

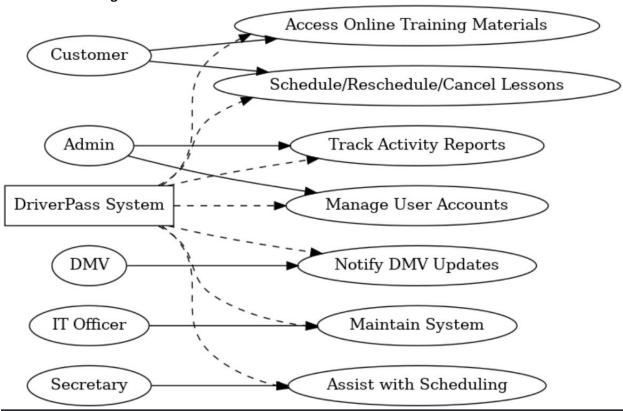
### **CS 255 System Design Document Template**

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12/15/2024

## **UML Diagrams**

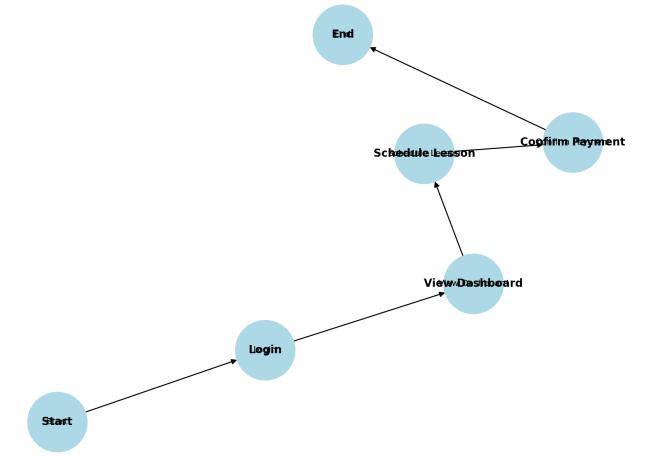
### **UML Use Case Diagram**



**UML Activity Diagrams** 

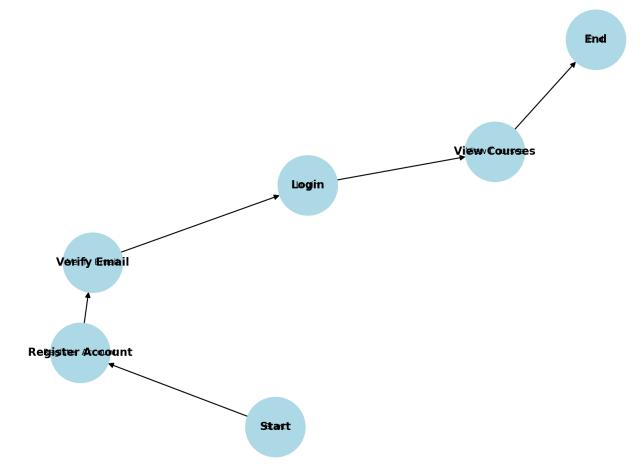


# Activity Diagram 1:



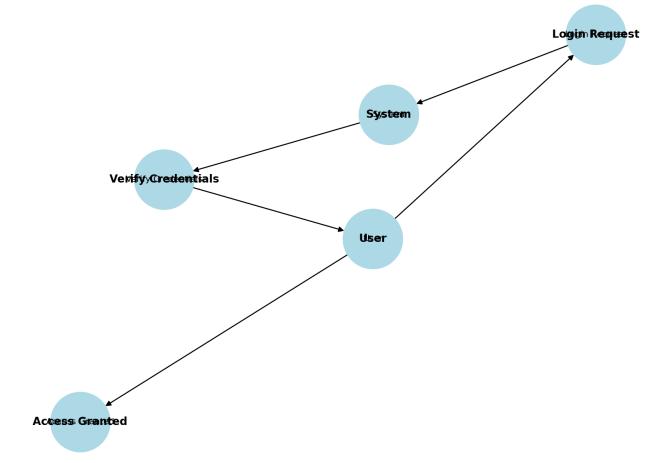


# Activity Diagram 2:



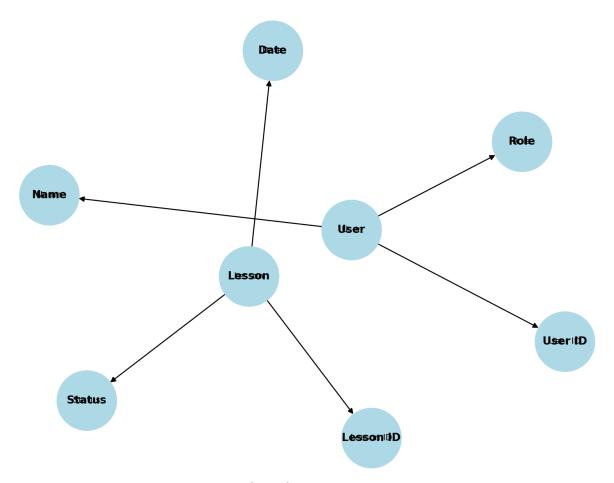
**UML Sequence Diagram** 





**UML Class Diagram** 





#### **Technical Requirements**

[The DriverPass system is designed to be reliable, secure, and scalable, meeting the needs of both users and administrators. It will use cloud-based servers to host the system, ensuring it can handle large amounts of data and user activity efficiently. The system will be accessible on various devices, including computers, smartphones, and tablets, and will support major platforms like Windows, macOS, iOS, and Android.

To provide a smooth user experience, the system will function as a web-based application compatible with modern browsers such as Chrome, Safari, and Firefox, as well as through a mobile app for iOS and Android users. Tools like Lucidchart will be used to create UML diagrams, and a secure database will manage user, lesson, and activity data.

The system will rely on secure servers with encryption to protect sensitive information, and regular backups will be performed to prevent data loss. A fast and reliable internet connection will be required to ensure quick response times for all users. By leveraging cloud infrastructure such as AWS, GCP, or Azure, the system will remain scalable and reliable, adapting to future growth and increasing demands.