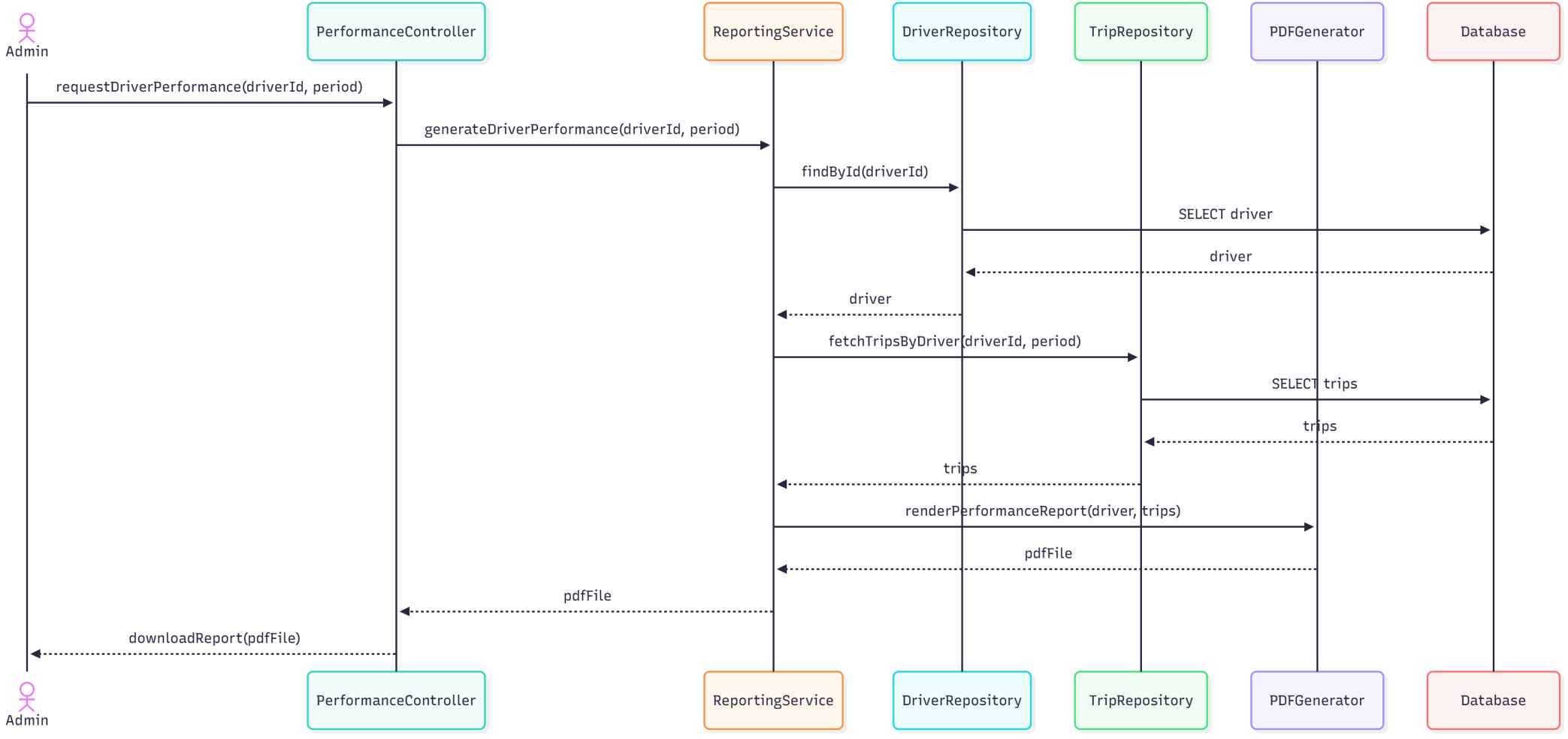
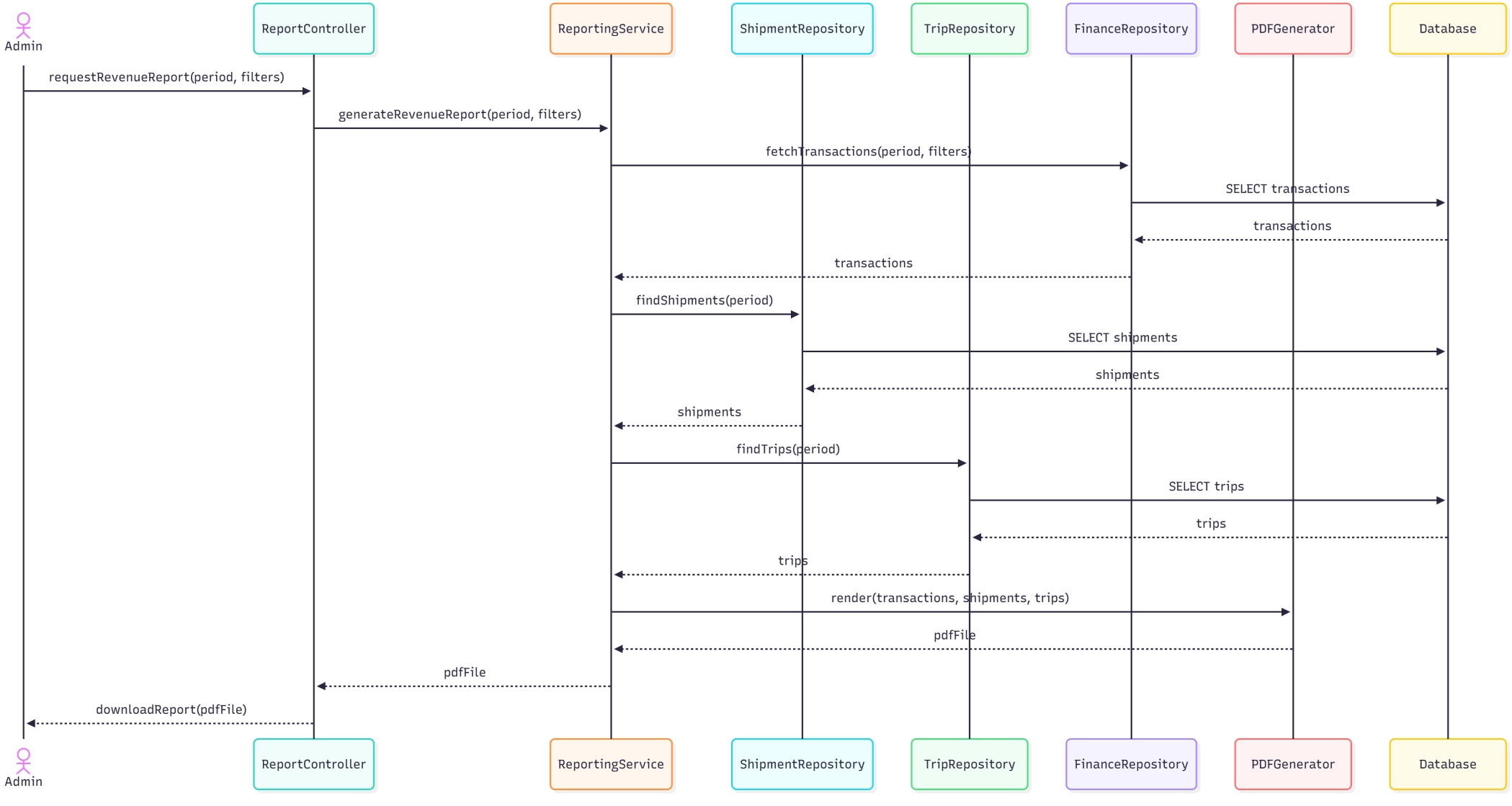
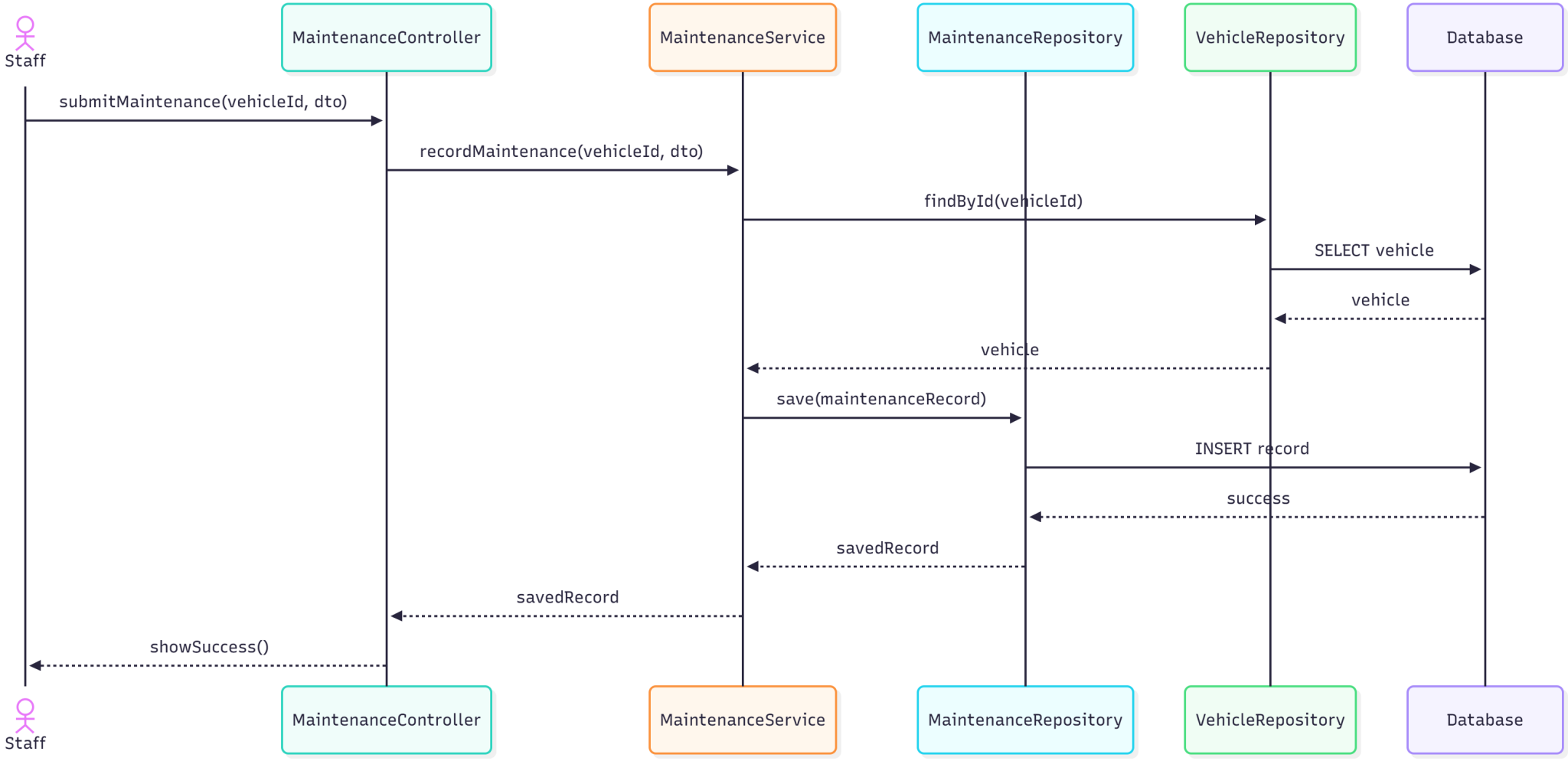
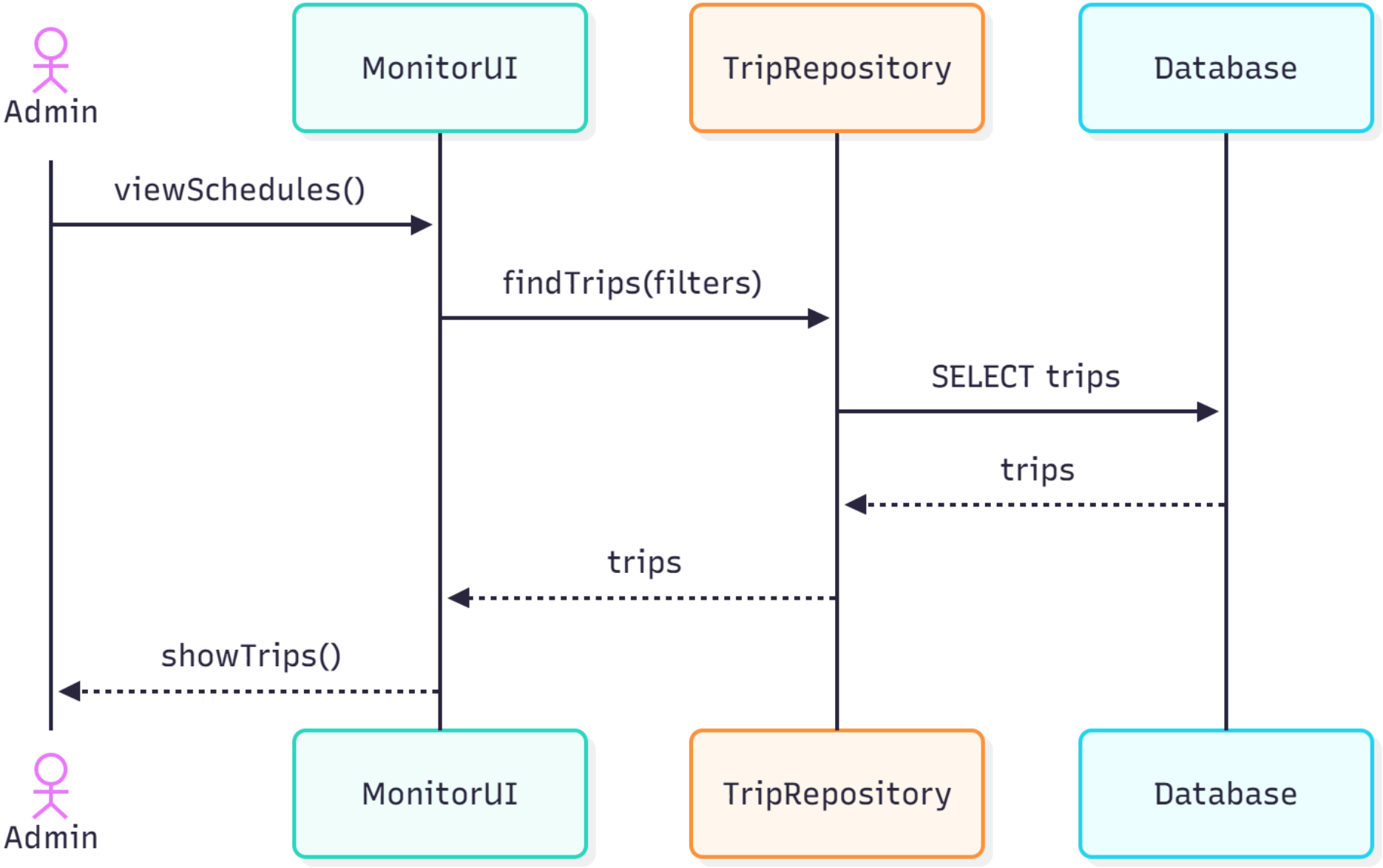
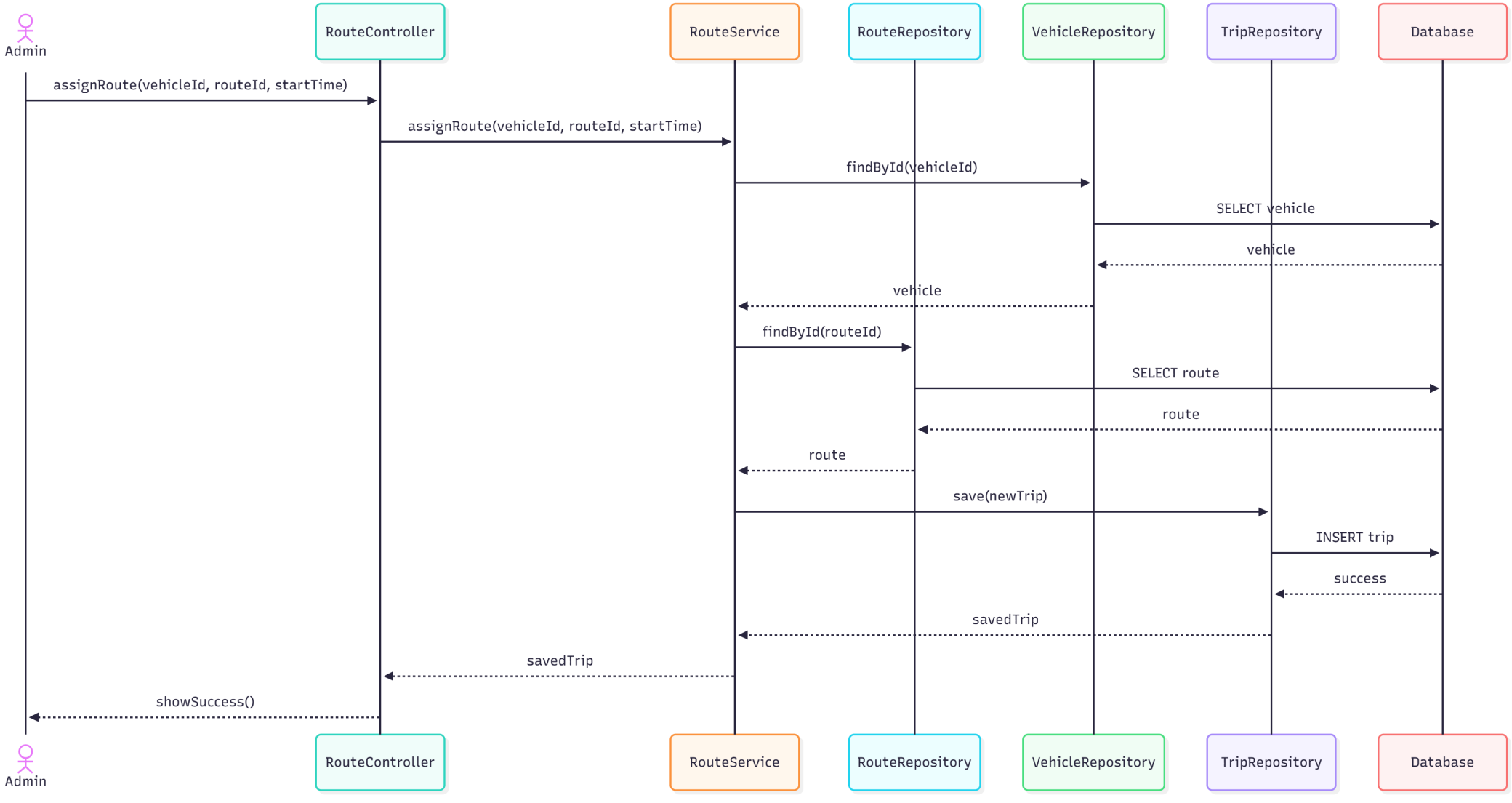
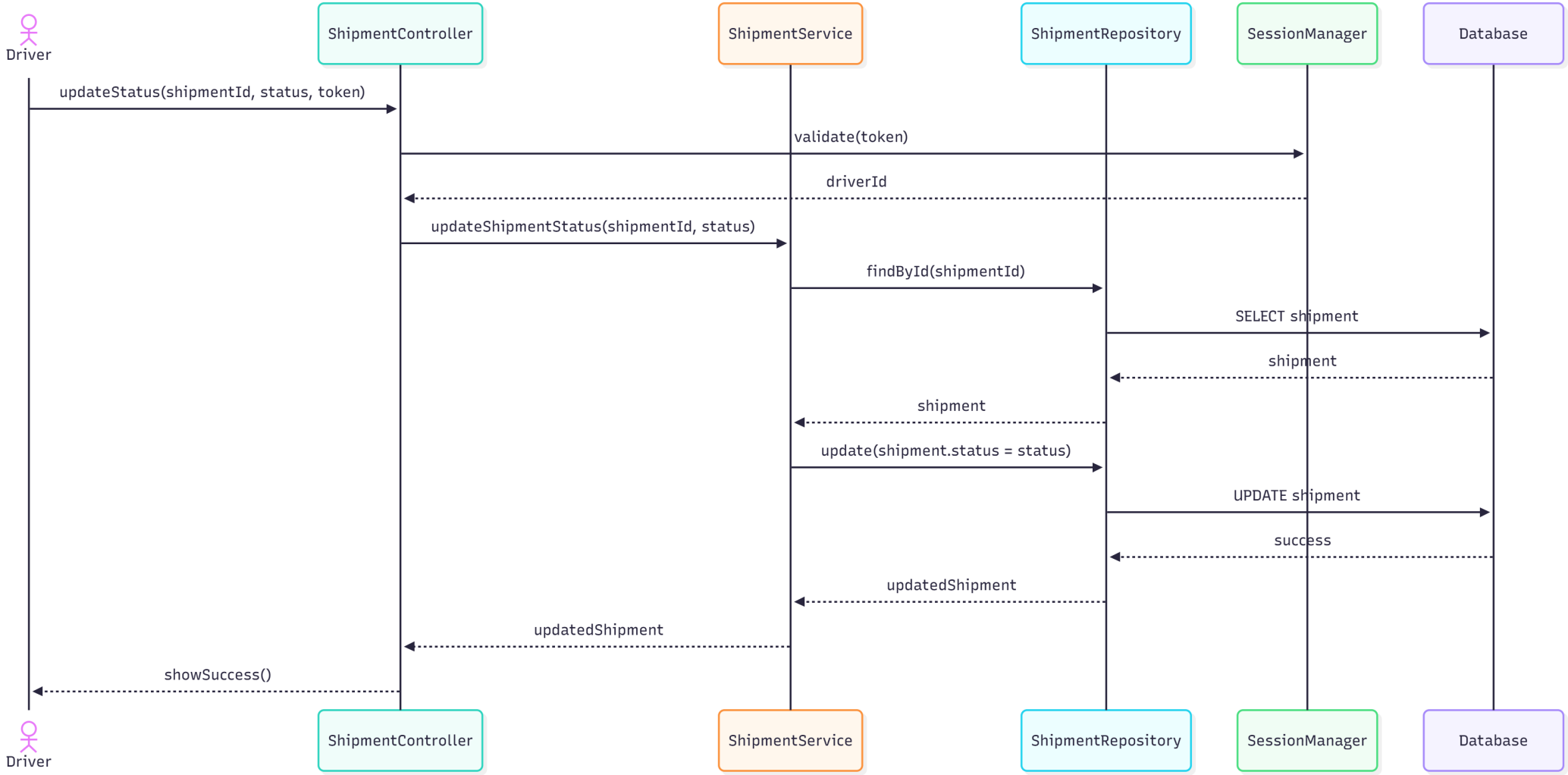

Admin
PerformanceController
ReportingService
DriverRepository
TripRepository
PDFGenerator
Database
requestDriverPerformance(driverId, period)
generateDriverPerformance(driverId, period)
findById(driverId)
SELECT driver
driver
driver
fetchTripsByDriver(driverId, period)
SELECT trips
trips
trips
renderPerformanceReport(driver, trips)
pdfFile
pdfFile
downloadReport(pdfFile)
Admin
PerformanceController
ReportingService
DriverRepository
TripRepository
PDFGenerator
Database

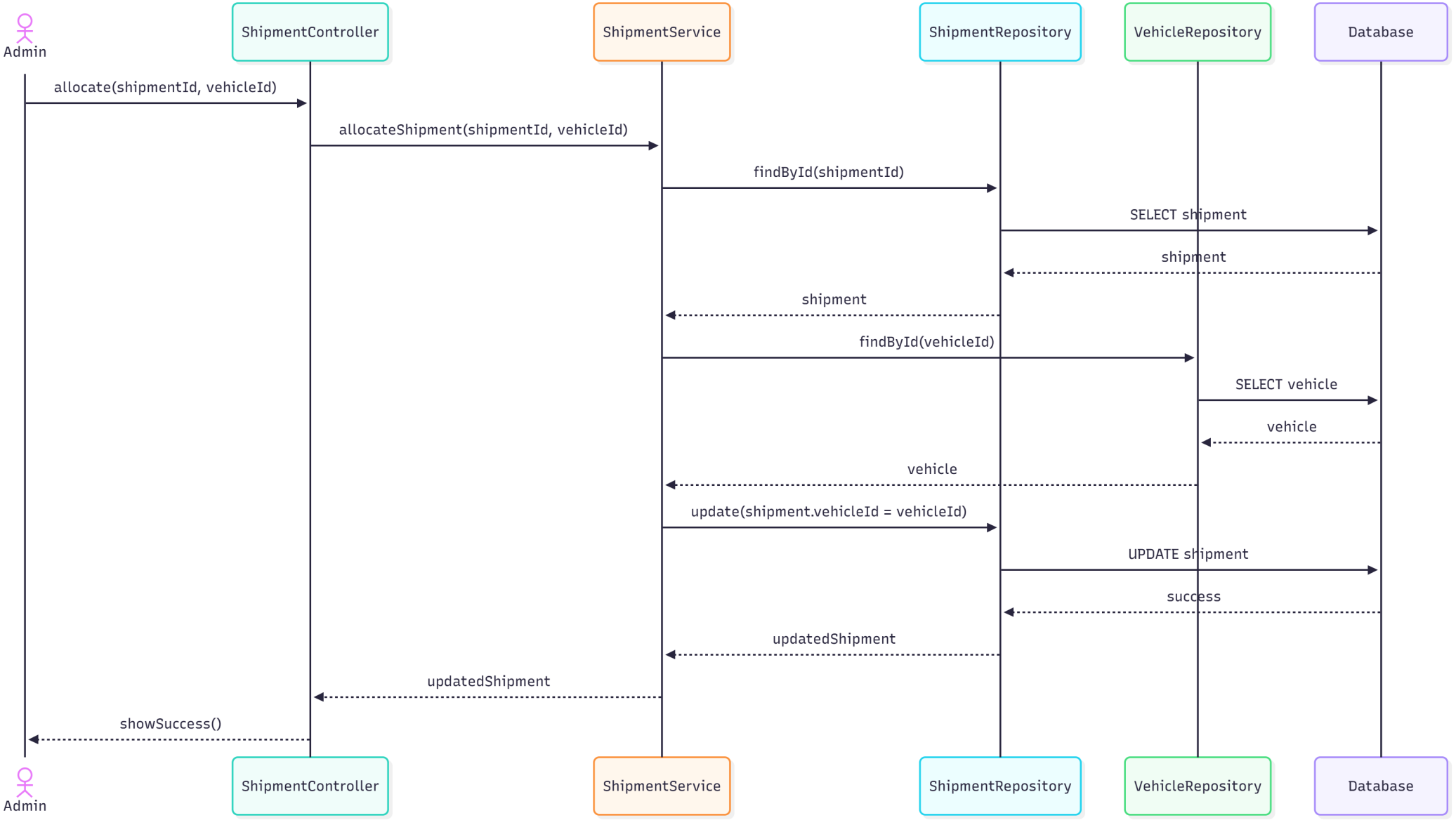

Admin
ReportController
ReportingService
ShipmentRepository
TripRepository
FinanceRepository
PDFGenerator
Database
requestRevenueReport(period, filters)
generateRevenueReport(period, filters)
fetchTransactions(period, filters)
SELECT transactions
transactions
transactions
findShipments(period)
SELECT shipments
shipments
shipments
findTrips(period)
SELECT trips
trips
trips
render(transactions, shipments, trips)
pdfFile
pdfFile
downloadReport(pdfFile)
Admin
ReportController
ReportingService
ShipmentRepository
TripRepository
FinanceRepository
PDFGenerator
Database

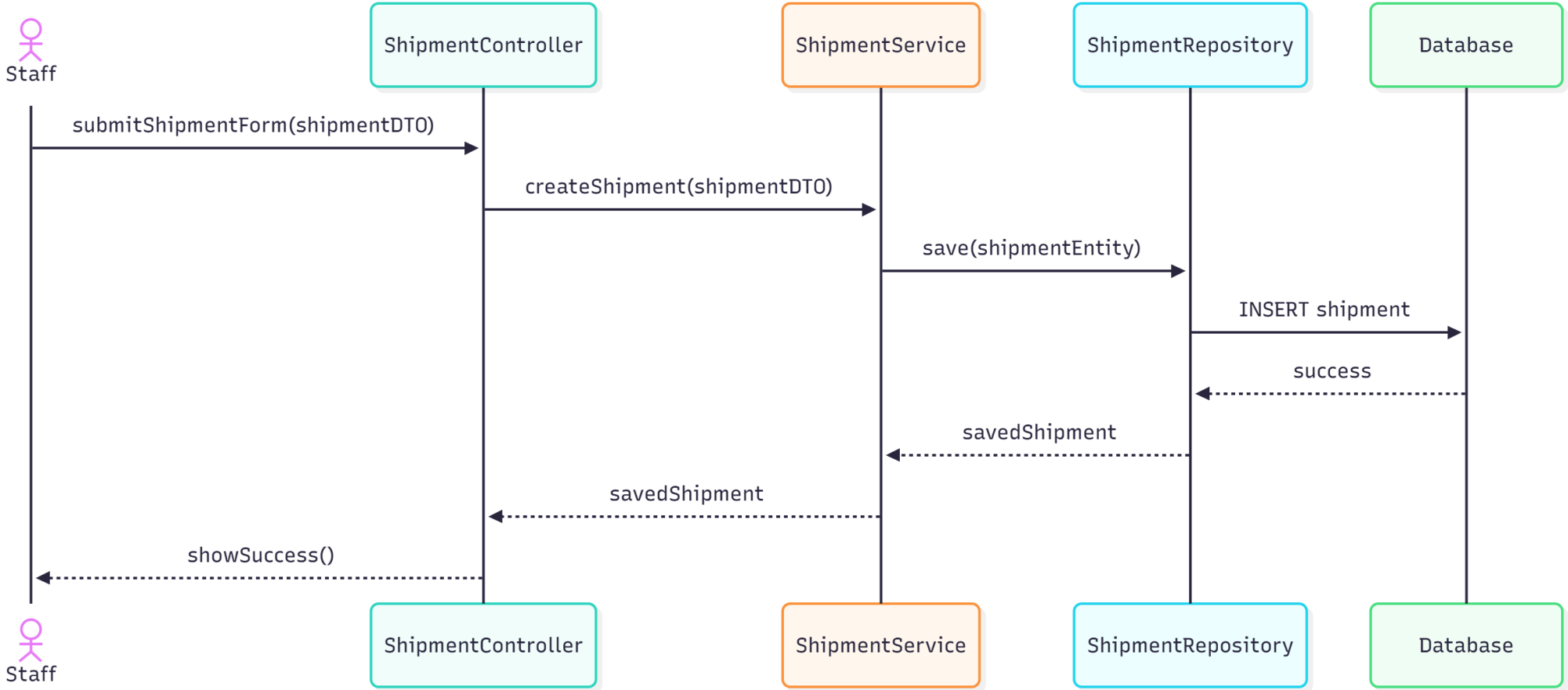

Staff
MaintenanceController
MaintenanceService
MaintenanceRepository
VehicleRepository
Database
submitMaintenance(vehicleId, dto)
recordMaintenance(vehicleId, dto)
findById(vehicleId)
SELECT vehicle
vehicle
vehicle
save(maintenanceRecord)
INSERT record
success
savedRecord
savedRecord
showSuccess()
Staff
MaintenanceController
MaintenanceService
MaintenanceRepository
VehicleRepository
Database

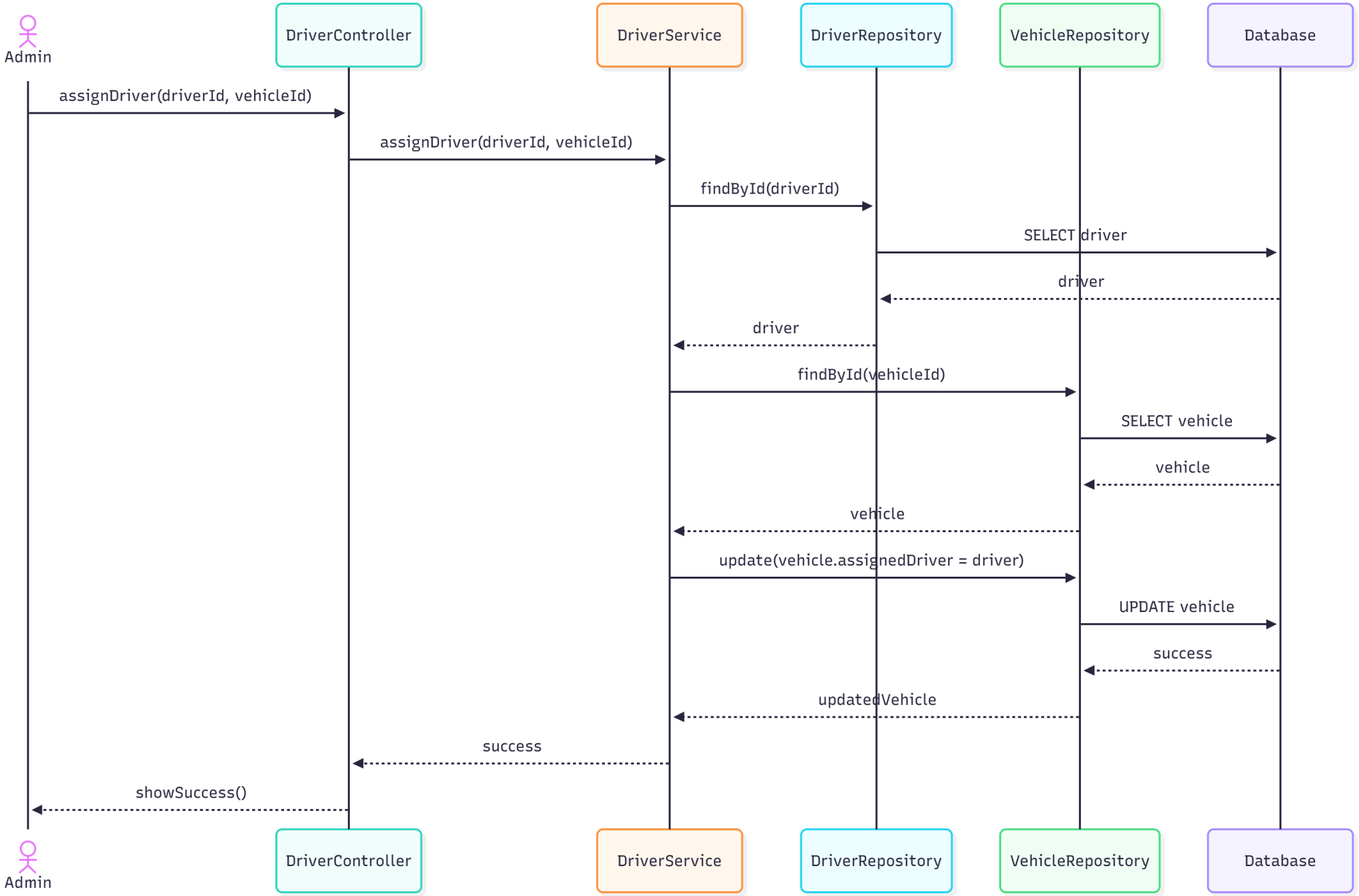

Admin
MonitorUI
TripRepository
Database
viewSchedules()
findTrips(filters)
SELECT trips
trips
trips
showTrips()
Admin
MonitorUI
TripRepository
Database

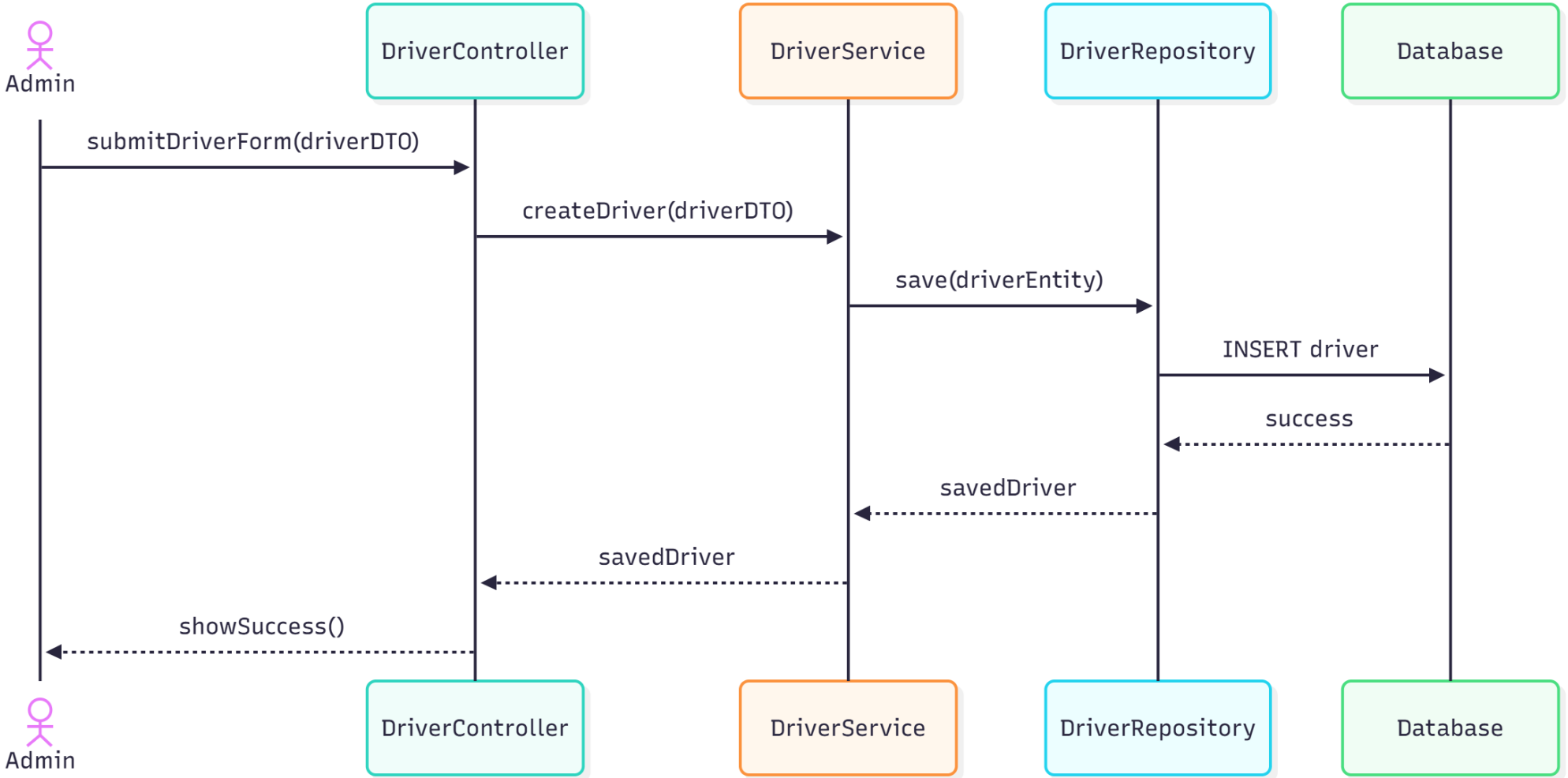

Admin
RouteController
RouteService
RouteRepository
VehicleRepository
TripRepository
Database
assignRoute(vehicleId, routeId, startTime)
assignRoute(vehicleId, routeId, startTime)
findById(vehicleId)
SELECT vehicle
vehicle
vehicle
findById(routeId)
SELECT route
route
route
save(newTrip)
INSERT trip
success
savedTrip
savedTrip
showSuccess()
Admin
RouteController
RouteService
RouteRepository
VehicleRepository
TripRepository
Database

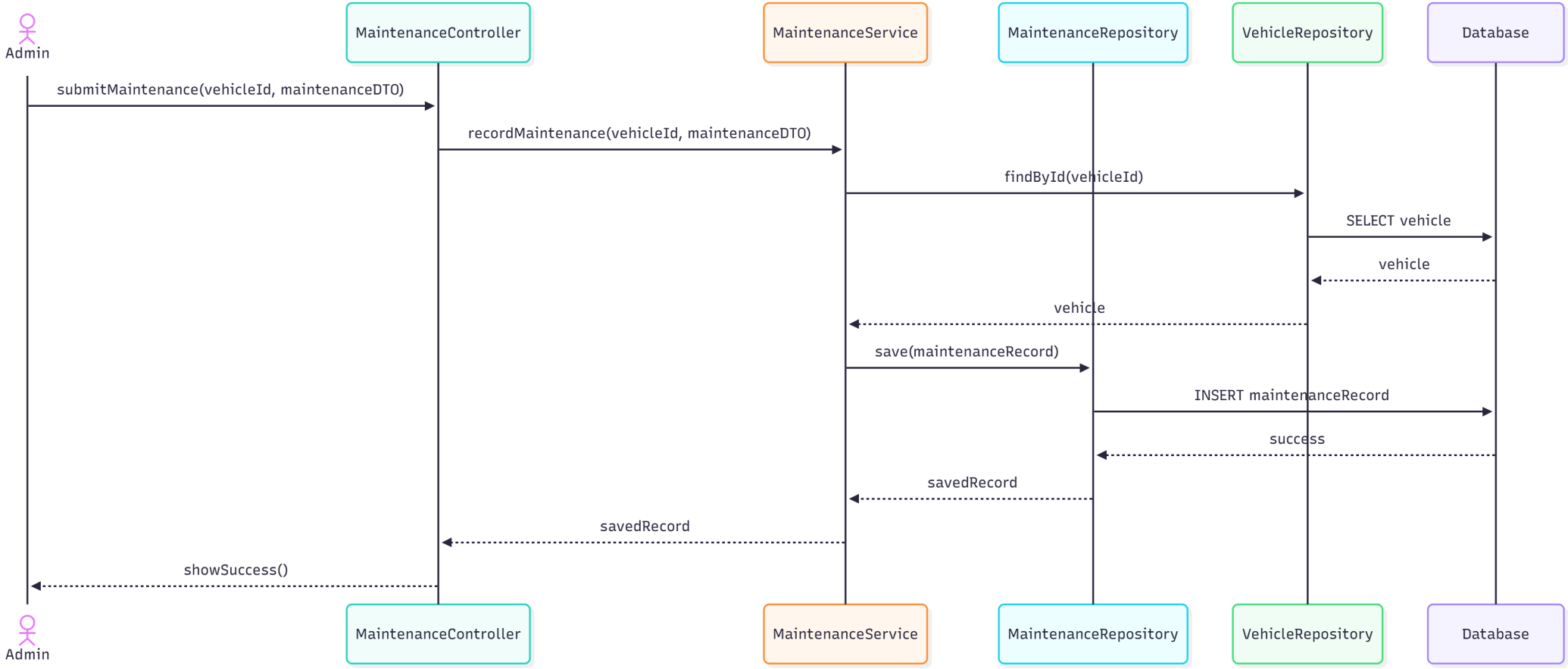

Driver
ShipmentController
ShipmentService
ShipmentRepository
SessionManager
Database
updateStatus(shipmentId, status, token)
validate(token)
driverId
updateShipmentStatus(shipmentId, status)
findById(shipmentId)
SELECT shipment
shipment
shipment
update(shipment.status = status)
UPDATE shipment
success
updatedShipment
updatedShipment
showSuccess()
Driver
ShipmentController
ShipmentService
ShipmentRepository
SessionManager
Database

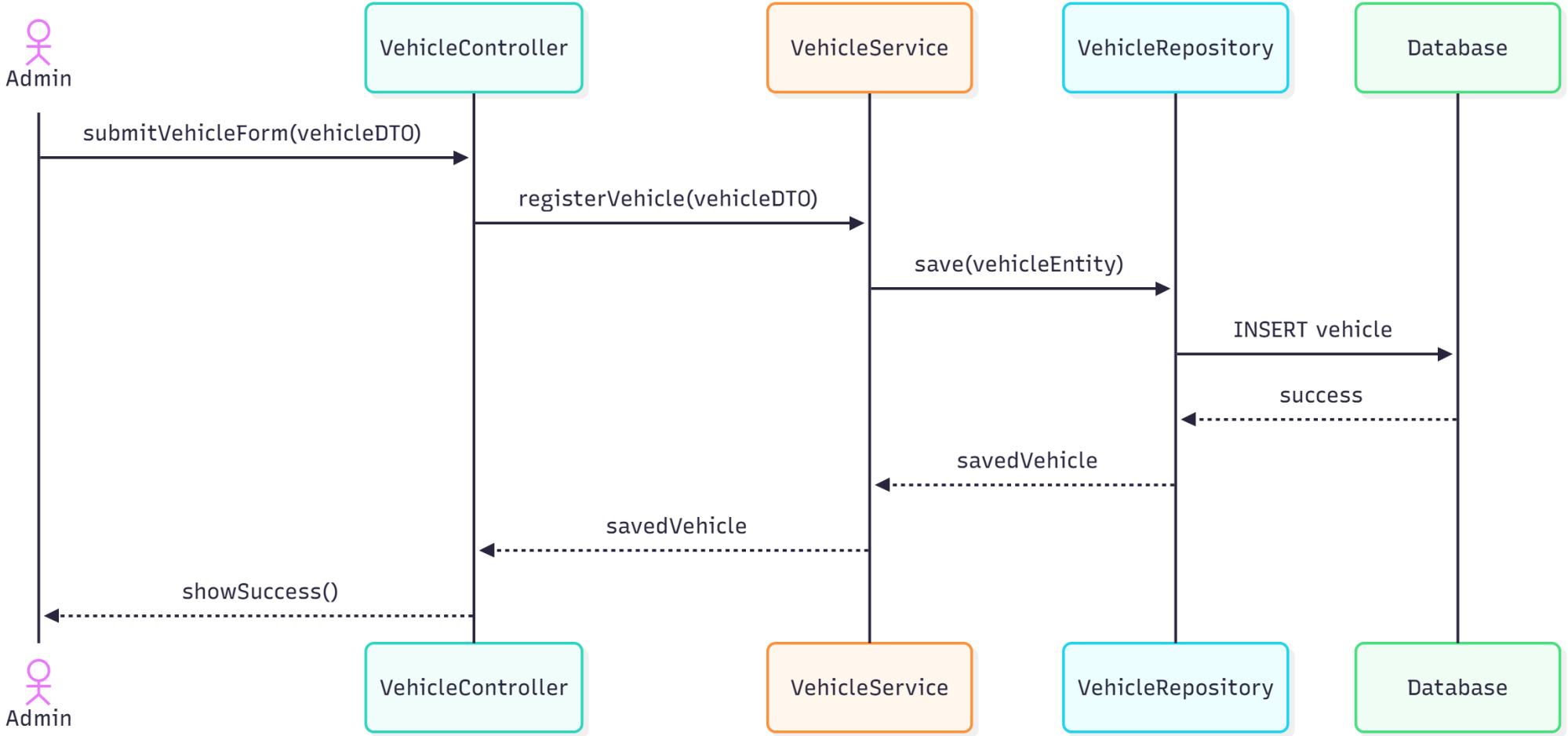

Admin
ShipmentController
ShipmentService
ShipmentRepository
VehicleRepository
Database
allocate(shipmentId, vehicleId)
allocateShipment(shipmentId, vehicleId)
findById(shipmentId)
SELECT shipment
shipment
shipment
findById(vehicleId)
SELECT vehicle
vehicle
vehicle
update(shipment.vehicleId = vehicleId)
UPDATE shipment
success
updatedShipment
updatedShipment
showSuccess()
Admin
ShipmentController
ShipmentService
ShipmentRepository
VehicleRepository
Database

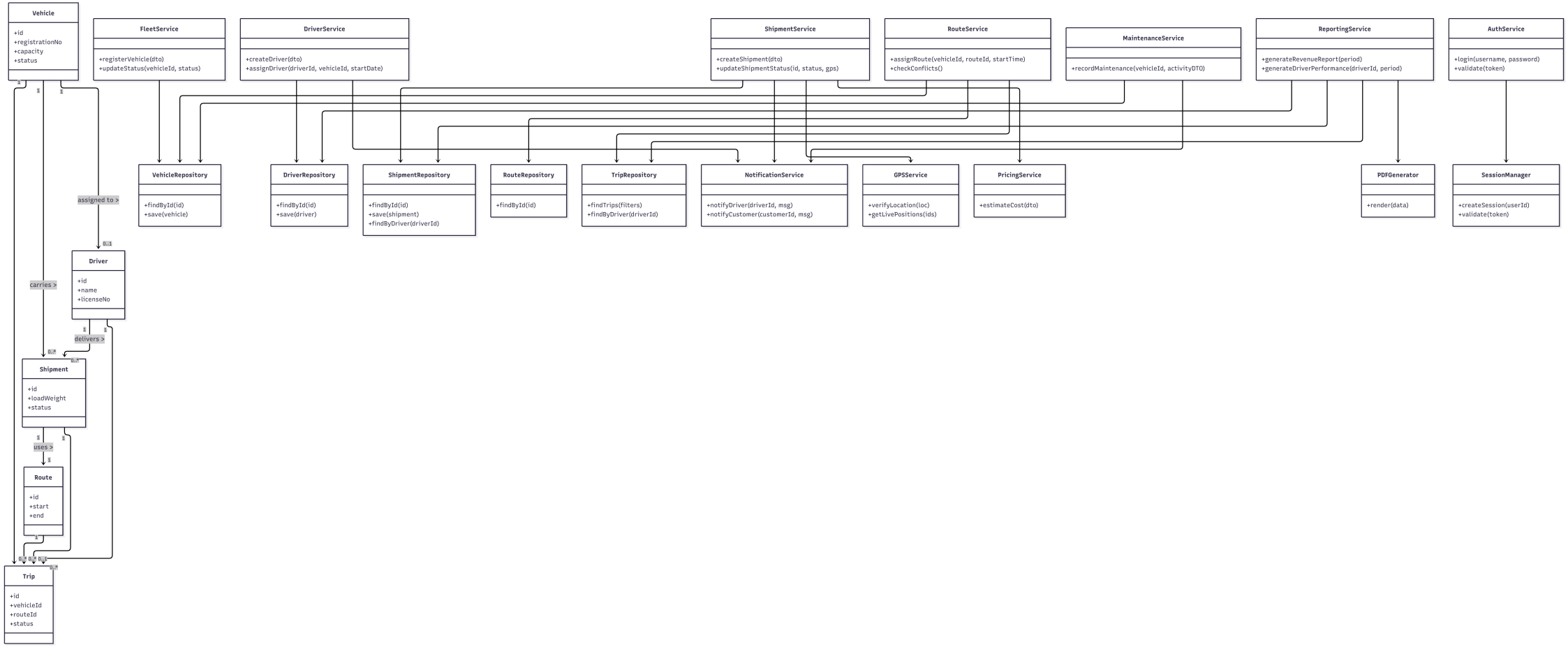

Staff
ShipmentController
ShipmentService
ShipmentRepository
Database
submitShipmentForm(shipmentDTO)
createShipment(shipmentDTO)
save(shipmentEntity)
INSERT shipment
success
savedShipment
savedShipment
showSuccess()
Staff
ShipmentController
ShipmentService
ShipmentRepository
Database


Admin
DriverController
DriverService
DriverRepository
VehicleRepository
Database
assignDriver(driverId, vehicleId)
assignDriver(driverId, vehicleId)
findById(driverId)
SELECT driver
driver
driver
findById(vehicleId)
SELECT vehicle
vehicle
vehicle
update(vehicle.assignedDriver = driver)
UPDATE vehicle
success
updatedVehicle
success
showSuccess()
Admin
DriverController
DriverService
DriverRepository
VehicleRepository
Database


Admin
DriverController
DriverService
DriverRepository
Database
submitDriverForm(driverDTO)
createDriver(driverDTO)
save(driverEntity)
INSERT driver
success
savedDriver
savedDriver
showSuccess()
Admin
DriverController
DriverService
DriverRepository
Database


Admin
MaintenanceController
MaintenanceService
MaintenanceRepository
VehicleRepository
Database
submitMaintenance(vehicleId, maintenanceDTO)
recordMaintenance(vehicleId, maintenanceDTO)
findById(vehicleId)
SELECT vehicle
vehicle
vehicle
save(maintenanceRecord)
INSERT maintenanceRecord
success
savedRecord
savedRecord
showSuccess()
Admin
MaintenanceController
MaintenanceService
MaintenanceRepository
VehicleRepository
Database


Admin
VehicleController
VehicleService
VehicleRepository
Database
submitVehicleForm(vehicleDTO)
registerVehicle(vehicleDTO)
save(vehicleEntity)
INSERT vehicle
success
savedVehicle
savedVehicle
showSuccess()
Admin
VehicleController
VehicleService
VehicleRepository
Database


Vehicle
+id
+registrationNo
+capacity
+status
FleetService
+registerVehicle(dto)
+updateStatus(vehicleId, status)
DriverService
+createDriver(dto)
+assignDriver(driverId, vehicleId, startDate)
ShipmentService
+createShipment(dto)
+updateShipmentStatus(id, status, gps)
RouteService
+assignRoute(vehicleId, routeId, startTime)
+checkConflicts()
MaintenanceService
+recordMaintenance(vehicleId, activityDTO)
ReportingService
+generateRevenueReport(period)
+generateDriverPerformance(driverId, period)
AuthService
+login(username, password)
+validate(token)
VehicleRepository
+findById(id)
+save(vehicle)
DriverRepository
+findById(id)
+save(driver)
ShipmentRepository
+findById(id)
+save(shipment)
+findByDriver(driverId)
RouteRepository
+findById(id)
TripRepository
+findTrips(filters)
+findByDriver(driverId)
NotificationService
+notifyDriver(driverId, msg)
+notifyCustomer(customerId, msg)
GPSService
+verifyLocation(loc)
+getLivePositions(ids)
PricingService
+estimateCost(dto)
PDFGenerator
+render(data)
SessionManager
+createSession(userId)
+validate(token)
assigned to >
carries >
Driver
+id
+name
+licenseNo
delivers >
Shipment
+id
+loadWeight
+status
uses >
Route
+id
+start
+end
Trip
+id
+vehicleId
+routeId
+status