# Titanium Assignment

* RESTFUL API endpoints to connect to an application layer
* Interact with DB layer for GET and POST data from and to data layer
* Simulate multizone DB layer redundancy.

Architecture

Graphical user interface, diagram

Description automatically generated

The above diagram shows the current implementation of system and its components.

*There are multiple approaches that can be implemented to sync between Data layer and multiple data sources.*

1. The data layer can be used to treat all data sources (databases) as independent and sync between them.

## API layer

* Controller with GET and POST api endpoints to connect to server and application

## Application layer

* Services and backend structure to define endpoint interfaces.

## Streaming service

* To communication asynchronously and handle large requests between microservices

## DB layer

* A infra consisting of Repositories and database configurations to control and commit between multiple data sources, in this case – 2 sqlite databases.

End points

* <http://localhost:8080/all>
  + Get all details from primary or any available cluster
* [http://localhost:8080/entityemp/<empname](http://localhost:8080/entityemp/%3cempname)>
  + Insert a new entity with name in URL
* [http://localhost:8080/entity/<empid](http://localhost:8080/entity/%3cempid)>
  + Get details of emp id in url
* <http://localhost:8080/syncEngines>
  + Sync all databases when LRC is enabled