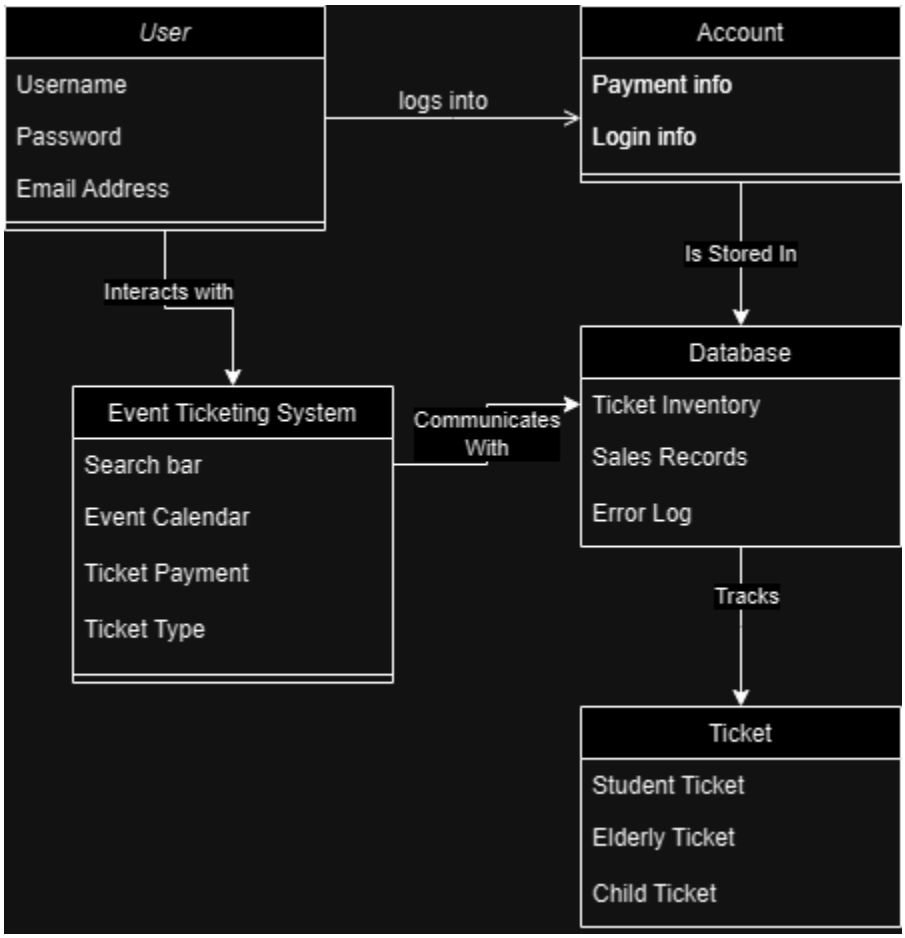
Vision Document

The goal of this project is to create a java app secure ticketing system for the College of Charleston that can interact with a database and allow users to search for events and purchase tickets for those events if available. Additionally, the project will contain a mock process payment and a display message of payment success as well as updating the ticket inventory after a transaction. The project will allow users to securely login to their own profiles using a unique username and a password that must be 15 characters and include a lowercase letter, upper case letter, number, and special character. If possible to implement, the project will also add purchased tickets, event date/time and info to the user's Google Calendar and allow users to choose their seats in a seated event.

Domain Model



Fully-Dressed Use Cases

Use Case Section	*Comment*
Use Case Name	Purchasing a ticket for a play on 10/4/23.
Scope	Java-lagged team designed event ticketing software
Level	User Goal
Primary Actor	User
Stakeholders and Interests	- User: wants to purchase a ticket for a play on a specific date - College of Charleston: wants to receive money from the transaction and ensure an accurate inventory of tickets
Preconditions	- The ticketing software is running and executing normally - There exists some ticket in the inventory that is able to be purchased for a play on the desired date
Success Guarantee	- Transaction is recorded and performed accurately - The ticket is provided to the user without issue - Receipt is also created and distributed to the reader - Ticket inventory is updated accordingly
Main Success Scenario	1. User logs in to the event ticketing system 2. User navigates to the search bar to input the name of the event 3. The search bar returns the event

	that the user is looking for 4. The user purchases a ticket for the event 5. The user proceeds to checkout where payment method can be specified and the transaction can be recorded 6. The transaction completes successfully and the ticket is digitally sent to the user 7. The system updates the ticket inventory to account for the purchased ticket
Extensions	1a. The user attempts to login with incorrect login information 1. An error is reported to the user 2. The user is allowed to try and input their login information up to 5 times 3. If 5 attempts are exceeded, the user will be directed to reset their login information 3a. The search bar does not find the desired event 1. The system will report that 0 results were found from the user's query 2. A pop-up will notify the user to try using the filter feature to try and search for events on a specific day to find their event a. This is useful since the User may have unintentionally misspelled the event name, which caused the system to be unable to find it by name

	alone 4a. The user attempts to purchase a ticket but there are no tickets available 1. A warning will be displayed to the User that no tickets remain for this event 2. They will be notified of any similar events on other days that have available tickets 6a. The transaction fails to complete 1. An error will be displayed to the user and an admin will be alerted to the failure 2. The ticket that was attempted to be purchased will be held in reserve for 24 hours or until an admin can resolve the error and allow the user to purchase the desired ticket 6b. The ticket is never sent 1. An error message will be sent to both the User and an admin 2. The system will allow the user to choose between receiving a full refund or waiting until an admin is able to resolve the issue and send them a ticket 7a. The ticket inventory is not updated/updated incorrectly 1. The system will attempt to check for discrepancies in ticket inventory and alert an admin 2. An admin with appropriate authority will enter the database manually and correct the ticket

	amounts 3. The system will be reviewed to figure out what caused the discrepancy and how to fix it
Special Requirements	- Java - Two-Factor Authentication - Guest Checkout Feature - Compatibility with different payment methods
Technology and Data Variations List	*a. Certain individuals must have admin authority to access the ticket database and resolve any errors that might occur in the system 3a. Search bar that can quickly and accurately find an event based on its name 3b. A search filter that would allow users to specifically search for events of a certain genre or taking place on a certain day or within a certain time span. 5a. A payment system that will allow users to pay using credit card or Cougar Cash 6a. User's email address so that tickets can be sent to them 7a. A database where information about tickets can be stored and updated
Frequency of Occurrence	Almost continuously
Miscellaneous	- How do we ensure that the system will be able to detect

	discrepancies in the ticket inventory if a discrepancy occurs? - If we factor tax into the ticket payment, how do we account for tax law variations? -

Use Case Section	*Comment*
Use Case Name	Searching for a play of a certain genre that has 4 open seats right next to each other.
Scope	Java-lagged team designed event ticketing software
Level	User Goal
Primary Actor	User
Stakeholders and Interests	- User: wants to search for a play of a certain genre that has 4 congruous seats
Preconditions	- The ticketing software is running and executing normally - There exists some play of a desired genre that has 4 congruous seats available
Success Guarantee	- The search filter functions efficiently and accurately without error - The database accurately returns data about the event being searched for
Main Success Scenario	1. The user logs into the Event

	Ticketing System 2. The user navigates to the search bar filter function 3. The user filters all available plays for those that are of a certain genre (i.e. Comedy, Tragedy, etc.) 4. The user further filters these results to find those plays that have 4 congruous seats 5. All plays matching both criteria are accurately displayed to the user
Extensions	1a. The user attempts to login with incorrect login information 1. An error is reported to the user 2. The user is allowed to try and input their login information up to 5 times 3. If 5 attempts are exceeded, the user will be directed to reset their login information 5a. No plays are found that match both criteria 1. The system will report that 0 results were found from the user's query 2. The user will be advised to alter their search filters in order to find other events, since the ones the user desires are unavailable
Special Requirements	- Java - Two-Factor Authentication - Guest Checkout Feature
Technology and Data Variations List	*a. Certain individuals must have admin authority to access the ticket

	database and resolve any errors that might occur in the system 2a. A search filter that would allow users to specifically search for events of a certain genre or having a certain number of congruous seats 5a. A system message that will alert the user if no plays match their desired query
Frequency of Occurrence	Practically continuously

Miscellaneous	- Would users be allowed to specify seat location in addition to congruity?
	  - I.e. would users be able to search for plays with 4 congruous seats in the front row?
	- What would be the default method for displaying events?
	  - I.e. would they be displayed alphabetically or chronologically or in a calendar format?
	- What other filters are available to the user?

Supplementary Specifications

Version 1.0

Creating a basic draft for all additional requirements to start off with

Intro

We will specify all additional requirements for our ticketing system in this document

Errors

Categorize all errors and logs them in a database to be review for consistent problems

Security

You will need 2 factor authentication from a 3rd party app authenticator to sign up for an account, or you will be charged as a guest with no information saved

Usability

All prices will be listed pre tax clearly before purchase, and all fees and other small rules will be listed in bold with different languages, like a no refund policy

Performance

Option for guest check out

Providers

Will need to be able to interact with multiple different providers, like PayPal and other 3rd party online payments.

OTHER

Will need to take data from the college about location and the seating arrangements to accurately display the positions of each seat.

Will need to be able to use the colleges' student verification system to verify student pricing.

Glossary

Version 1.0

Definitions

Ticket

Represents a seat in a theater at a specific time to watch a play

Play

What show will be playing, as well as time frame played and location

Types of payment

Paypal, visa, amex, ect.

Receipts

Summary of transaction given to customer

User info

Accounts that users make

Customer info (different values for different customers)

How many people are going to each play, types of customers (elder, student, adult)

Calendar

Has all events categorized chronologically