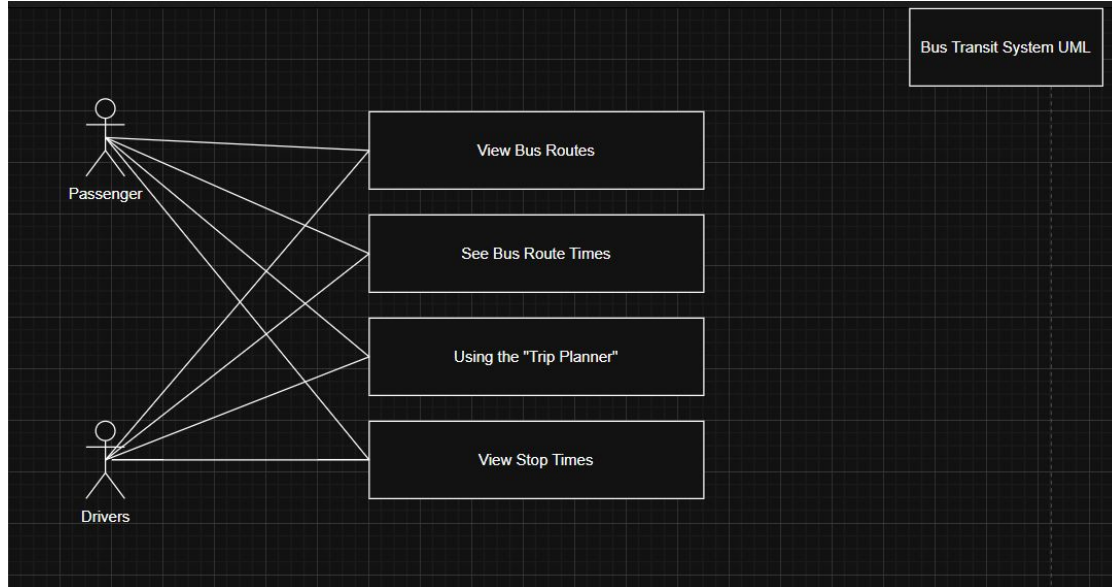


# Phase 1

Krishna & Ronan

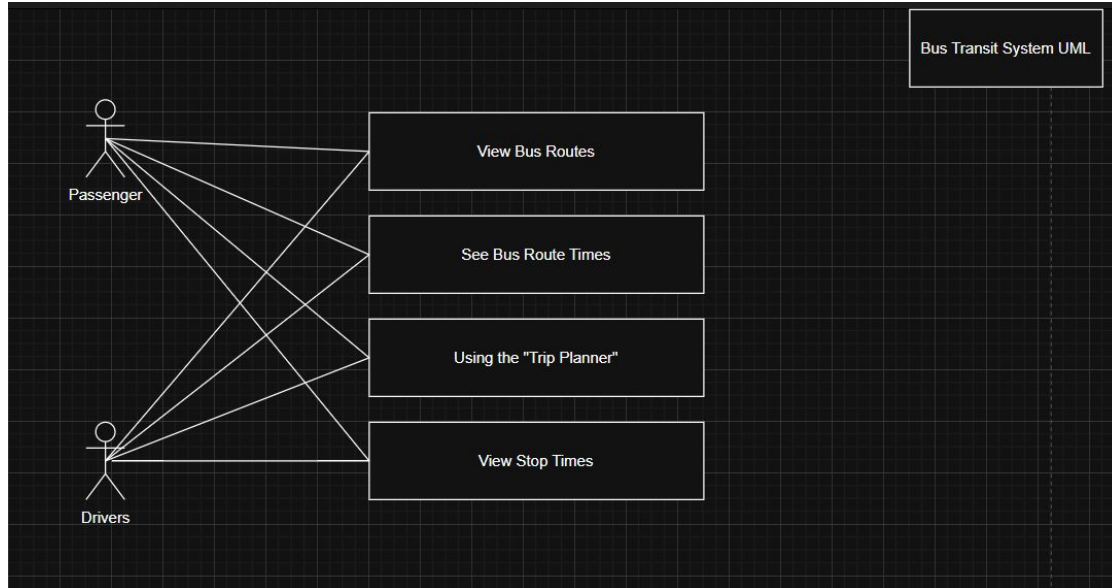
# Use Cases



## Viewing the bus routes:

1. Passenger selects “View Bus Routes” in the app/interface.
2. System retrieves all route names from the routes table.

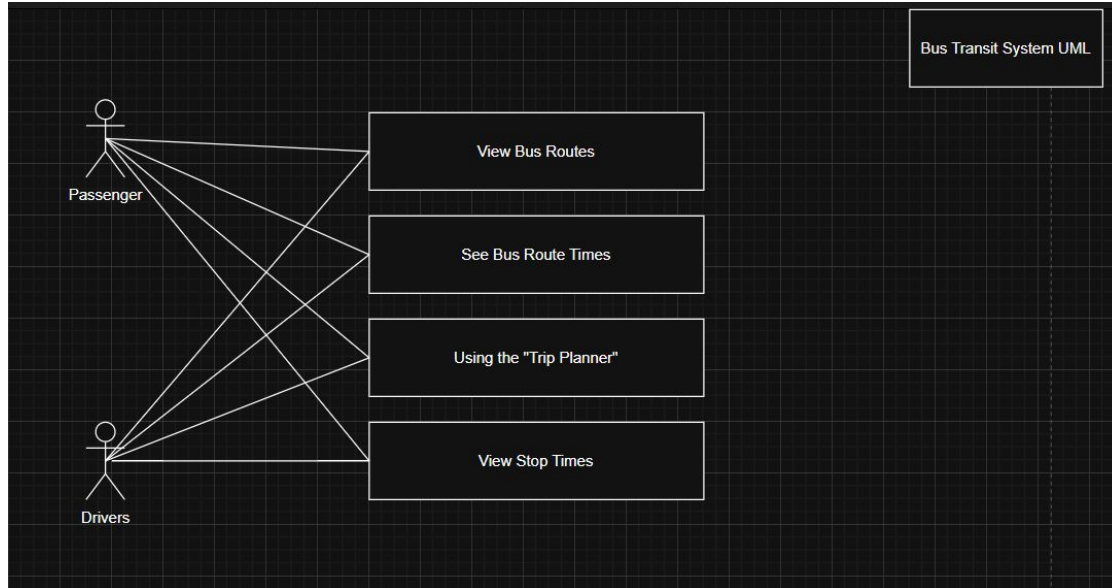
# Use Cases (Cont'd)



## See bus route times:

1. Passenger selects a specific route (e.g., "UC Route").
2. System retrieves the list of stops and their scheduled departure times (RouteStop).
3. System displays the ordered list of stops with times.

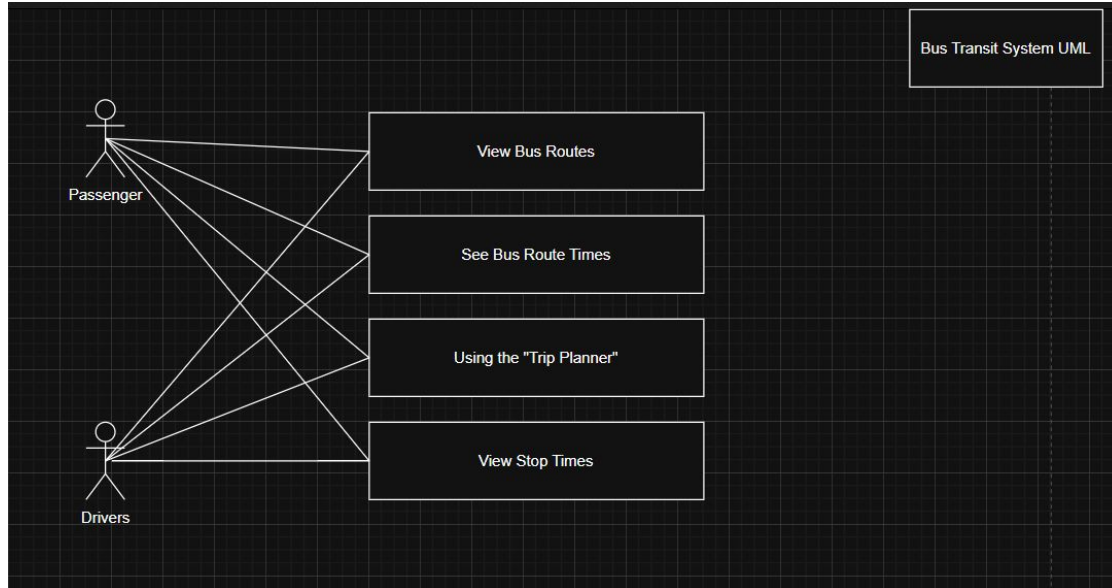
# Use Cases (Cont'd)



## Using the “Trip Planner”

1. User inputs a start location, and a destination location
2. Check for direct routes (check if a route exists with start + destination location), if no such route exists, move to the UTC hub and move from there to the destination location
3. Display the times of the busses (RouteStop)

# Use Cases (Cont'd)



## View Stop Times:

1. User inputs a specific stop
2. Check for all routes with stop\_key, return all routes with times (ascending time) sharing the same stop\_key

# Schema

Route(route\_key, route\_name)

Stop(stop\_key, stop\_name)

route\_stop(route\_key[FK], stop\_key[FK], time)

driver(driver\_key, driver\_name)

driver\_route(driver\_key[FK], route\_key[FK]) -> link to route/driver

route\_status(status\_key, description) -> link to route w/ foreign key

# Entities and Relations

