
***Epic v. Apple:
A View from Computer Science***

James Grimmelman

December 7, 2021







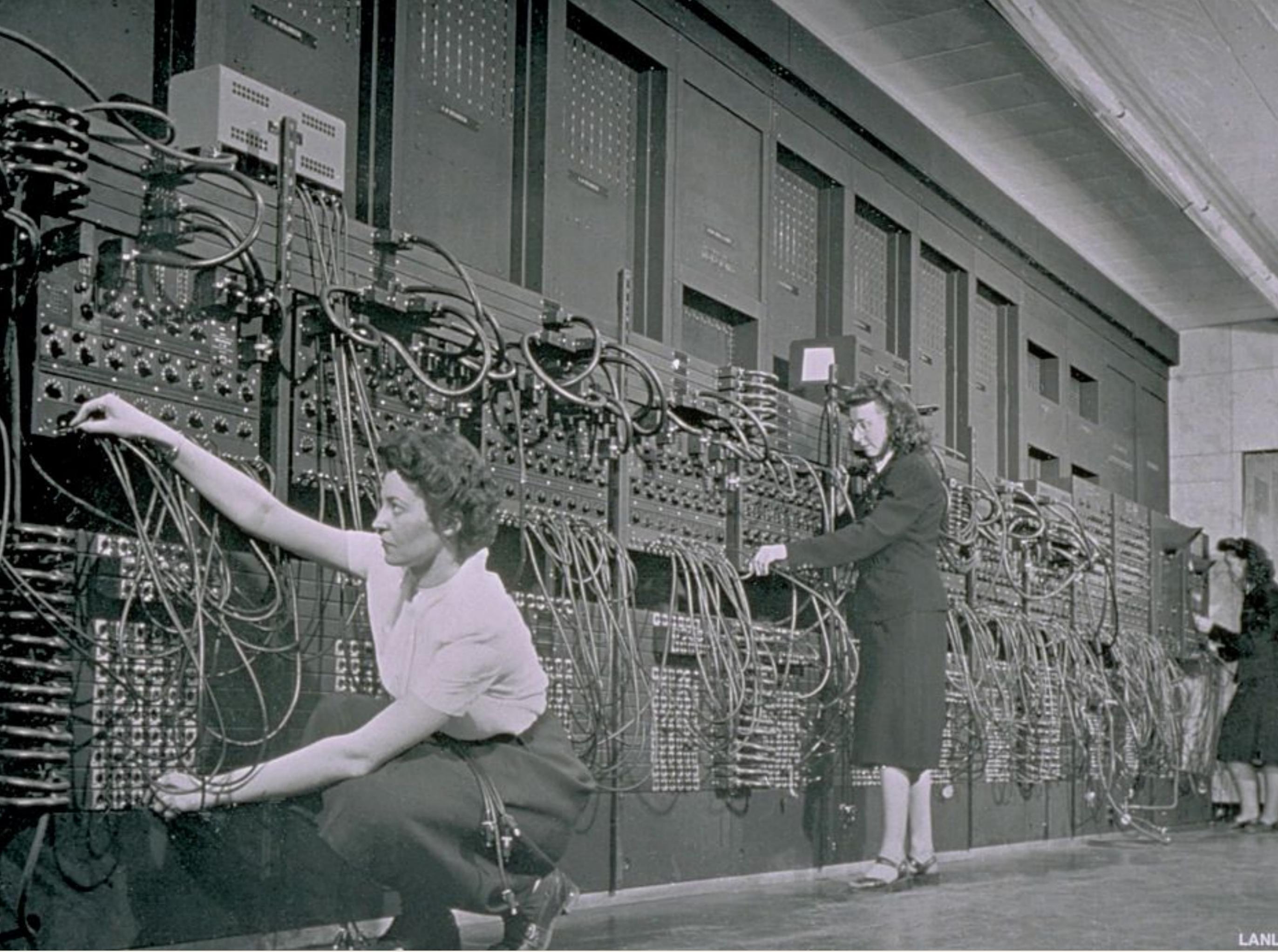
2 3 2 3 3 1

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Clock

Settings

Program Manager

File Options Window Help

Main

File Manager Control Panel Print Manager ClipBoard Viewer

Solitaire

Game Help

Select Card Back

Score: 0 Time: 0

About Program Manager

Microsoft Windows Program Manager
Version 3.1
Copyright © 1985-1992 Microsoft Corp.

OK

File Explorer

Options Tools Window Help

C:

a c

- dos
- old_dos
- window
 - sys

- ..
- system
- _default.pif
- accessor.grp
- applicat.grp
- arcade.bmp
- argyle.bmp
- awcas.dll

C: 477MB free, 498MB total

Calculator

Edit View Help

1337.

C CE Back

MC 7 8 9 / sqrt

MR 4 5 6 * %

MS 1 2 3 - 1/x

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Minesweeper

Game Help

Score: 0 Time: 0

Music

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3	<input checked="" type="checkbox"/> Steal My Kisses		3:49	Alanis Morris...	<input type="radio"/>	Jagged Little ...	<input type="radio"/>	Rock	★★★★
4	<input checked="" type="checkbox"/> Tears In Heaven	<input type="radio"/>	4:05	Ben Harper	<input type="radio"/>	Burn To Shine	<input type="radio"/>	Rock	★★★★
5	<input checked="" type="checkbox"/> Layla	<input type="radio"/>	4:36	Eric Clapton	<input type="radio"/>	Unplugged	<input type="radio"/>	Alternative	★★★★
6	<input checked="" type="checkbox"/> Like A Virgin	<input type="radio"/>	4:46	Eric Clapton	<input type="radio"/>	Unplugged	<input type="radio"/>	Rock	
7	<input checked="" type="checkbox"/> Material Girl	<input type="radio"/>	3:11	Madonna	<input type="radio"/>	Unplugged	<input type="radio"/>	Rock	★★★★
8	<input checked="" type="checkbox"/> Come As You Are	<input type="radio"/>	3:53	Madonna	<input type="radio"/>	The Immacul...	<input type="radio"/>	Pop	★★★★
9	<input checked="" type="checkbox"/> Nothingman	<input type="radio"/>	4:13	Nirvana	<input type="radio"/>	The Immacul...	<input type="radio"/>	Pop	★★★★
10	<input checked="" type="checkbox"/> Losing My Religion	<input type="radio"/>	4:35	Pearl Jam	<input type="radio"/>	MTV Unplugg...	<input type="radio"/>	Rock	★★★★
11	<input checked="" type="checkbox"/> Scar Tissue	<input type="radio"/>	4:29	R.E.M.	<input type="radio"/>	Vitalogy	<input type="radio"/>	Rock	★★★★
12	<input checked="" type="checkbox"/> Californication	<input type="radio"/>	3:37	Red Hot Chili ...	<input type="radio"/>	Out of Time	<input type="radio"/>	Rock	★★★★
13	<input checked="" type="checkbox"/> Maria Maria	<input type="radio"/>	5:21	Red Hot Chili ...	<input type="radio"/>	Californication	<input type="radio"/>	Rock	★★★★
14	<input checked="" type="checkbox"/> Building A Mystery	<input type="radio"/>	4:22	Santana	<input type="radio"/>	Californication	<input type="radio"/>	Rock	★★★★
15	<input checked="" type="checkbox"/> If it Makes You Happy	<input type="radio"/>	4:07	Sarah McLach...	<input type="radio"/>	Supernatural	<input type="radio"/>	Rock	★★★★
16	<input checked="" type="checkbox"/> Brown Eyed Girl	<input type="radio"/>	5:23	Sheryl Crow	<input type="radio"/>	Surfacing	<input type="radio"/>	Rock	★★★★
17	<input checked="" type="checkbox"/> Burn To Shine	<input type="radio"/>	3:05	Van Morrison	<input type="radio"/>	Sheryl Crow	<input type="radio"/>	Rock	★★★★
18	<input checked="" type="checkbox"/> Tears In Heaven	<input type="radio"/>	3:34	Ben Harper	<input type="radio"/>	Best Of Van ...	<input type="radio"/>	Rock	★★★★
19	<input checked="" type="checkbox"/> Home Roll	<input type="radio"/>	3:34	Ben Harper	<input type="radio"/>	Burn To Shine	<input type="radio"/>	Alternative	★★★★
20		<input type="radio"/>	5:17	Ben Harper	<input type="radio"/>	Burn To Shine	<input type="radio"/>	Alternative	★★★★
21		<input type="radio"/>	3:40	G. Love & Spe...	<input type="radio"/>	Burn To Shine	<input type="radio"/>	Alternative	★★★★
22		<input type="radio"/>	3:40	G. Love & Spe...	<input type="radio"/>	Has Gone Co...	<input type="radio"/>	Folk	★★★★
23		<input type="radio"/>	5:48	Morcheeba	<input type="radio"/>	Big Calm	<input type="radio"/>	Electronic	★★★★
24		<input type="radio"/>	2:54	Pearl Jam	<input type="radio"/>	Vitalogy	<input type="radio"/>	Rock	★★★★
25		<input type="radio"/>	4:04	Sarah McLach...	<input type="radio"/>	Surfacing	<input type="radio"/>	Rock	★★★★
26		<input type="radio"/>	4:32	Van Morrison	<input type="radio"/>	Best Of Van ...	<input type="radio"/>	Rock	★★★★













Ooops, your files have been encrypted!

English

What Happened to My Computer?

Your important files are encrypted.

Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?

Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time.

You can decrypt some of your files for free. Try now by clicking <Decrypt>.

But if you want to decrypt all your files, you need to pay.

You only have 3 days to submit the payment. After that the price will be doubled. Also, if you don't pay in 7 days, you won't be able to recover your files forever.

We will have free events for users who are so poor that they couldn't pay in 6 months.

How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.

Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window.

After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am

CMT from Mandar to Eldar

Payment will be raised on

5/16/2017 00:47:55

Time Left

02:23:57:37

Your files will be lost on

5/20/2017 00:47:55

Time Left

06:23:57:37

[About bitcoin](#)

[How to buy bitcoins?](#)

[Contact Us](#)



Send \$300 worth of bitcoin to this address:

12t9YDPgwueZ9NyMgw519p7AA8isjr6SMw

Copy

Check Payment

Decrypt

The World's Most Powerful Monitoring Software for Computers, Mobile Phones and Tablets

Know Everything That Happens on A Computer or Smartphone, No Matter Where You Are



- ✔ Monitor all Android and iPhone digital and audio communications
- ✔ Monitor everything that happens on a PC or Mac
- ✔ More monitoring features than any other product
- ✔ No Hassle Remote Installation Service
- ✔ FREE Mobile Viewer App for Android and iPhone
- ✔ Used for Parental Control and Employee Monitoring

[View Demo](#)

[Buy Now](#)

FlexiSPY is monitoring software that you install on your computer or mobile device. It takes complete control of the device, letting you **know everything, no matter where you are.**



WARNING!

COMPUTER MAY BE AT RISK:

855-486-1800

Emergency Tech Support call immediately

System may have found (2) viruses that pose a serious threat

Rootkit.Sirefef.Spy ./ Trojan.FakeAV-Download

Your personal and financial information
may not be secured.

Call us now for support
855-486-1800

TECH SUPPORT LogMeIn Rescue

Your desktop is being remote controlled by [redacted] Powered by LogMeIn

9:22 AM Connecting...

9:22 AM Connected. A support representative will be with you shortly.

9:23 AM Support session established with [redacted].

9:23 AM [redacted] restarting application as Windows system service

9:23 AM Connecting...

9:23 AM Connected. A support representative will be with you shortly.

9:23 AM Connection closed. Attempting reconnection...

9:23 AM Application running as Windows system service

9:23 AM Support session established with [redacted].

9:23 AM You have granted full permission to [redacted]. To revoke, click the red X on the toolbar or press Pause/Break on the keyboard.

9:23 AM Remote Control started by [redacted].

Type here and press Enter to send

Search

- Discover
- Arcade
- Create
- Work
- Play
- Develop
- Categories**
- Updates

Daria Davidson
\$29.97 Credit

PalAbout GET

Sticker Pack
Cute cats, adorable puppies, lovable pandas, and more.
\$1.99

Party Games
Challenge your friends one-on-one or play as teams.
\$9.99

Funny Filters
Silly glasses, wacky hats, and hilarious hairstyles.
\$1.99

App Privacy See Details

The developer, PalAbout Inc., indicated that the app's privacy practices include handling of data as described below. For more information, see the [developer's privacy policy](#).

Data Used to Track You

The following data may be used to track you across apps and websites owned by other companies:

- Financial Info
- Location
- Contact Info

Data Linked to You

The following data may be collected and linked to your accounts, devices, or identity:

- Financial Info
- Location
- Contact Info
- Purchases
- Browsing History
- Identifiers

Data Not Linked to You

The following may be collected but is not linked to your accounts, devices, or identity:

- Usage Data
- Diagnostics

Information

Seller PalAbout Inc.	Size 52MB	Category Social Networking
Compatibility Works on this Mac	Location This app may use location even ...	Languages English and 7 more



MacBook Pro

9:41

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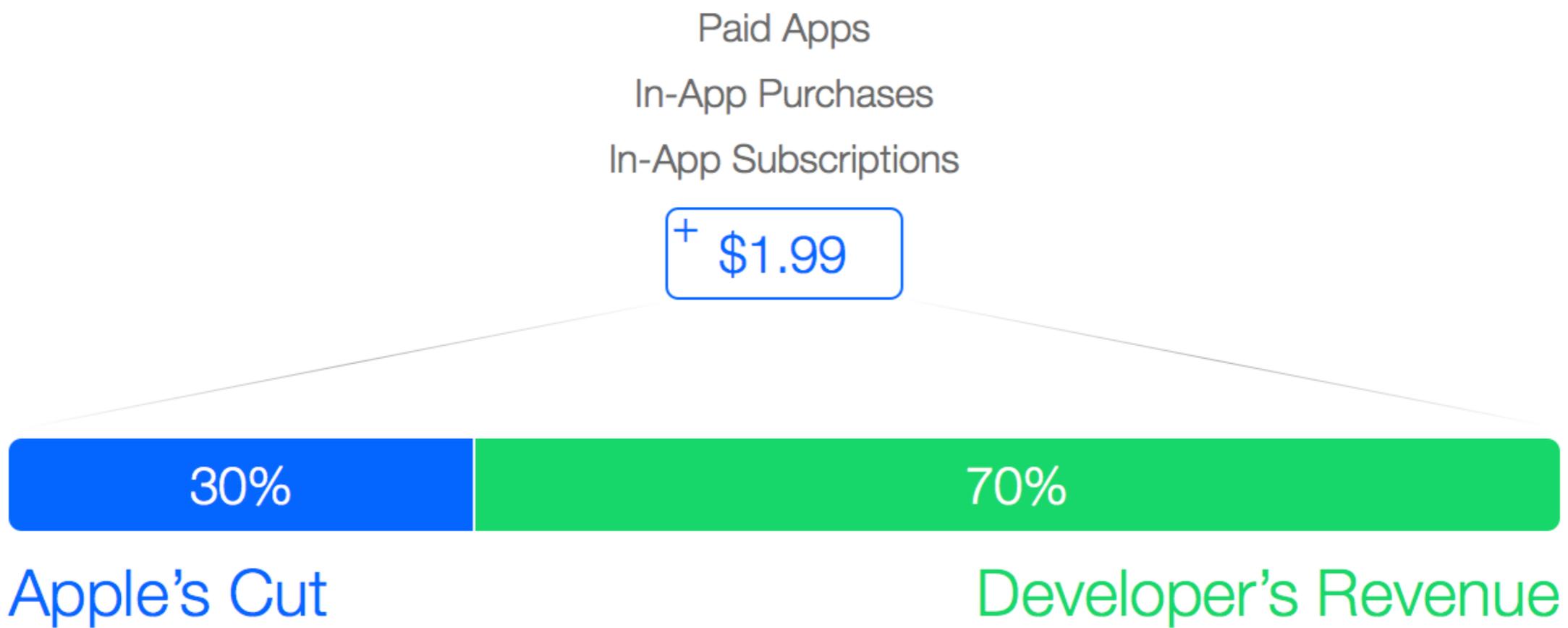
Data Linked to You

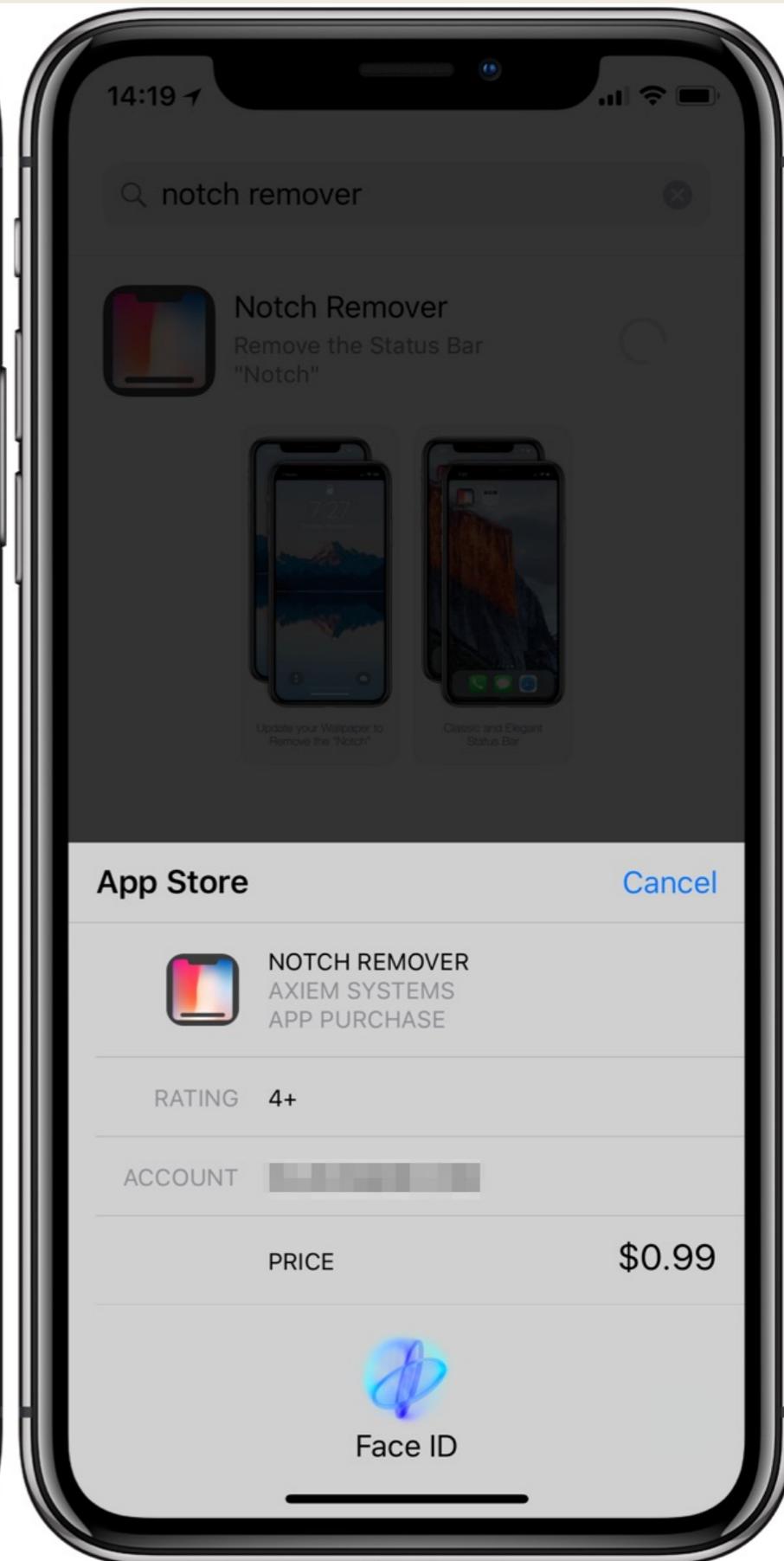
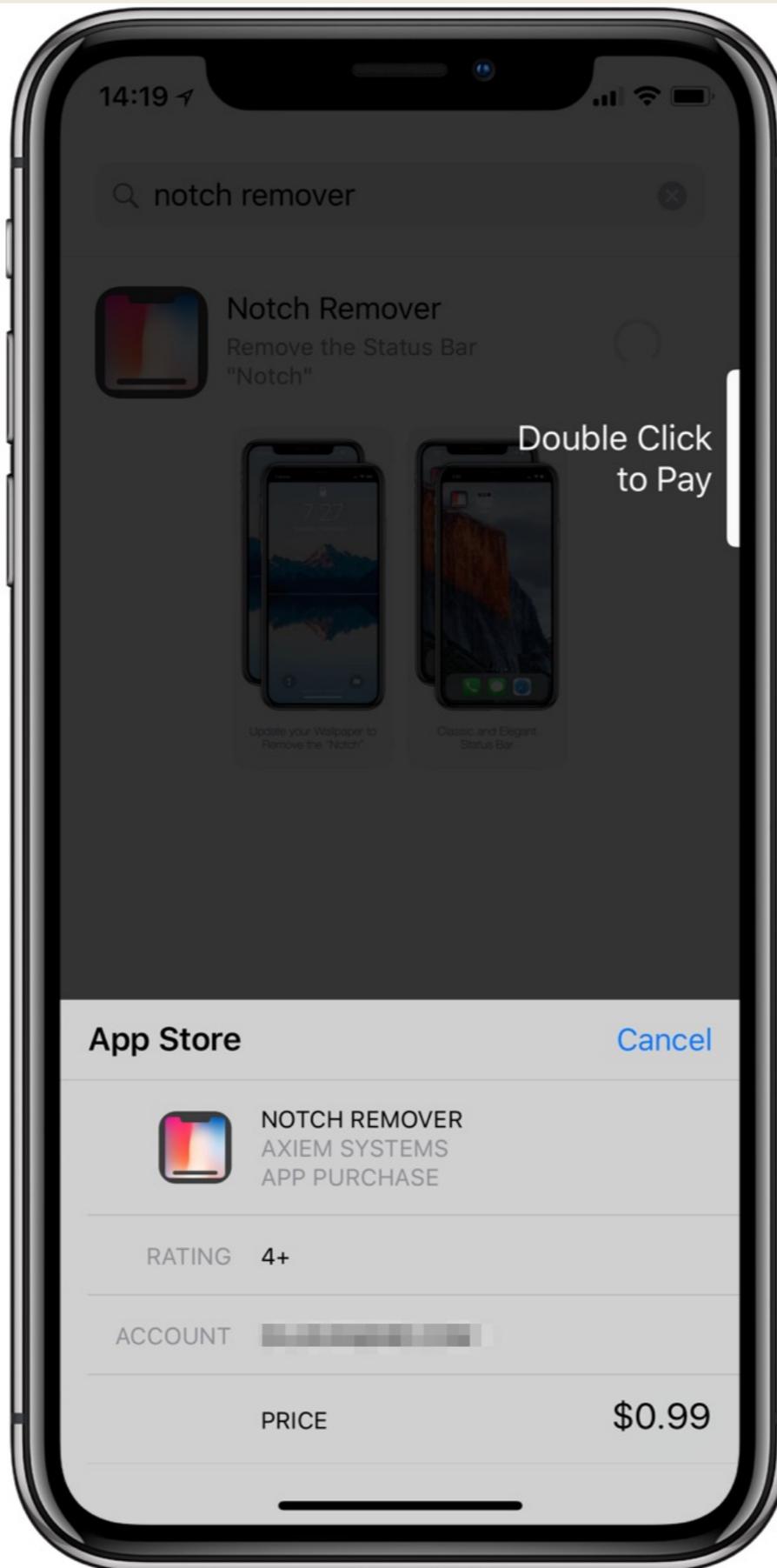
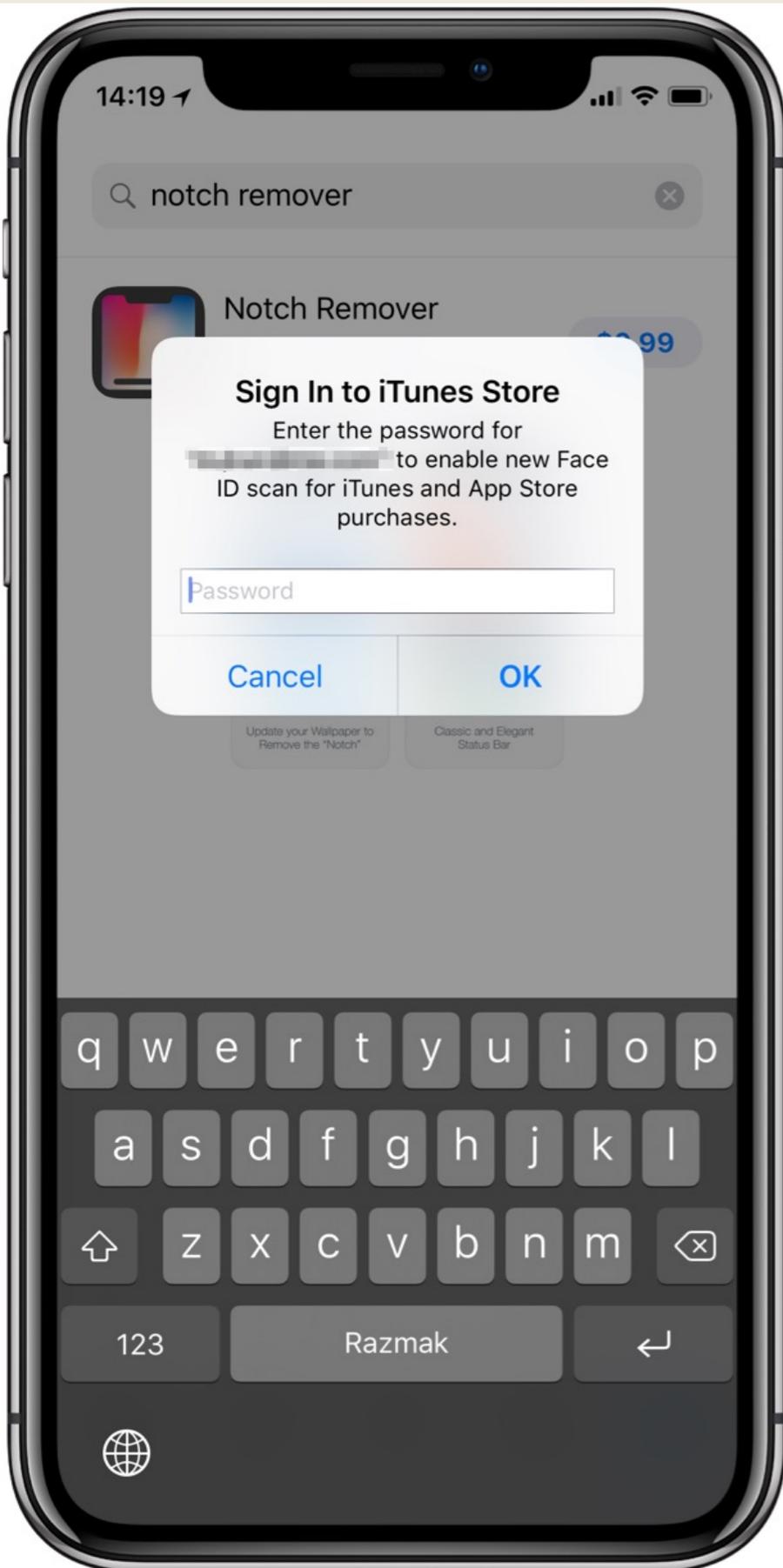
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Today Games Books TV

Apple takes a 30% cut of all App Store payments





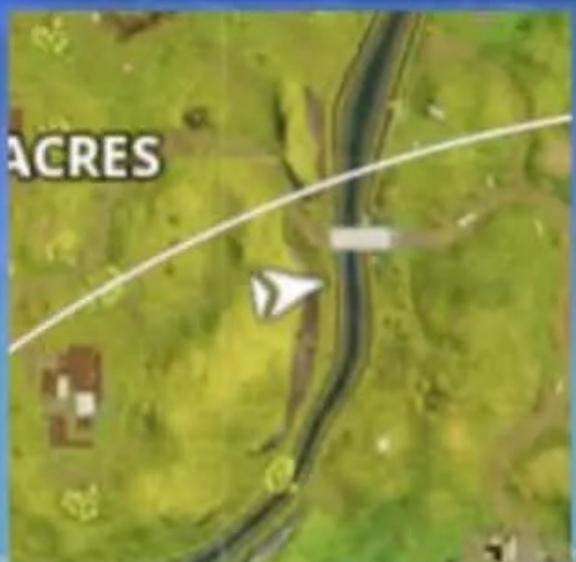
The Apple Bundle

- Hardware
- Operating system
- App installation
- Payment processing

On macOS, the bottom three are *nonexclusive*

On iOS, the bottom three are *exclusive*





0 | 100
 100 | 100

79
 15 30 NE 60 75 E 105 120

1:34 45 1



35 | 11





The court's Solomonic compromise

- All of Apple's iOS restrictions are valid
- *Except* for the anti-steering provision
 - Epic can now *explicitly* direct users to make their purchases elsewhere
 - E.g., in a Safari tab on the very same device

A four-way struggle

- Platform providers
- App developers
- Hackers, scammers, etc.
- Users

The first three are all highly creative and highly motivated

