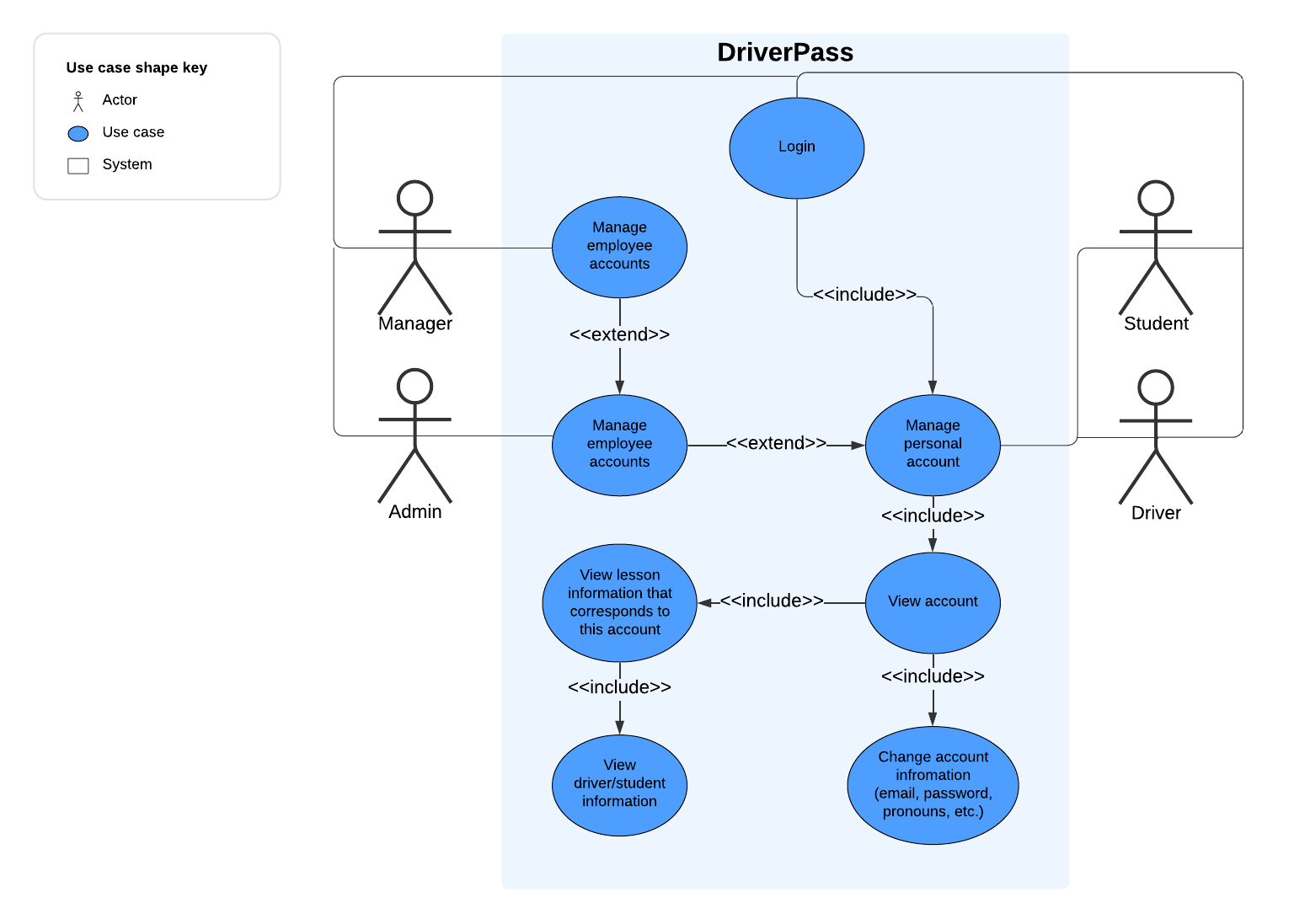
# CS 255 System Design Document Template

This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead the goal is to complete each section based on what your client’s needs are. Remove this note when you are finished, and replace all bracketed text with the relevant information.

## UML Diagrams

### UML Use Case Diagram

*[In Module Six, you were asked to complete a use case diagram based on your system design. If you would like to make any adjustments to your diagram, please do so. Please insert your use case diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s needs.]*



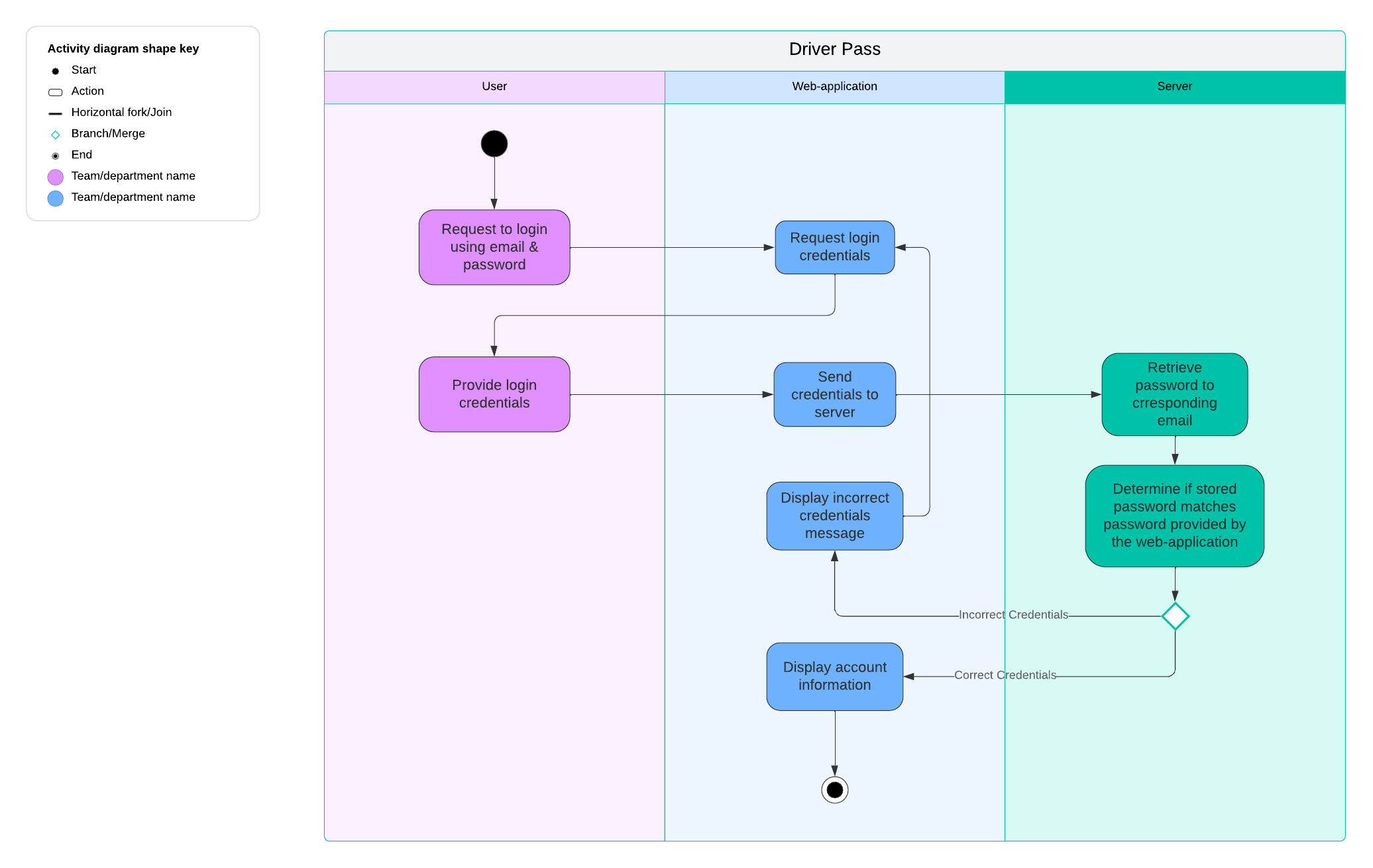
### UML Activity Diagrams

*[You were asked to choose* ***two*** *use cases and create* ***two*** *activity diagrams, one for each use case. Please insert* ***both*** *of your activity diagrams here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s needs.]*

Change account password:

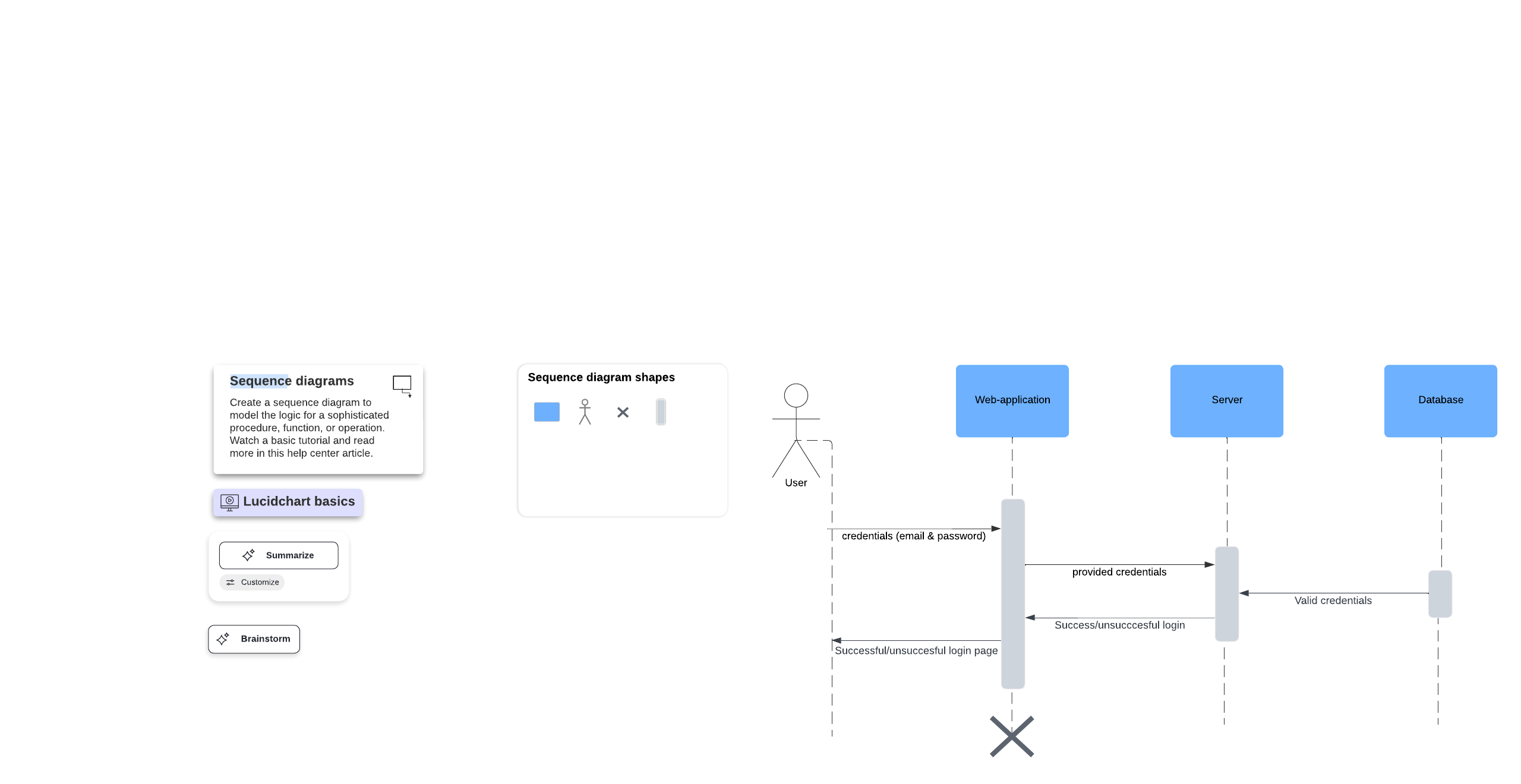
### 

### Login:



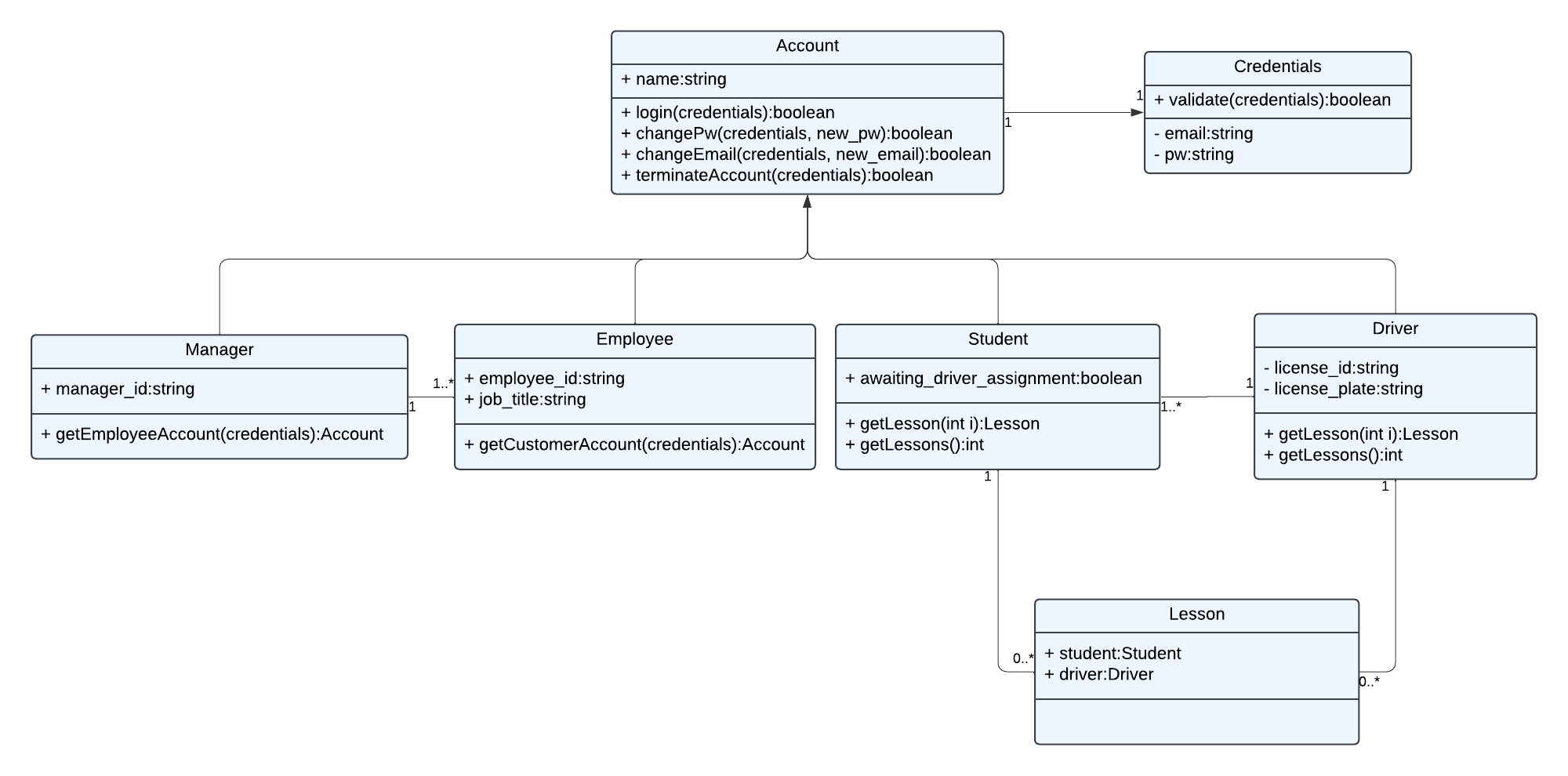
### UML Sequence Diagram

*[You were asked to create a sequence diagram based on* ***one*** *of the use cases you chose. Please insert your sequence diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s needs.]*

Login:

### UML Class Diagram

*[You were asked to create a class diagram based on the different classes and attributes needed for your system design. You are* ***not*** *required to include methods, but you may if you wish. Please insert your class diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s requirements.]*



## Technical Requirements

*[Based on the diagrams you have created, describe the technical requirements of your system. These requirements should address the required hardware, software, tools, and infrastructure necessary for your system design.]*

* Account management capabilities for customers, employees, and managers using a web-application.
  + Some account information such as the account password, may require more authentication before being mutable/viewable, but all information should provide some method to mutate and view the data.
* A serverless environment which hosts a database of accounts.
  + A serverless environment will ensure scalability and security by abstracting the server out of the codebase. Developers will lose some control over the server, but they will rarely interact with the server at all. The database will store tables of information that loosely correspond to the above UML class diagram.
* API endpoints provided by the server to be used in the web-application.
  + Using a RESTful API architecture could ease development for the web-application since there are many libraries and frameworks that work quite well with RESTful APIs.
* Account authentication.
  + Some form of two-factor authentication and potentially a Captcha should be implemented to protect users from bad actors looking to get information that they shouldn’t have access to.