Assignment - Lead Engineer / Principal Engineer

Design a software architecture to support a user experience as offered on popular food delivery apps, which allows users to see the status of their food delivery post-payment.

Background

Imagine that you are building your own app for helping users with online food order and delivery (similar to contemporary food delivery apps). So far your team has developed the mobile app, which can allow users to place their food orders to restaurants and make the payment thereof.
Now the pending part is to enable the app users to be able to track their order status in a seamless manner.

End-user Requirements

You are expected to come up with an architectural design that will enable the below user requirements to be met on the mobile app:

1) What is the order status?
    a) Received by Restaurant
    b) Food Prepared
    c) Picked-up for Delivery
2) What is the delivery status?
    a) Who has been assigned for delivery?
    b) Tracking of delivery associate's live location

Architectural Design - Expectations

The architecture that you conceive for the user flow to track order and delivery status could touch upon the following aspects ad minimum:

- Communication of food order status to app
- Logic for allocation of delivery boy
- Live location tracking for every order
- What data store will you use for storing the necessary data?
- How will your architecture / design change for large user load - 10K, 100K, 1 million users per hour
- Submit REST API designs, as appropriate

Outcomes

Possible outcomes from your design exercise, could include but need not be limited to:

- Powerpoint / Google slides explaining the approach / solution
- API specification, if possible on Swagger