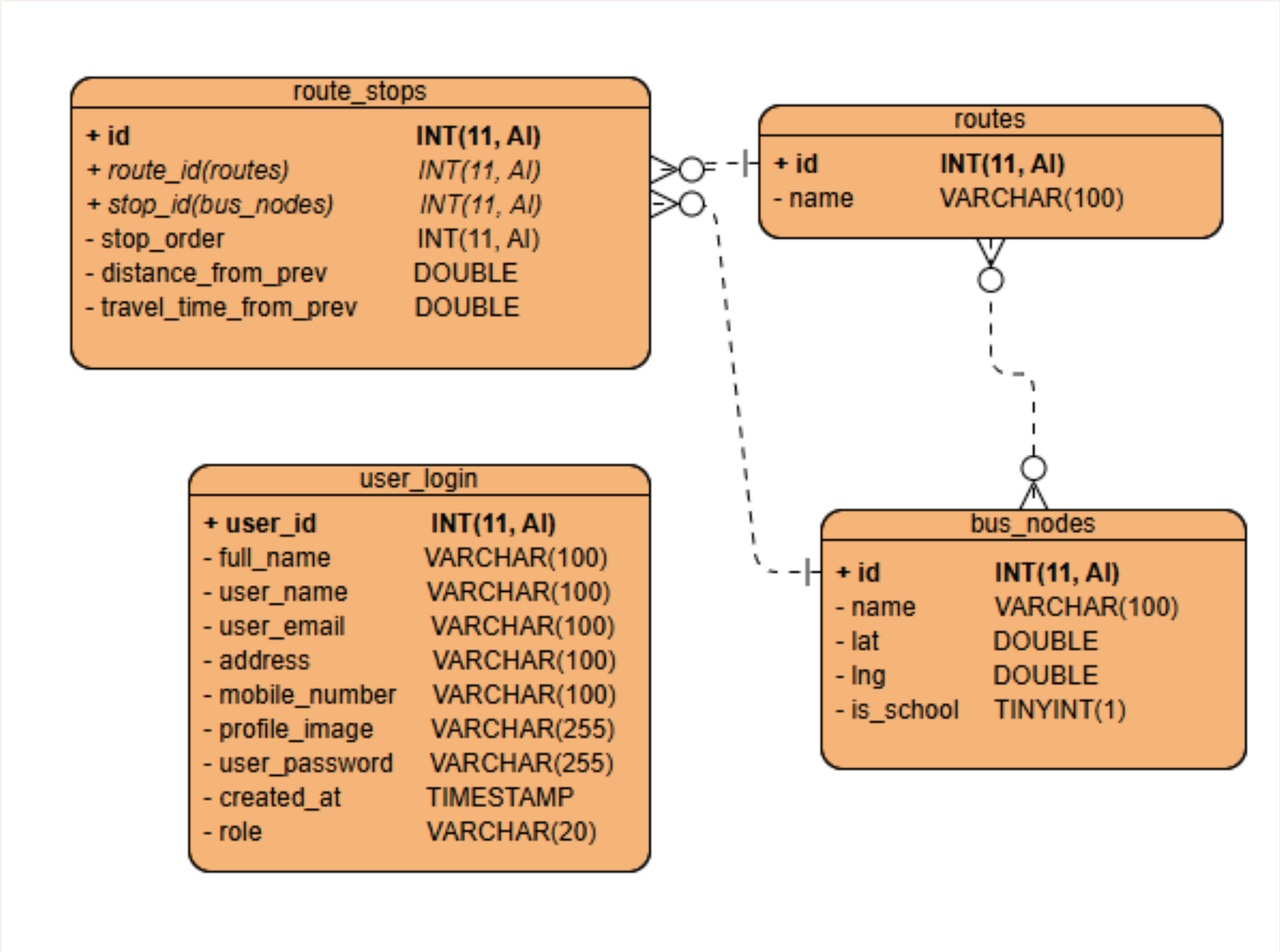
ENTITY RELATIONSHIP DIAGRAM



SYSTEM ARCHITECTURE DIAGRAM

WEB INTERFACE

SERVER-SIDE / PHP

USERS

Admin
- admin.php

User

FRONT END

Login / Registration
- login.php
- registration.php

User Pages
- index.php
- profile.php

Admin Dashboard
- admin_home.php

Route Editor
- add_routes.html
- add_routes.js
- Leaflet

Route Simulation
- simulation_routes.html

BACK END

Backend API
- api.php

Authentication & Sessions
- login.php
- logout.php

Database Connector
- db_connect.php

DATABASE

Databse (MySQL)
- iligancity_route.sql

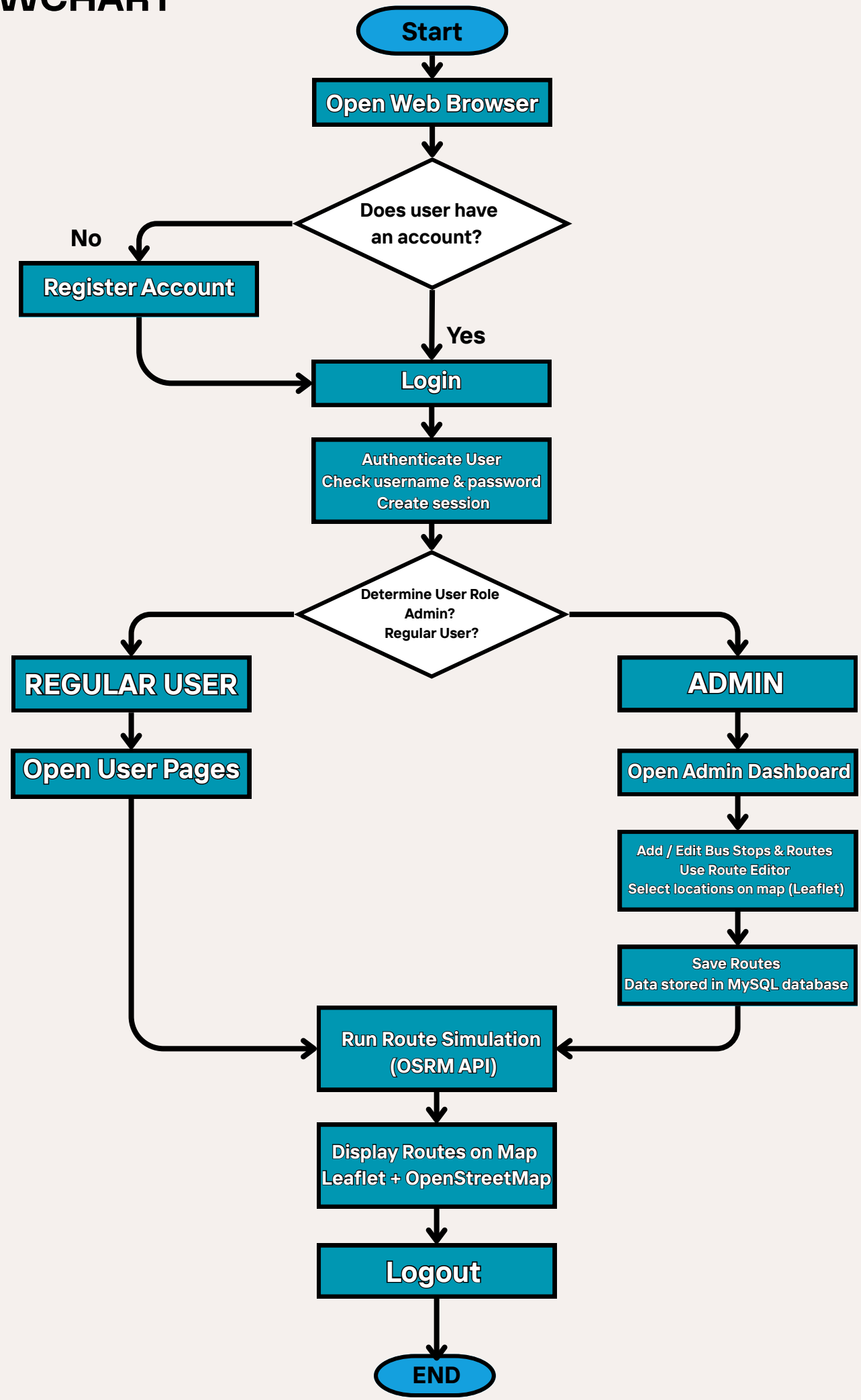
tables
- bus_nodes
- routes
- route_stops
- users_login

EXTERNAL SERVICES

OSRM Routing API

Leaflet + OpenStreetMap

FLOWCHART


Start
Open Web Browser
Does user have an account?
No
Register Account
Yes
Login
Authenticate User
Check username & password
Create session
Determine User Role
Admin?
Regular User?
REGULAR USER
Open User Pages
ADMIN
Open Admin Dashboard
Add / Edit Bus Stops & Routes
Use Route Editor
Select locations on map (Leaflet)
Save Routes
Data stored in MySQL database
Run Route Simulation
(OSRM API)
Display Routes on Map
Leaflet + OpenStreetMap
Logout
END