

#WWDC19

Presenting Rich Links In Your App

Tim Horton, Apple Inc.

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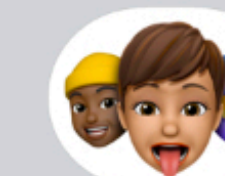
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iMessage



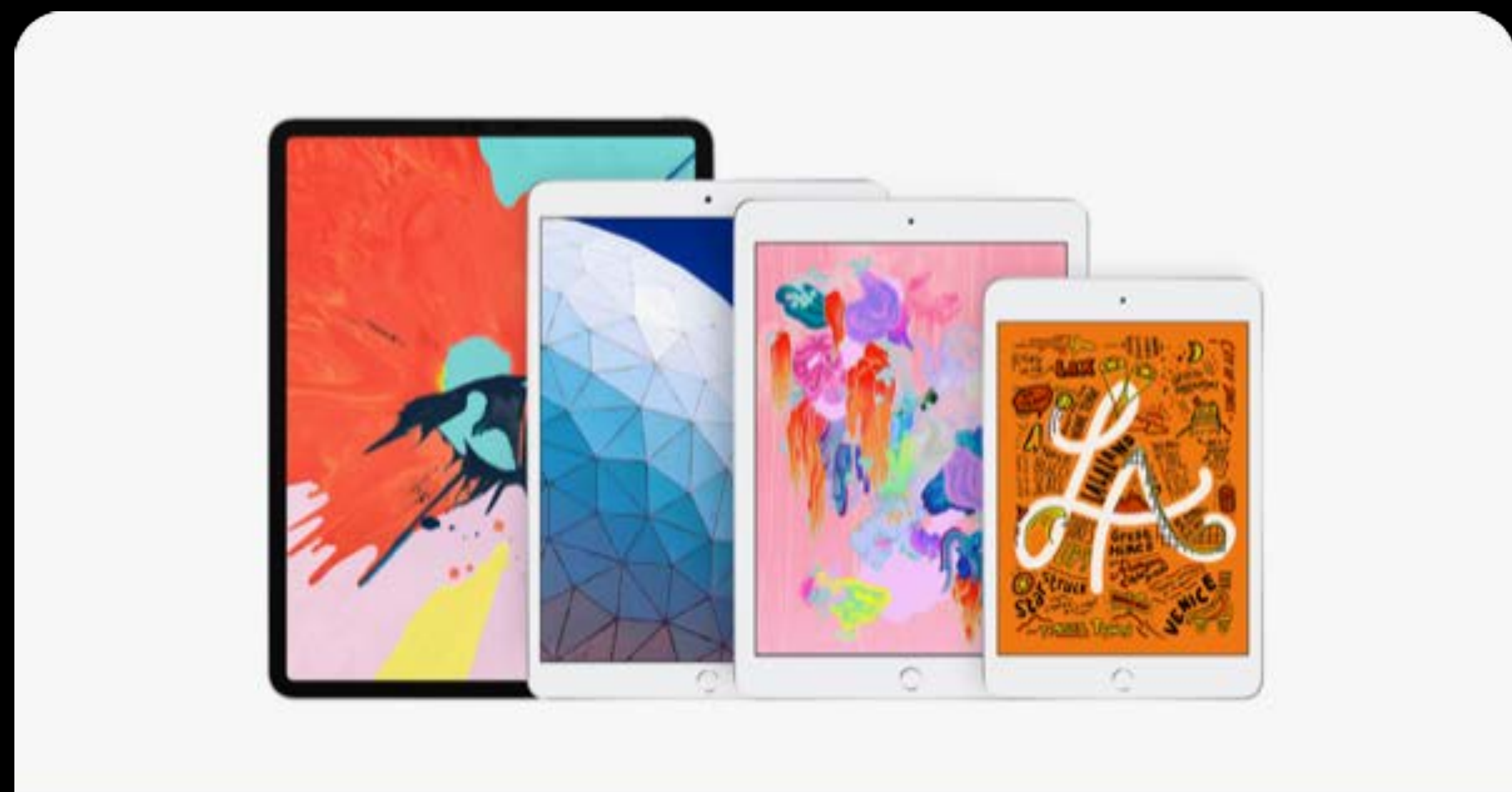


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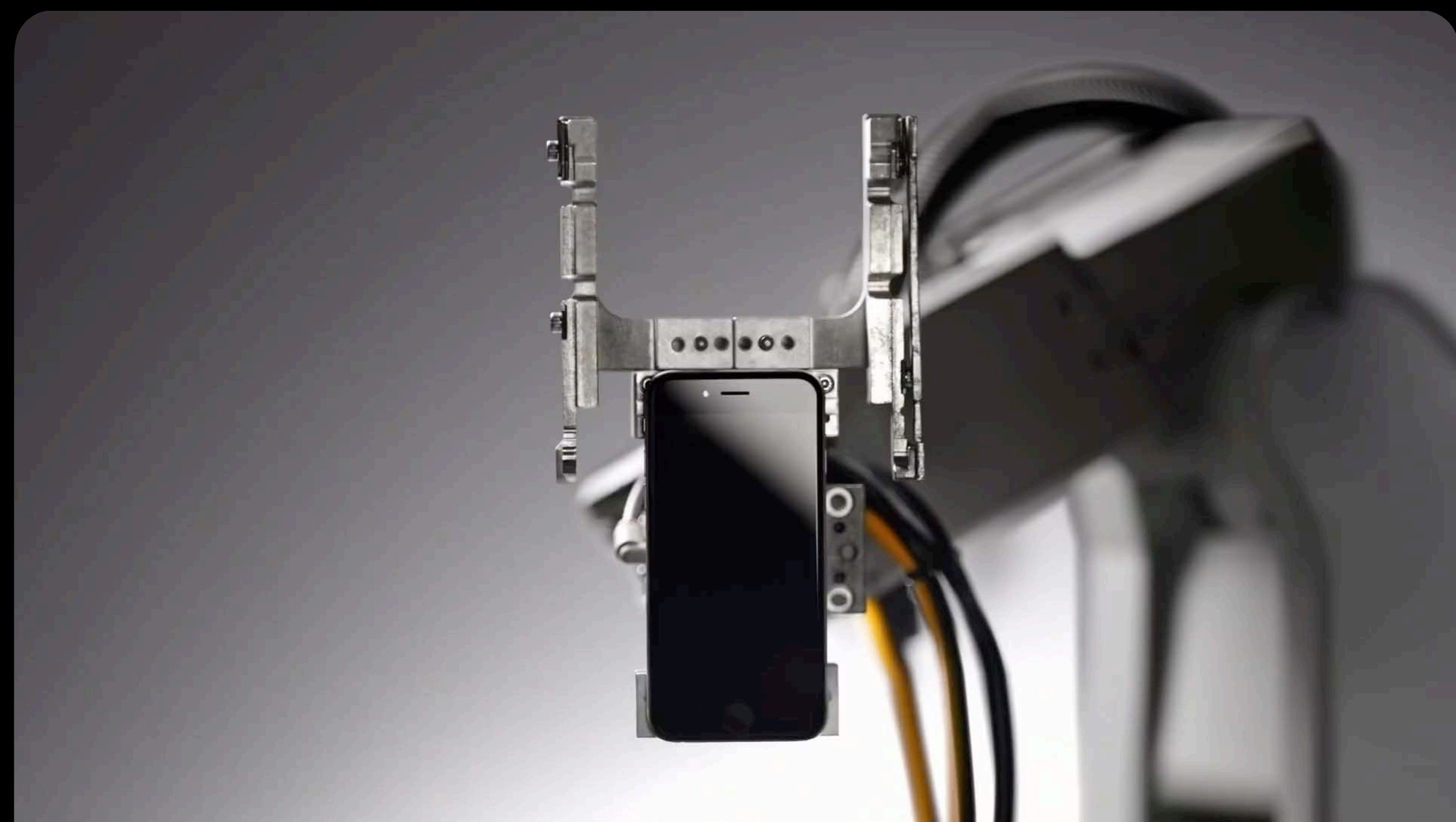
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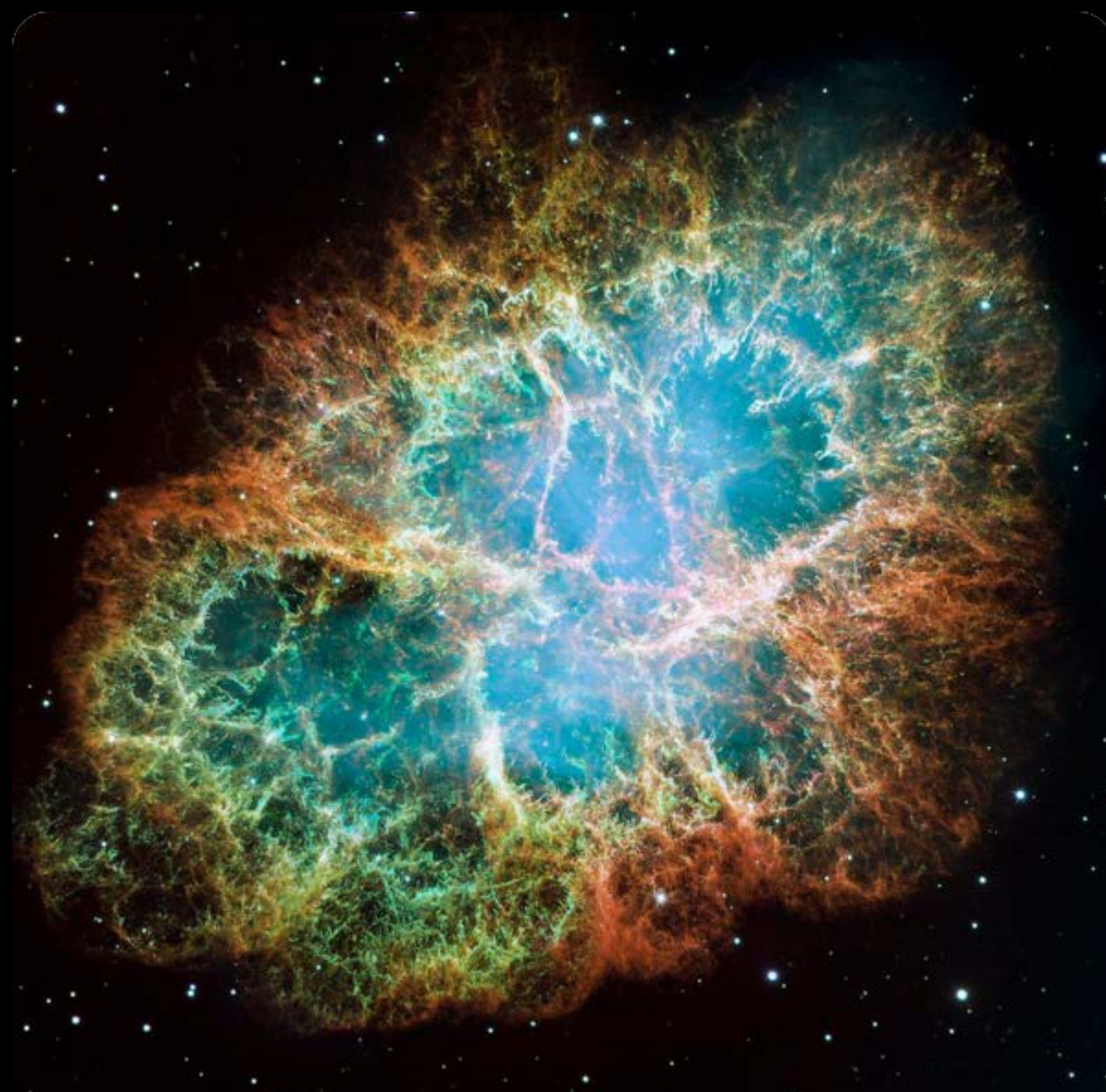
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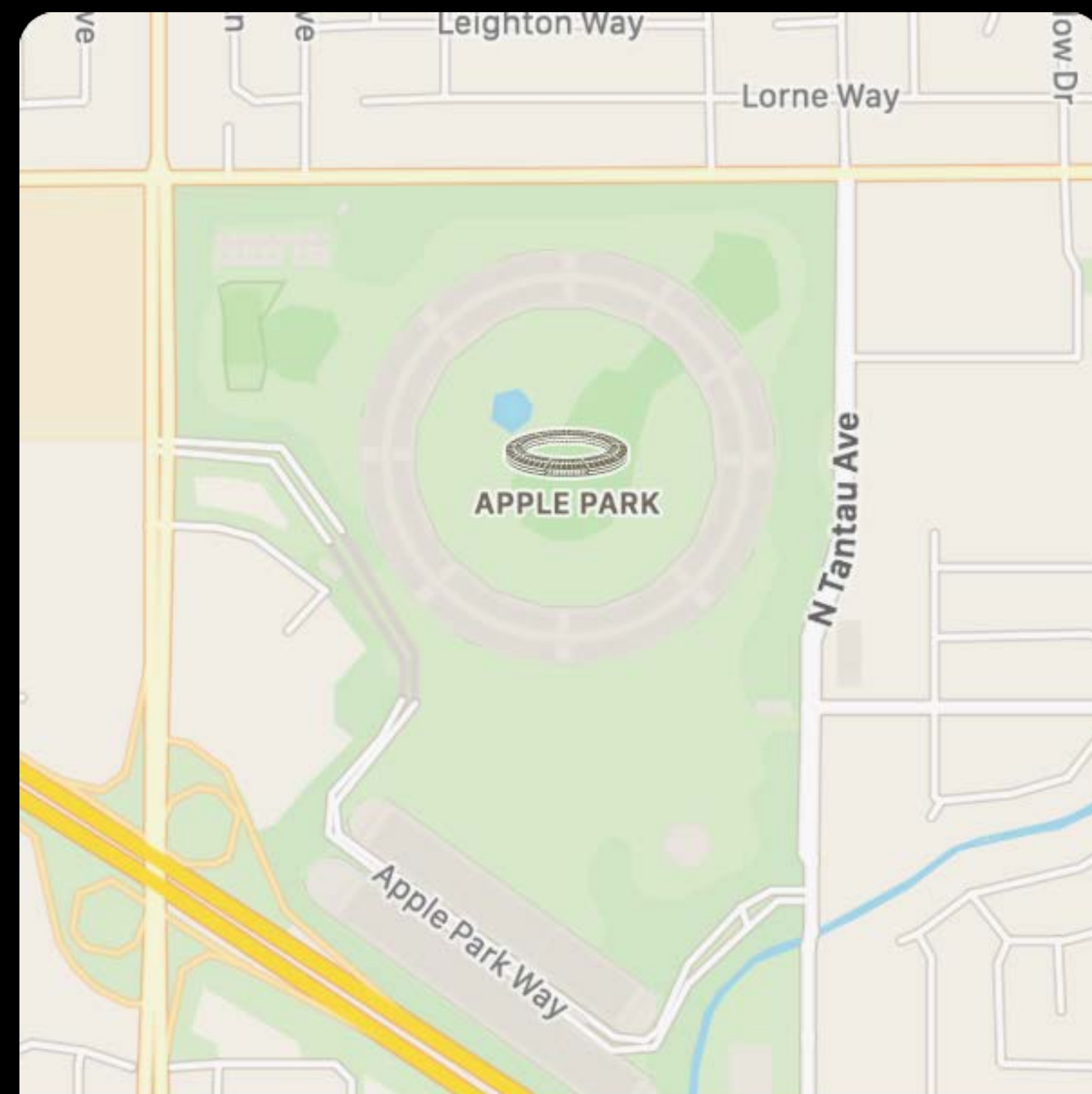
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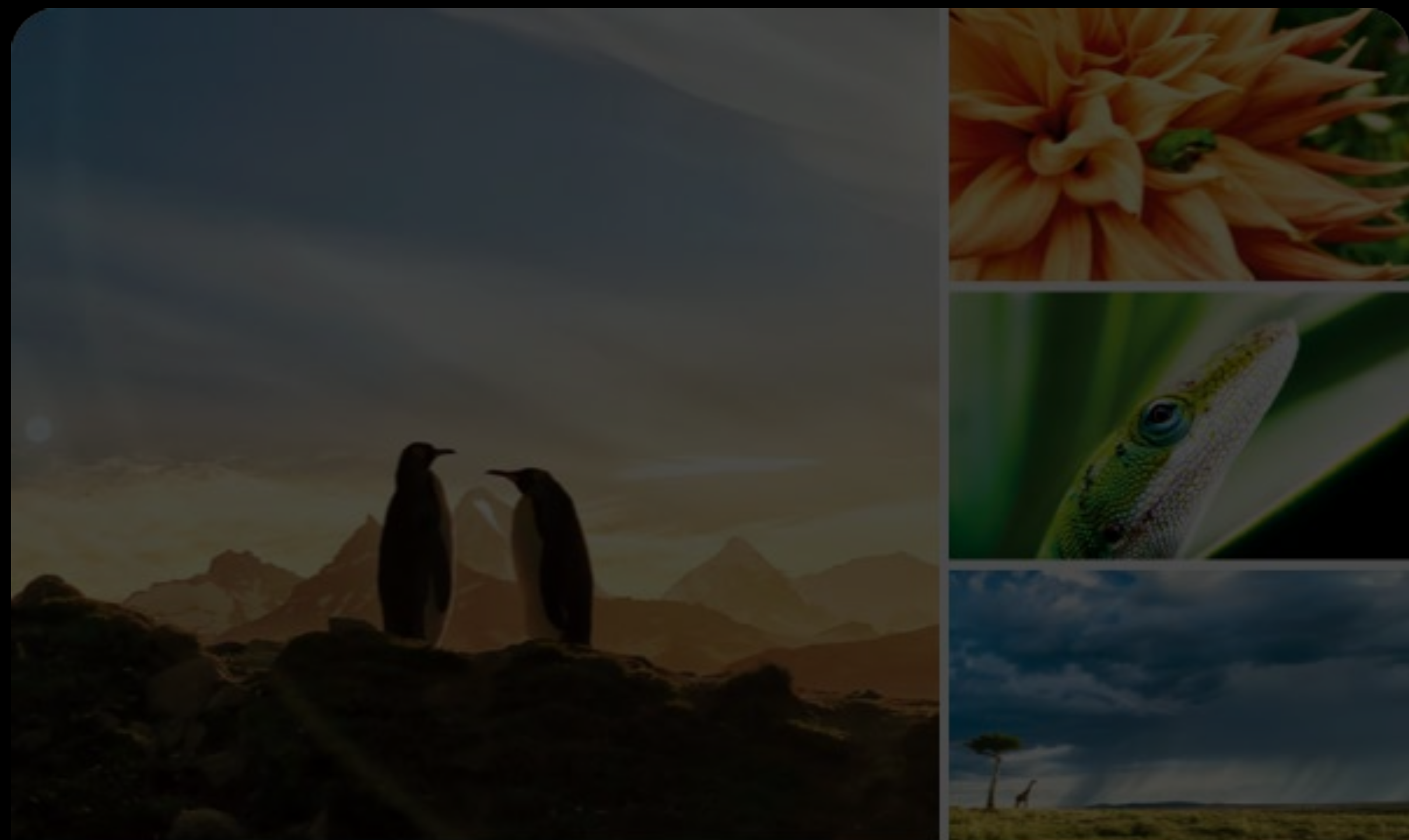


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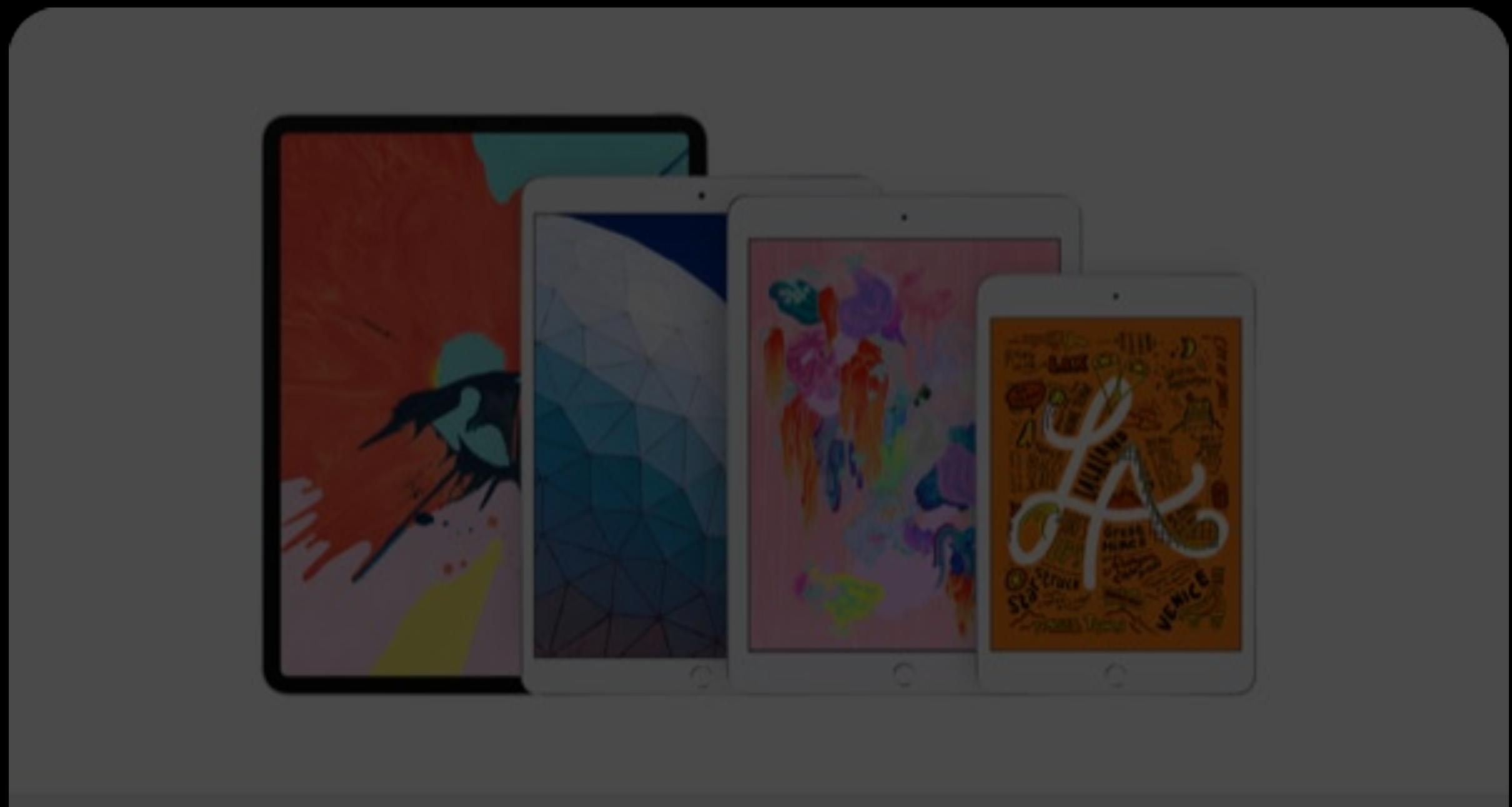
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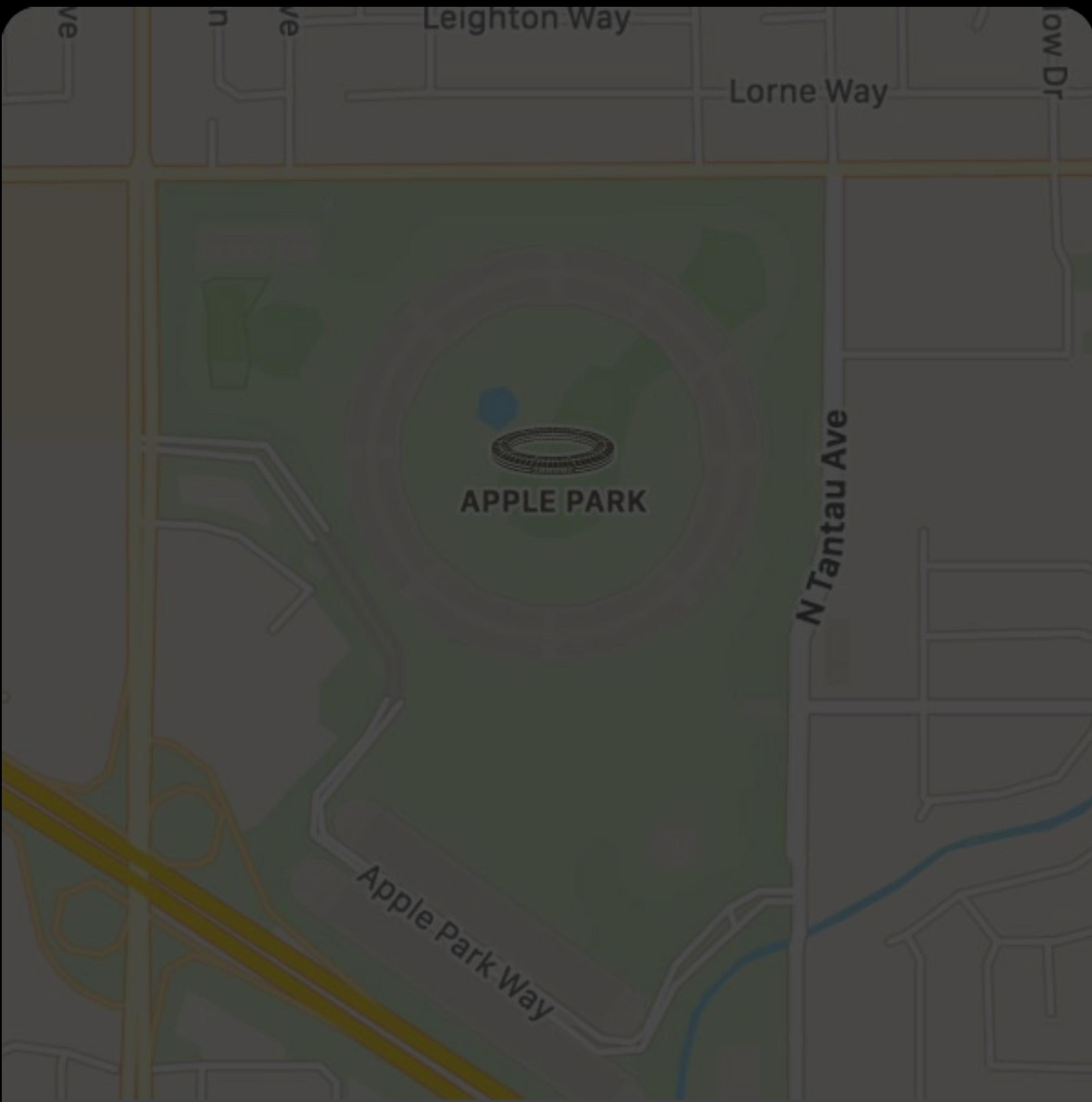
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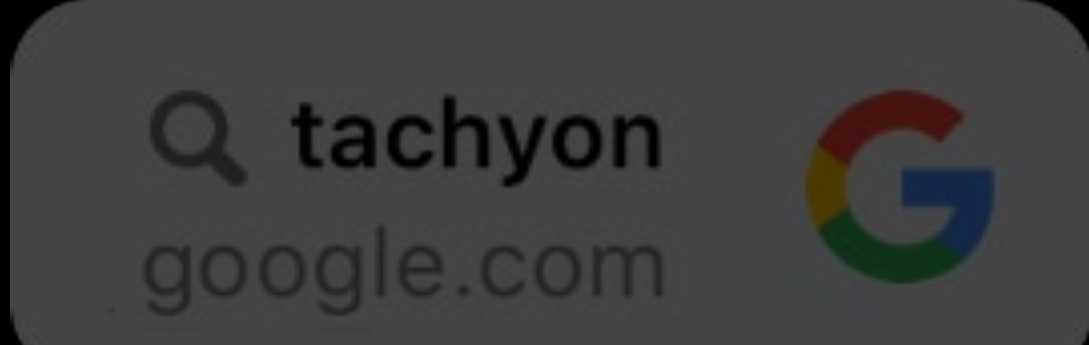
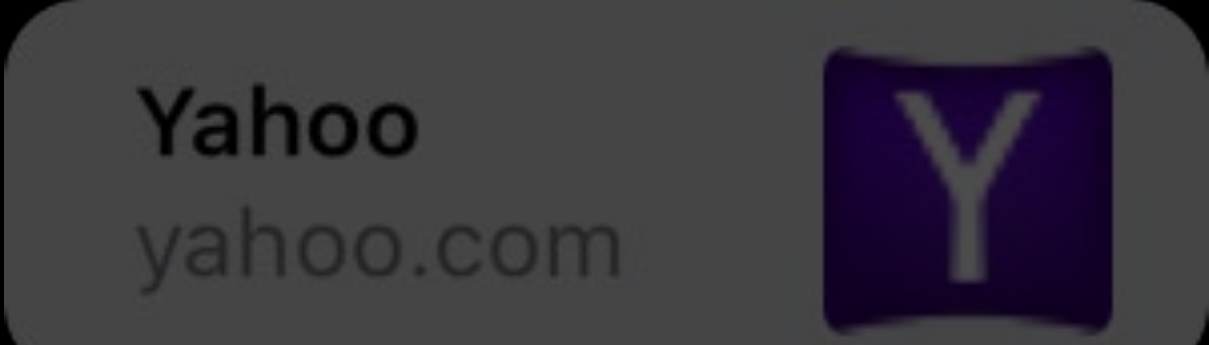
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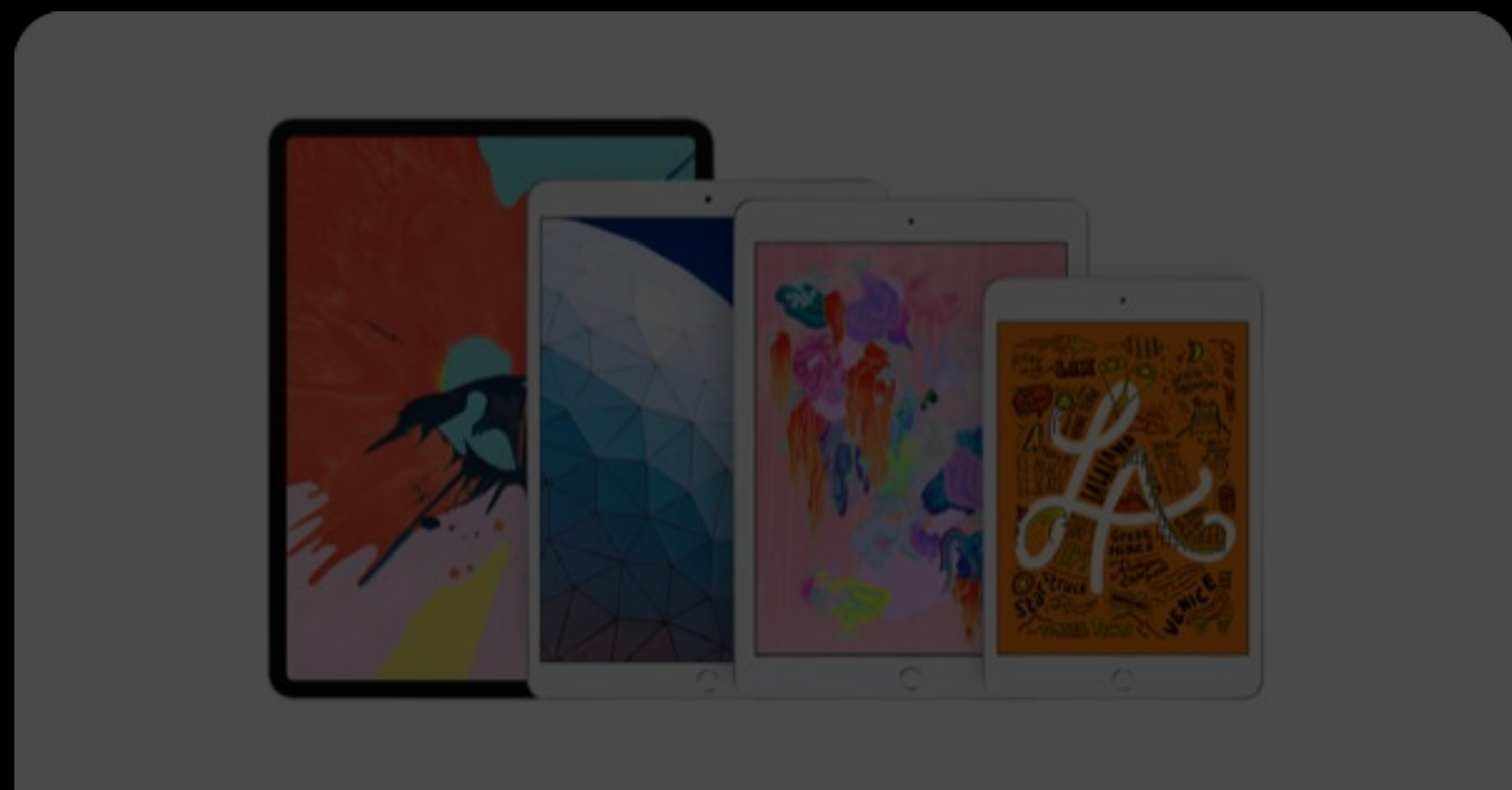
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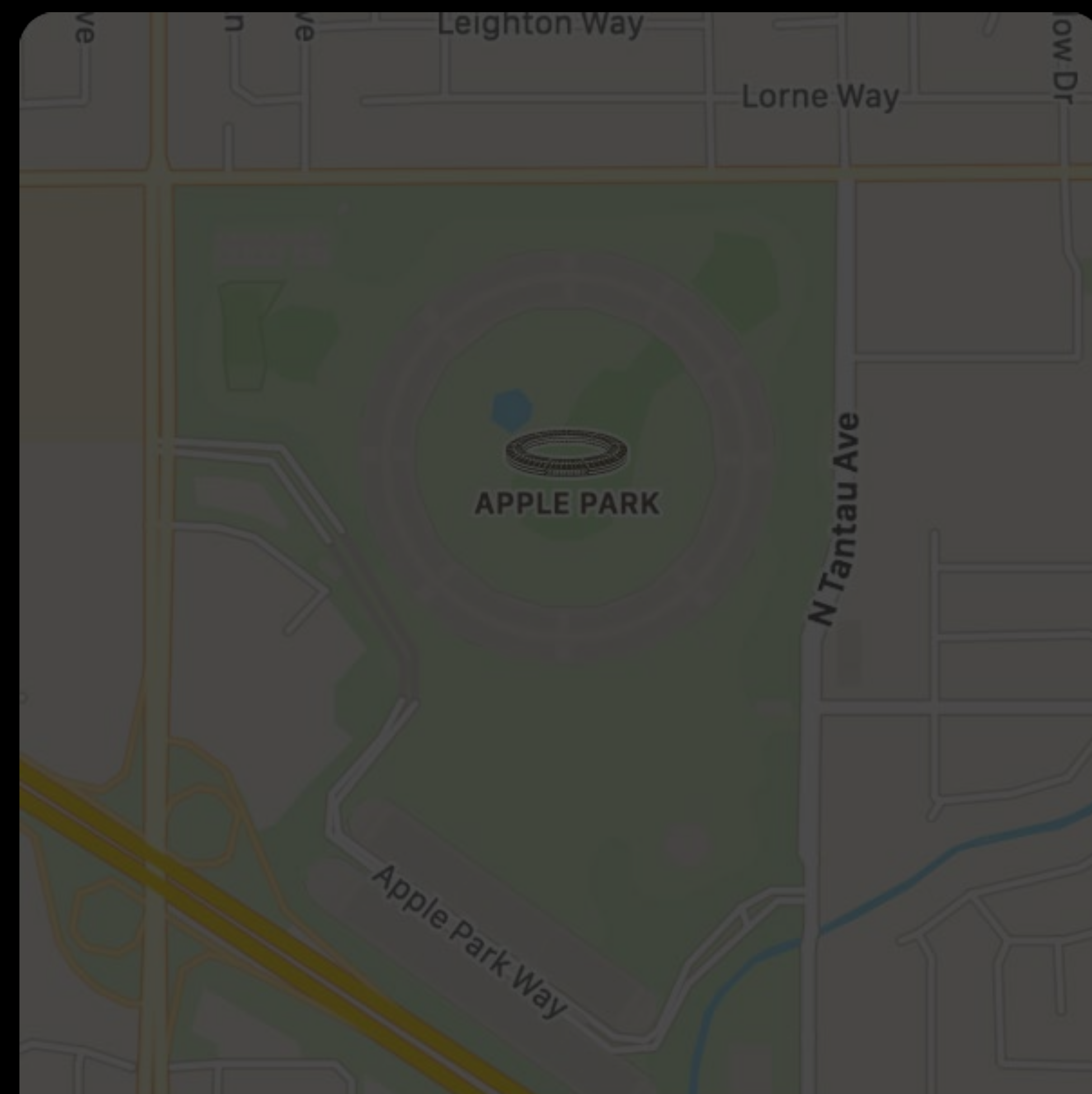
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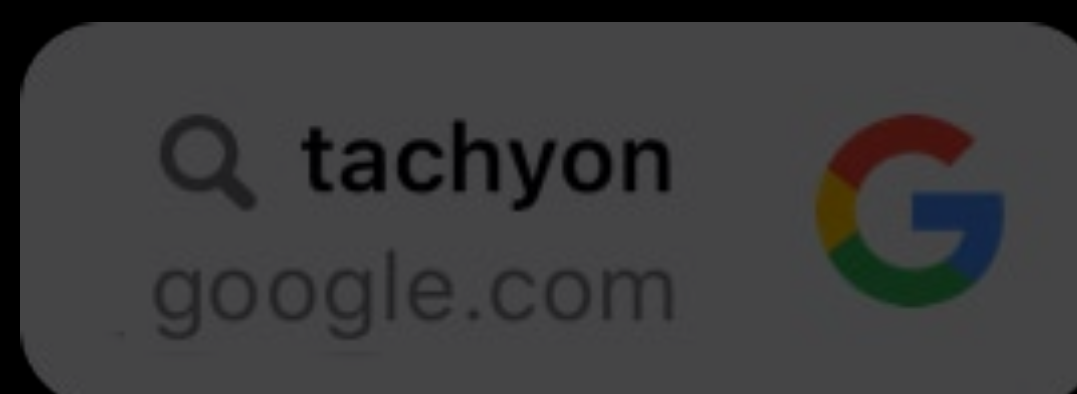
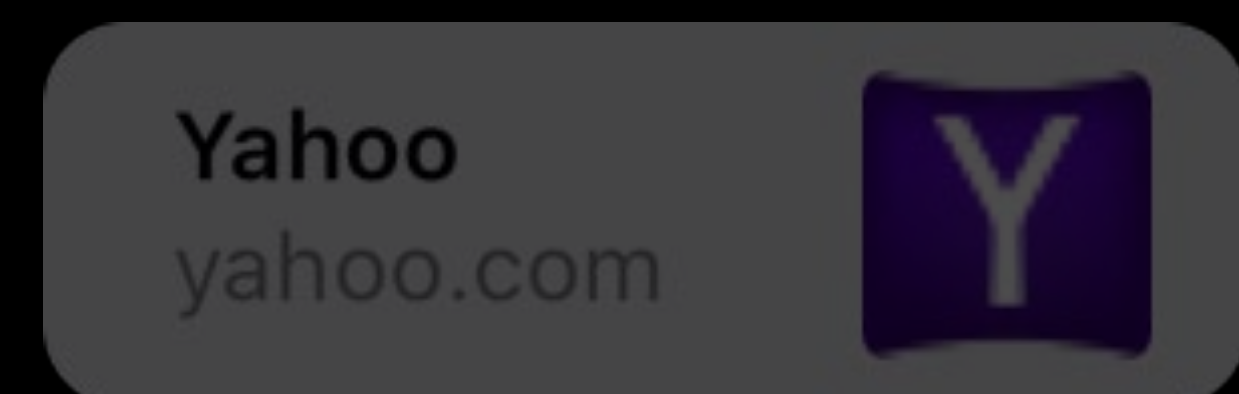
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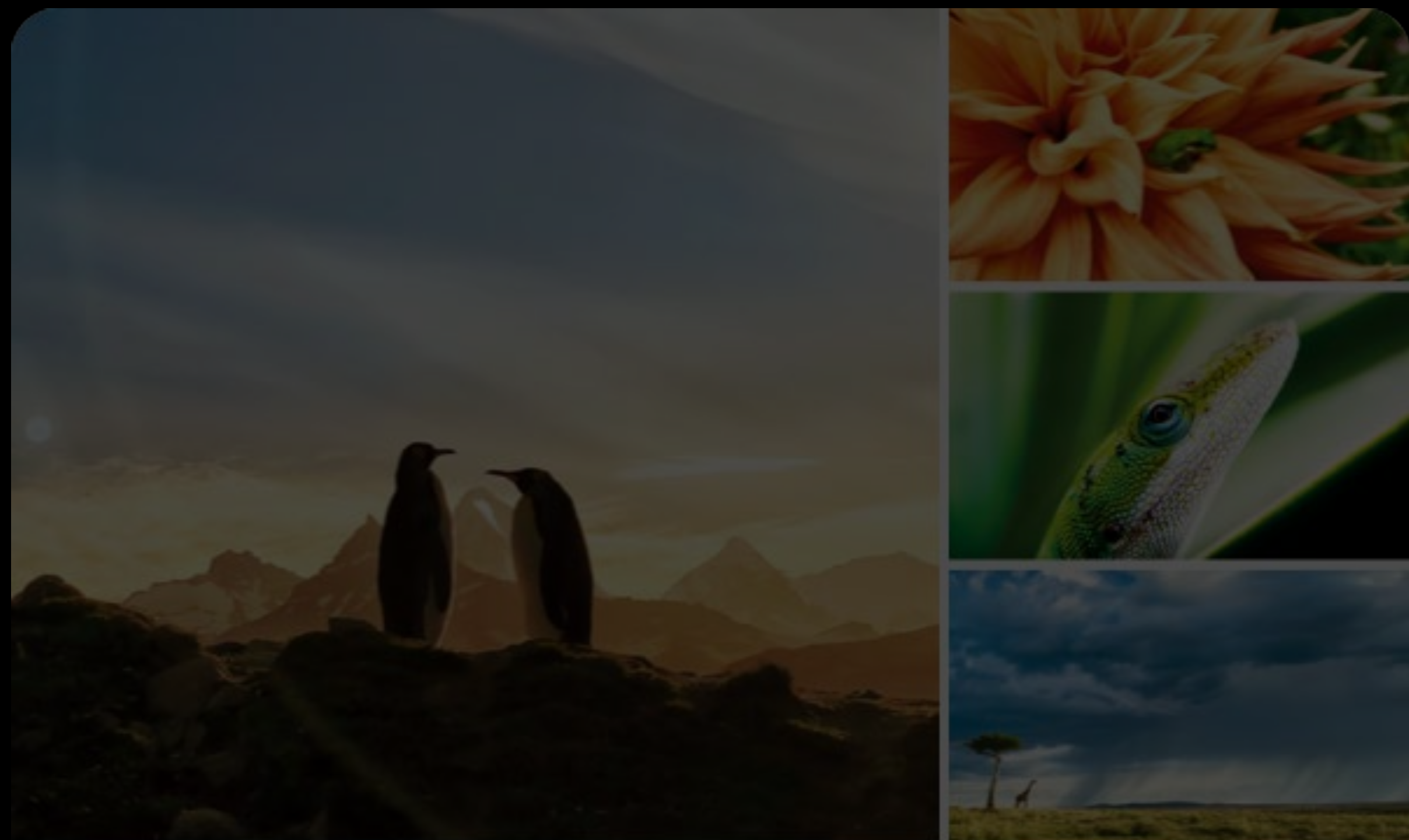


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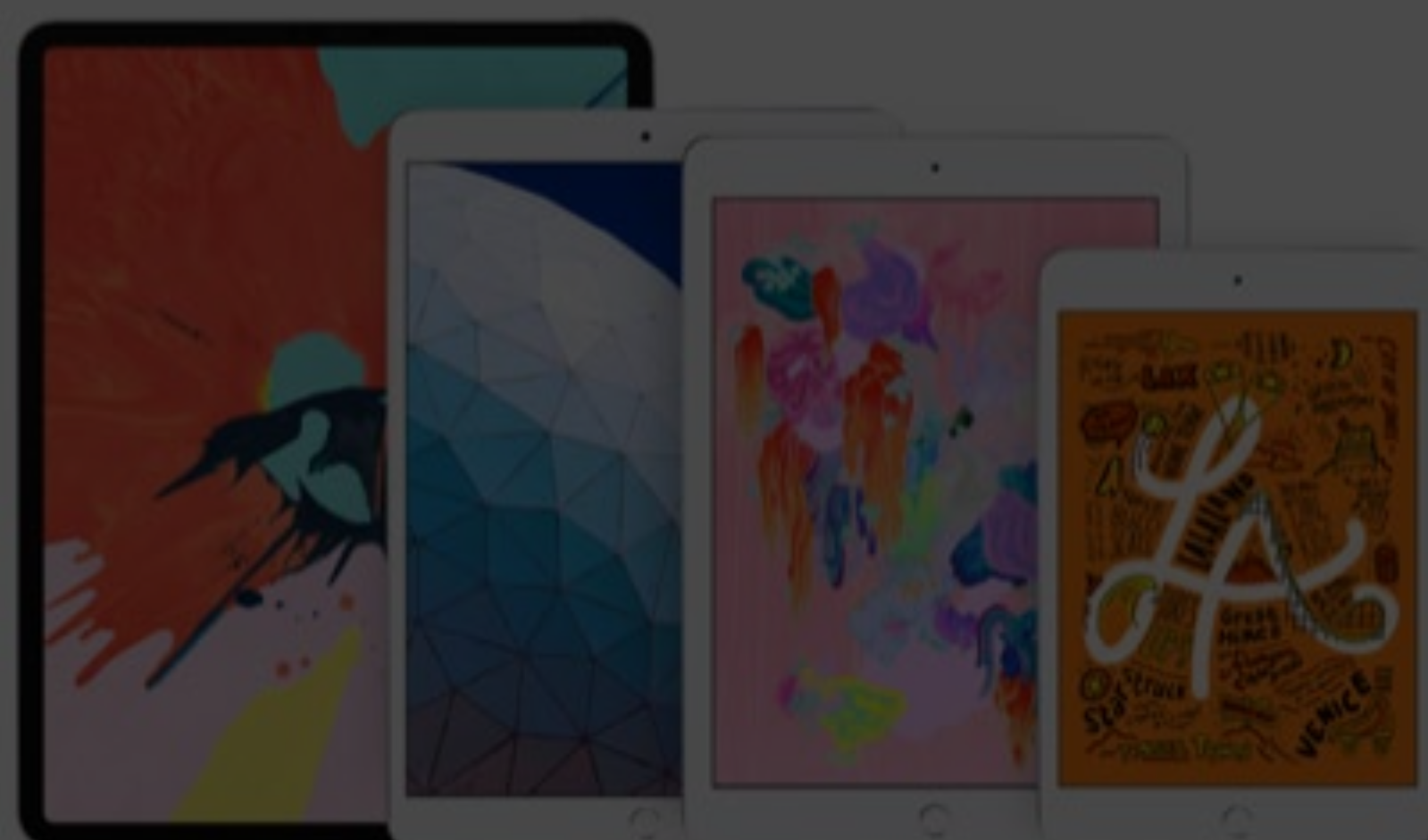
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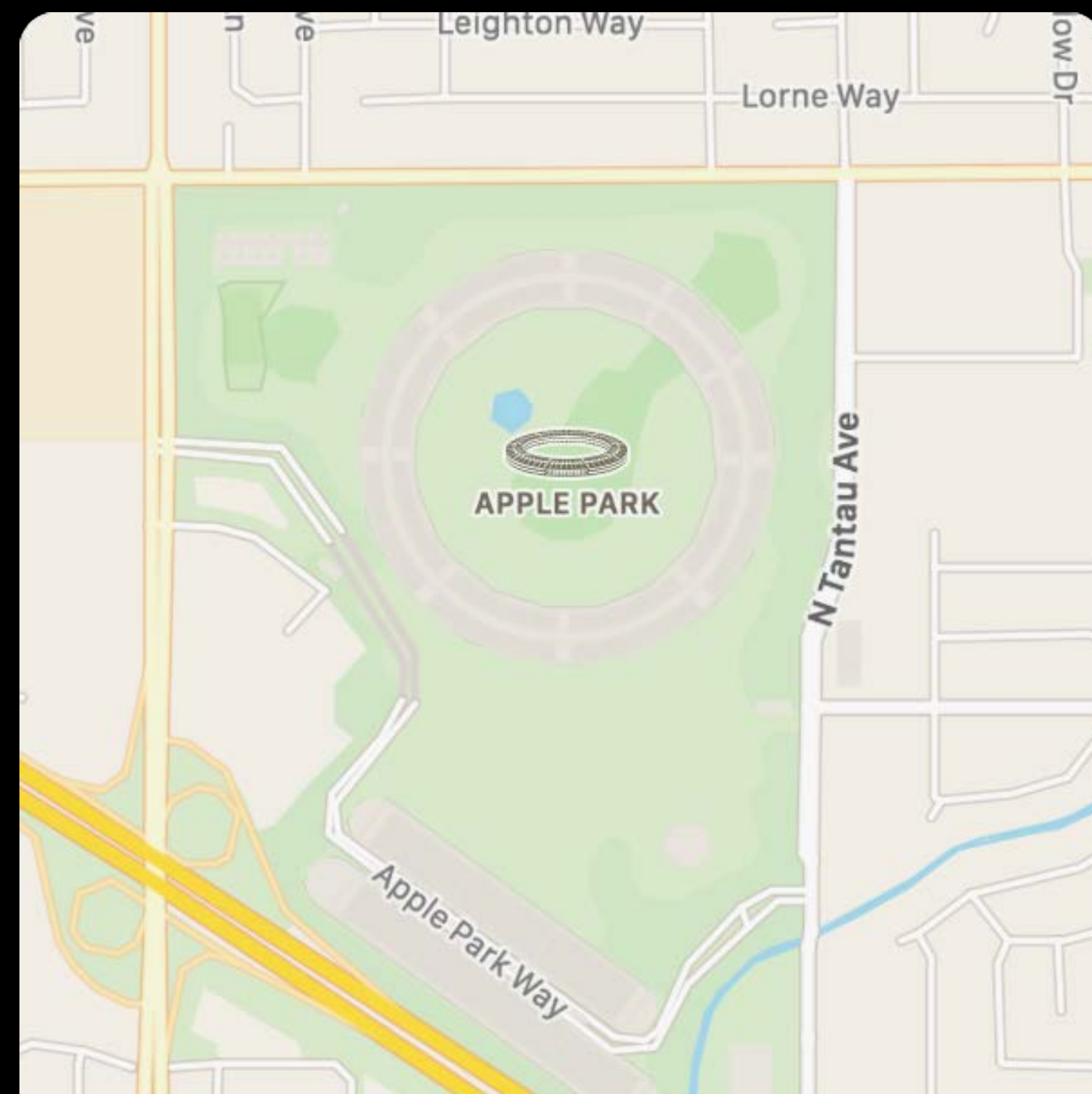
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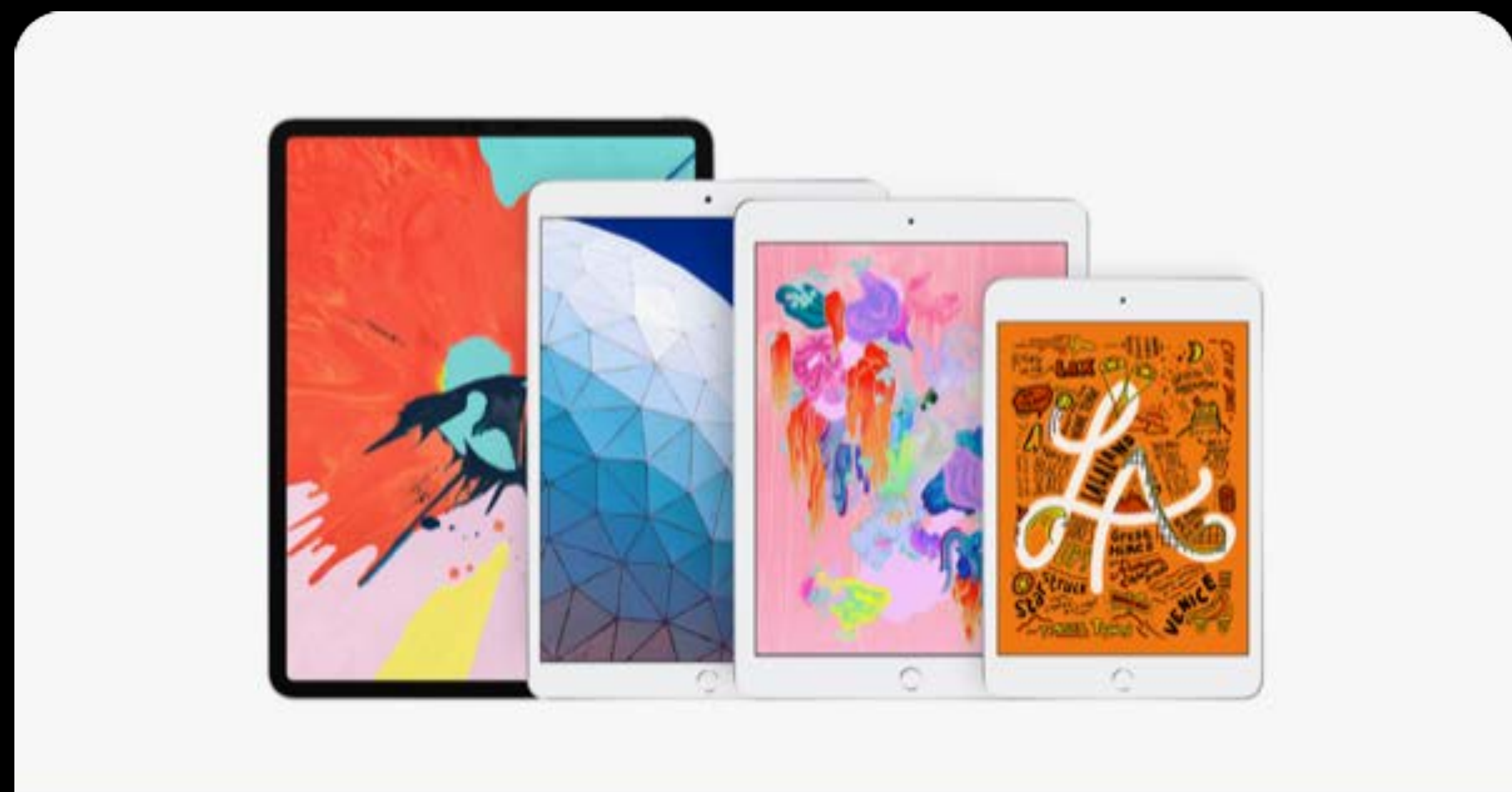


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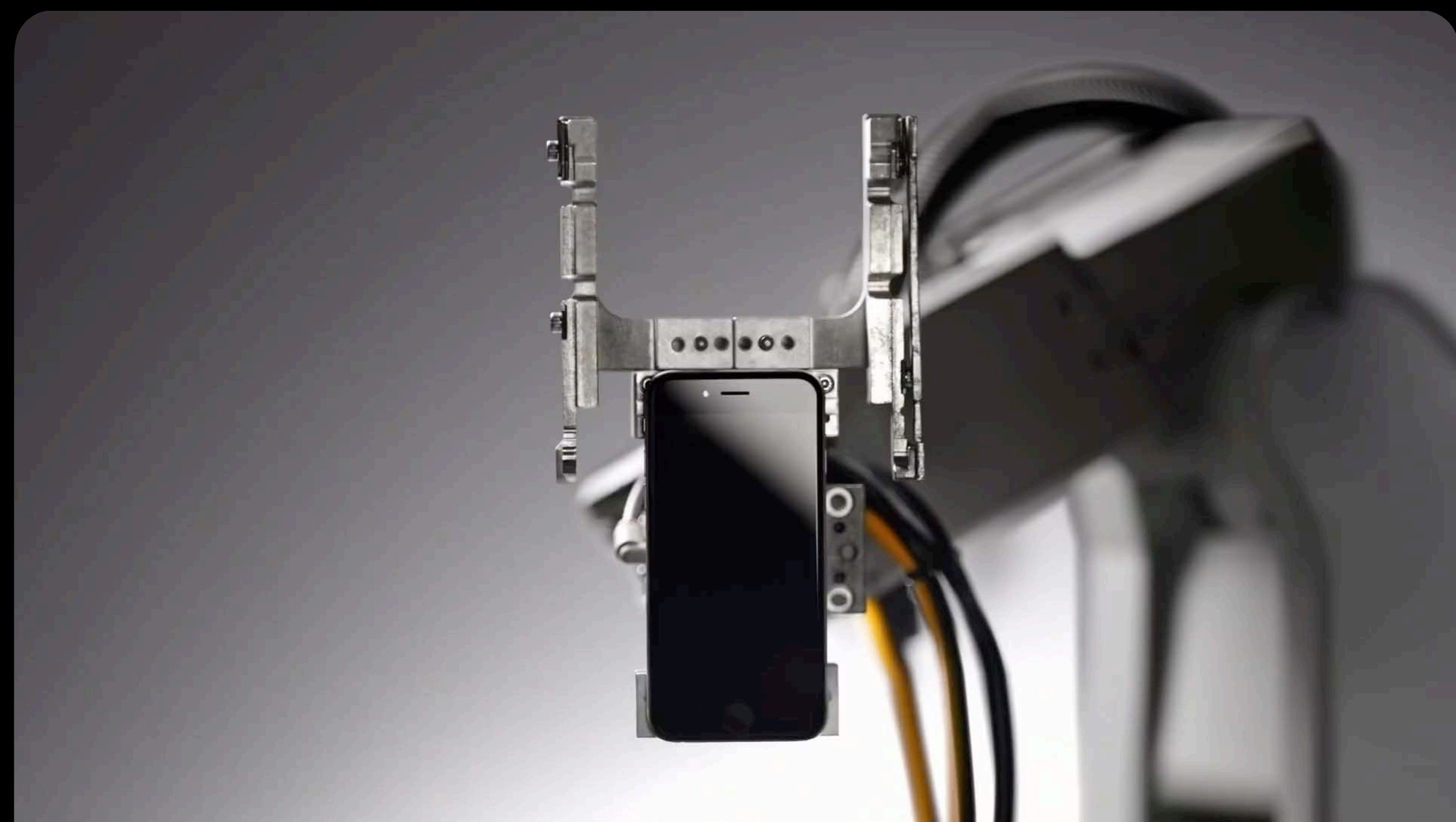
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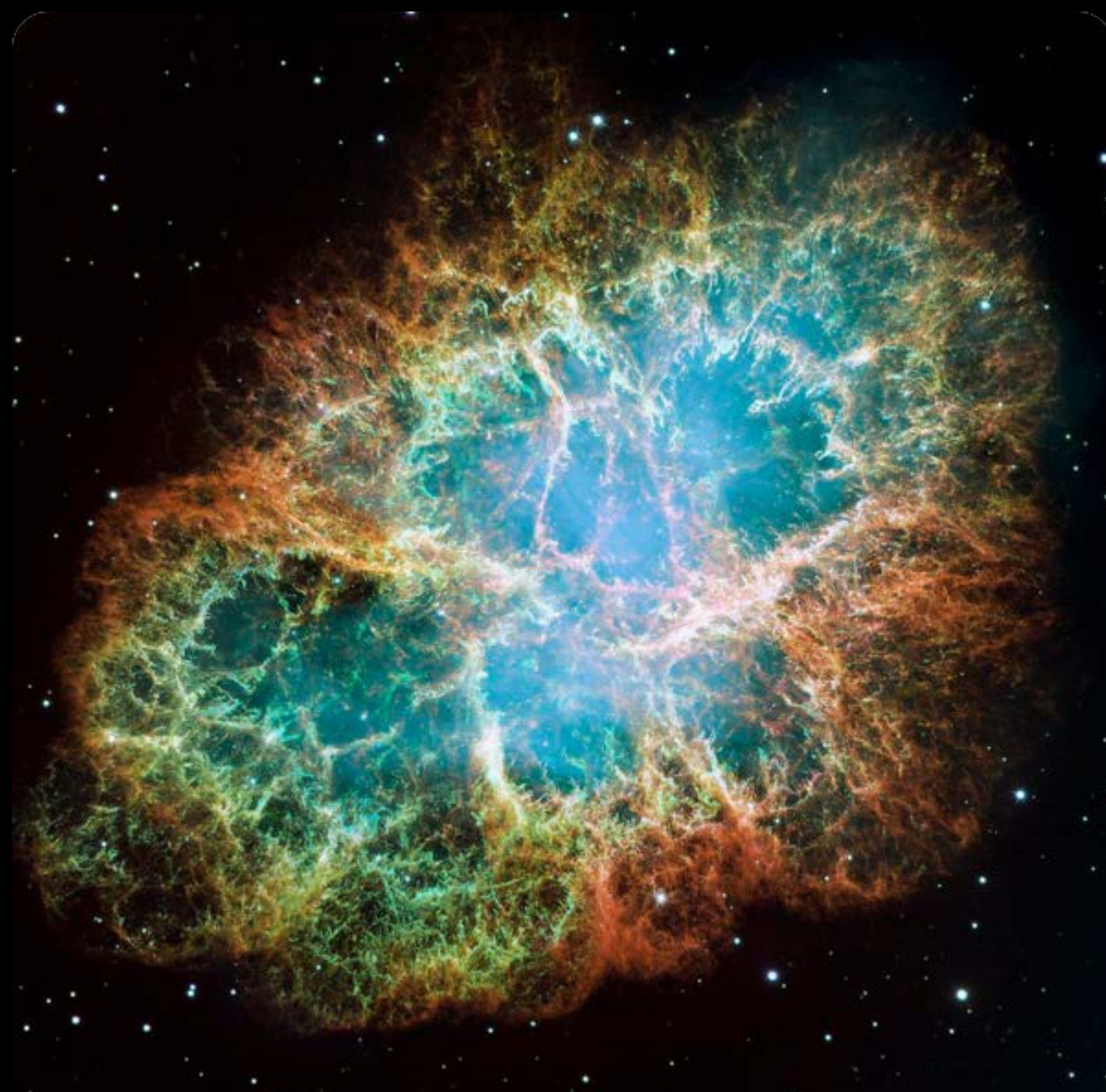
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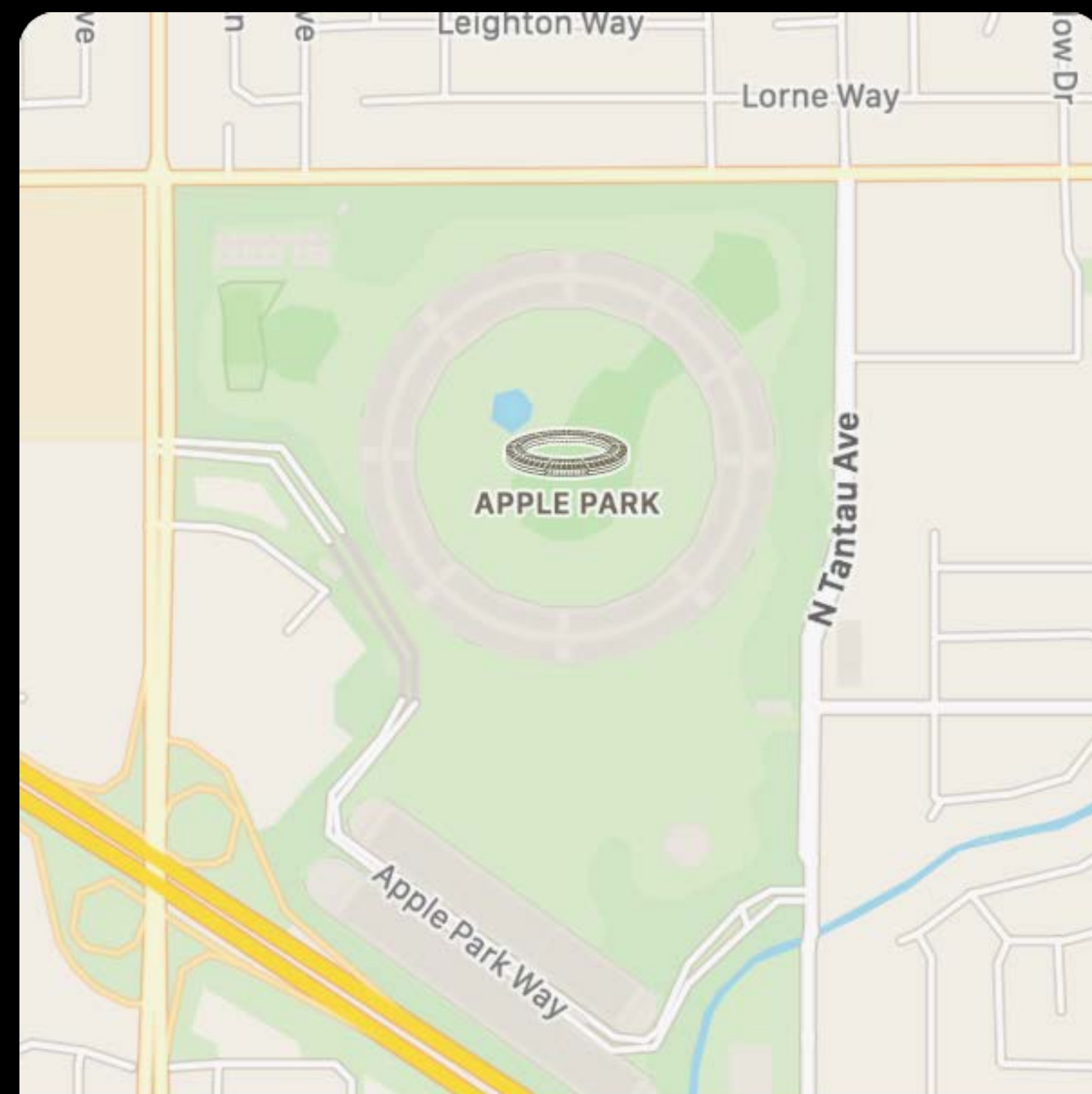
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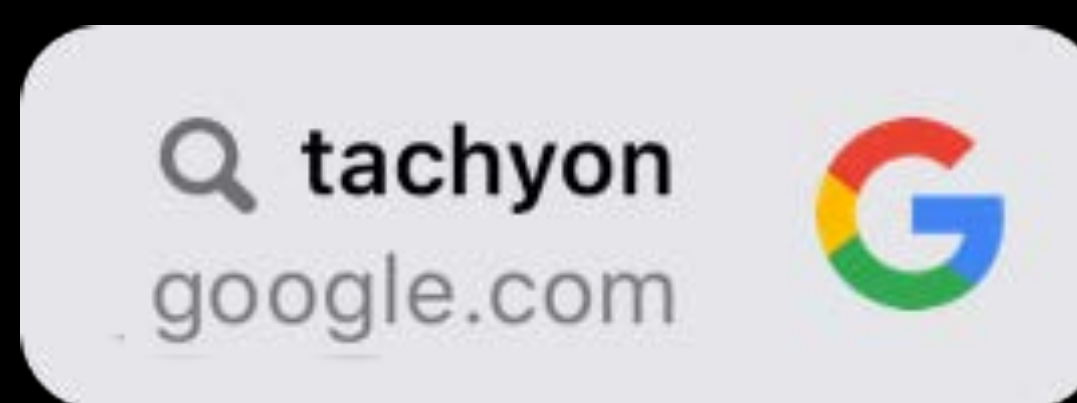
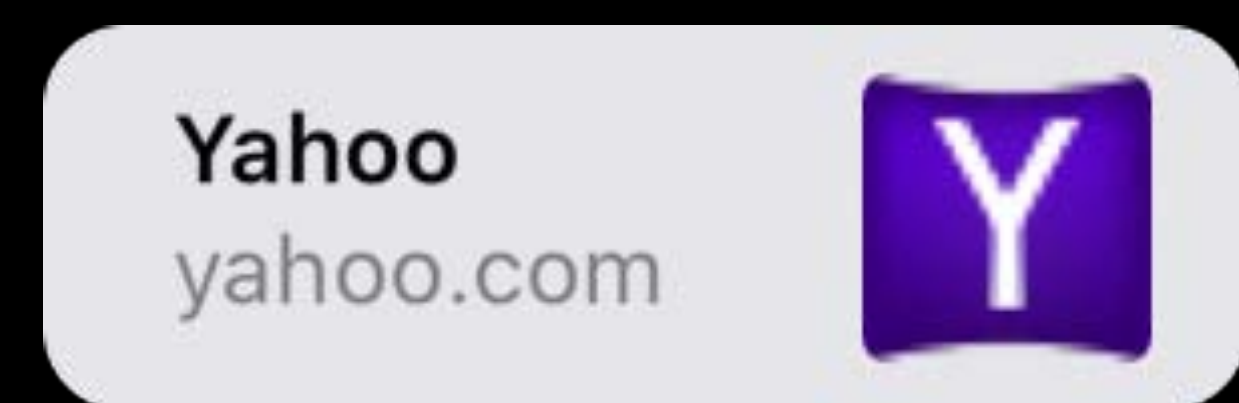
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Retrieving metadata

Presenting links

Accelerating the share sheet

Retrieving metadata

Presenting links

Accelerating the share sheet

URL `http://cooking.nytimes.com/...`

LPMetadataProvider

LPLinkMetadata

```
title: "Classic Shrimp Scampi"  
icon:   
image: 
```



```
// Fetch metadata from a given URL.

let metadataProvider = LPMetadataProvider()
let url = URL(string: "https://www.apple.com/ipad")!

metadataProvider.startFetchingMetadata(for: url) { metadata, error in
    if error != nil {
        // The fetch failed; handle the error.
        return
    }

    // TODO: Make use of fetched metadata.
}
```



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```


LPMetadataProvider and LPLinkMetadata

Title, icon, image, and video are all optional

LPLinkMetadata is serializable

Can also be used for local file URLs

Retrieving metadata

Presenting links

Accelerating the share sheet

NEW

LPLinkMetadata

```
title: "Classic Shrimp Scampi"  
icon:   
image: 
```



LPLinkView



Classic Shrimp Scampi
cooking.nytimes.com


```
// Present LPLinkMetadata in a LPLinkView.  
  
let linkView = LPLinkView(metadata: metadata)  
cell.contentView.addSubview(linkView)  
linkView.sizeToFit()
```



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```

```
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```
cell.contentView.addSubview(linkView)
```

```
linkView.sizeToFit()
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```
// Provide prefetched metadata to UIActivityViewController via UIActivityItemSource.  
  
func activityViewControllerLinkMetadata(_: UIActivityViewController) -> LPLinkMetadata? {  
    return self.metadata  
}
```


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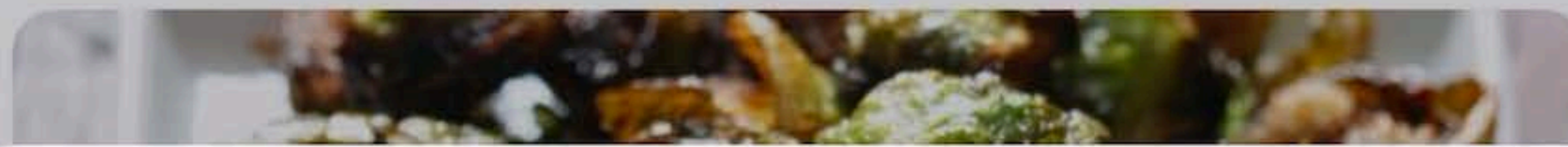
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Tim



Amy



June



Bob



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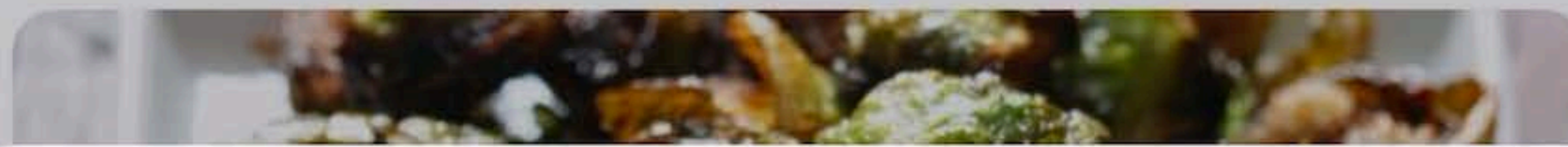
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AirDrop



Messages



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Reminders

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Add to Reading List




```
// Provide custom metadata to UIActivityViewController via UIActivityItemSource.  
  
func activityViewControllerLinkMetadata(_: UIActivityViewController) -> LPLinkMetadata? {  
    let metadata = LPLinkMetadata()  
    metadata.originalURL = URL(string: "https://www.example.com/apple-pie")  
    metadata.url = metadata.originalURL  
    metadata.title = "The Greatest Apple Pie In The World"  
    metadata.imageProvider = NSItemProvider.init(contentsOf:  
        Bundle.main.url(forResource: "apple-pie", withExtension: "jpg"))  
    return metadata  
}
```



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Summary

Use LPMetadataProvider to fetch rich metadata for a URL

Use LPLinkView to beautifully present links in your app

Prefetch LPLinkMetadata to accelerate the share sheet preview in your app

More Information

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