



GMAIL EXPLAINED

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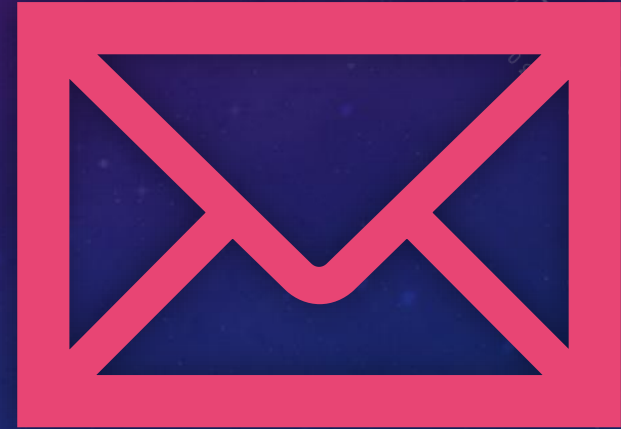
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INTRODUCTION OF MY PROJECT

- Everyone uses email services to send and receive mails from friends, school, office, and many other companies.
- We all email each other everyday without thinking how the process works.
- Two of the leading email services are Outlook by Microsoft and Gmail by Google.
- I am going to dive deep to understand how email services work behind the screen and explain Gmail in detail.

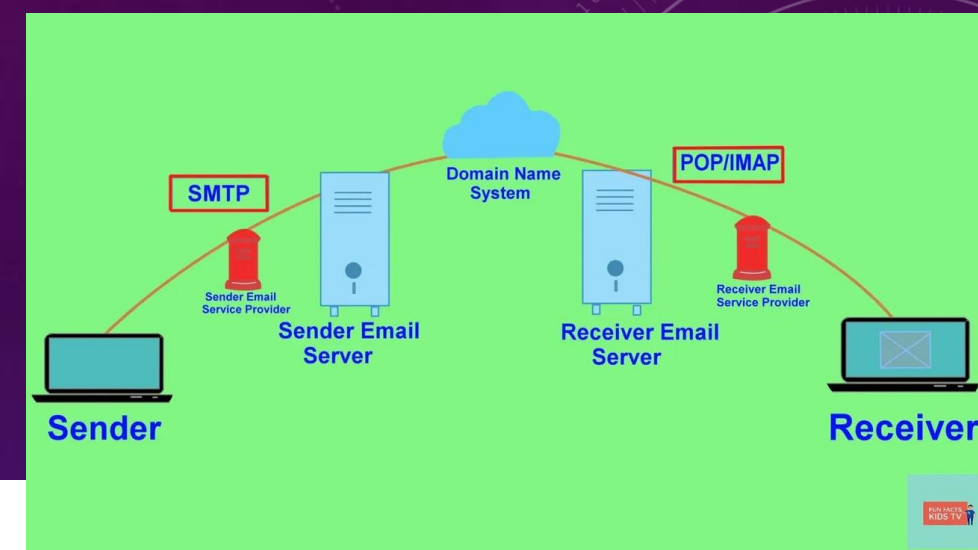




WHAT IS EMAIL?

- Email – Electronic Mail
- Messages are sent virtually over the internet
- Needs electronic devices like computer, and smartphone to receive and send email
- Messages are delivered instantly across the globe
- Used for personal communication, document sharing, information sharing

HOW DOES EMAIL WORK?



Compose Email and Send

Write message in email client/application (Gmail, Outlook, Yahoo)
Email client sends your mail to its outgoing mail server also know as SMTP server (Simple Mail Transfer Protocol)

Delivery Relay

SMTP server is like a post office. It identifies and verifies where this email needs to go
SMTP uses a tool called DNS (Domain Name System) to know the map the route of the email

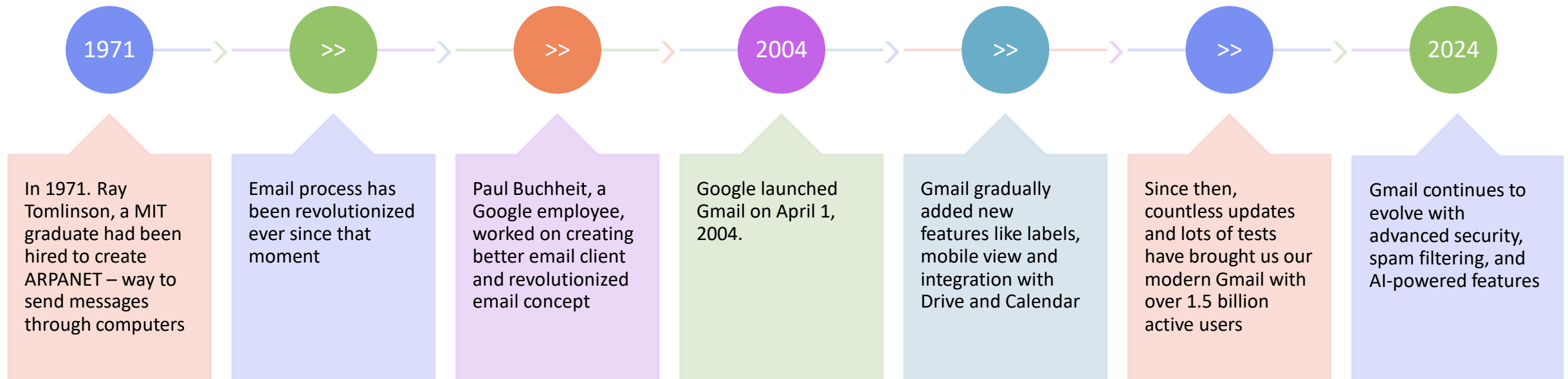
Reaching Destination

Using the route set by server, email comes to incoming mail server of the recipient email service
Incoming mail server uses MTA (Mail Transfer Agent) to check for spam and virus and filter good/safe email
MTA takes a new good/safe email in recipient's inbox using one of the two protocols; POP (Post Office Protocol) or IMAP (Internet Message Access protocol)

GMAIL
GOOGLE MAIL
SERVICE

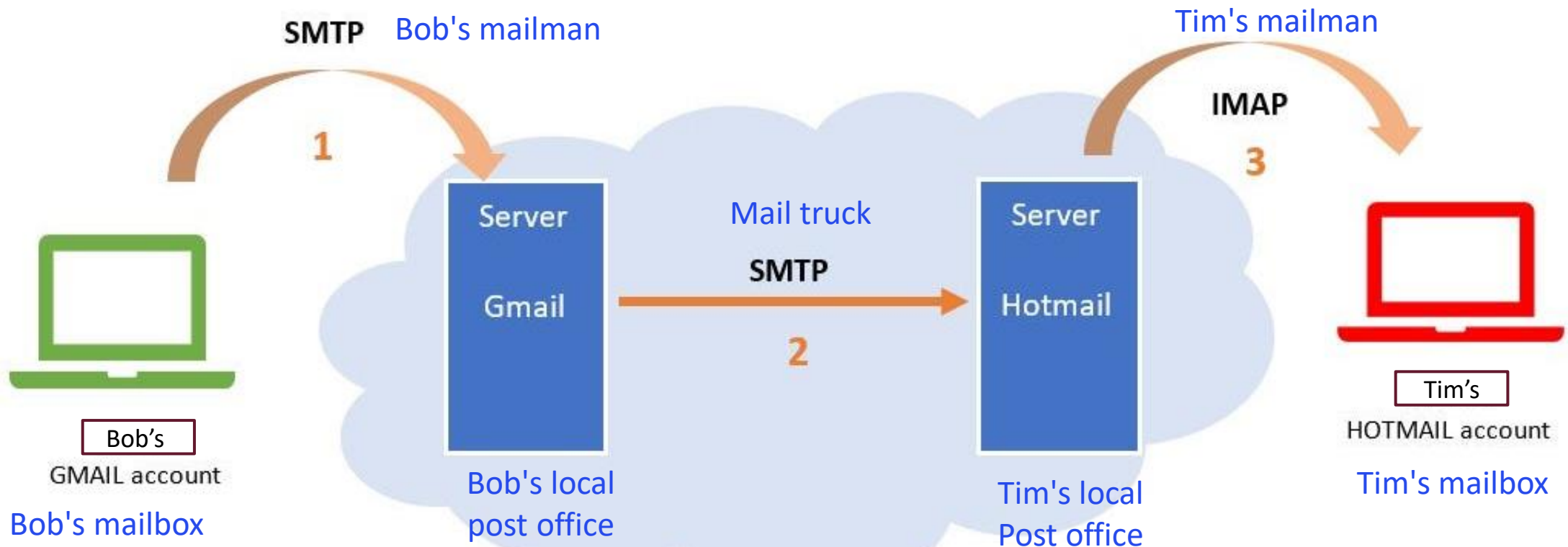


GMAIL HISTORY






HOW DOES GMAIL WORK?

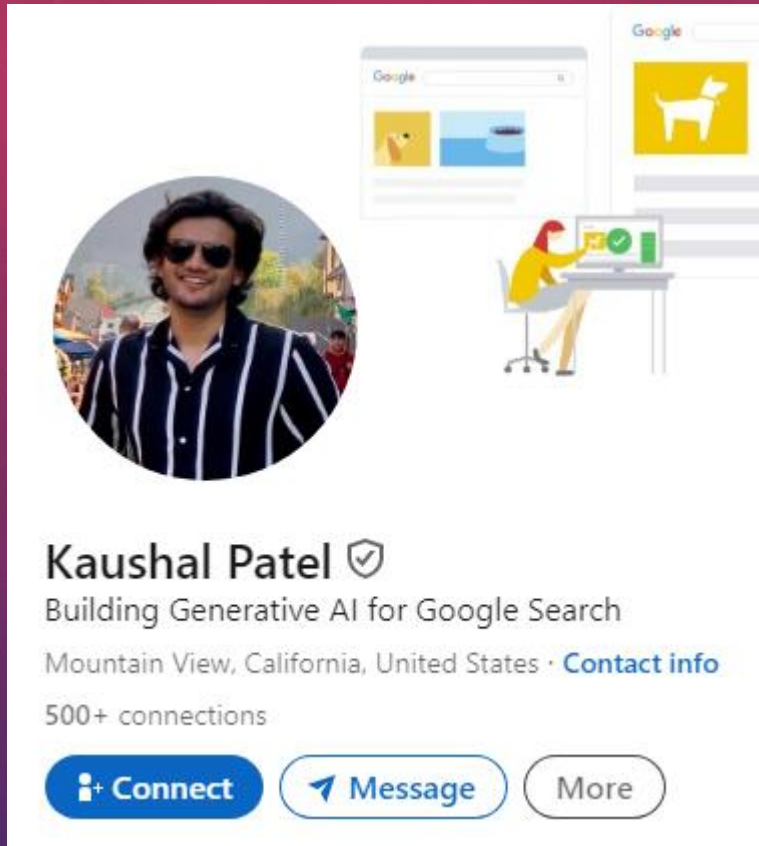
LET'S SAY BOB (BOB@GMAIL.COM) WANTS TO SEND AN EMAIL TO TIM (TIM@HOTMAIL.COM)



EMAIL AND OTHER FREE EMAIL SERVICES

Gmail	Outlook / Hotmail	Yahoo
<ul style="list-style-type: none">✓ The most popular email service with 1.5 billion users✓ Generous storage space, powerful search functionality✓ Seamless integration with other Google products like Drive, Docs, and Calendar	<ul style="list-style-type: none">✓ Formerly known as Hotmail✓ Microsoft's free email service with over 400 million users✓ Integration with other Microsoft products like Office 365✓ Robust security features	<ul style="list-style-type: none">✓ Pioneer in the email space✓ Offers a free and paid version with ample storage, customizable themes, and advanced spam filtering✓ Significant user base globally
		

INTERVIEW WITH GOOGLER



Q. **What do you do at Google?** – Kaushal is working with a generative search A.I. team for the last 5 years.

Q. **How did Google get an idea for Gmail?**- "Google wanted a better communication channel for its internal teams." Initially, it did not function as intended, but with a lot of updates and work, Gmail was born.

Q. **What is unique about Gmail?**- Gmail is a free, public service with great spam blocking and security features. It also has other Google services built into it.

Q. **What are upcoming new features in Gmail?**- One upcoming feature will be adding A.I. to Gmail to help compose messages easily. Gmail will also be adding a time-sensitivity feature to emails.

FUN FACT: The name "Google" came from the word "googol," which means the number 1 followed by 100 zeros. The name was originally suggested by Larry Page, one of the co-founders of Google!

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SAFE EMAIL PRACTICE

Email security tips and best practices to keep yourself and your device safe from fraud activities



Never	Always
<ul style="list-style-type: none">○ Use an easy-to-guess password or share your passwords with strangers○ Share your personal information online○ Open unknown attachments○ Open emailed files that end in .exe, .scr, or .bat○ Click random links in an email unless you trust the sender.○ Click on an unknown 'Unsubscribe' link	<ul style="list-style-type: none">✓ Use a spam filter✓ Check the sender's email address to make sure the email is legitimate✓ Check the file format of attachments✓ Be aware of phishing scams✓ Forward suspicious emails to your organization's security team.✓ Keep your device's security features updated✓ Be mindful of what you share

GLOSSARY

- Client (email) – a system or program that allows the user to send and receive email. (ex. Gmail is a browser-based client. Outlook can be a desktop-based client or a browser-based client.)
- DNS – The Domain Name System (DNS) acts like a phonebook for the internet, translating user-friendly domain names (e.g., google.com) into numerical IP addresses computers use to connect.
- SMTP – SMTP (Simple Mail Transfer Protocol) is the email delivery workhorse, acting like a postman who transfers emails from senders to receivers across the internet.
- MTA – An MTA (Mail Transfer Agent) acts like a post office, receiving emails from senders and queuing them for delivery by other email servers.
- POP – POP (Post Office Protocol) is a setting about how you access your email. POP directly downloads an incoming email to your inbox and deletes it from the server.
- IMAP – IMAP (Internet Message Access Protocol) is a setting about how you access your email. IMAP lets you read email directly from a server and lets you sync changes across devices as and when you need it.
- URL – A URL (Uniform Resource Locator) acts as every website's unique tag, showing where it is located on a web browser's server. It is also called web address.

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THANK YOU!

PALASH DOSHI