System Design Basics (Lottery Ticket)

http://cse.buet.ac.bd/bsadd
https://medium.com/bsadd

Md Imran Hasan Hira

Software Developer, Booking.com

The situation

Alan Turing needs some help.

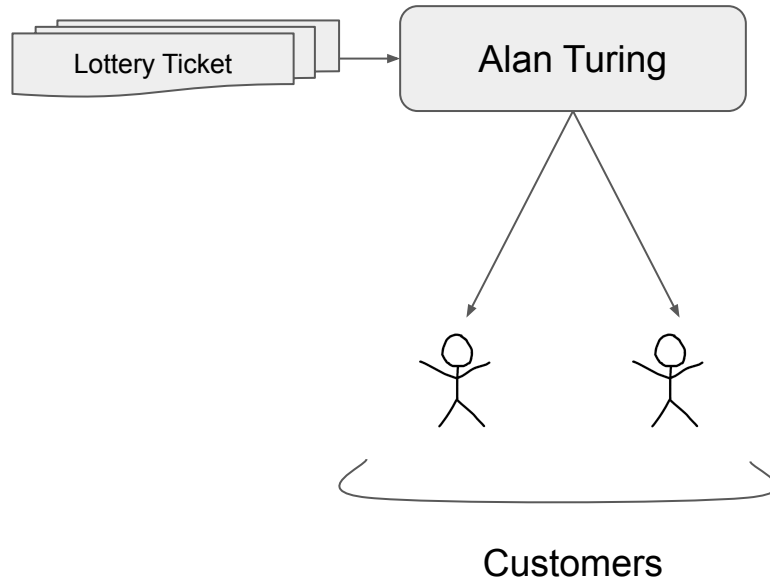He is out of money and he is looking for a work.

The stupid solution
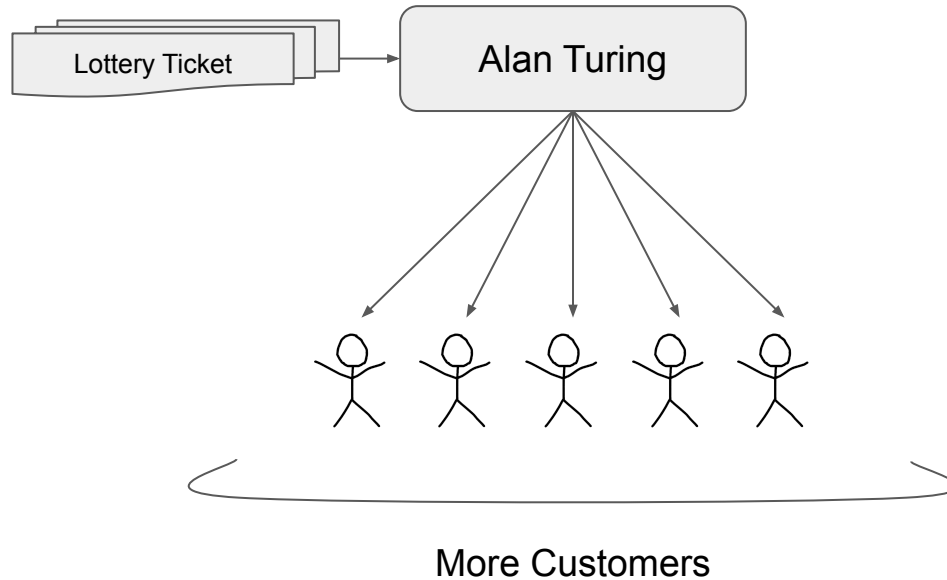
Alan Turing needs some help.

He is out of money and he is looking for a work.

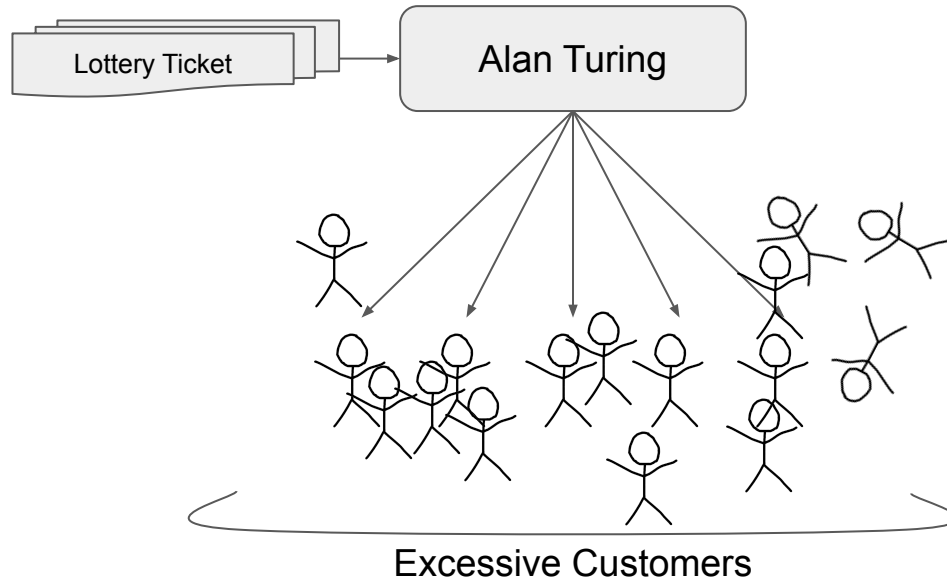So he decided to sell lottery ticket and earn some money around that.
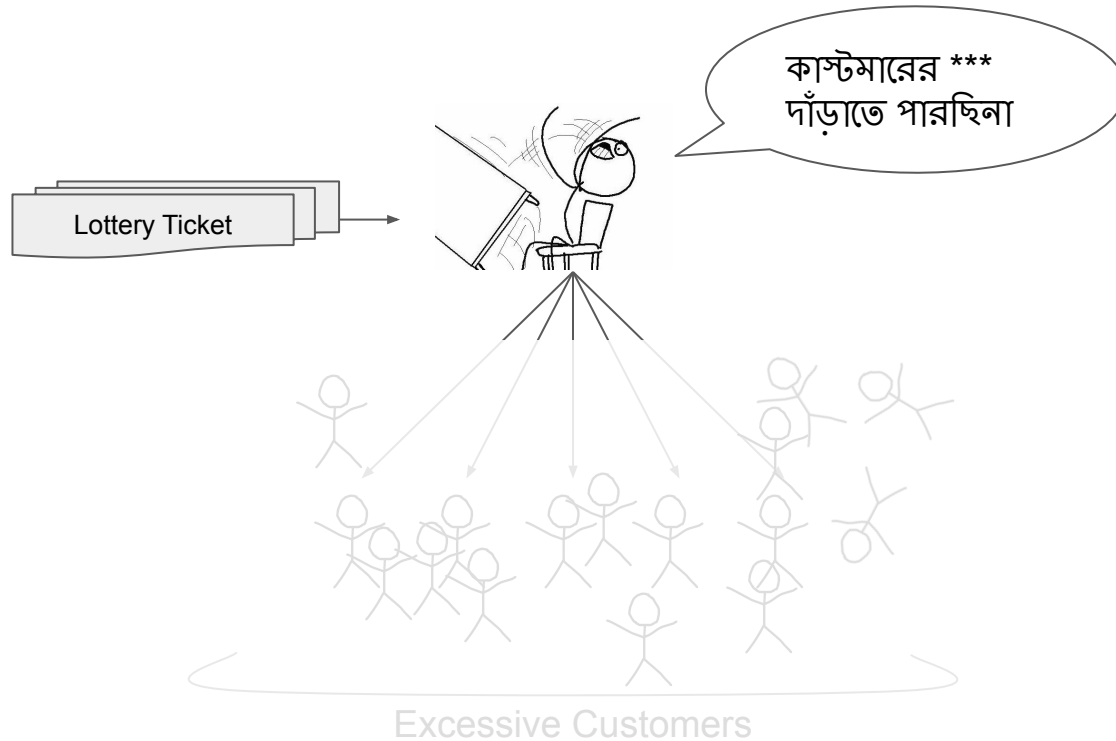
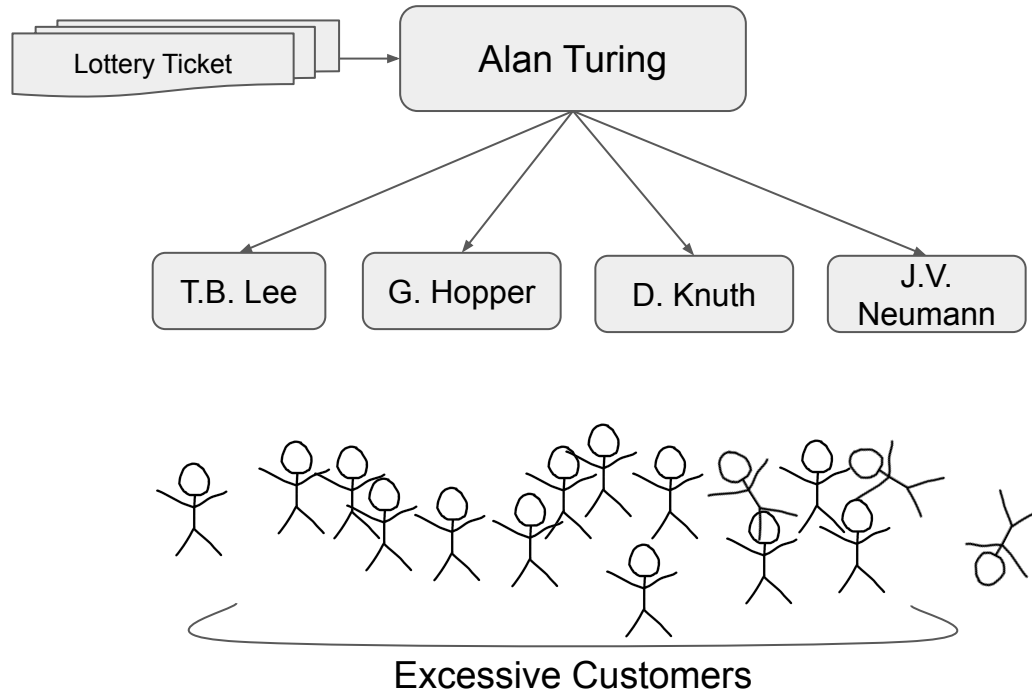# Alan Turing is selling lottery ticket

Turing became popular

Lottery Ticket → Alan Turing

More Customers

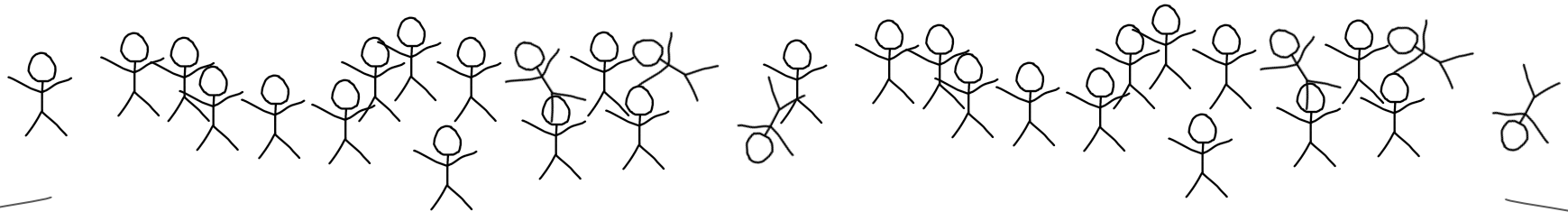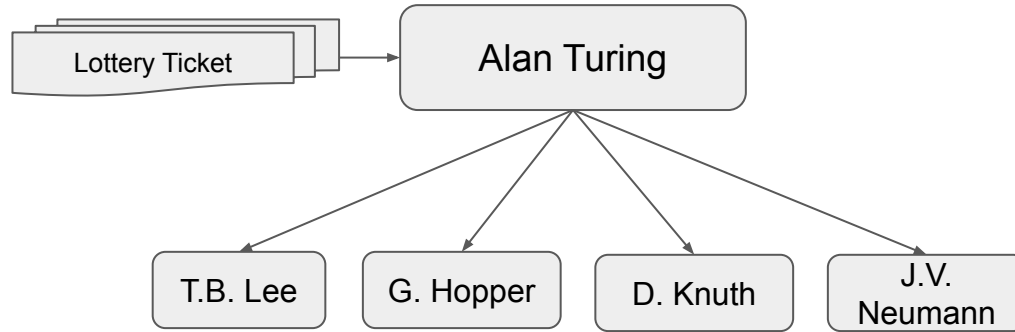# Turing's ticket booth became super popular

At some moment, Turing feeling like...

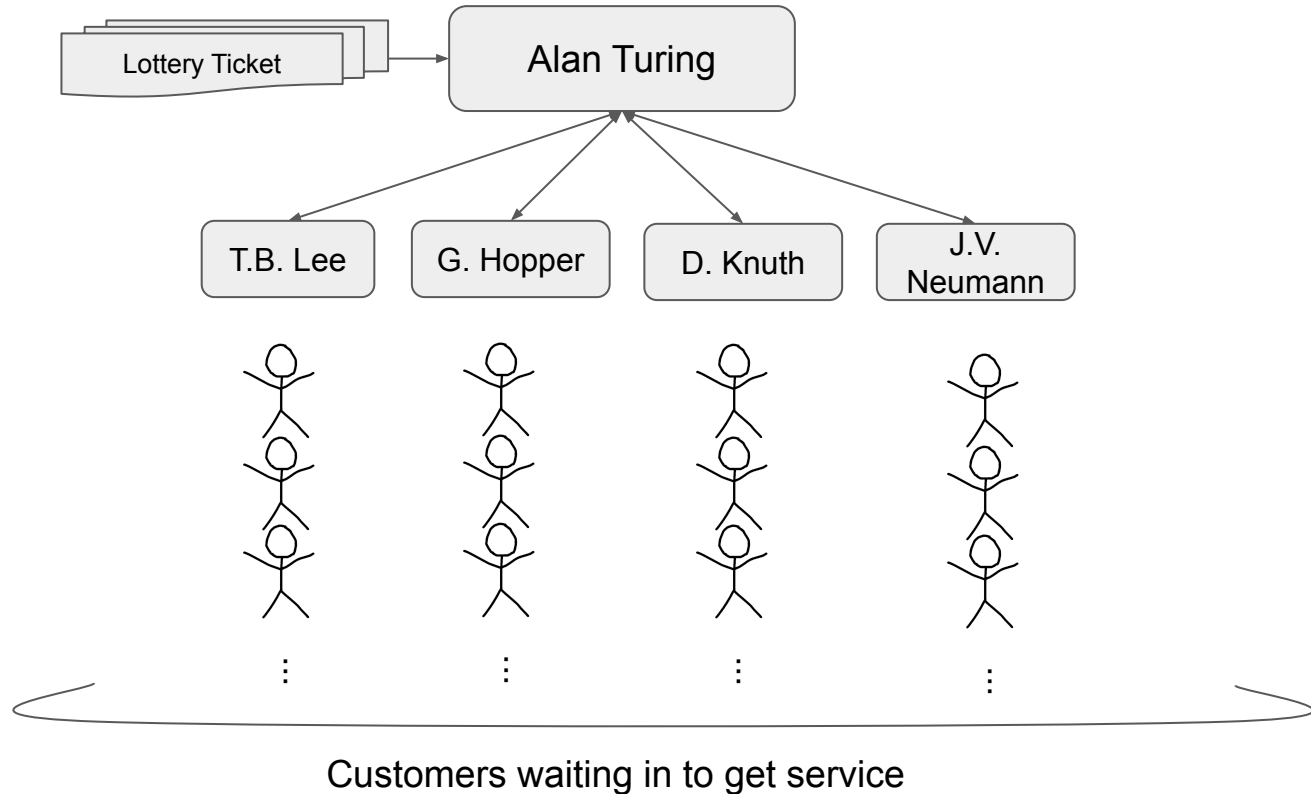# So, Turing recruited some people for him

Things were running fine, but then more customers came

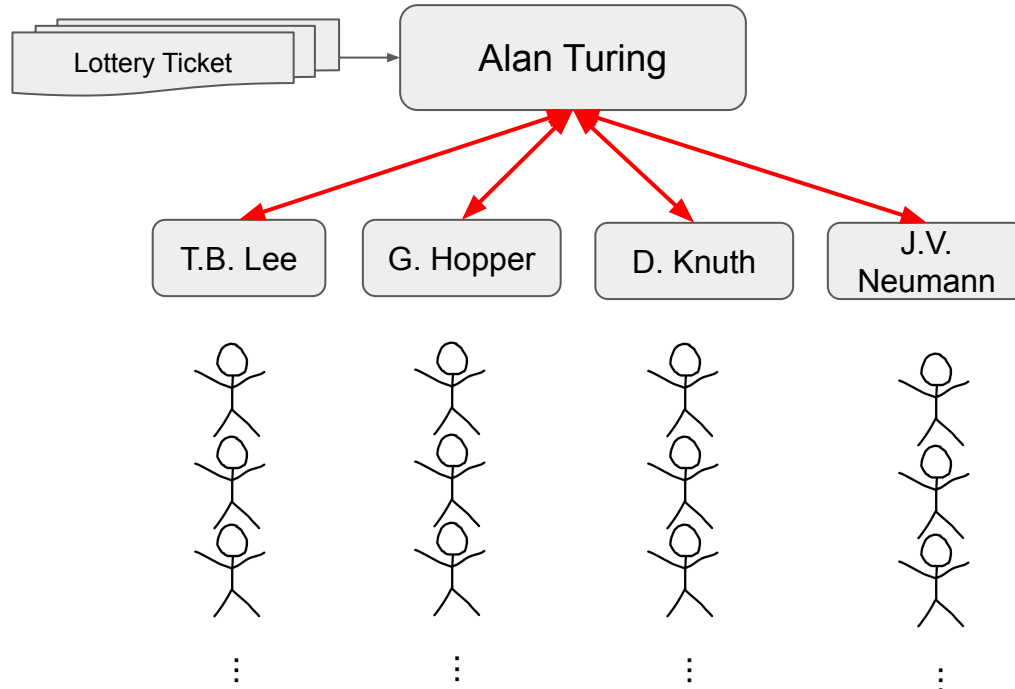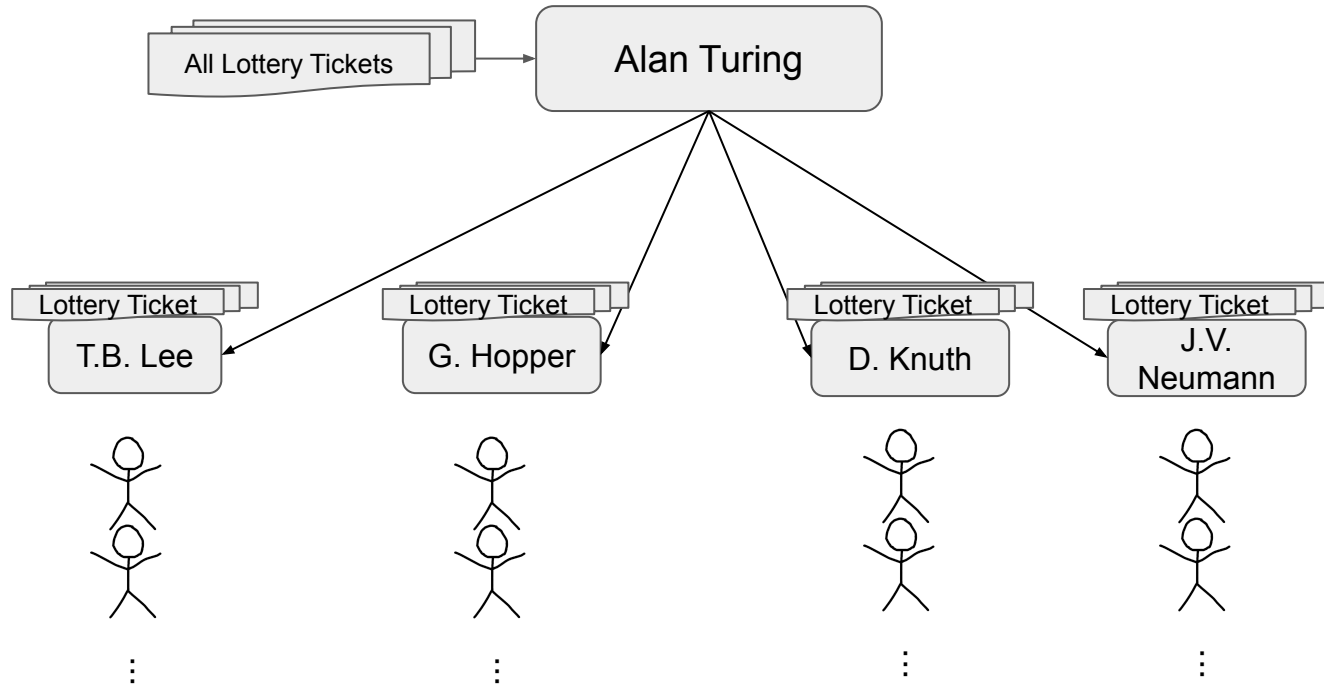Super Excessive Customers

Turing came up with this idea to put them in line

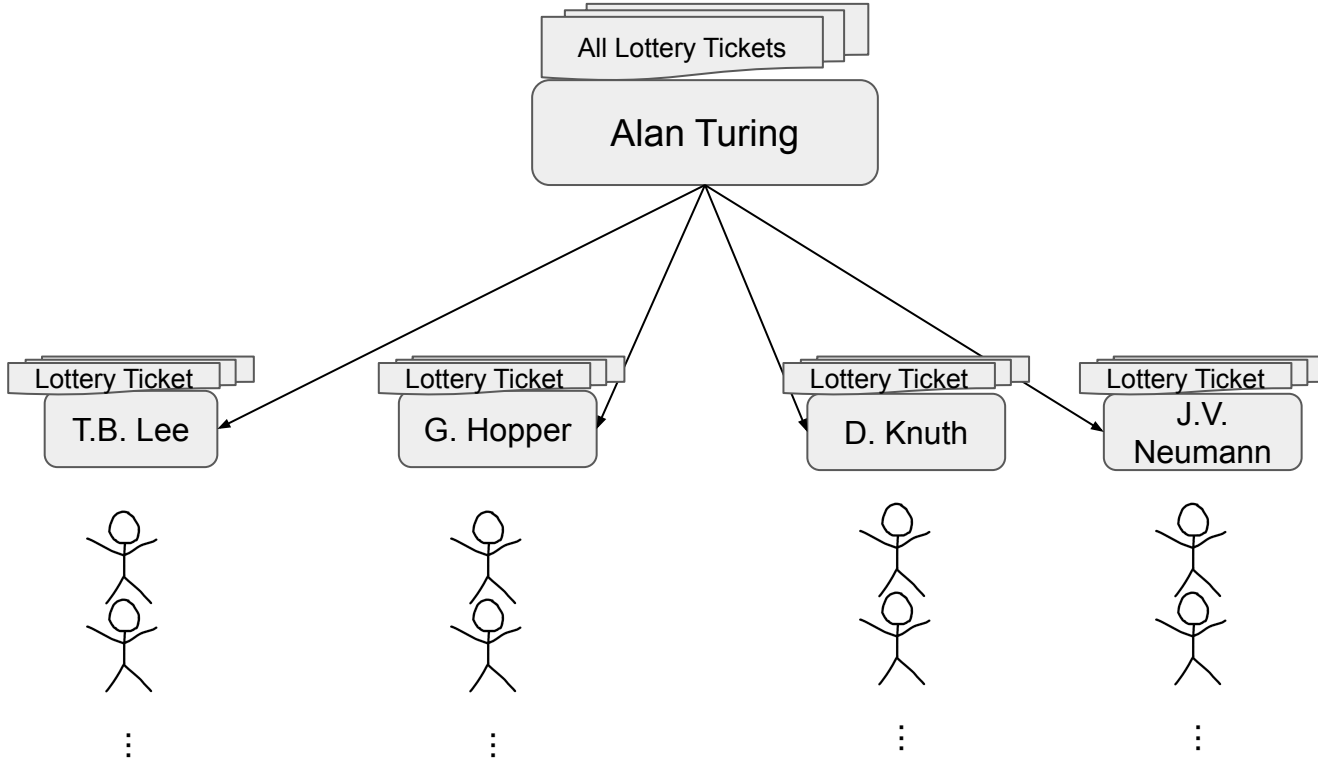Customers waiting in to get service

With too many people in the line, the ticket resellers were unnecessarily going back and forth to Turing
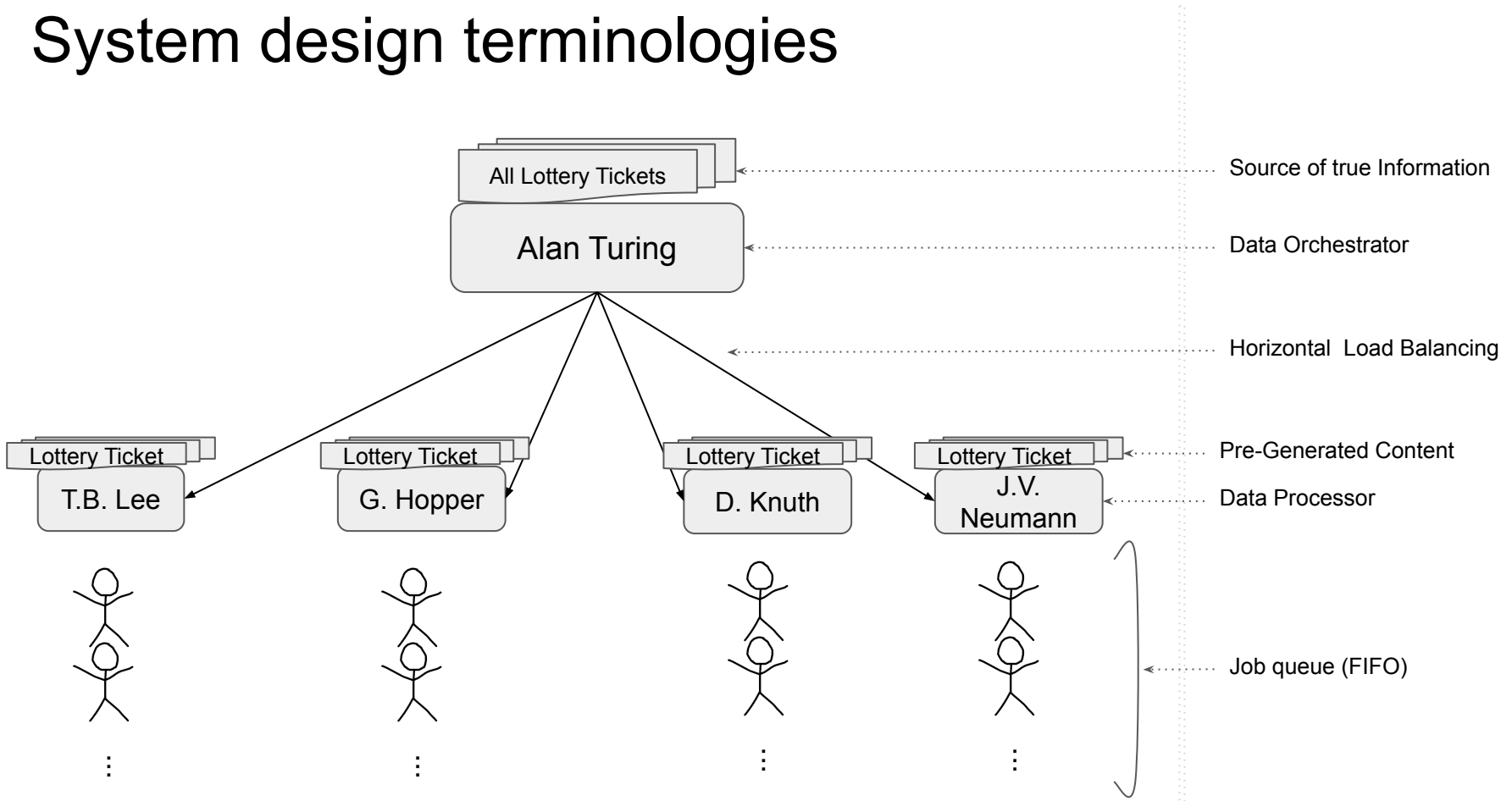
So, Turing printed a bunch of tickets and give them to resellers upfront, so that they can save time

And the final design looks like this

System design terminologies

All Lottery Tickets ·············→ Source of true Information

Alan Turing ·············→ Data Orchestrator

·············→ Horizontal Load Balancing

Lottery Ticket ·············→ Pre-Generated Content

T.B. Lee   G. Hopper   D. Knuth   J.V. Neumann ·············→ Data Processor

·············→ Job queue (FIFO)

Thank You :)