System Description

For this project, we have decided to design a software system that aims to simplify the ticket buying and the seat choosing process by combining the systems into one system that is accessible on both a mobile app and a website. This system should simplify the process of finding a movie theater or a movie and subsequently purchasing a ticket and selecting a seat.

On the back end of the project, we plan on having the ticketing system be the core of the software. It will interact directly with the ticket software, payment system software, theater software, and the account software. The ticketing system should be able to get information about movies without having to go directly through the theater system. The theater system will interact with the movie system and the seat system. Finally, the account system will contain information about the accounts payment method. Using this structure will allow us to maintain control and limit cyberattacks as well as create a solid structure where each system can access the information that each needs.

On the front end of the project, the mobile app and the website should have exactly the same flow. The user should be able to see movie listings, register for an account, and login on the main page. The movie listings page will allow the user to view time and location, the seating arrangement of the theater, and have the option to purchase a ticket. From the registration page, the user should be able to create an account that will allow them to come back and purchase tickets in the future with ease. After logging in, the user should be able to view the tickets that they have and have the ability to cancel their tickets and get a refund if it is available.

The following diagrams will go into deeper detail about both the back end and the front end of the software. Then we have listed an expected timeline and the tasks that each member of the team will be responsible for.