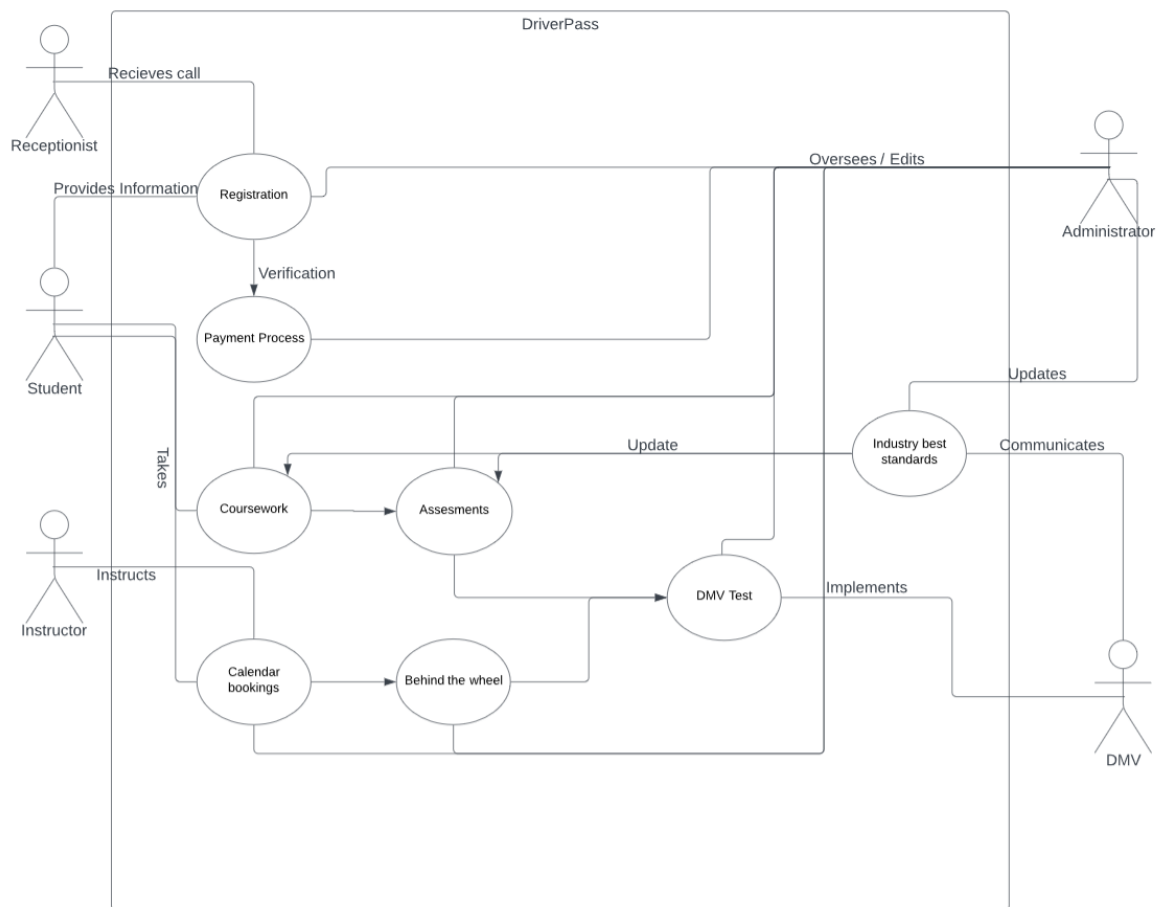
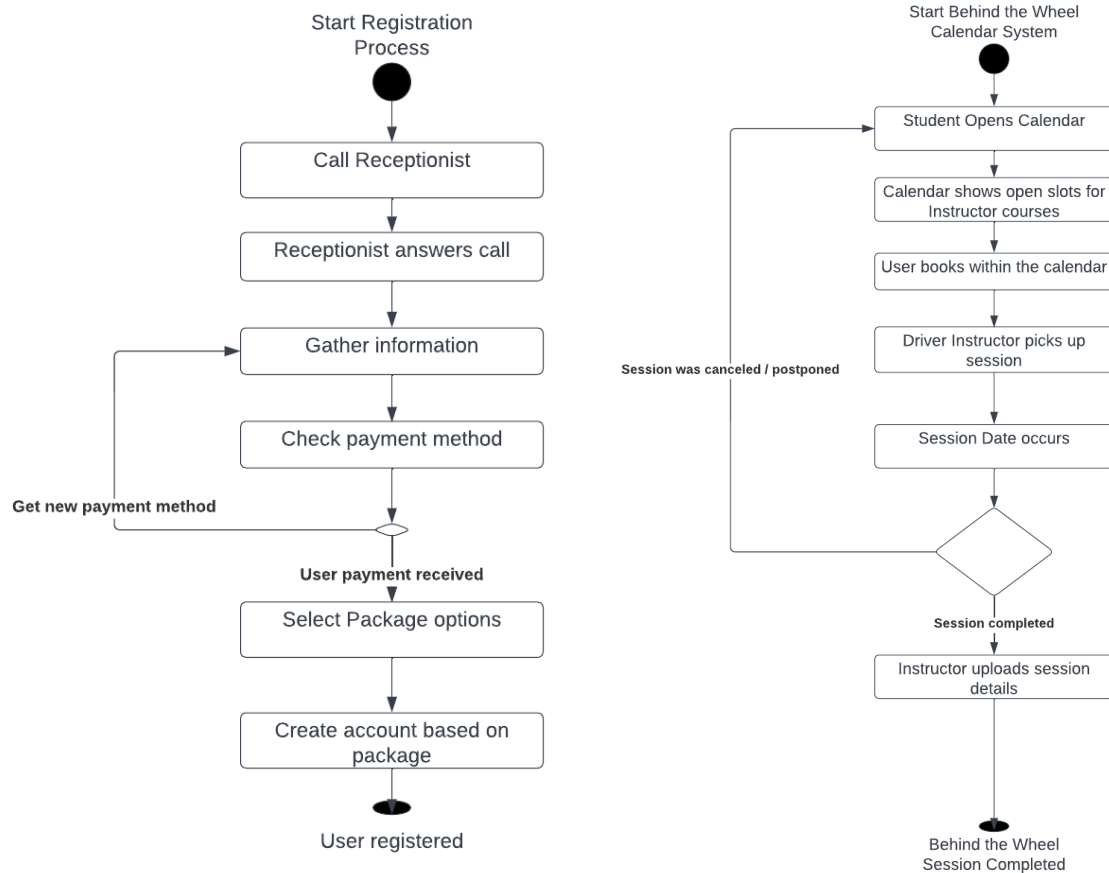


## UML Diagrams

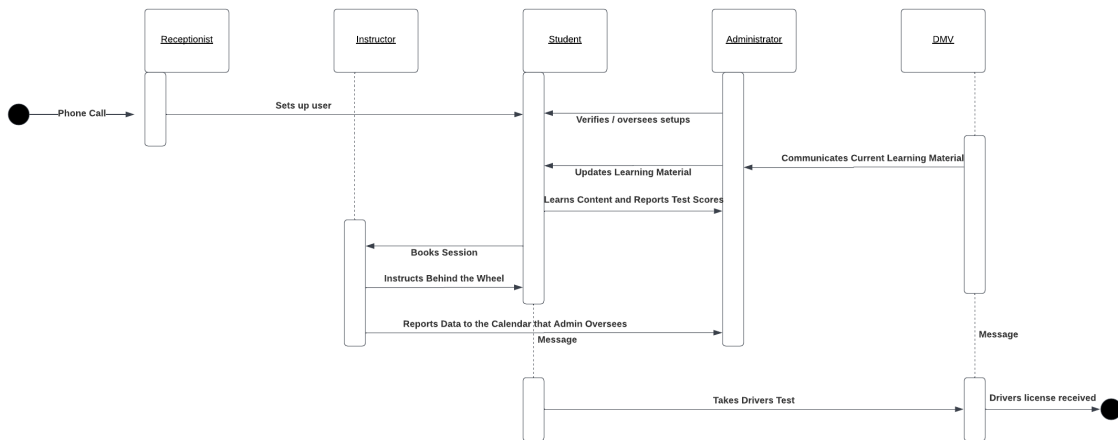
### UML Use Case Diagram



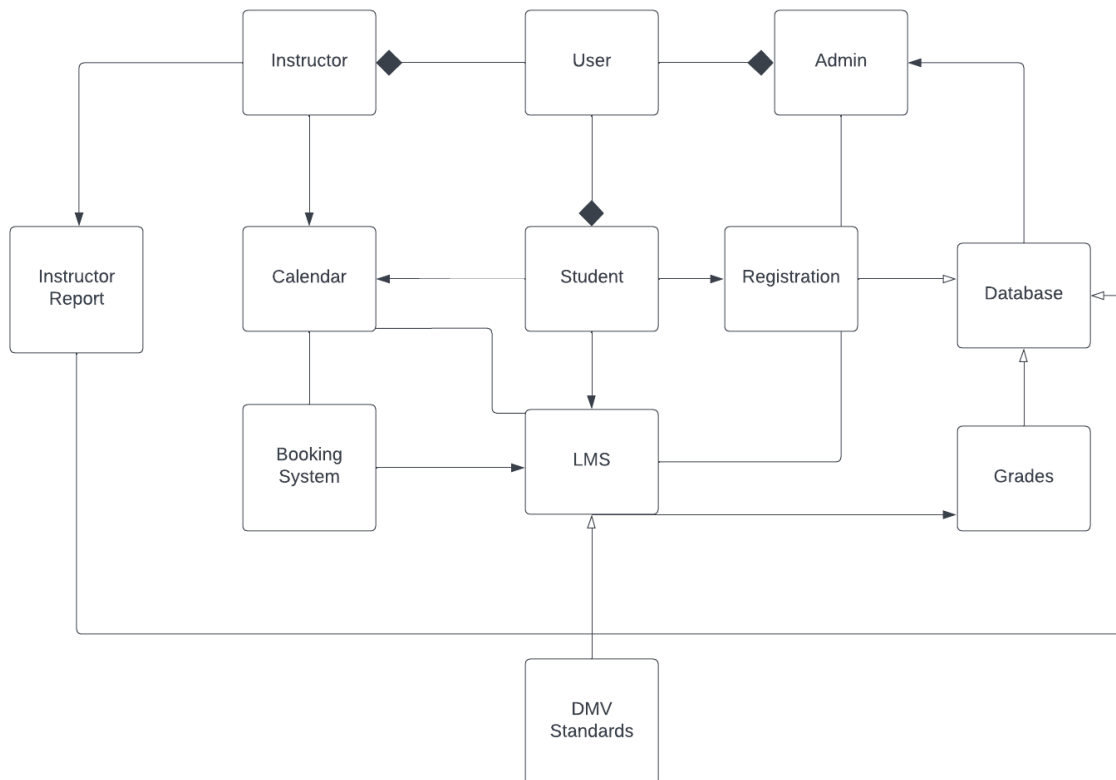
## UML Activity Diagrams



## UML Sequence Diagram



## UML Class Diagram



## Technical Requirements

This system should be developed as a web application. The benefits of making this a web application are that it creates flexibility for the users devices, they can access the portal via pc, phone, or any other system that has access to a browser.

This system should be hosted by a cloud service to cut costs of maintenance and is easily updated through a virtual machine instead of through a server. This allows the server to scale as DriverPass becomes more popular.

It would be best to also have a database that runs through the cloud. The users are expected to also have a internet connection. However, since the CEO of Driver Pass wants to create edits with no internet connection, there should use a application such as SharePoint where the user can download sections that he wants to view such as grades and have it update using office 365 applications while he is back online.

As far as maintenance goes, maintenance and updates should be ran when the least amount of users are online (preferably around night) to create the best user experience. Downloads should finish before the installation takes place for the new updates. This will ensure that the server will be on for the maximum amount of time.

For security we will ensure that there is routine preventative maintenance and we protect or users' information by using SSLs for logging in to ensure encrypted information, on top of this we will use Multifactor Authentication methods such as a token or authentication app / text messages to verify security processes. SSLs will also protect stored payment information by encryption. For SQL in our database there will be set query processes where the data will not be manipulated unless every step is taken, this prevents catastrophic events in the database. These methods will protect against SQL Injections.