# CS 255 System Design Document Template

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## UML Diagrams

### UML Use Case Diagram

Diagram

Description automatically generated

### UML Activity Diagrams

Diagram

Description automatically generatedDiagram

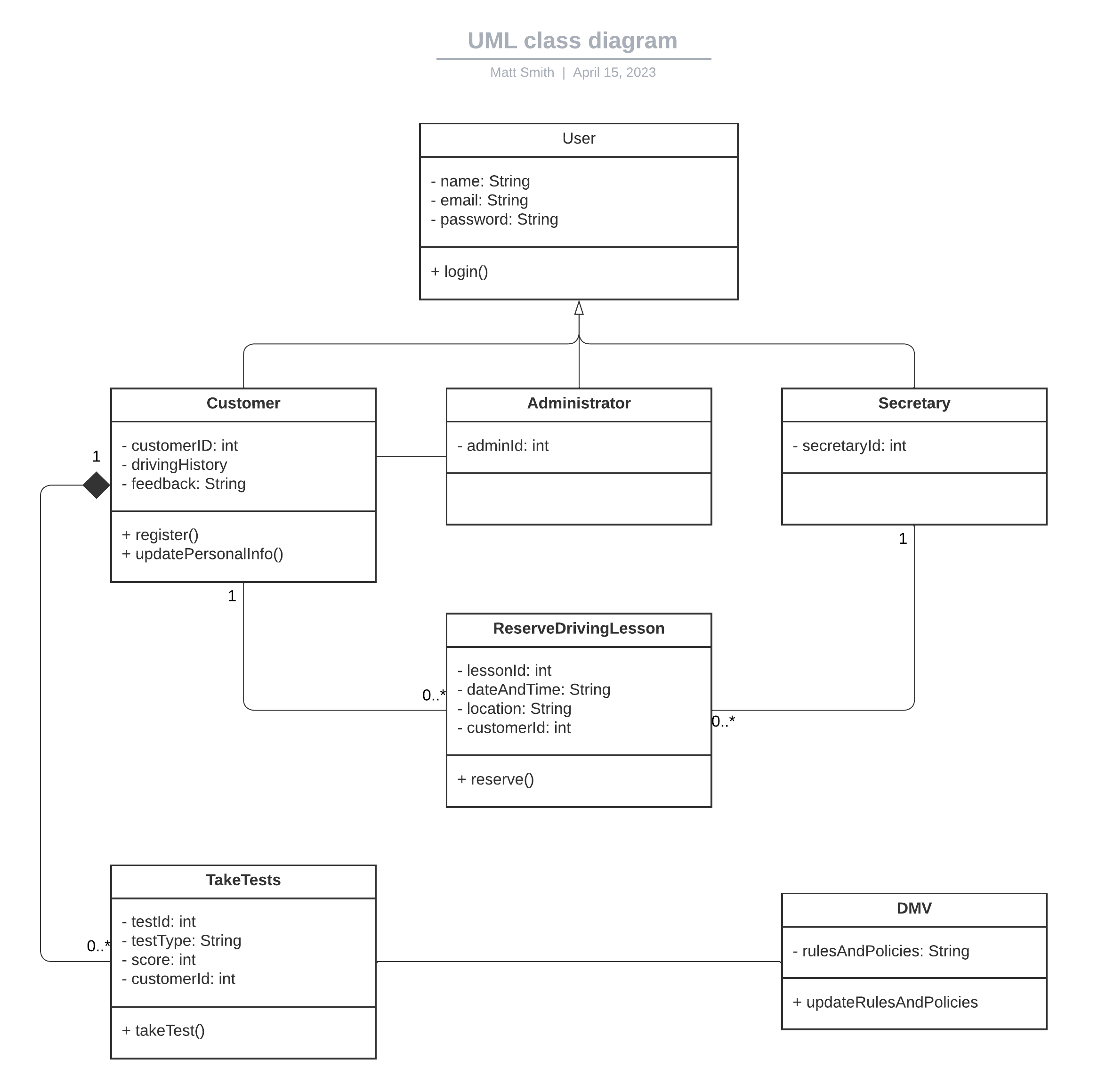
Description automatically generated

### UML Sequence Diagram

Diagram

Description automatically generated

### UML Class Diagram



## Technical Requirements

Hardware:

* A server or servers to host the web-based application.
* Network infrastructure that’s able to handle multiple users and requests.
* PCs, laptops, and mobile devices that can access the interface for the application.

Software:

* A web development framework.
* A database system.
* A server-side scripting language.
* A client-side scripting language.
* A modern web browser.
* An operating system that’s compatible with the development framework and database system.

Tools:

* Version control software.
* An IDE for writing and editing code.
* Deployment tools for deploying the application to a cloud platform.
* Testing tools for verifying the applications functionality and performance.

Infrastructure:

* A cloud platform that’s capable of hosting a web-based application.
* A database server for storing all information.
* HTTPS encryption for secure data transmission.
* Regular backups and recover procedures for data safety and system availability.