[1]/div[1]/div/div/span[1]/div/div/div[2]/div/div[2]/div/div[1]/div/div[2]/div/div/i by xpath  
timeout 10000
```

-run for n days continuously

-selenium.click search //\*[@id="jsc\_c\_48"] by xpath timeout  
10000

-keyboard "<<<backspace 2>>>n"

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[1]/div/div[3]/div[2]/div/div/div[3]/div/div[4]/div/div/div/div/div/div[2]/div  
by xpath timeout 10000
```

delay 5

-GST

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[2]/div/div[1]/div/div[2]/div/div/div/div/div[1]/div[3]/div/div[1]/div[2]/div[1]/div/div/div/div/div/div/label/div/div[1] by xpath timeout 10000
```

keyboard "GST"

delay 5

-PAN

selenium.click search

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[2]/div/div
```



```
v/div[1]/div/div[2]/div/div/div/div/div[1]/div[3]/div/div[1]/div[2]/div[2]/div/div/div/div/div/div/label/div by xpath timeout 10000
```

```
keyboard "PAN"
```

```
delay 5
```

```
-Business name
```

```
selenium.click search
```

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[2]/div/div/div/div[1]/div/div[2]/div/div/div/div/div[1]/div[3]/div/div[2]/div[2]/div/div/div/div/div/div/label/div/div[1] by xpath timeout 10000
```

```
keyboard "Business name"
```

```
delay 5
```

```
-Street address 1
```

```
selenium.click search
```

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[2]/div/div/div/div[1]/div/div[2]/div/div/div/div/div[1]/div[3]/div/div[3]/div[2]/div/div[1]/div/div/div/div/div/div/label/div/div[1] by xpath timeout 10000
```

```
keyboard "address1"
```

```
delay 5
```

```
-Street address 2
```

```
selenium.click search
```

```
//*[@id="mount_0_0"]/div/div[1]/div[1]/div[4]/div/div/div[2]/div/div/div/div[1]/div/div[2]/div/div/div/div/div[1]/div[3]/div/div[3]/div[2]/div/div[2]/div/div/div/div/div/div/label/div/div by xpath timeout 10000
```

```
keyboard "address2"
```

```
delay 5
```



delay 5

selenium.click search

//\*[@id="facebook"]/body/div[5]/div[2]/div/div/div/div/div/div/div/div[3]/span[2]/div/div[2]/button by xpath timeout 10000

delay 5

selenium.click search

//\*[@id="AdsPaymentDisclaimerAcceptButton"] by xpath timeout 10000

delay 5

selenium.click search //\*[@id="u\_a\_2"] by xpath timeout 10000

delay 5

selenium.click search

//\*[@id="app"]/main/div[2]/div[3]/section/div/span[1]/label/input by xpath timeout 10000

delay 5

selenium.click search //\*[@id="inp"] by xpath timeout 10000

keyboard "number<<<enter>>>"

selenium.click search

//\*[@id="facebook"]/body/div[5]/div[2]/div/div/div/div/div/div/div/div[2]/div/div[4] by xpath timeout 10000

else if  values[ i]=="L"

 i =  i + 8

 login =  credential[linkedin:login]

♥ pword = ♥ credential[[linkedin:password]]

selenium.open type chrome url  
https://www.linkedin.com/login?fromSignIn=true&trk=guest\_ho  
mepage-basic\_nav-header-signin

delay 2

selenium.type text ♥ login search //\*[@id="username"] by  
xpath

delay 2

selenium.type text ♥ pword search //\*[@id="password"] by  
xpath

delay 2

selenium.click search  
//\*[@id="app\_\_container"]/main/div[2]/form/div[3]/button by  
xpath

delay 20

selenium.click search //\*[@id="ember45"]/div/div[1]/button  
by xpath

delay 2

keyboard "advertising the product...."

delay 2

selenium.click search //\*[@id="ember547"] by xpath

else if ♥ values[[♥ i]]=="I"

♥ i = ♥ i + 9

-need to have a facebook account to open instagram and which is already connected

```
appium.open apppackage com.instagram.android appactivity  
com.instagram.mainactivity.MainActivity
```

```
delay 10
```

```
appium.click search  
/hierarchy/android.widget.FrameLayout/android.widget.Linear  
Layout/android.widget.FrameLayout/android.widget.LinearLay  
out/android.widget.FrameLayout/android.widget.FrameLayout/  
android.widget.FrameLayout/android.widget.FrameLayout/and  
roid.widget.LinearLayout/android.widget.LinearLayout/android  
.widget.TextSwitcher by xpath
```

```
delay 25
```

```
appium.click search //android.widget.ImageView[@content-  
desc="Camera"] by xpath
```

```
delay 8
```

```
appium.click search  
/hierarchy/android.widget.FrameLayout/android.widget.Fra  
meLayout/android.widget.FrameLayout/android.widget.ScrollV  
iew/android.widget.LinearLayout/android.widget.LinearLayout/  
android.widget.LinearLayout[2]/android.widget.Button[1] by  
xpath
```

```
delay 5
```

```
appium.click search  
/hierarchy/android.widget.FrameLayout/android.widget.Fra  
meLayout/android.widget.FrameLayout/android.widget.ScrollV
```

iew/android.widget.LinearLayout/android.widget.LinearLayout/  
android.widget.LinearLayout[2]/android.widget.Button[1] by  
xpath

delay 5

appium.click search

/hierarchy/android.widget.FrameLayout/android.widget.Fra  
meLayout/android.widget.FrameLayout/android.widget.ScrollV  
iew/android.widget.LinearLayout/android.widget.LinearLayout/  
android.widget.LinearLayout[2]/android.widget.Button[1] by  
xpath

delay 5

appium.click search

/hierarchy/android.widget.FrameLayout/android.widget.Fra  
meLayout/android.widget.FrameLayout/android.widget.ScrollV  
iew/android.widget.LinearLayout/android.widget.LinearLayout/  
android.widget.LinearLayout[2]/android.widget.Button[1] by  
xpath

delay 8

appium.click search "'//android.view.View[@content-  
desc='Create mode button']'" by xpath

delay 5

appium.click search

/hierarchy/android.widget.FrameLayout/android.widget.Linear  
Layout/android.widget.FrameLayout/android.widget.LinearLay  
out/android.widget.FrameLayout/android.widget.FrameLayout/  
android.widget.FrameLayout[1]/android.widget.FrameLayout/a  
ndroid.widget.FrameLayout/android.widget.FrameLayout/andr  
oid.widget.FrameLayout[2]/android.widget.FrameLayout[3]/and

roid.widget.FrameLayout/android.widget.FrameLayout/android.  
widget.FrameLayout/android.widget.FrameLayout[2] by xpath

delay 5

--advt

keyboard "'advt about product...'"

appium.button back

delay 2

appium.click search "'//android.widget.ImageView[@content-  
desc="Save to Device"]'" by xpath

delay 15

appium.button back

delay 5

appium.click search

/hierarchy/android.widget.FrameLayout/android.widget.Fra  
meLayout/android.widget.FrameLayout/android.widget.Frame  
Layout/android.widget.LinearLayout/android.widget.FrameLay  
out[1]/android.widget.TextView by xpath

delay 5

appium.button back

delay 5

appium.click search

//android.widget.FrameLayout[@content-desc="Camera"] by  
xpath

delay 5

```
appium.click search //android.widget.TextView[@content-  
desc="Next"] by xpath
```

```
delay 5
```

```
appium.click search //android.widget.TextView[@content-  
desc="Next"] by xpath
```

```
delay 5
```

```
appium.click search  
/hierarchy/android.widget.FrameLayout/android.widget.Linear  
Layout/android.widget.FrameLayout/android.widget.LinearLay  
out/android.widget.FrameLayout/android.widget.FrameLayout/  
android.widget.FrameLayout[1]/android.view.ViewGroup/androi  
d.widget.ScrollView/android.widget.LinearLayout/android.widg  
et.LinearLayout[1]/android.widget.FrameLayout[1]/android.widg  
et.LinearLayout/android.widget.EditText by xpath
```

```
delay 5
```

```
-caption
```

```
keyboard "caption"
```

```
delay 5
```

```
appium.click search //android.widget.TextView[@content-  
desc="Next"] by xpath
```

```
else
```

```
break
```

```
end
```

```
end
```

NOTES:



- The above code will create a post on the platform specified by the customer in the google docs.
- If Facebook platform is chosen, then the customer need to give further details for creating a page and advertising the product given as a paragraph option in Google forms.