# **DP201 - Designing an Azure Data Platform Solution**

## Lab 3 – Azure Real Time Reference Architectures

**Exercise 2**

**Task 1: Build a high-level architecture that reflects a stream processing pipeline with Azure Databricks.**

Use the template below to document the high-level architecture that would form part of a stream processing pipeline with Azure Databricks.

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| 1. **Connected bicycle streaming data** | | | |
| Data Source | Ingestion and Data Storage | Analysis | Visualisation |
| Bike Data  Trip Data | Event Hub/Stream Analytics  Event Hub/Stream Analytics | Analysis Svc  Cosmos | PowerBI |

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| 1. **Performing predictive analytics of bicycle maintenance** | | | |
| Data Source | Ingestion and Data Storage | Analysis | Visualisation |
| Connected Bicycle (CosmosDB)  Raw telemetry data | Already in CosmosDB  Iot Hub/Stream Analytics | Analysis Services  Databricks | PowerBI |

1. Real Time Architecture

Bike Data

Event Hub

Power BI

Data Bricks

Stream analytics

CosmosDB

Trip Data

Raw Telemetry Data

IOT Hub

Holistic Arch.



