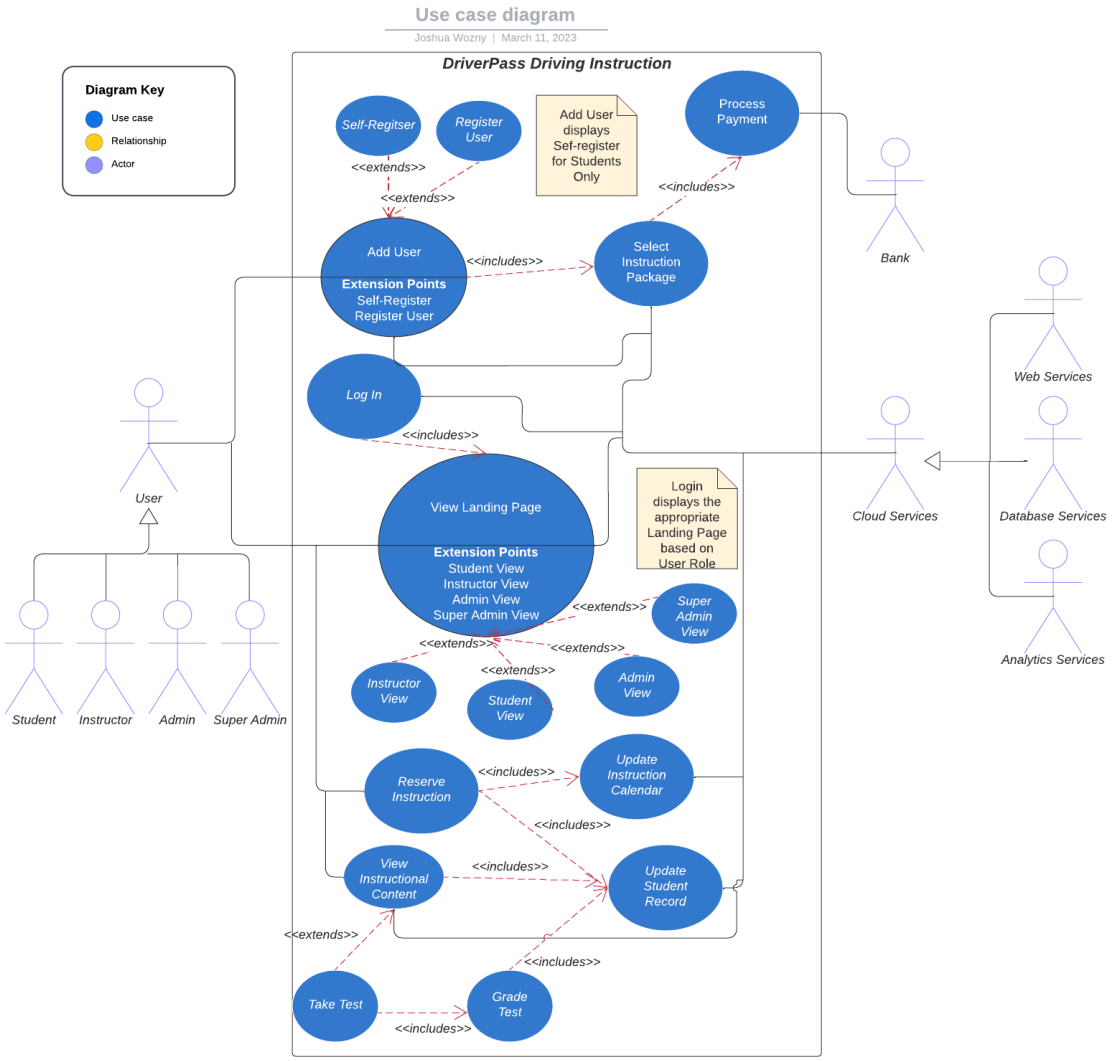
Southern New Hampshire University

CS 255 System Design: DriverPass

UML Diagrams



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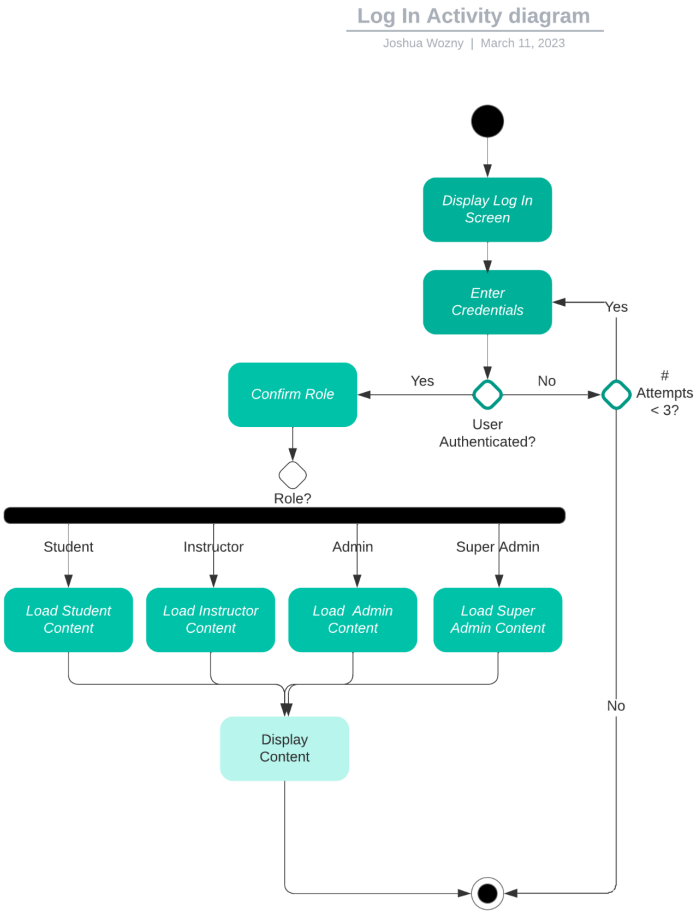
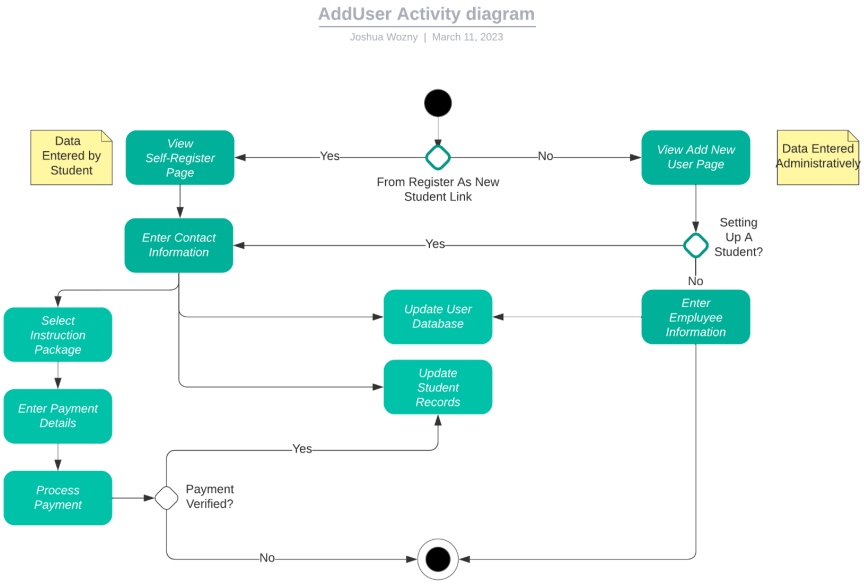
UML Activity Diagrams





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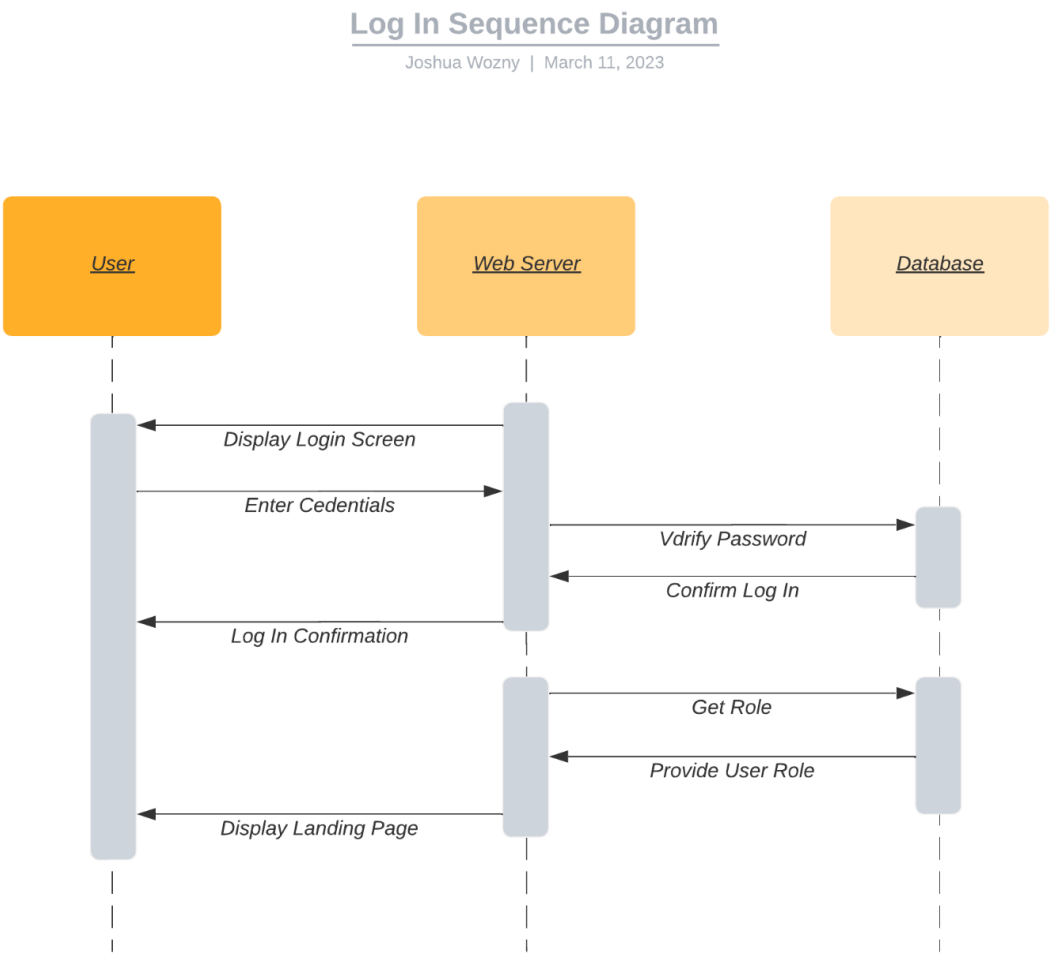
UML Sequence Diagram



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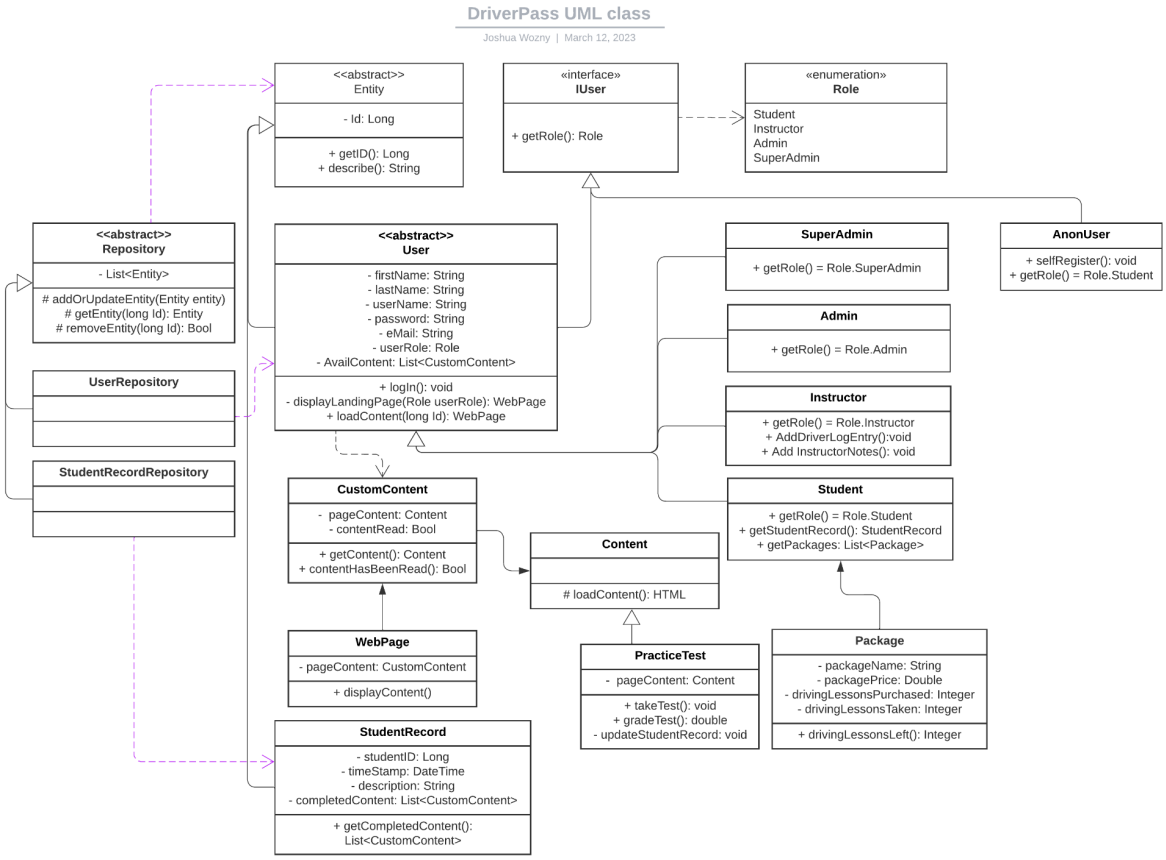
UML Class Diagram



Technical Requirements

Summary: The system will be hosted on the Cloud as a web-based application. Payments for services will use an API provided by DriverPass' bank. The application back-end will handle User Authentication, and data storage will use a Cloud-based SQL server. The Cloud Service will provide analytics data.

Development Environment

- IDE: Web Storm & IntelleJ
- Languages: Java, SQL, Javascript, HTML
- Frameworks: React, Hibernate, Java Authentication and Authorization Services (JAAS)
- Implement Bank's Payment Processing API

System Components:

- Cloud Services
    - Web Server
    - Analytics Service
    - Database Server with PostgreSQL
    - Virtual Machine to run the back-end application
- Windows, Android, Linux, and Apple software compatibility
- Search Engine Optimization

Assumptions: Users have an active internet connection and a web browser.
Limitations: The system will not function if the Cloud Provider experiences an outage. The Cloud Provider can suspend services if suspicious activity occurs or for a Terms of Service Breach.