



SECURE WAY OF USING SMART PHONE

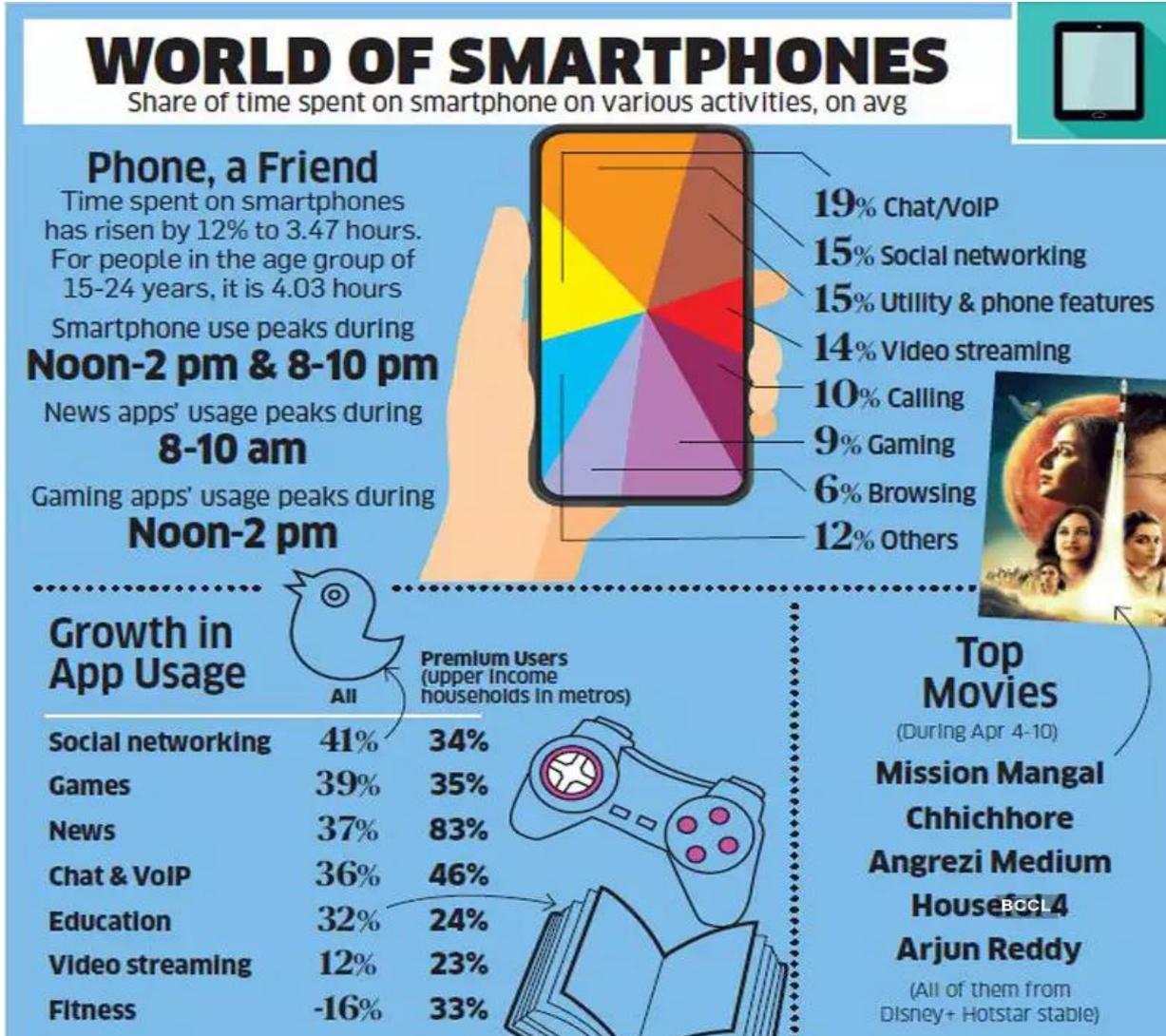
Indraveni K

Joint Director,

C-DAC, Hyderabad



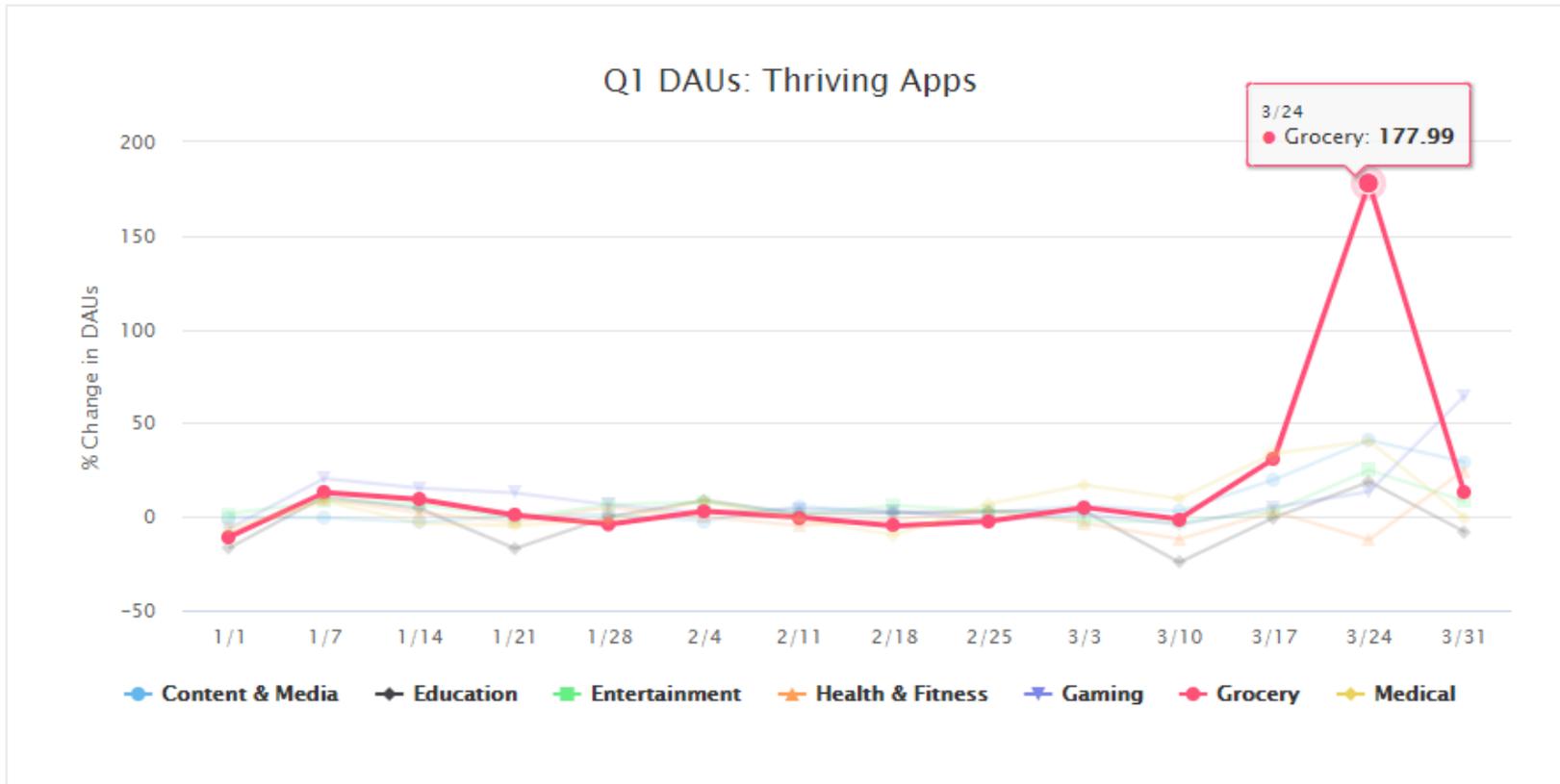
Smart Phones usage





Smart Phones usage

- Daily Active Users





Why should we worry ?

- smartphones
 - Have our credentials are saved
 - Have our banking apps are installed
 - We carry out many financial transactions -
upi, wallets etc.,
 - Messages
 - Photographs and videos



Why should we worry ?

Our complete

Personal Sensitive

Information is carried by our smart phones



Critical Features of your mobile

- Messaging – OTP , password research codes etc.,
- Camera
- Microphone
- Gallery
- Contacts
- Location

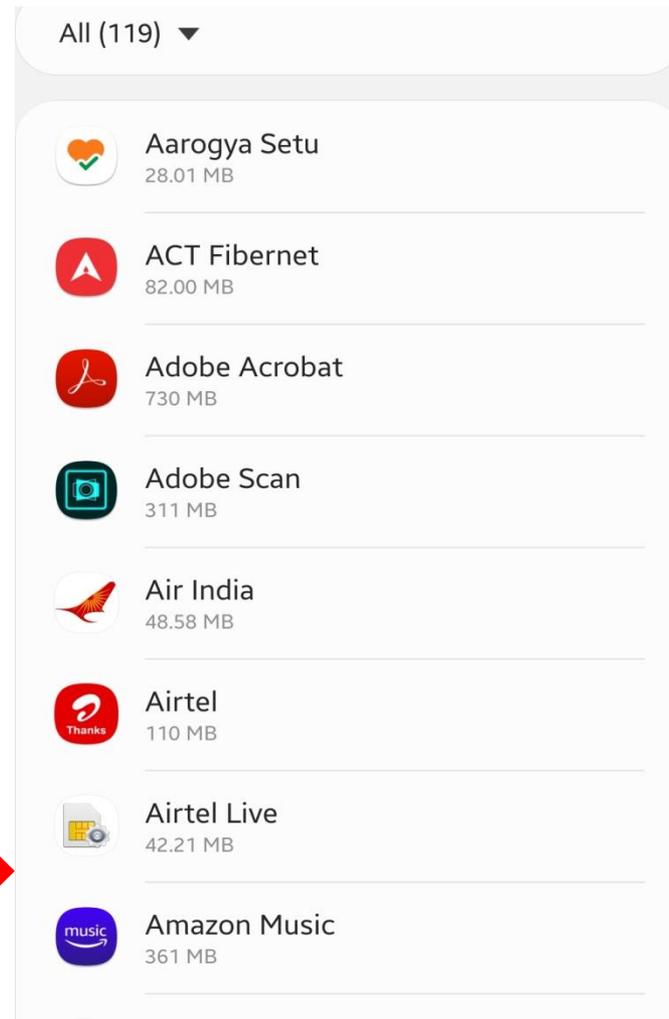
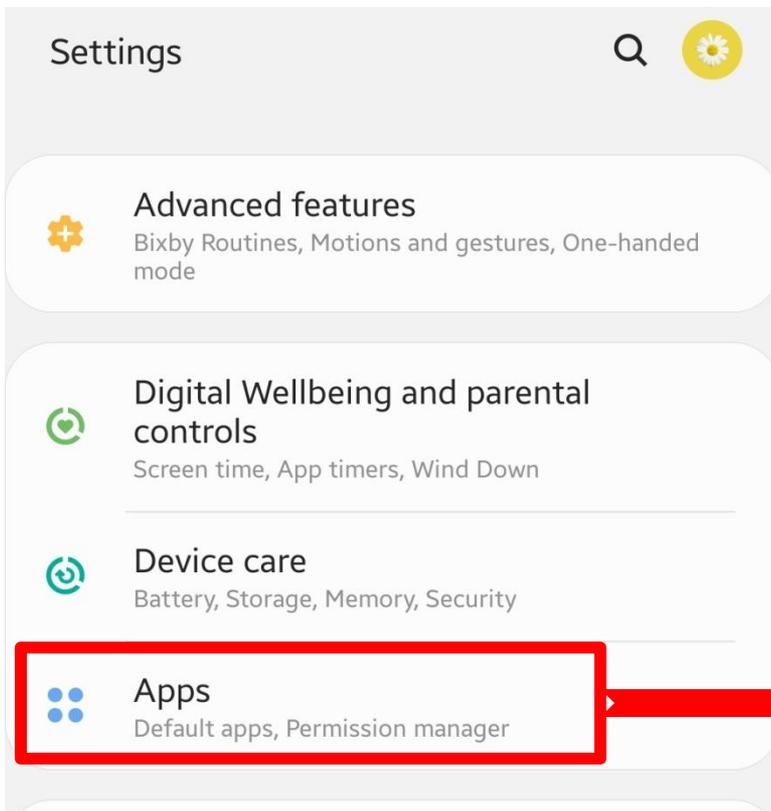


Regularly Monitor the permissions of critical features of your mobile

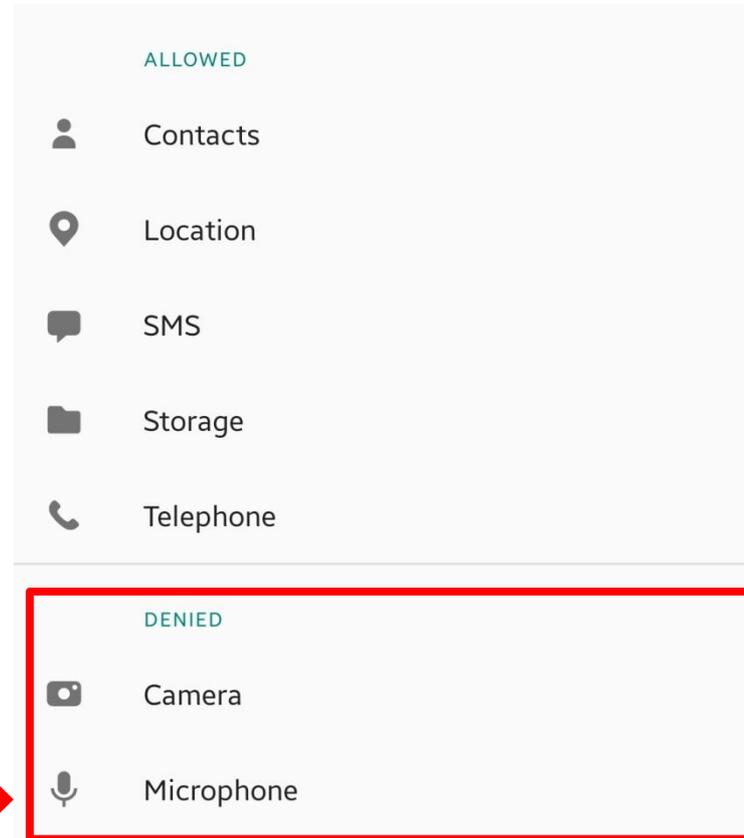
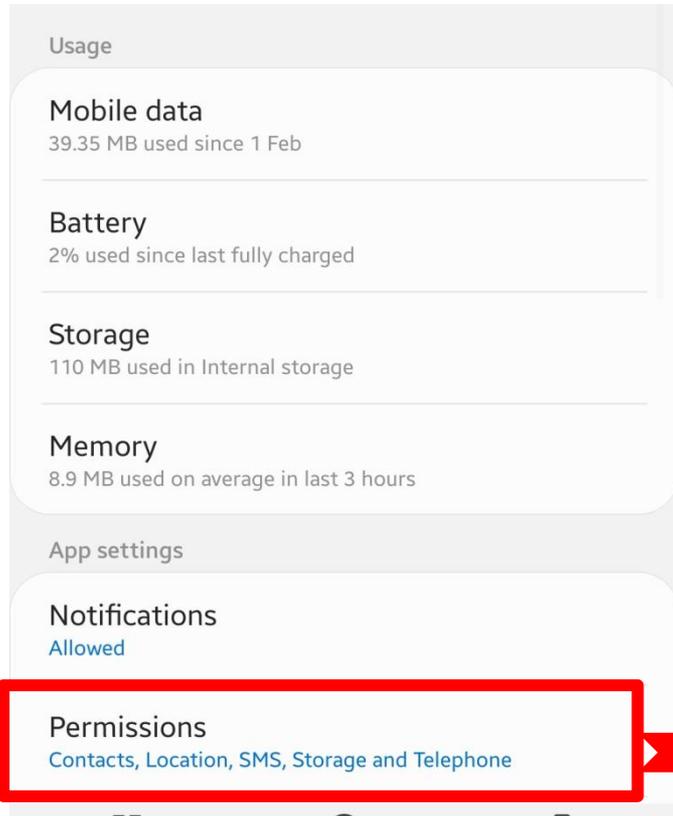


Monitor Permissions

- Settings - Apps



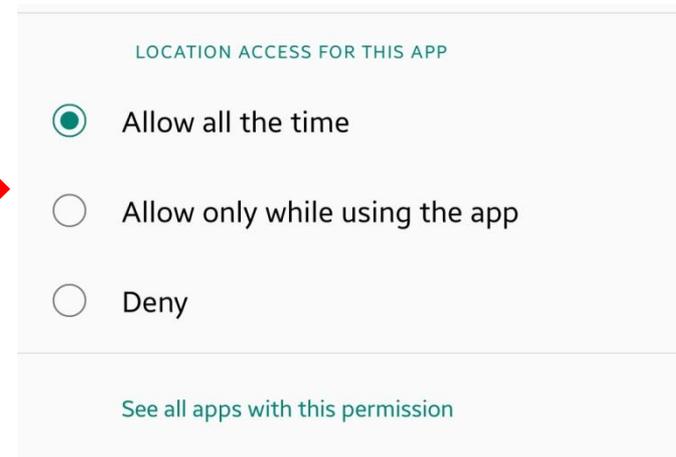
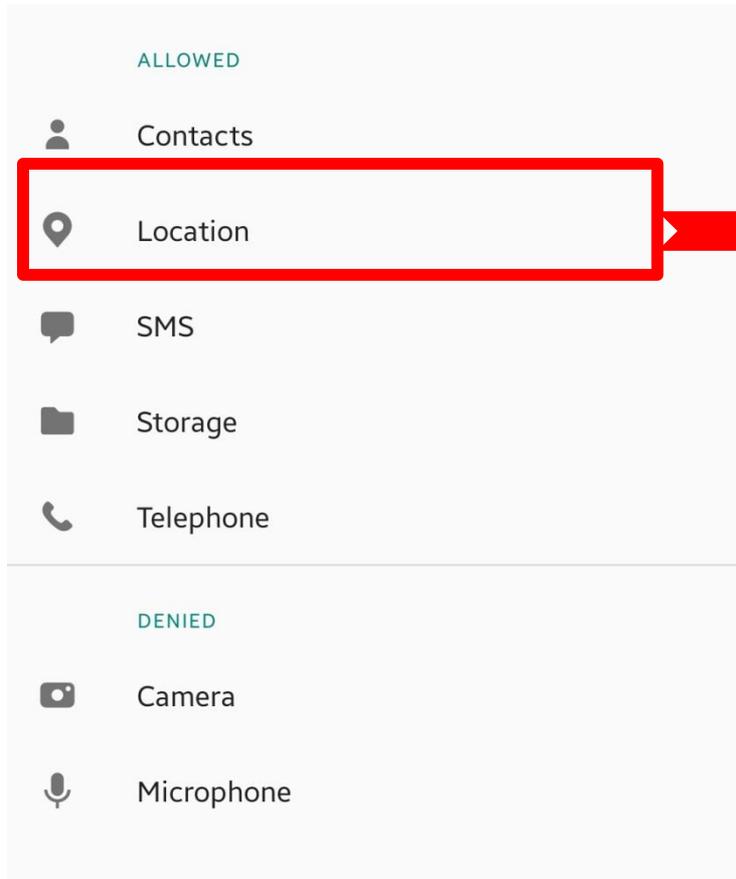
Monitor Permissions



Based on App functionality we should be able to analyze if these permissions are necessary for the app or not



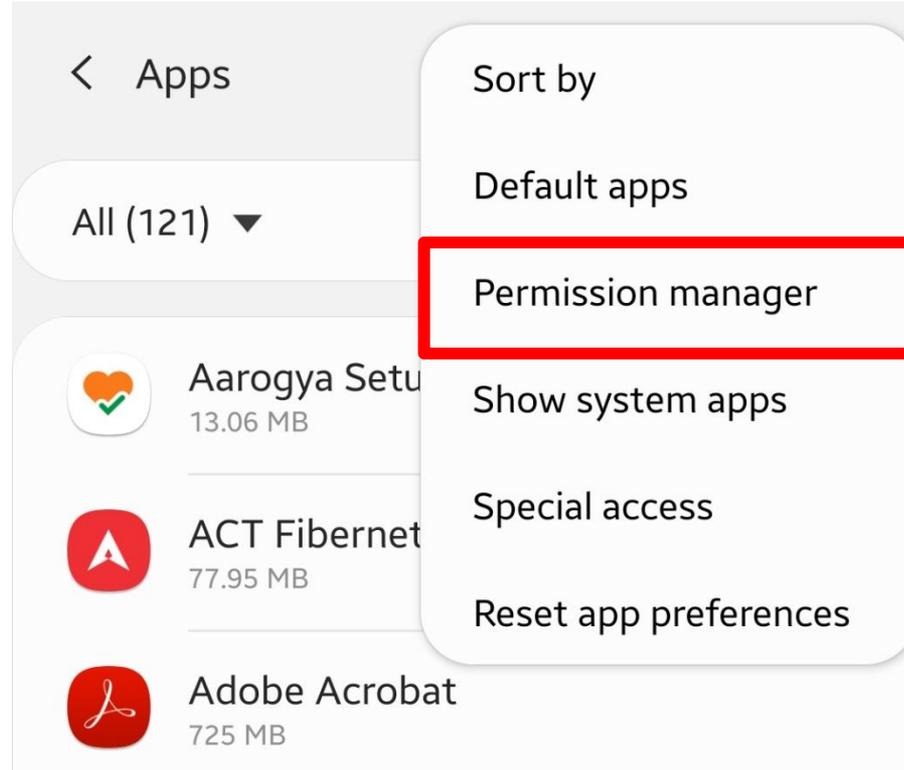
Change Permissions





Monitor all critical permissions at one place

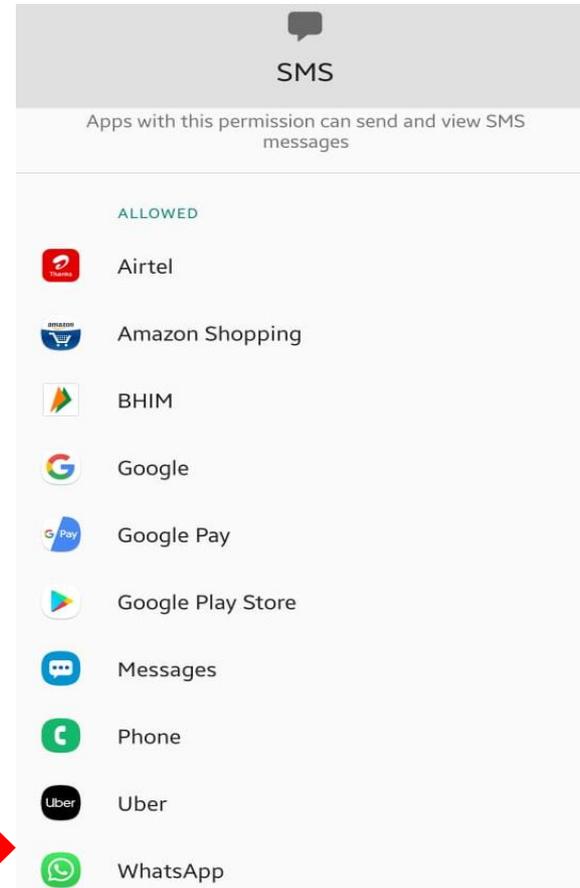
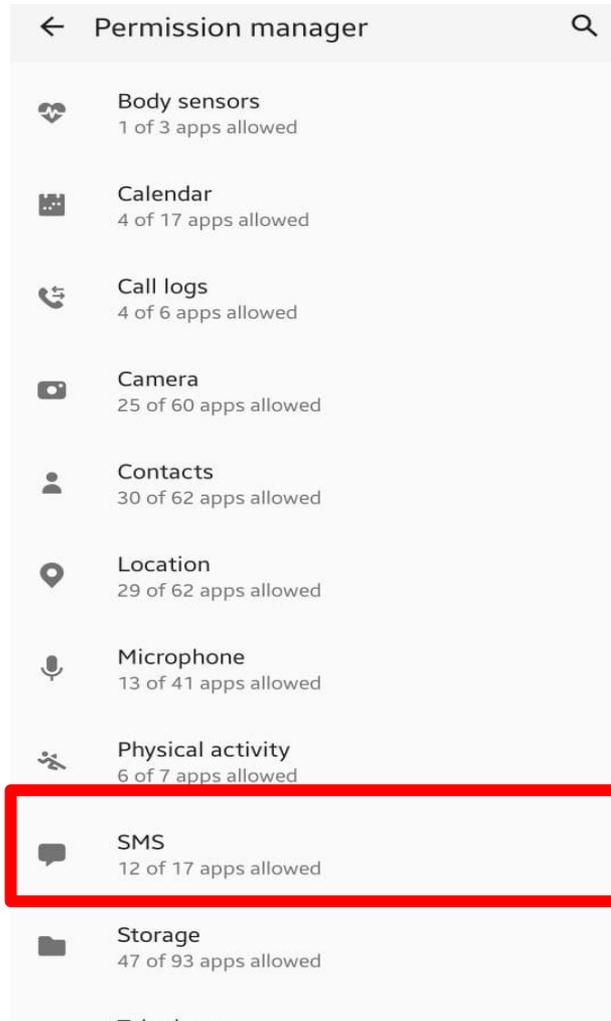
- Access Permission Manager in your Mobile
 - Settings – Apps – Permission Manager (OR)
 - Settings - Privacy





Monitor all critical permissions at one place

- Permission Manager





Symptoms

- If **OTP is filled automatically** by your application while performing any transaction or filling any page, it means that the app is having permissions to read your SMS automatically.
- If in your browser **without entering your credentials**, you are able to see the logged in state of website, it means you browser saved your credentials
- In spite of **Turning OFF** Location, Bluetooth , its **automatically turned ON** in some time, it means some app in controlling the same.



Installing Apps

- **Advertisements** could be one of the medium to bring malware to your mobiles or steal personal information
- Sometimes, App download page itself states that it contains advertisements or you can **see the reviews** to know if it contains advertisements
- Reviews also can help understand **Good and Bad** about apps



Avoid installing apps which contains advertisements and read reviews before installing



Installing Apps

- Search in stores can lead to **malicious/phishing apps**.
- For apps related to payment, banking , social networking etc., prefer to download app from company's owned website rather than searching in the stores.



Example – search for PNB banking app

23:26 [icons] • [icons] VoLTE 4G+ LTE1 33%

← punjab national bank 🔍 🗣️

-  **All Bank Balance Check - Bank Balance Enqu...**
Ad • DoubleRun Technology • Finance
bank balance check
4.1 ★ 5.0 MB 📄 5M+
-  **PNB ONE**
PNB • Finance
4.0 ★ 40 MB 📄 1M+
-  **PNB mPassBook**
PNB • Finance
4.4 ★ 1.6 MB 📄 1M+
-  **BHIM PNB**
PNB • Finance
3.7 ★ 6.7 MB 📄 1M+
-  **PNBIL**
Punjab National Bank International Limited
4.1 ★ 29 MB 📄 100K+
-  **PNB Verify**
PNB • Finance
4.0 ★ 11 MB 📄 100K+
-  **PNB Mobile Banking**
Pacific National Bank • Finance
4.2 ★ 18 MB 📄 100K+
-  **PNB Univ**
PNB • Education
3.2 ★ 4.6 MB 📄 100K+
-  **PNB Parivar**
PNB • Tools
4.2 ★ 25 MB 📄 100K+
-  **Net Banking App for All India - HDFC - SBI - ...**
III B Infotech • Finance
3.8 ★ 4.5 MB 📄 100K+



Example - Link from Original Bank website

pnbindia.in

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How to avoid becoming the victim of Covid-19 scams

Stay away from

- ₹ Fund transfers to unknown accounts
- 💡 Fund investment opportunities
- 📄 Suspicious links and websites
- 👤 Unreliable sources of information

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BHARATOR

PNB Bharat QR Merchant

BHIM AADHAAR PNB

Read More



Say No to All-In-One Apps

23:26

VoLTE 4G+ 33%

← punjab national bank





All Bank Balance Check - Bank Balance Enqu...
Ad • DoubleRun Technology • Finance
bank balance check
4.1 ★ 5.0 MB 100K+



PNB ONE
PNB • Finance
4.0 ★ 40 MB 1M+



PNB mPassBook
PNB • Finance
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PNB Parivar
PNB • Tools
4.2 ★ 25 MB 100K+



Net Banking App for All India - HDFC - SBI - ...
Infotech • Finance
3.8 ★ 4.5 MB 100K+



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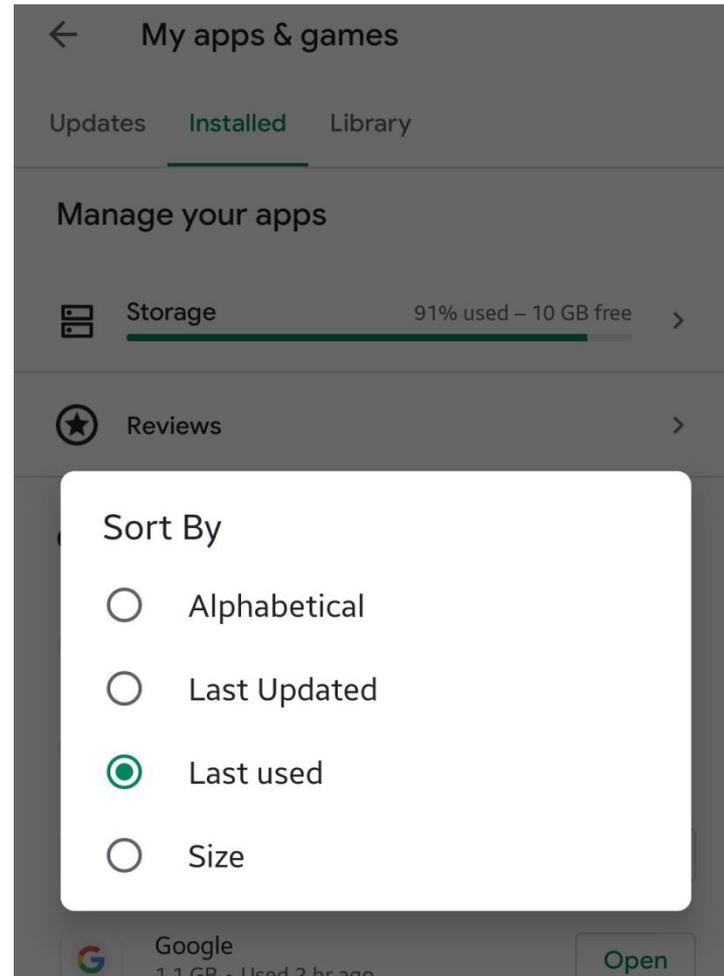


Download apps from genuine link & avoid all in one apps for any requirement



Unused Apps

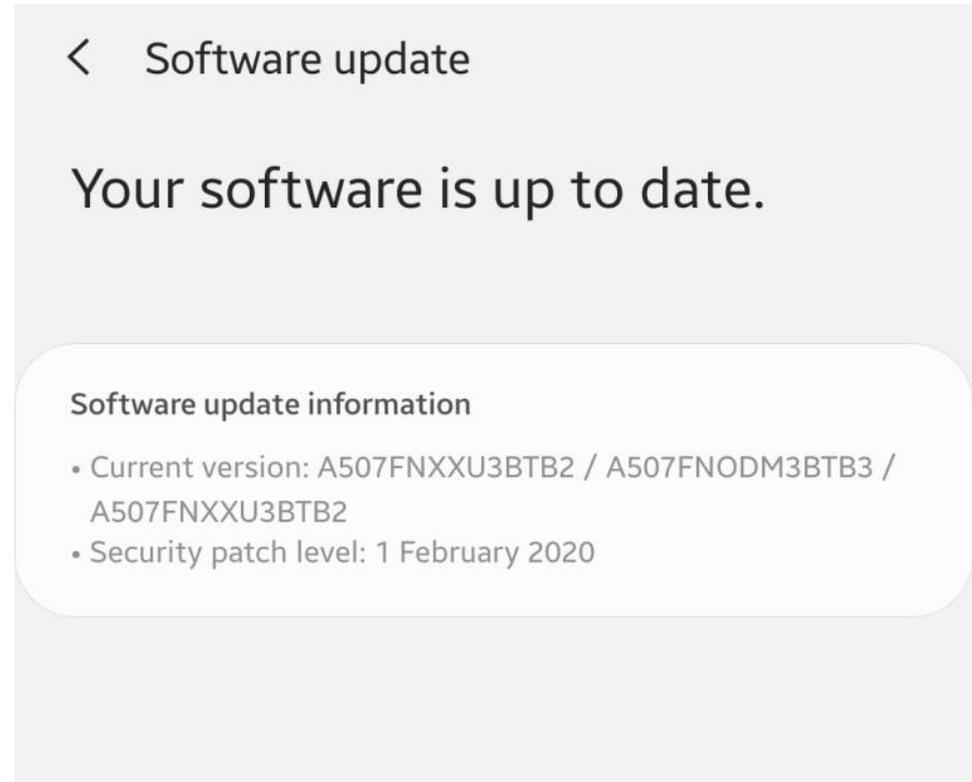
- Monitor your mobile for **unused apps** – Look in play store by sorting with Last used to know which apps were not used by you since long time.





Updated Operating System and Apps

- Ensure your anti-virus and operating system are always updated
- Settings -> Software Update



Ensure Auto Updates are enabled for OS, Apps and Anti-Virus

WhatsApp Security – Tip 1



WhatsApp Settings - Account - Privacy



Who can see my personal info

If you don't share your Last Seen, you won't be able to see other people's Last Seen

Last seen

Nobody

Profile photo

My contacts

About

Nobody

Status

My contacts

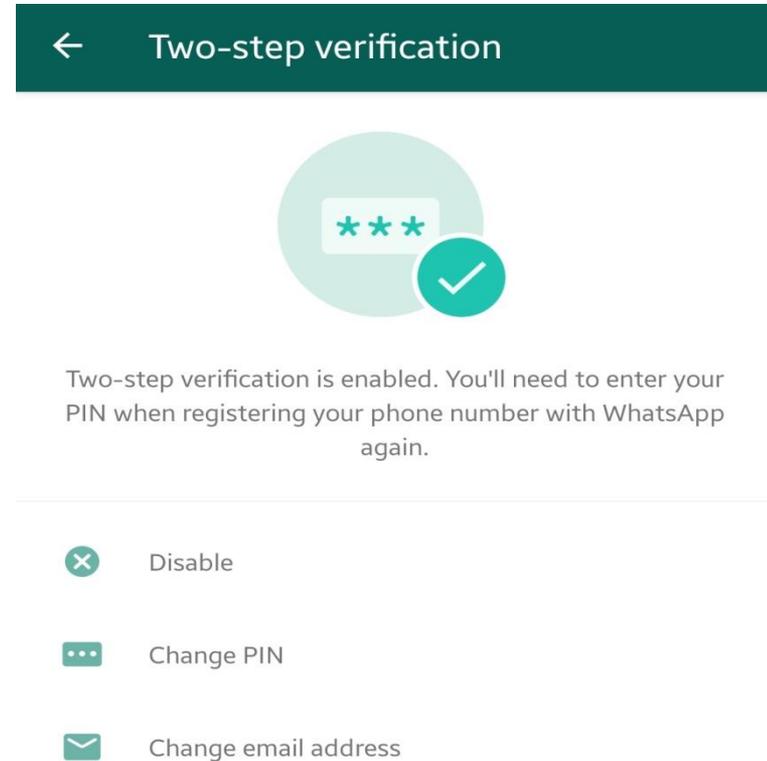


Control Visibility of your **Profile Photo** and **Status** to limited or contacts only

WhatsApp Security - Tip 2



WhatsApp Settings -
Account – Two –
factor
Authentication

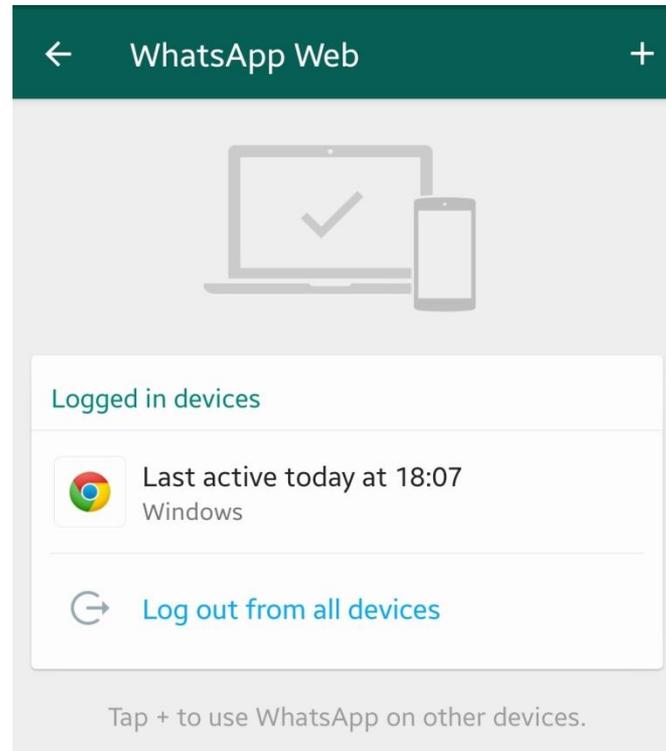


Enable two-factor authentication to stop unauthorized registration of your whatsapp account



WhatsApp Security - Tip 3

WhatsApp Settings – WhatsApp Web



Logout Web WhatsApp when not in use by you



WhatsApp Security - Tip 4

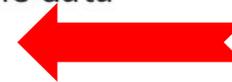
WhatsApp Settings – Data and Storage usage

Media auto-download

Voice messages are always auto-downloaded for the best communication experience

When using mobile data

No media



When connected on Wi-Fi

No media



Disable Auto-Download of Media



Safe Mobile Usage - Recap

1. Regularly Monitor the permissions of critical features of your mobile
2. Avoid installing apps which contains advertisements and read reviews before installing
3. Download apps from genuine link & avoid all in one apps for any requirement
4. Ensure Auto Updates are enabled for OS, Apps and Anti-Virus
5. Whatsapp Security
 1. Control Visibility of your Profile Photo and Status to limited or contacts only
 2. Enable two-factor authentication to stop unauthorized registration of your whatsapp account
 3. Logout Web WhatsApp when not in use by you
 4. Disable Auto-Download of Media



Tips for your daily practice

- Turn OFF Bluetooth and Wifi when not in use
- Set time limit and Lock mobile automatically when not in use
- Prefer PIN/ finger print / face recognition locks as supported by your mobile.
 - Pattern lock are to be avoided - beware of shoulder surfing , screen reading by placing mobile in different positions.
- Track your mobile for unnecessary and unused apps



THANKYOU

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