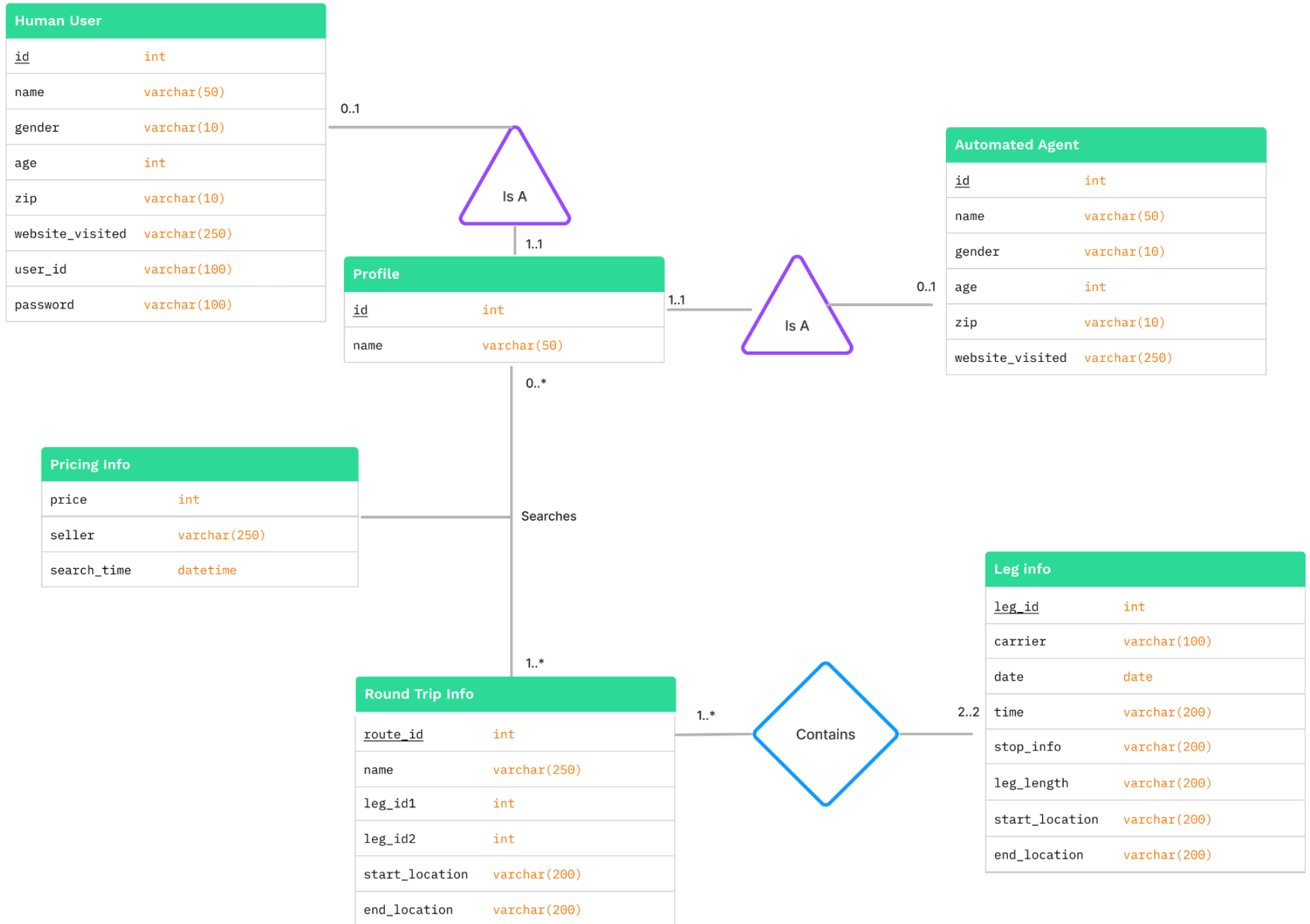


UML Diagram



Assumptions / Description

We make the following assumptions for our UML diagram:

- Each profile must search for at least one route to exist on the profiles table.
- Each route has exactly two corresponding legs; one for the departing leg_id and one for the returning leg_id.
- Each leg is part of at least one Round Trip, and may be part of multiple Round Trips.
- There is a subclass structure between Profile and Human User / Automated User; each id in the profiles table is found in only one of the subclass tables: Human User or Automated User. Every id on the Human User or Automated User tables is found on the Profiles table.

Relational Schema

```
AutomatedAgent(  
    id : INT [PK] [FK to Profile.id],  
    name : VARCHAR(50),  
    gender : VARCHAR(10),  
    age : INT,  
    zip : VARCHAR(10),  
    website_visited : VARCHAR(250)  
)
```

```
HumanUser(  
    id : INT [PK] [FK to Profile.id],  
    name : VARCHAR(50),  
    gender : VARCHAR(10),  
    age : INT,  
    zip : VARCHAR(10),  
    website_visited : VARCHAR(250),  
    user_id : VARCHAR(100),  
    password : VARCHAR(100)  
)
```

```
Profile(  
    id : INT [PK],  
    name : VARCHAR(50)  
)
```

```
PricingInfo(  
    price : INT,  
    seller : VARCHAR(250),  
    search_time : DATETIME
```

)

```
RoundTripInfo(  
    route_id : INT [PK],  
    name : VARCHAR(250),  
    leg_id1 : INT [FK references LegInfo.leg_id],  
    leg_id2 : INT [FK references LegInfo.leg_id],  
    start_location : VARCHAR(200),  
    end_location : VARCHAR(200)  
)
```

```
LegInfo(  
    leg_id : INT [PK],  
    carrier : VARCHAR(100),  
    date : DATE,  
    time : VARCHAR(100),  
    stop_info : VARCHAR(200),  
    leg_length : VARCHAR(200),  
    start_location : VARCHAR(200),  
    end_location : VARCHAR(200)  
)
```