# Project Two System Design Document DriverPass

## UML Diagrams

### UML Use Case Diagram

*A diagram of a software development process

Description automatically generated*

### UML Activity Diagrams

*A diagram of a software

Description automatically generated*

A diagram of a payment process

Description automatically generated

### UML Sequence Diagram

*A screenshot of a computer screen

Description automatically generated*

### UML Class Diagram

*A screenshot of a computer program

Description automatically generated*

## Technical Requirements

* **Hardware requirement:** The system should be hosted online. It could be a private or a public cloud to ensure accessibility from anywhere and redundancy to avoid a single point of failure. Hardware will be composed of a web server, a database server, and a network printer.
* **Software requirement:** The DriverPass App should be able to be run on all operating systems (Windows, Mac, Linux, Unix, mobile). PostgreSQL, or MySQL will be used as a Database management system, and other software such as HTTP, HTTPS, SSL, TLS, AES, and MD5 for ensuring a secure connection to the server.
* **Infrastructure and scalability:** The system should be able to handle multiple requests from anywhere in the world. To achieve this the system should be put behind a load balancer. Cloud providers such as AWS, GCP, and Azure are good choices to ensure scalability and redundancy.
* **Documentation and training**: Technical documentation regarding the system (system architecture, API documentation, database schemas, and some code comments). In addition, a training module must be created for users to get accommodated with the new system.
* **Maintenance and support:** A maintenance plan should be developed and provided to the IT Officer regarding system updates, and patches (resolve vulnerabilities and improve performance). Customer support must be put in place either online or in person through live chat, email, and FAQ to address user concerns and inquiries.