# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

Diagram

Description automatically generated

**UML Activity Diagrams**

Diagram

Description automatically generated

Diagram

Description automatically generated

### UML Sequence Diagram

Diagram

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### UML Class Diagram

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## Technical Requirements

The DriverPass system will be hosted by a third-party cloud-based provider. This will eliminate the need for a massive investment in hardware. There will be a need for at least three desktop systems. There will be one for the company owner/operator, the secretary, and the IT administrator. These systems can be mid to high level hardware with internet access. Secure access to each device can be managed within the Windows provided security features. A monitor, wireless keyboard, and wireless mouse will be provided with each system. Each user system will also require printing services. No extraordinary infrastructure will be required for this system. Typical electrical systems in facilities can handle the hardware to be implemented.

At least two mobile devices will be provided for remote and offline access to the system. The company owner will require remote, offline access. This applies to the IT administrator as well. These devices can be either laptops or tablets. The Microsoft Surface line of products would cover all the needs either system operator will have. The owner/operator and IT administrator should have CRUD capabilities within the mobile devices. However, some of those features will not be available offline.

A local server is an option should the system owner desire on-site document/system backup and restore capabilities. Even though the DriverPass system is not hosted locally, having a local server for important client information and documentation can be beneficial, though it is not required. Typical server management tools would be implemented for this system. This feature could also provide better management of hardware resources within the facility. No extraordinary infrastructure would be required other than a robust local are network. No rack mountable equipment is required.

The DriverPass system will be a Java based design. The client-server system will serve multiple platforms using HTML communication protocols. RSA encryption will be deployed to handle data security. Future system updates or architecture changes will require further development and implementation as determined by the client. The system will be developed with administrative tools to allow for user account changes, user account lock-out management, documentation, and scheduling, print services, and simple notification services for the user.