CS 255 System Design
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UML Diagrams

UML Use Case Diagram
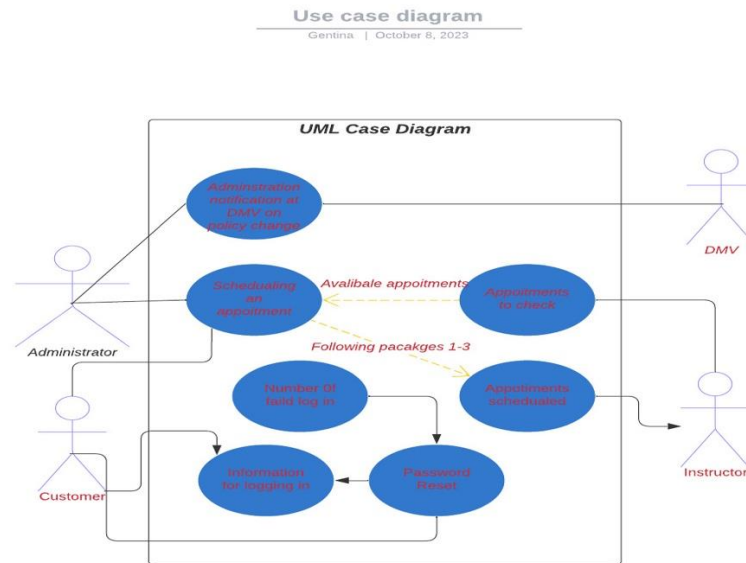
UML Activity Diagrams
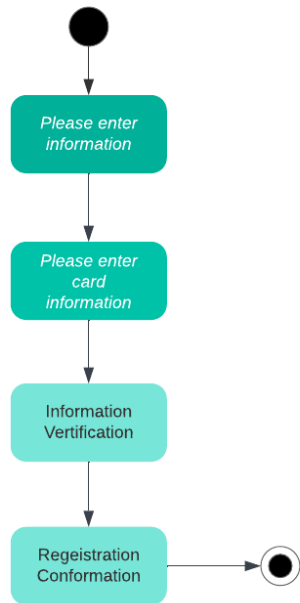
Please enter
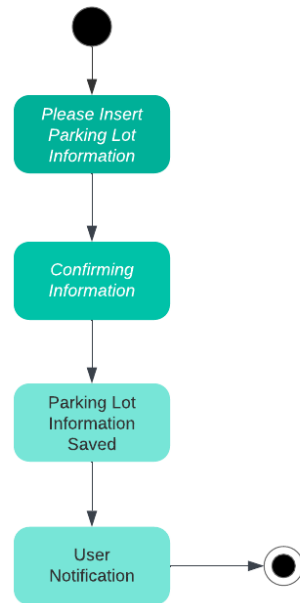information

Please enter
card
information

Information
Vertification

Regeistration
Conformation

Please Insert
Parking Lot
Information

Confirming
Information

Parking Lot
Information
Saved

User
Notification

UML Sequence Diagram

Validate Information

Confirm and Update

Finish

User
0..*

Information

Registration Confirmation

Print Confirmation

Parking lot Details

Saving Parking Lot

Notify User

0..*

Class Diagram

Driver
-name: String
-adress: String
-contact: String

DriverPass Card
-cardnumber: String
-experationData: date

Parking Lot
-location: String
-capacity: int
-rates: flota

System Admin
-adminID
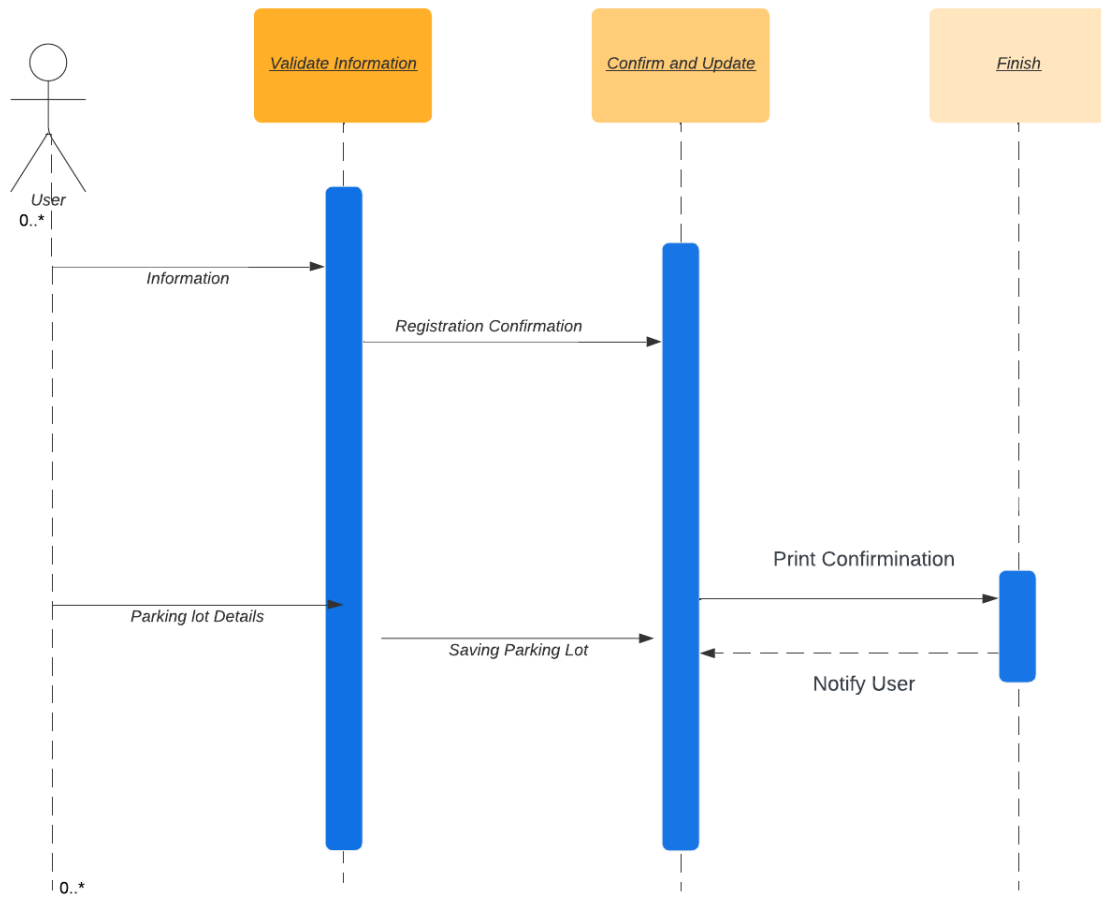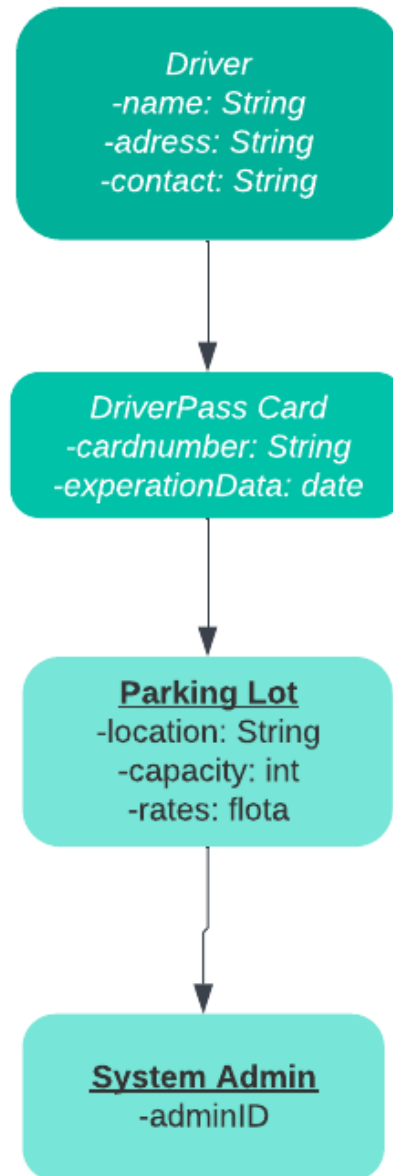
Technical Requirements

Functional Requirement	Rationale for Requirement
User Authentication	Required for maintaining data security and privacy
Course Management	Required so creators and instructors create, organize and update course content
Assessment and Grading	Required for creating and designing assignments and exams. Helping automate grading and tracking of progression
Analytics and Reporting	Required to gather data of student performance, and course effectiveness
Communication Tools	Required for proper communication through messaging systems and discussion boards.
Integration with External Systems	Required for best user experience, integrated with other systems to enhance accessibility and efficiency

Nonfunctional Requirement	Rationale for Requirement
Scalability	Required to handle a high number of users and content without destroying the user experience or performance
Usability and Accessibility	Required to be accessible to people with special needs and user friendly
Security and Data Privacy	Required to have encryption and authentication policies to keep information private while applying with regulations
Reliability and Availability	Required to accommodate different schedules from different groups
Performance	Required for a great system performance to have the best learning experience.
Interoperability	Required to be able in being used across different platforms and browsers.