Grameenphone hackathon
Part-2
(Category: “Business Analyst”)

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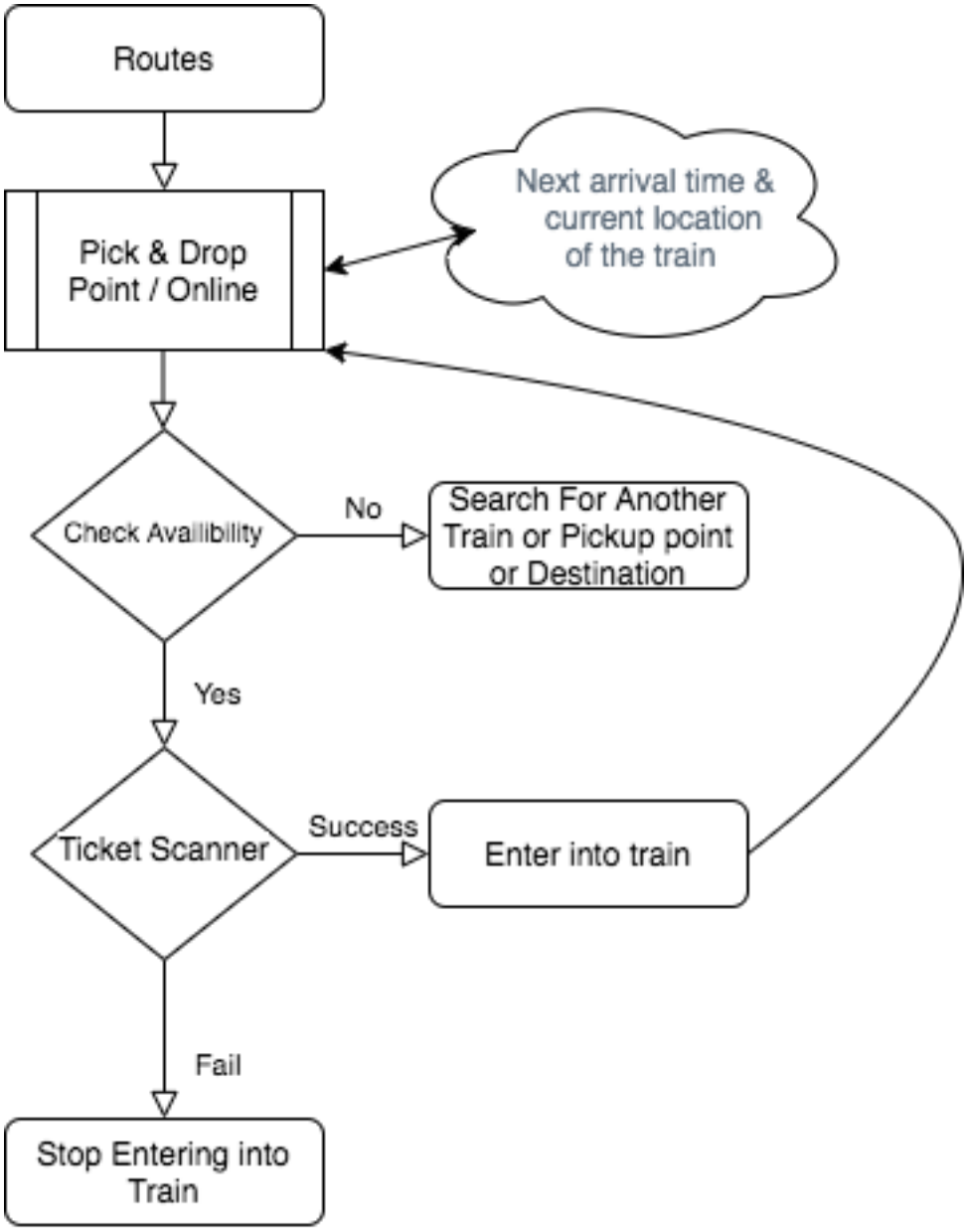
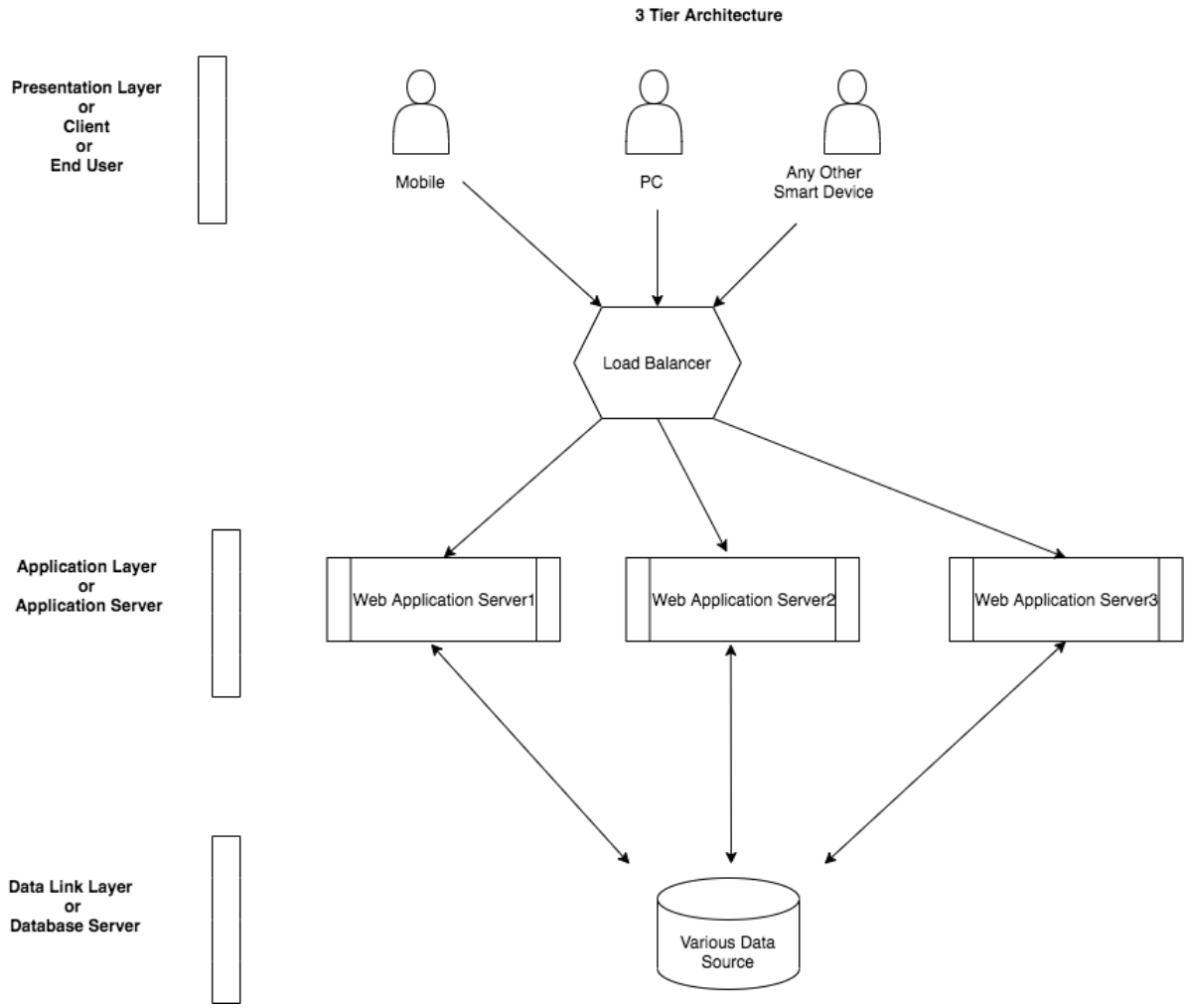
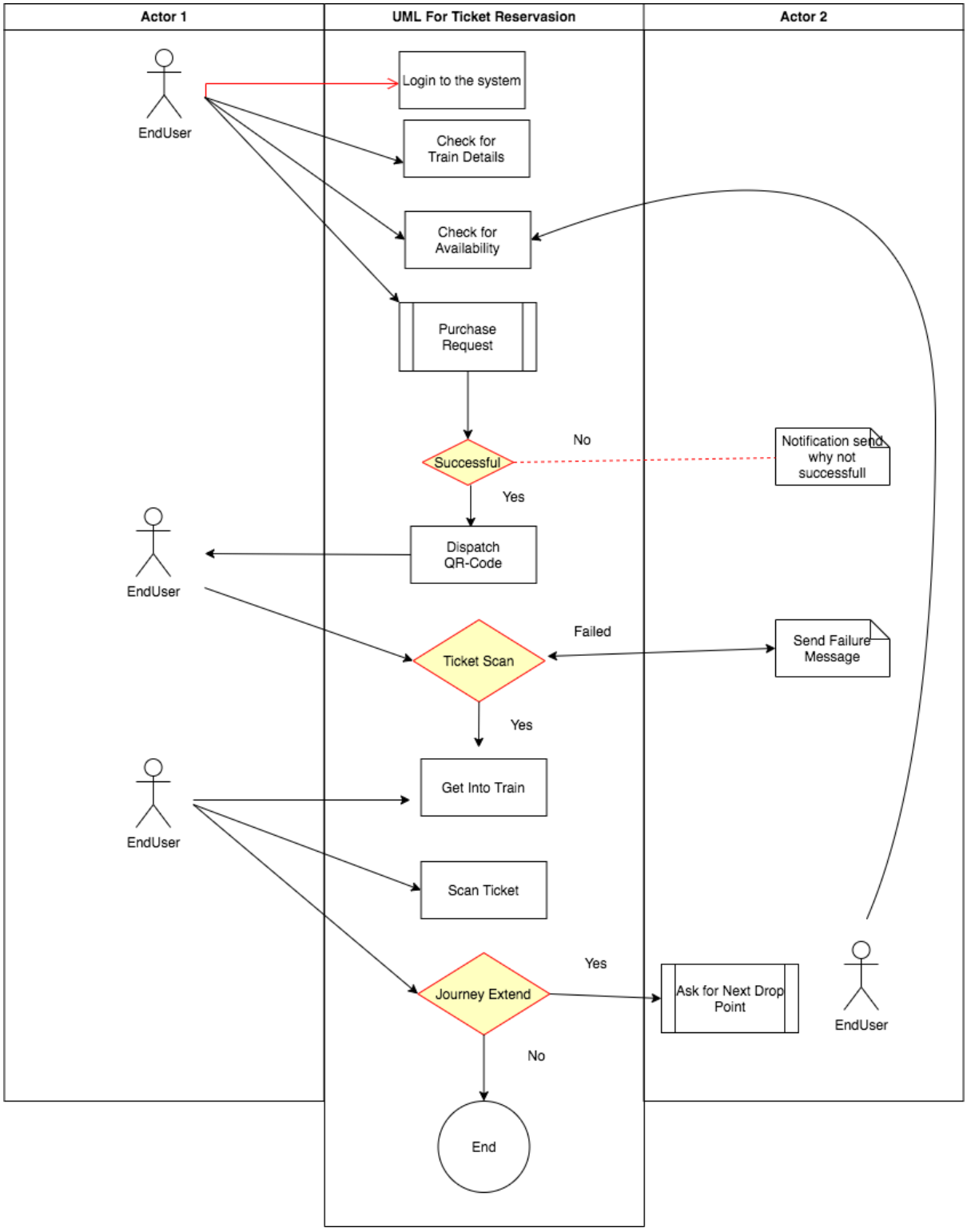
1. High level design of the service flow



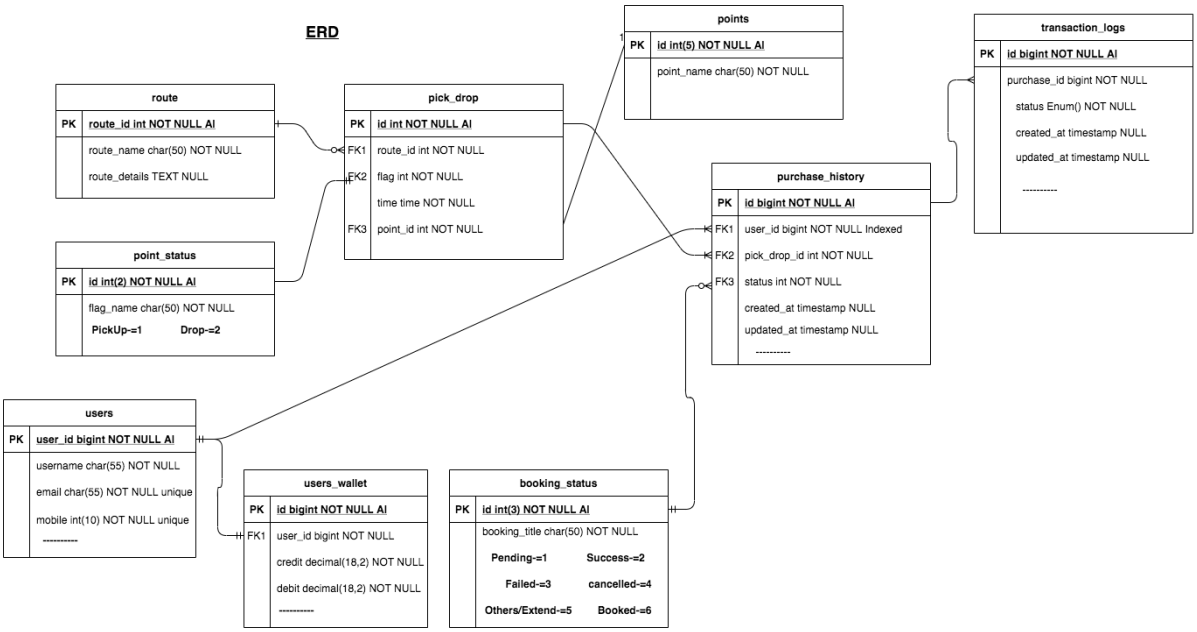
2. High level architecture of this system



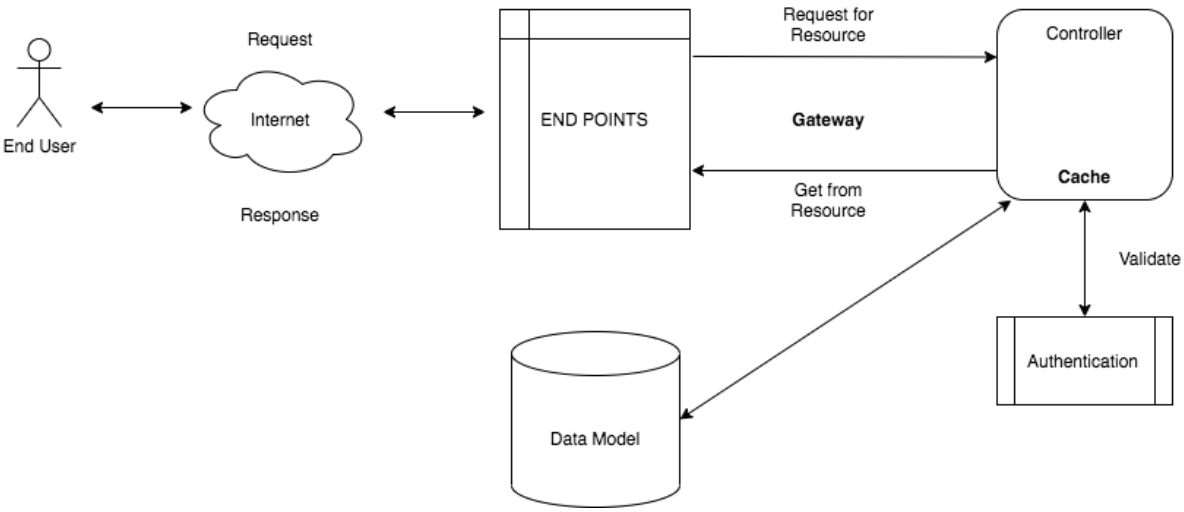
3. UML diagram



4. ERD



5. High Level API Designs



6. **TPS (transaction per second)**:

Calculation = user forecast / time range;

App Login = 100k per day 86400 seconds in a day

1.16 transactions per second

Booking = 80k per day

0.93 transactions per second

Purchase = 50k per day

0.58 transactions per second

Complete Journey = 25k per day

0.3 transactions per second

Infrastructure:

Get transaction per second by approx. user request in a given range (Above Example)

Get TMM Count

TPS (of full server system) = (TMM * TPS)

0 - - - - - - - 5 - - - - - - - 10ms

if transaction come in between after 5 and failed then we will take a log & regenerate the transaction (while limit exceed of TPS)

Need to Calculate Bandwidth

Estimate Peak Load

Using JMeter we can in in detail

Scale Database, use sharding technology & use License product to enhance TPS.

Highly Parallel Loosely Coupled

Ensure that multiple processing complexes remained synchronized in real-time.