Project 2

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System Design Document

CS-255-T3660 System Analysis and Design 22EW3

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# CS 255 System Design Document

## UML Diagrams

### UML Use Case Diagram

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### UML Activity Diagrams

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### UML Sequence Diagram

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### UML Class Diagram

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## Technical Requirements

Technical requirements for the DriverPass system would include the following:

1. The application User Interface will be created with React JS in order to create a modular and scalable design that is accessible on multiple devices and viewable in Chrome, Safari, and Microsoft Edge browsers.
2. A subscription to Amazon Web Services for the cloud computing server instances (Amazon elastic cloud compute EC2).
3. A subscription to Amazon Cloudfront CDN content delivery network to store the DriverPass web application content materials.
4. A managed relational database service with MySql from Amazon Web Service to store website data..
5. SQL Server Reporting Services(SSRS) enabled on the AWS MySql relational database to create reports.
6. A managed backup and recovery solution that integrates with AWS. The client can choose from Clumio, Druva, N2ws, or Rubrik.
7. A REST API written with Java Spring Boot and secured with TLS to assure the safe transmittal of data from the web site interface to the backend server.
8. A online payment gateway that integrates into the web application, such as Stripe.
9. AWS Amplify Auth from Amazon Web Services to handle user authentication during the login process.
10. A subscription to Blackboard Learning Management System that integrates with the web application user interface.
11. An integration to a third party cloud security provider such as Alert Logic in order to provide managed detection and response solutions in the cloud environment.
12. DriverPass IT employees should utilize free training at Amazon Web Services in order to familiarize themselves with the details of the technology used to create their new system.
13. DriverPass IT and Administrator employees should use an up to date web browser such as Chrome, Safari, or Microsoft Edge.
14. DriverPass will need to provide a high speed internet connection for the best interactive performance with the web application and the AWS cloud platform.