

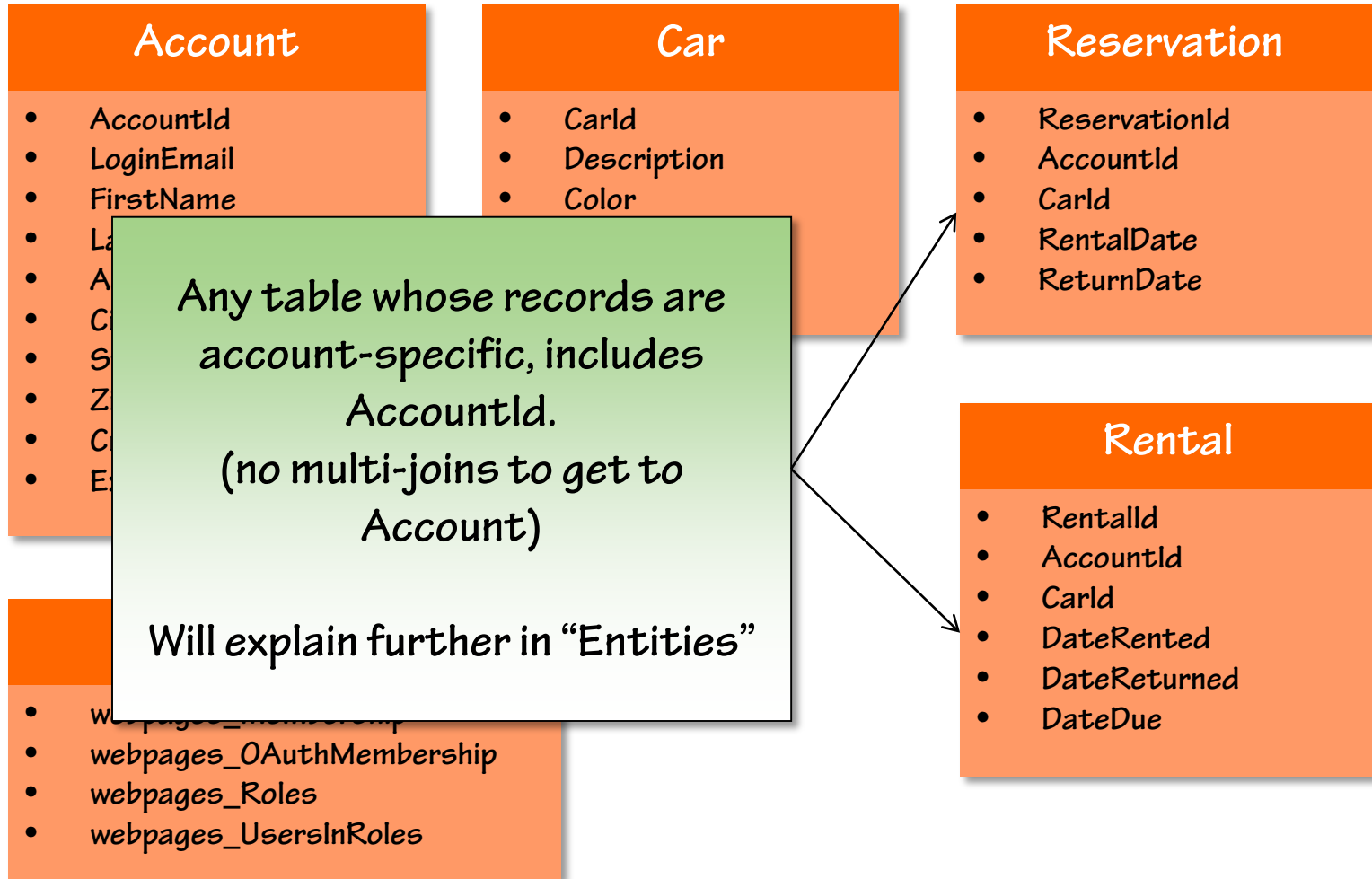
Building End-to-End Multi-Client Service Oriented Applications

Module 03

Architecture & Database of the Car Rental System



Database



Core Use Cases

- **As a customer**
 - Reserve an available car for a given set of dates
 - Cancel an existing reservation
 - View rental history
- **As a Car Rental employee**
 - Manage inventory of cars
 - Rent a reserved car to a customer
 - Accept a returned car from a customer
 - View customer and rental history list

Service Decomposition

Inventory

- Vehicle CRUD
- Vehicle availability

Rental

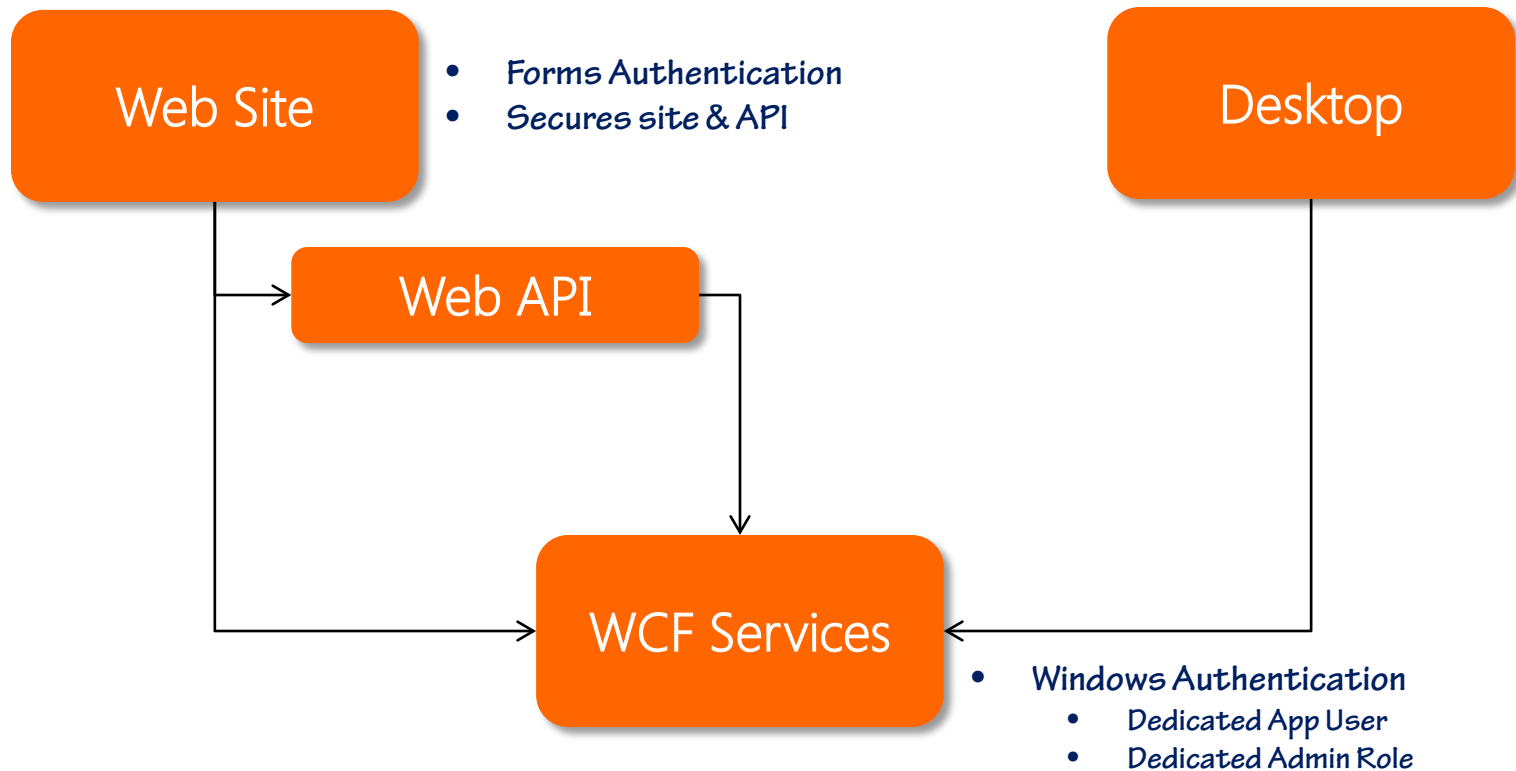
- Vehicle reserve
- Reservation cancel
- Vehicle rental
- Rental return
- Current rentals
- Dead reservations

Account

- Customer list
- Account update
- View account info

Services can hit business engine for behavior reusability or data repository for straight data I/O

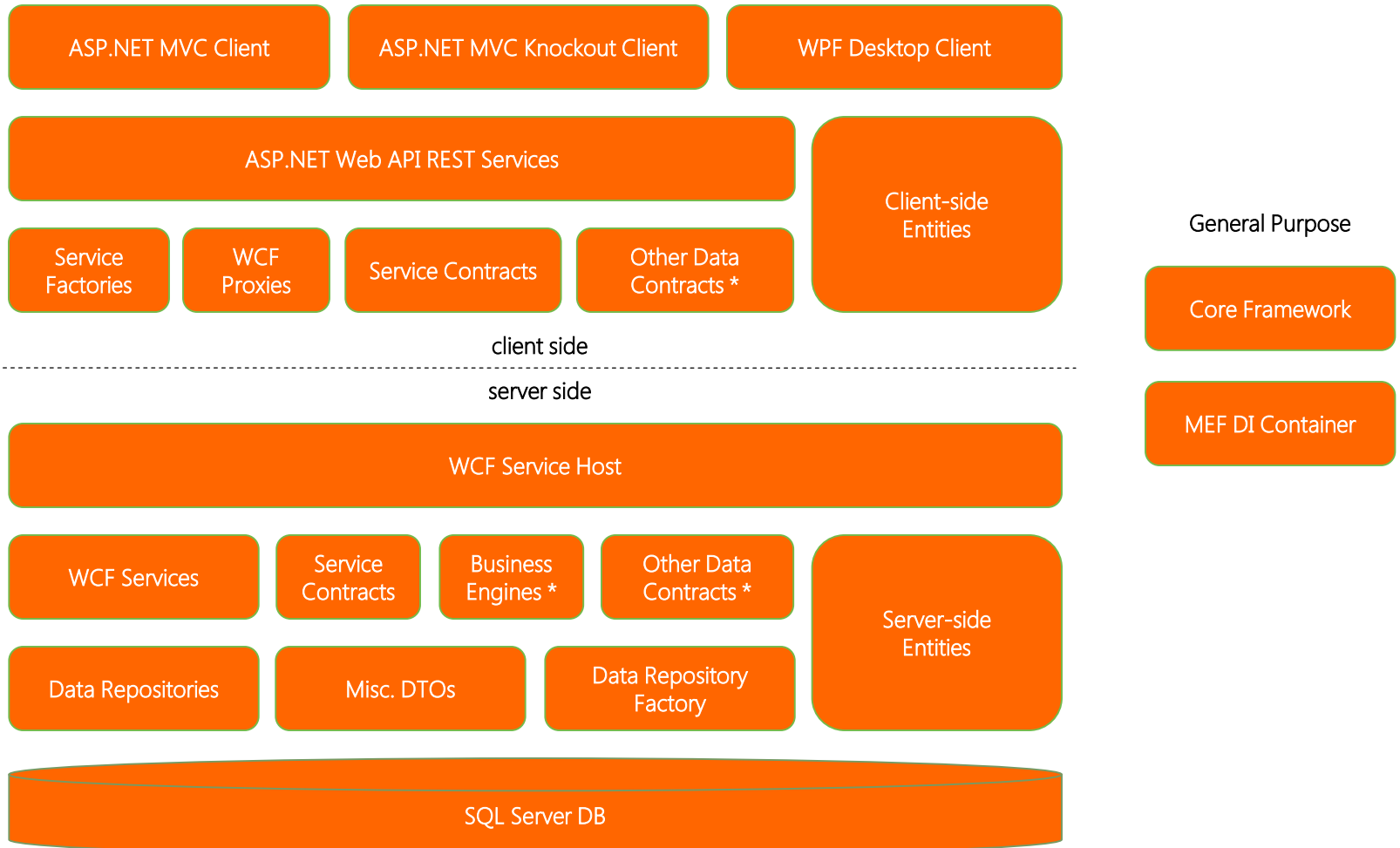
Security



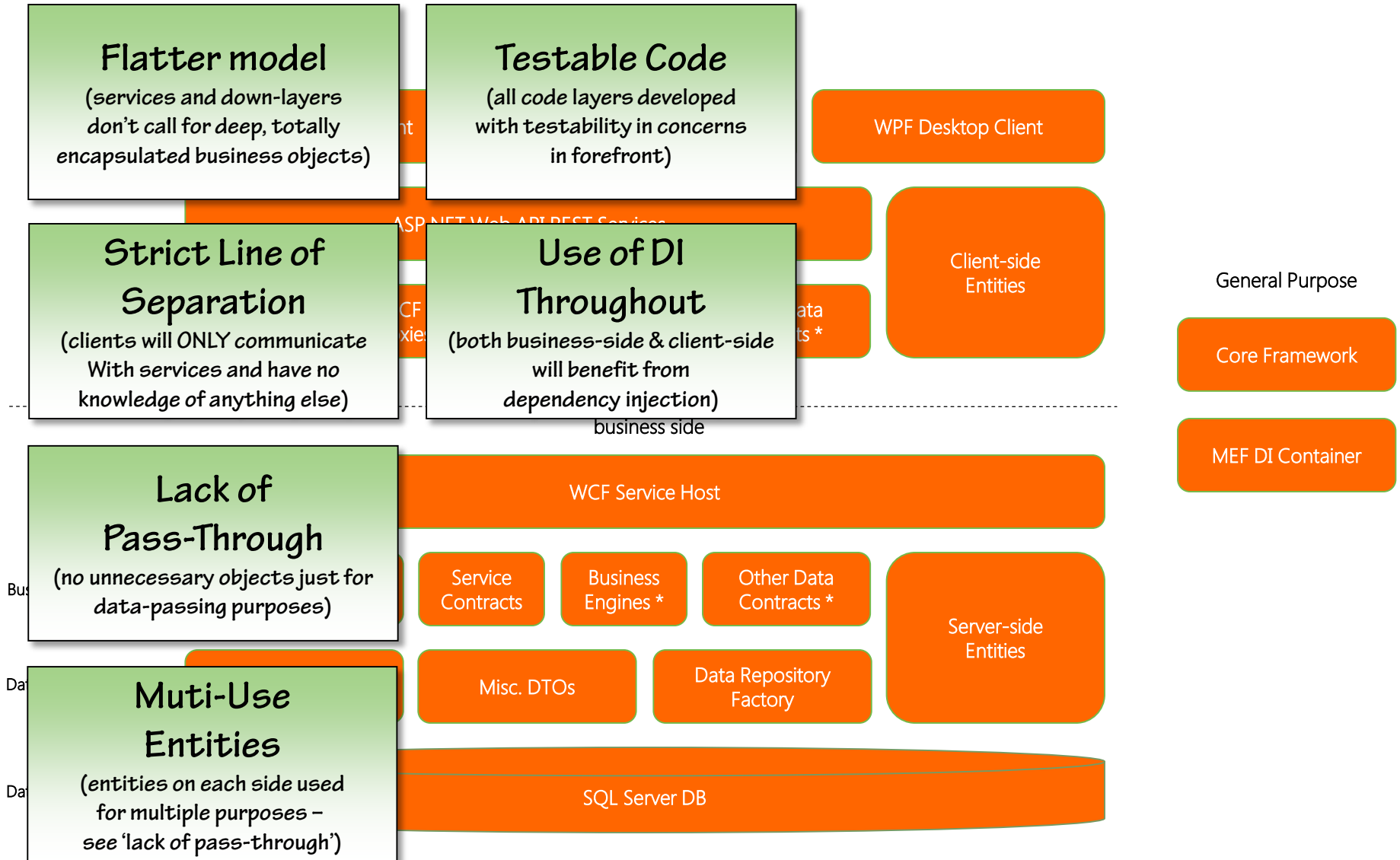
Validate Authorization by user:

- Site user to be passed in every service call and account compared to data being retrieved.
- Ex: User1 may be authenticated but should not be able to retrieve data for User2
- Web API calls also use similar facility

Car Rental System Architecture



Car Rental System Architecture



End of module

LET'S GET TO SOME SERIOUS CODING !