



Focus on Core Value and Keep Cloud Infrastructure Flexible with “Ports & Adapters”



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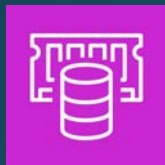
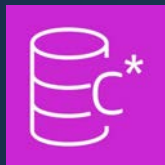
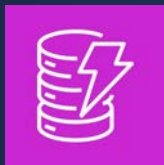
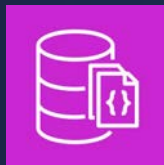
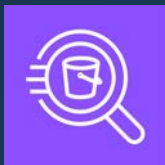
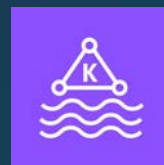
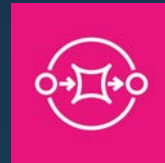
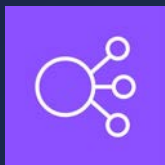
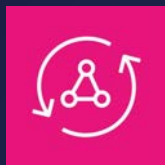
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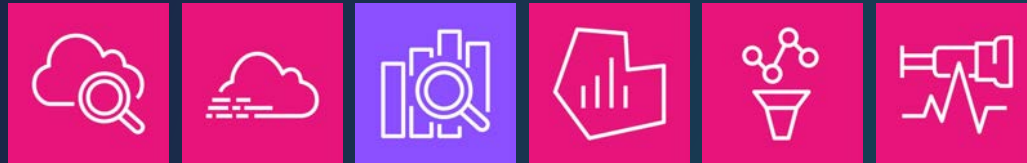


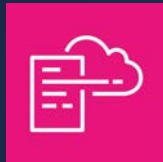
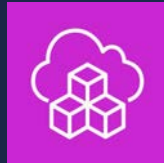
Selecting Cloud Infrastructure



Cloud Services





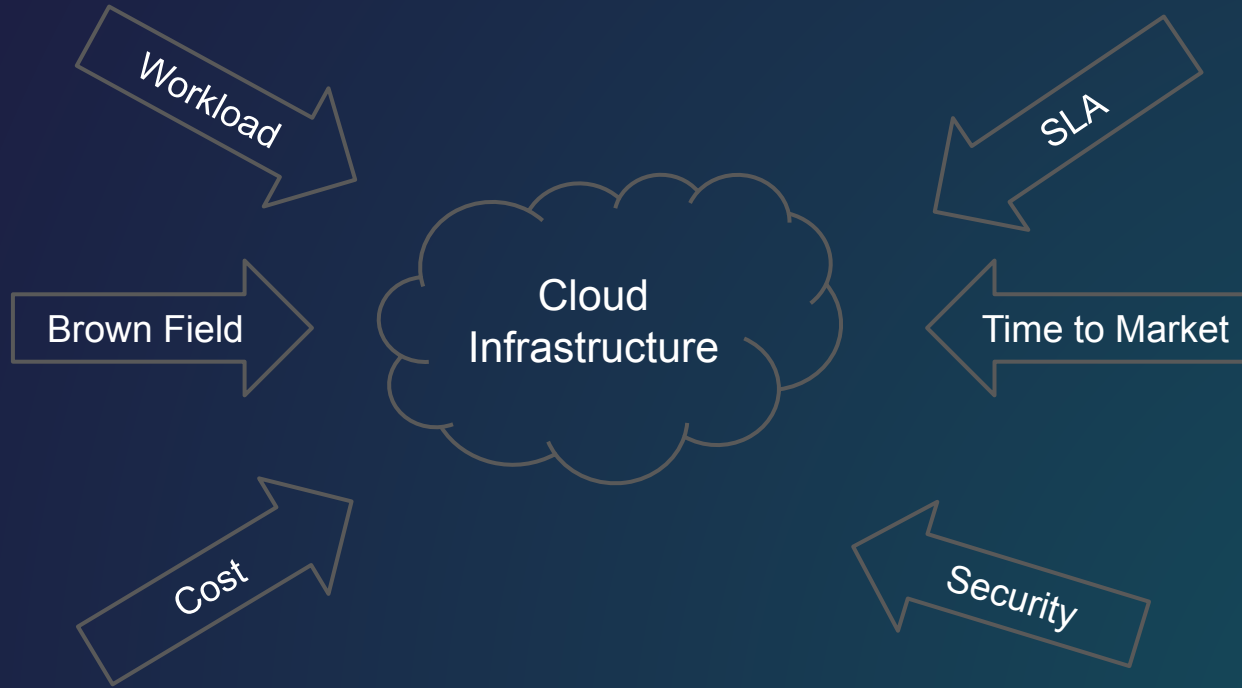


Development

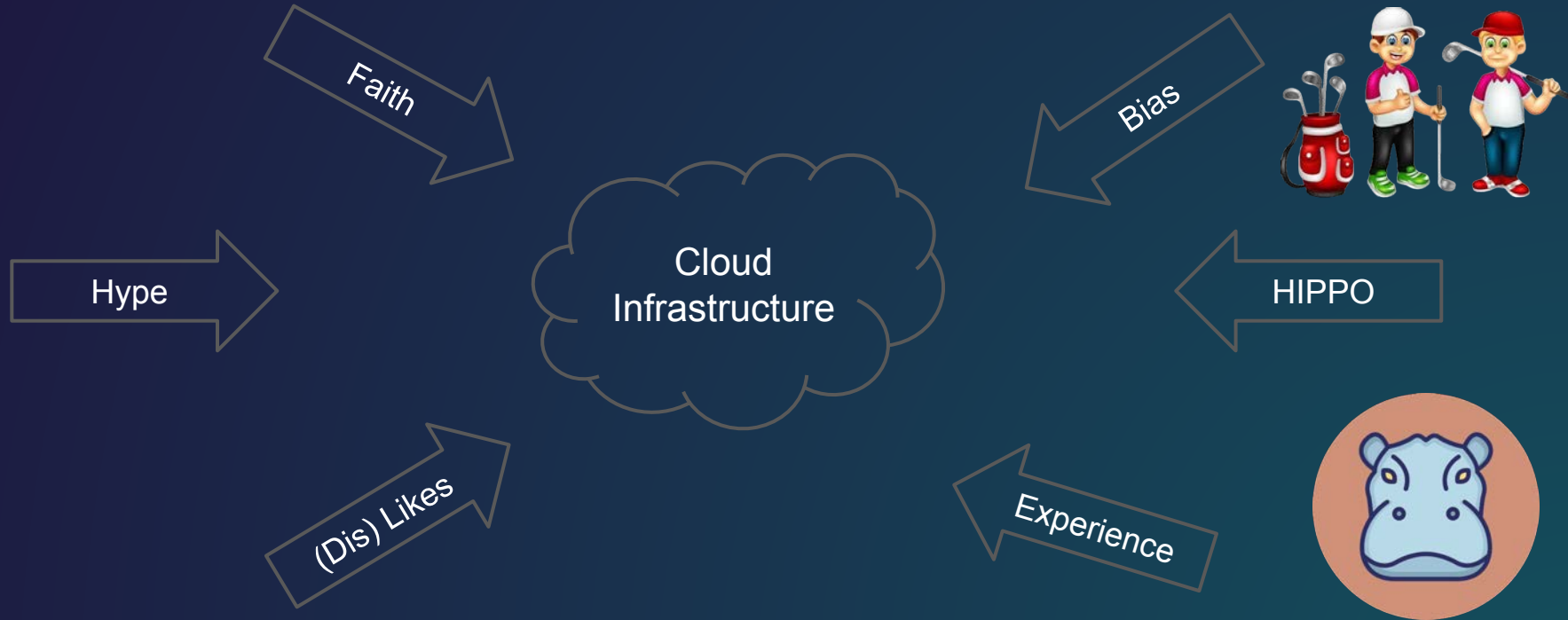


Decision-Making Process

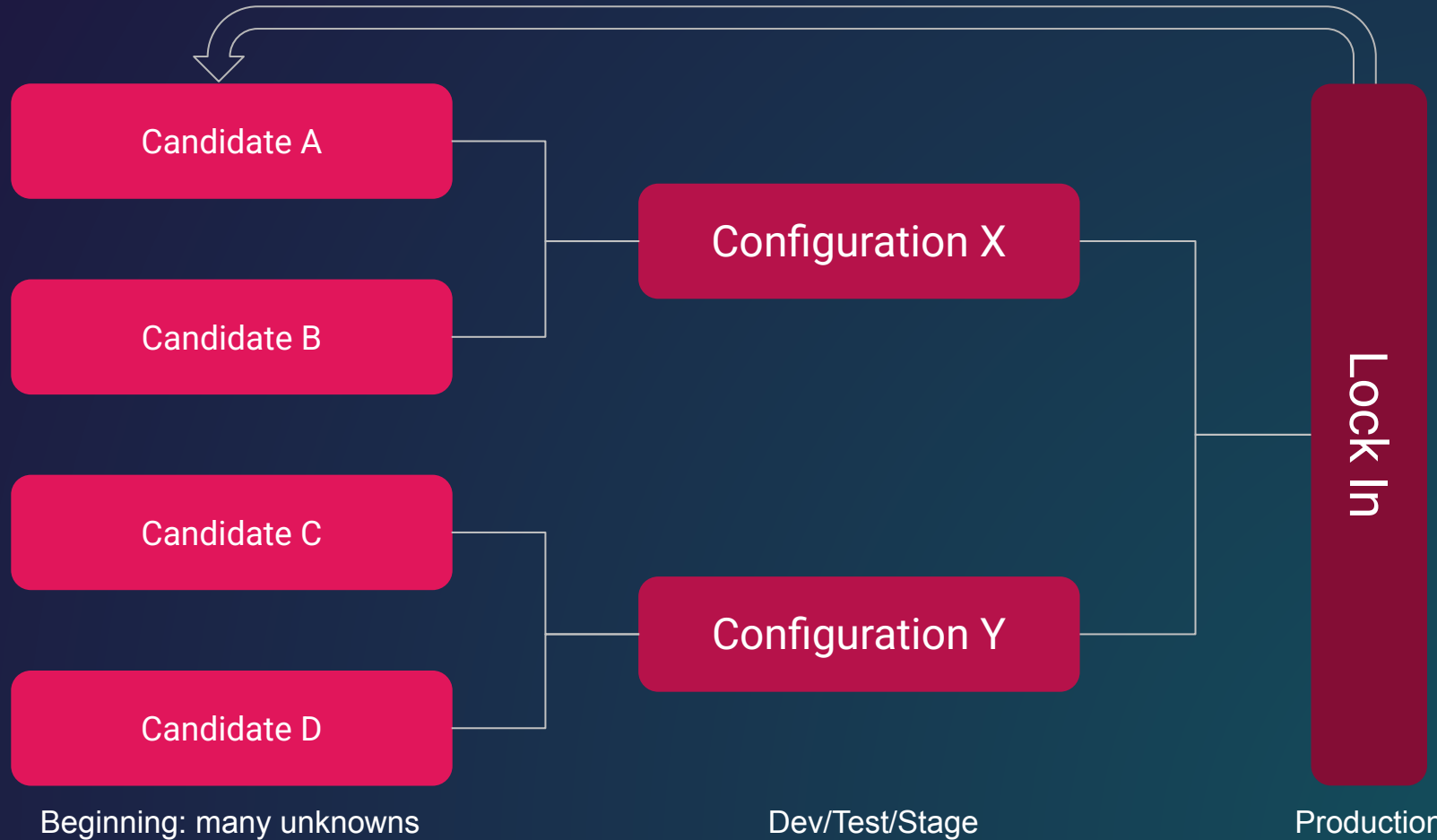
Decision Driving Factors (Expected)



Decision Driving Factors (Actual)



Set-Based Engineering

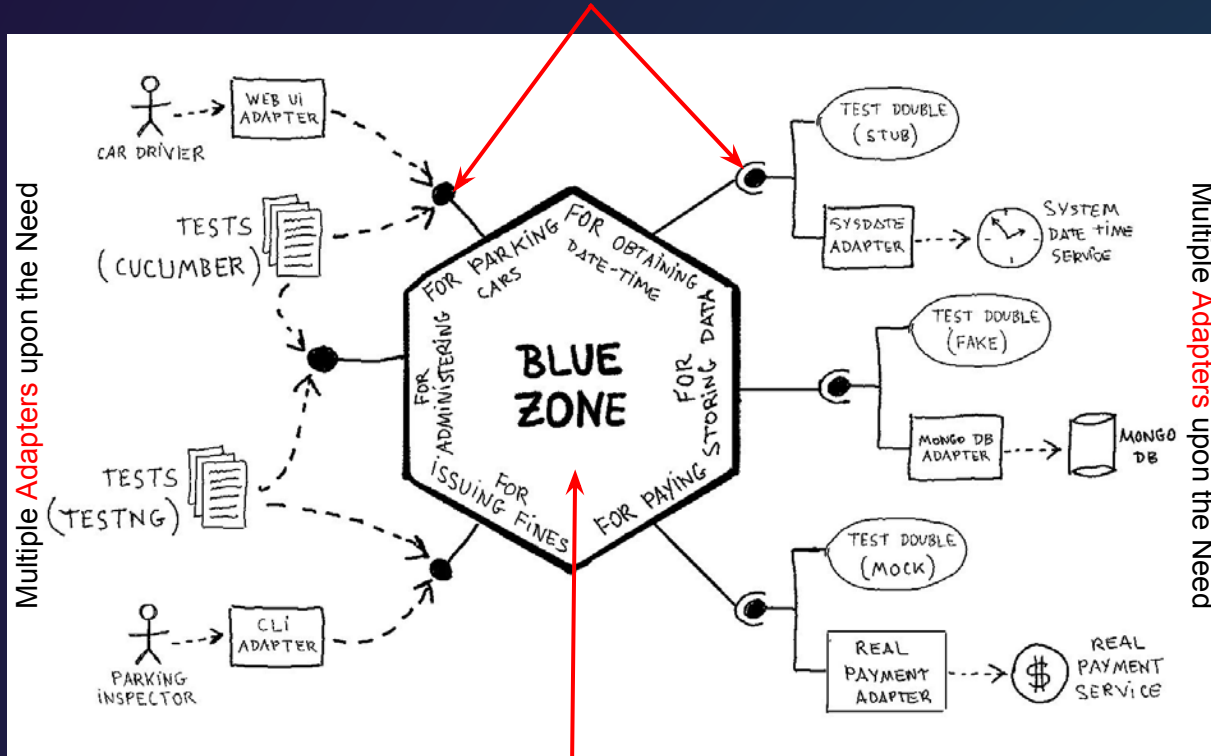


Focus on Core Value and Keep
Cloud Infrastructure Flexible
with “Ports & Adapters”



“Ports and Adapters” in a Nutshell

Well-Defined **Ports** for in- and out- Communication



Application Logic Isolated from Underlying Infrastructure

*Configurator to Plug **Adapters** into **Ports***

Hexagonal Architecture Explained

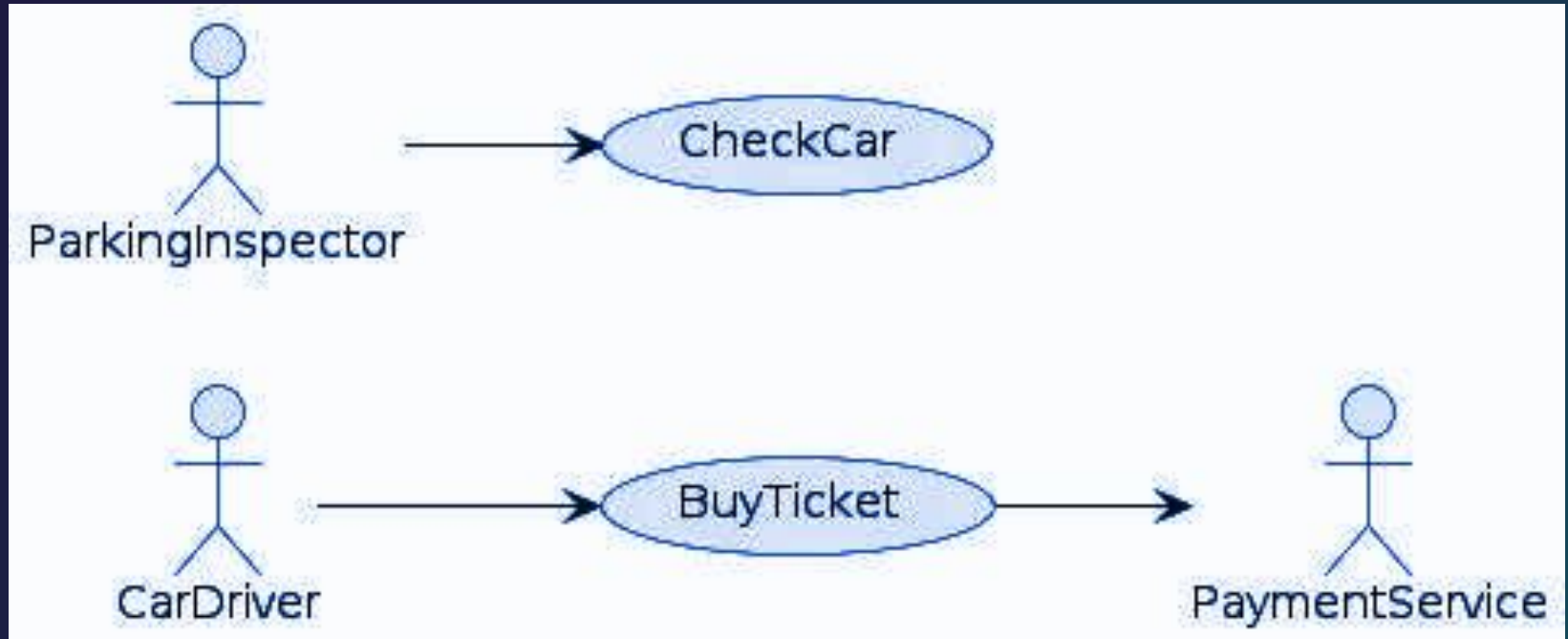
How the Ports & Adapters architecture simplifies your life, and how to implement it



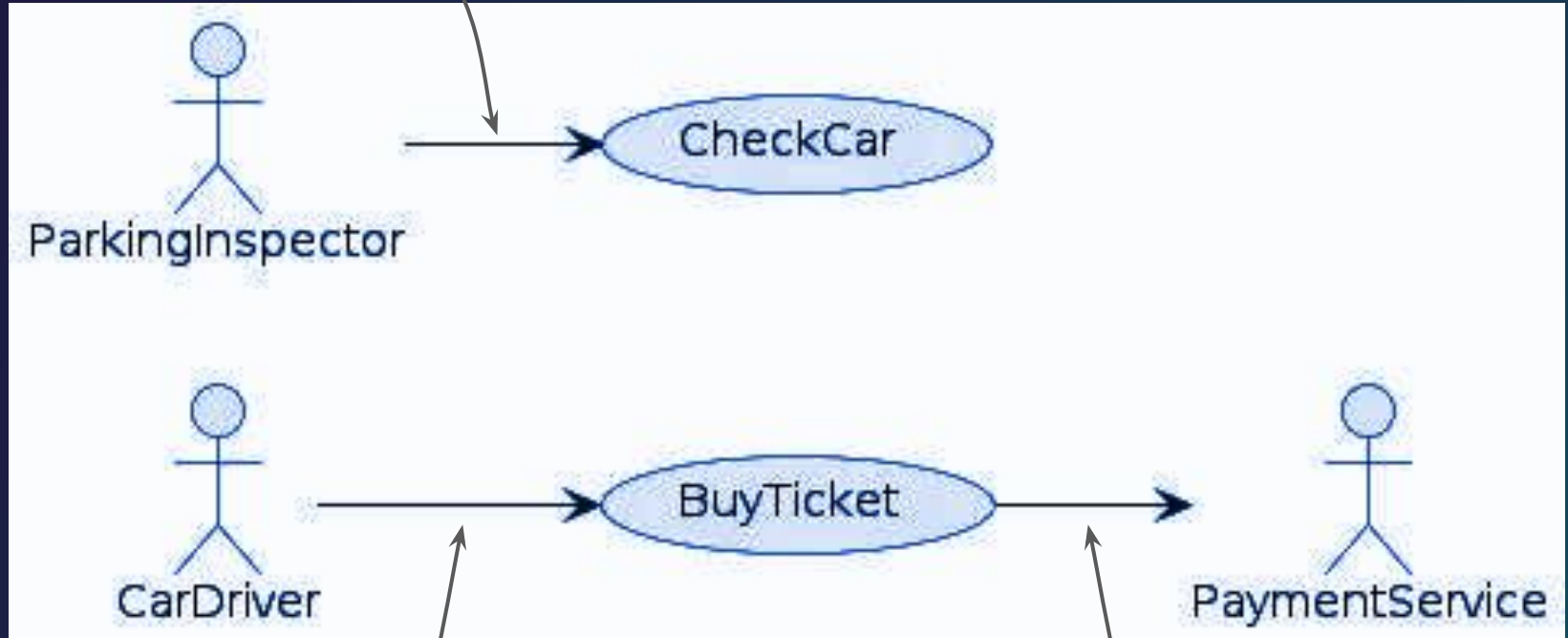
Alistair Cockburn
Juan Manuel Garrido de Paz

It Starts with Use Cases

Why the System Exists?



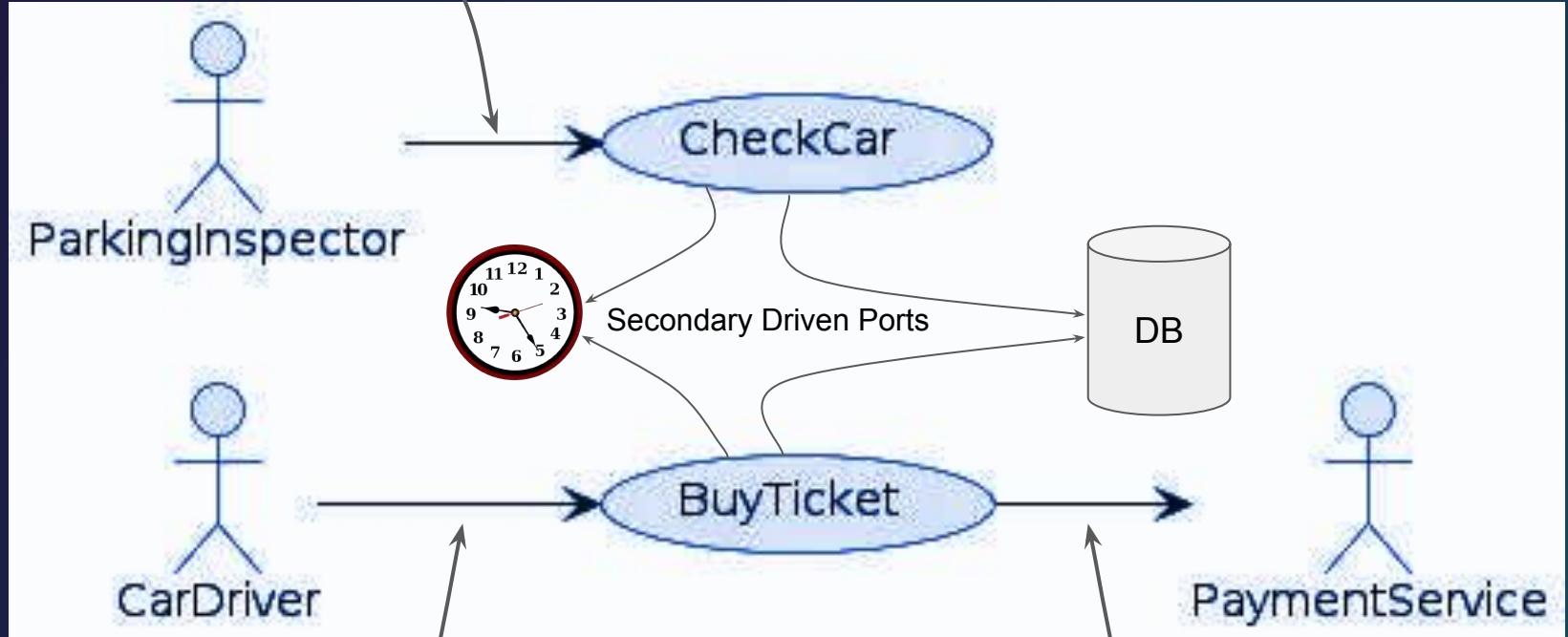
Actors → Primary Ports



Primary Driving Ports
(to initiate a use case
workflow)

Primary Driven Port
(to initiate communication
with an external system)

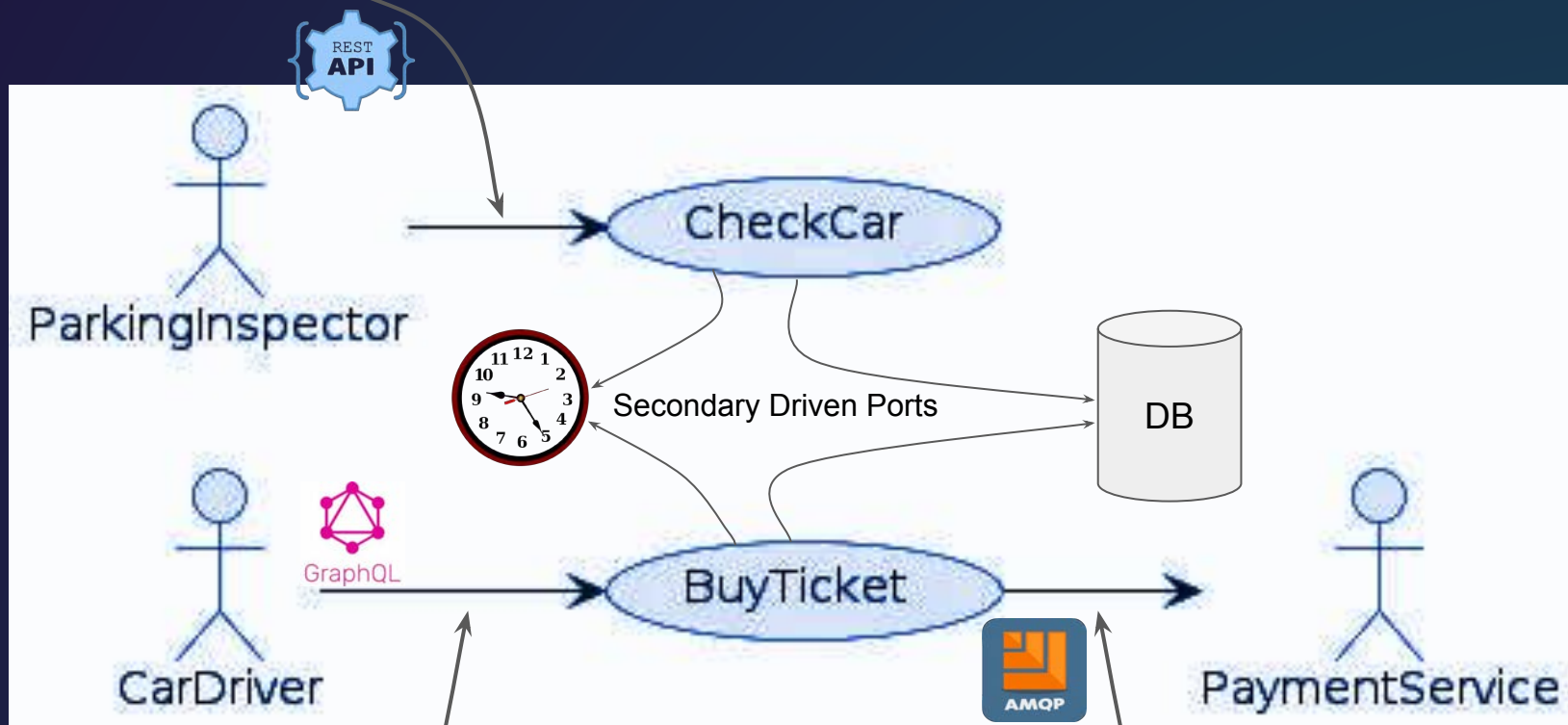
Use Case Event Flow → Secondary Ports



Primary Driving Ports
(to initiate a use case
workflow)

Primary Driven Port
(to initiate communication
with an external system)

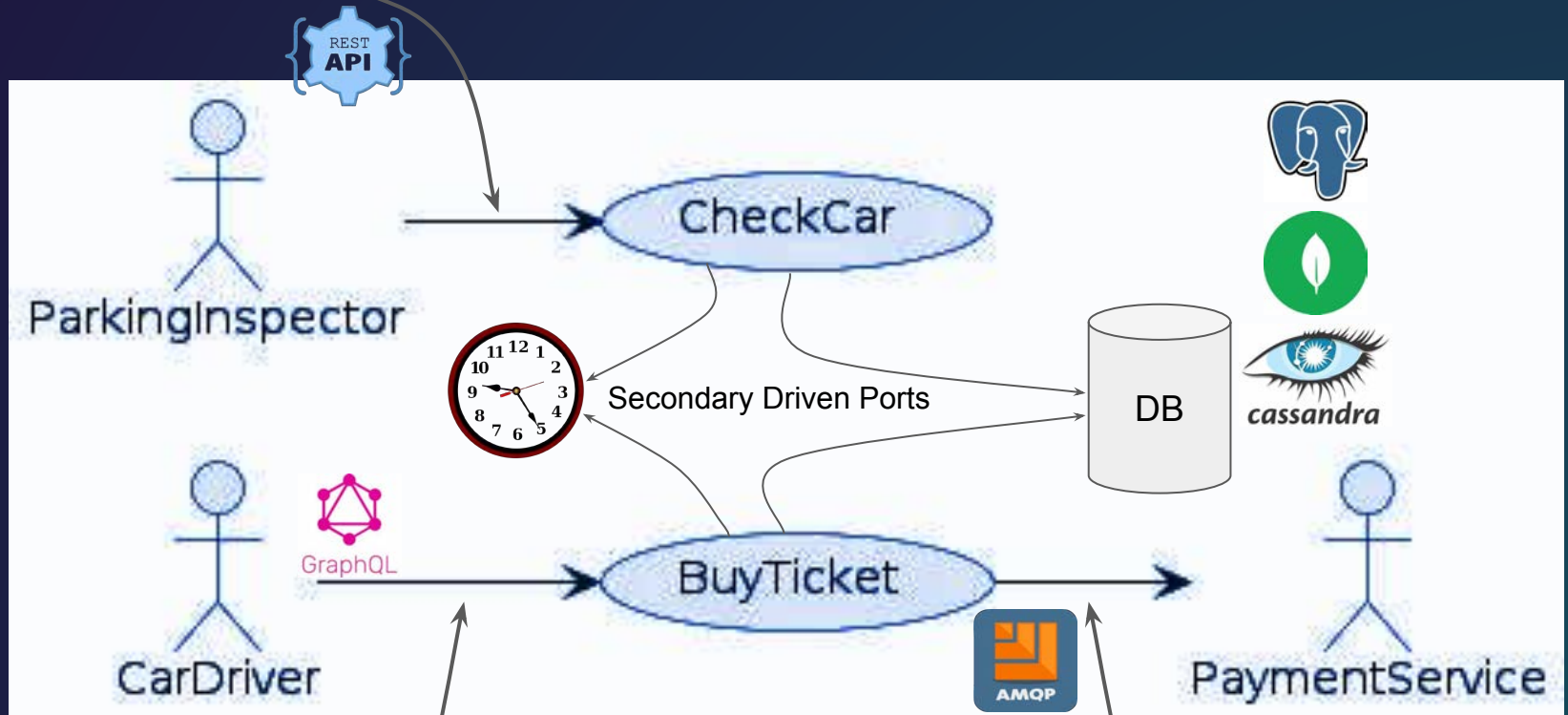
Actor Interfaces → Protocols



Primary Driving Ports
(to initiate a use case
workflow)

Primary Driven Port
(to initiate communication
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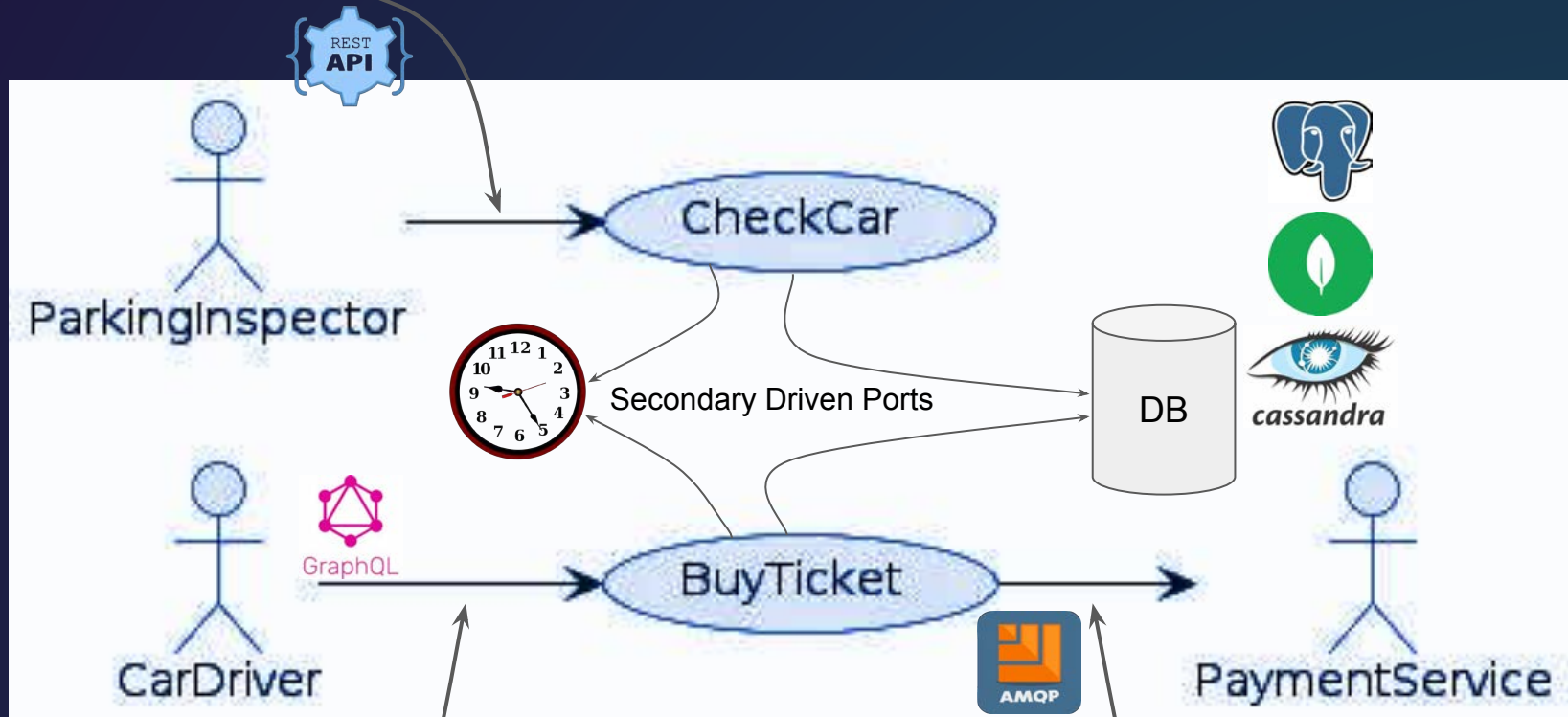
Use Case SLA → DB Type



Primary Driving Ports
(to initiate a use case
workflow)

Primary Driven Port
(to initiate communication
with an external system)

Supplementary Spec → Cloud Platform

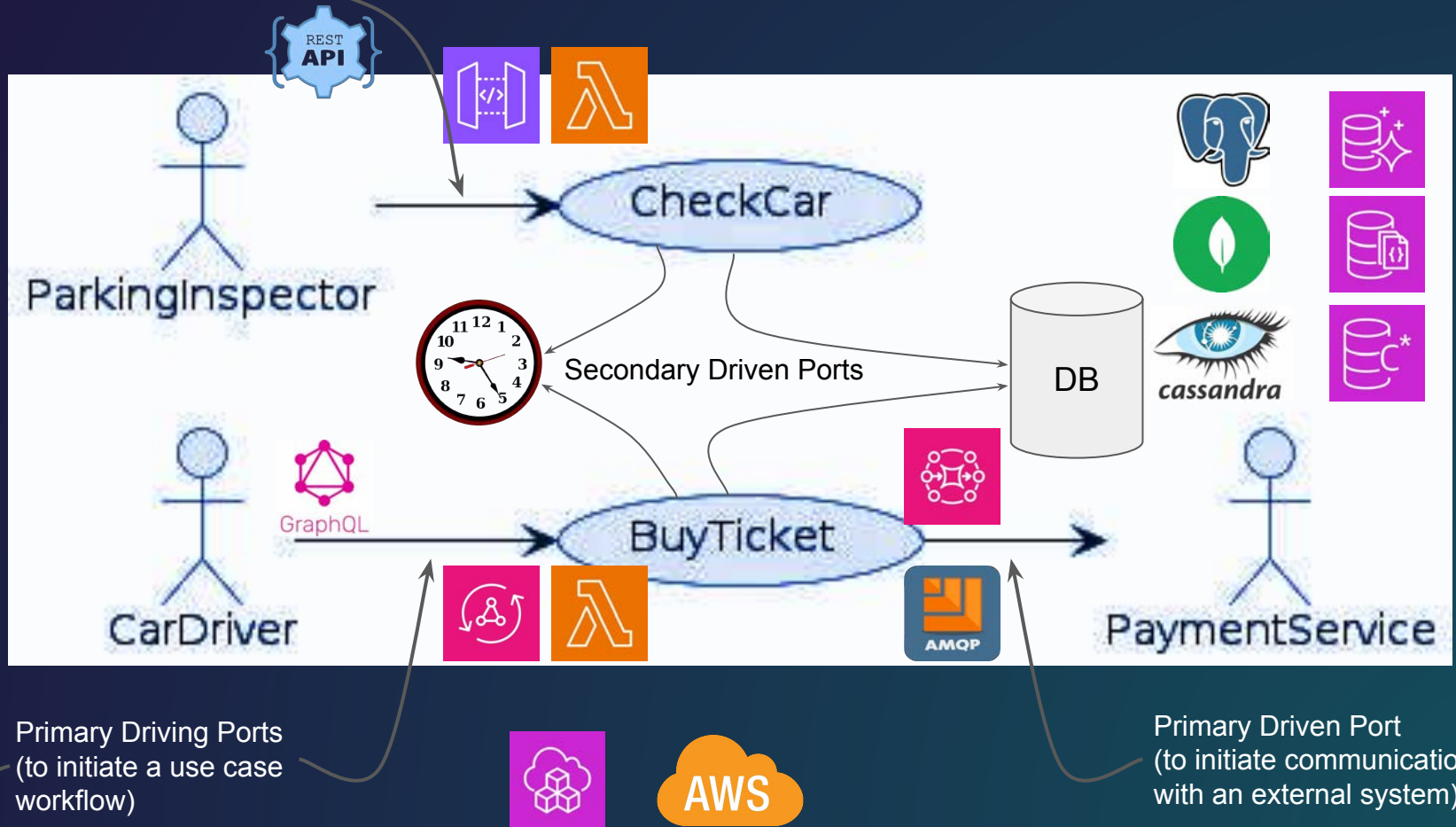


Primary Driving Ports
(to initiate a use case
workflow)

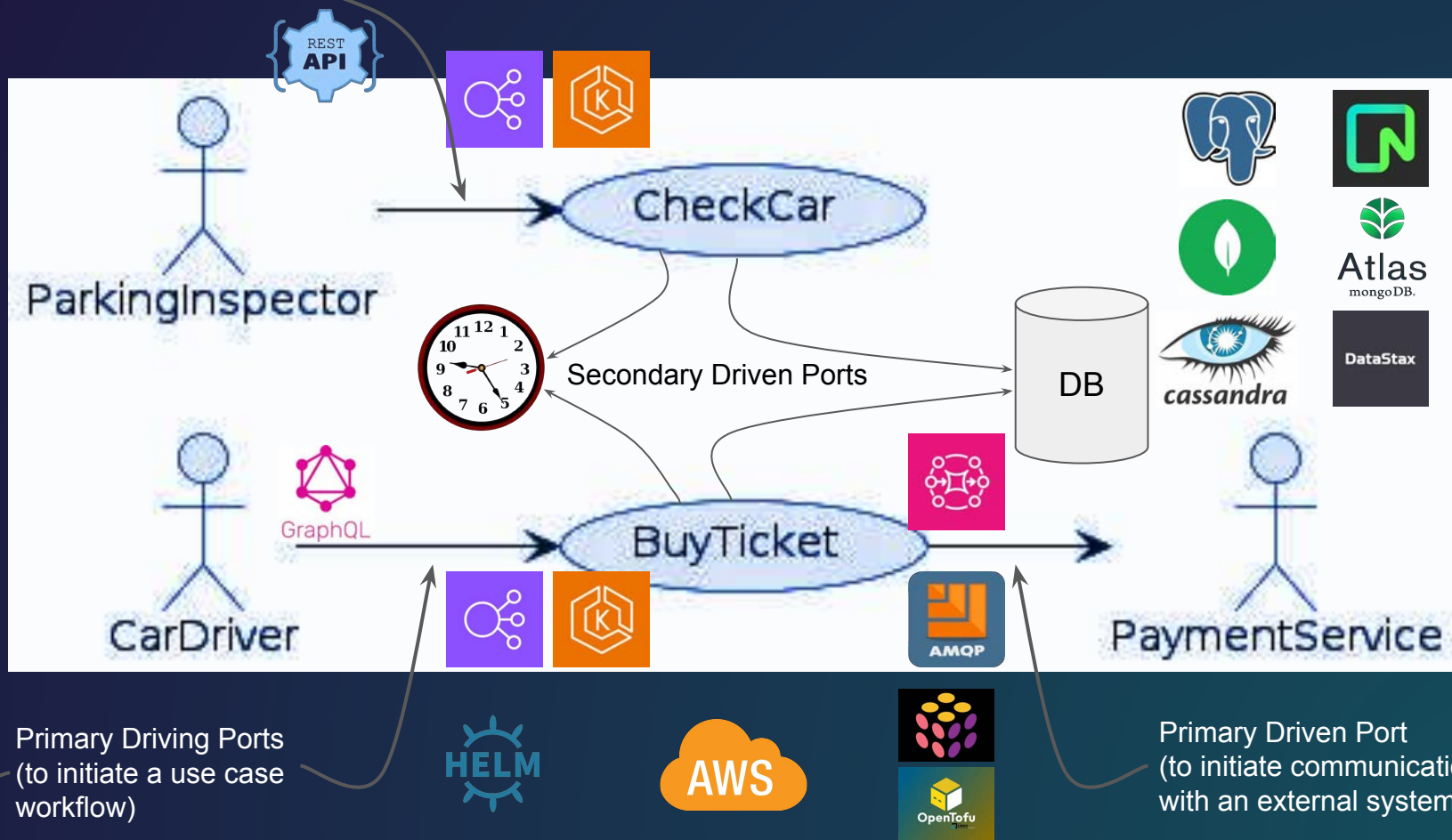


Primary Driven Port
(to initiate communication
with an external system)

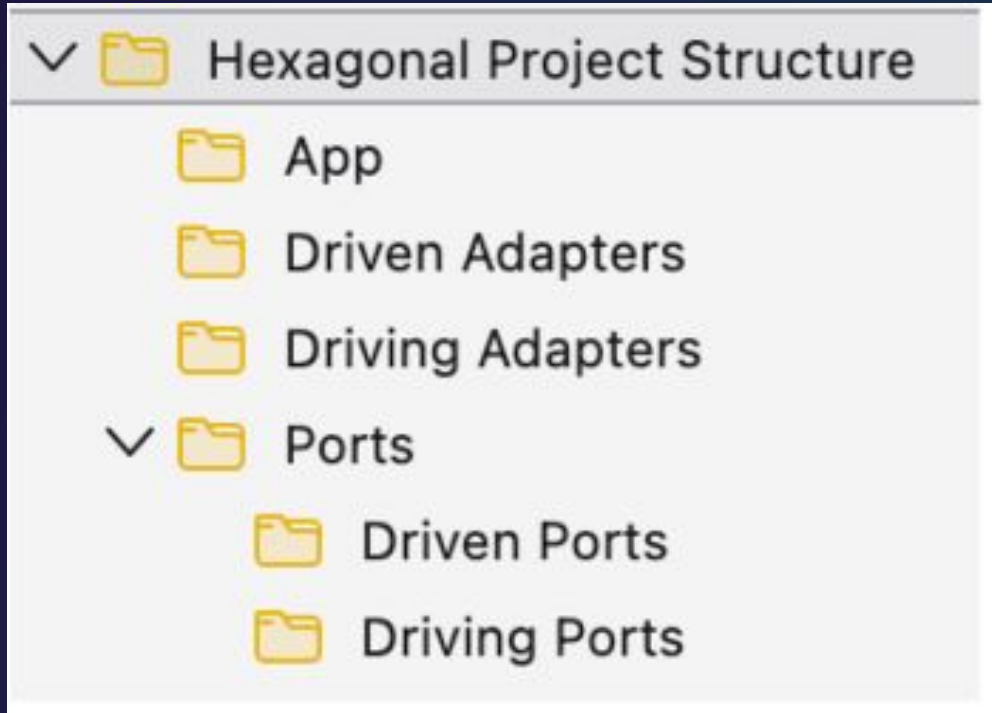
Time to Market → Serverless Options



Production Measurements → Alternatives



Project Structure



- This is a high-level structure
- Details depend on:
 - Domain
 - Programming Language
 - Business Model:
 - SaaS
 - Cloud IsV
 - Core Technology

"Ports and Adapters" architectural pattern is a powerful tool for managing uncertainty and variability in complex software systems.

To be Continued ...



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