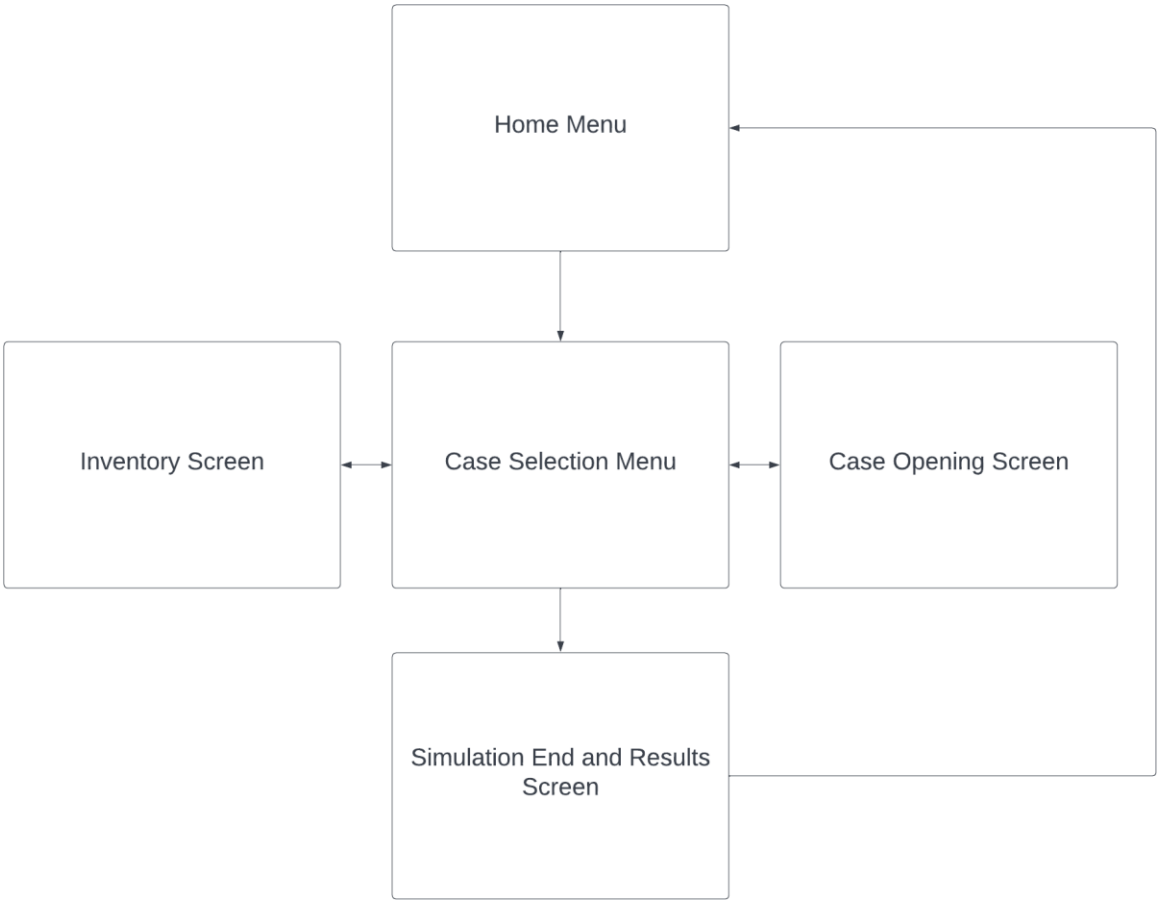
HSC SDD Major Project Diagrams

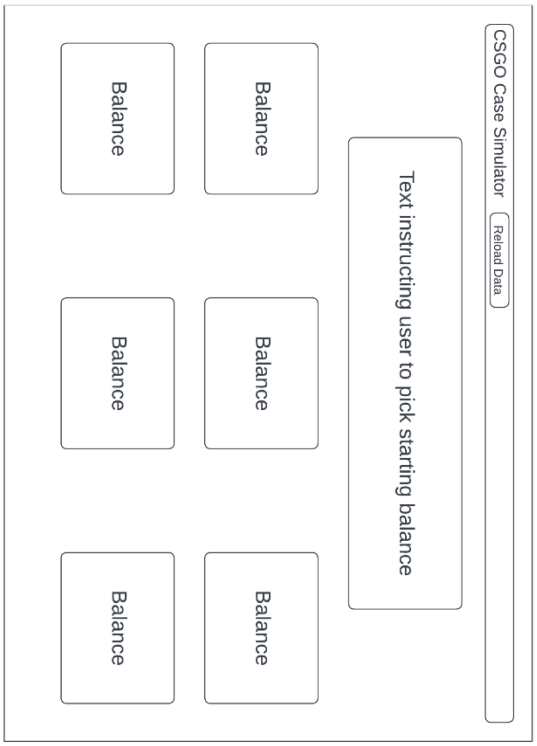
CS:GO Case Opening Simulator

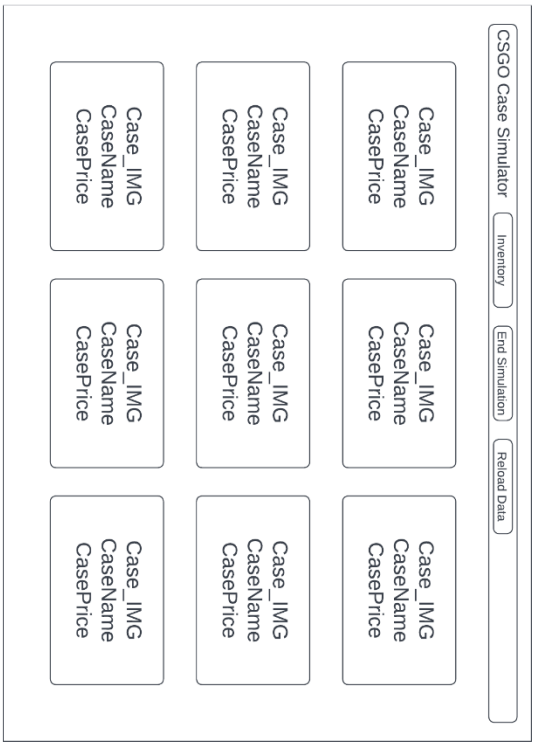
Oscar Reinitz

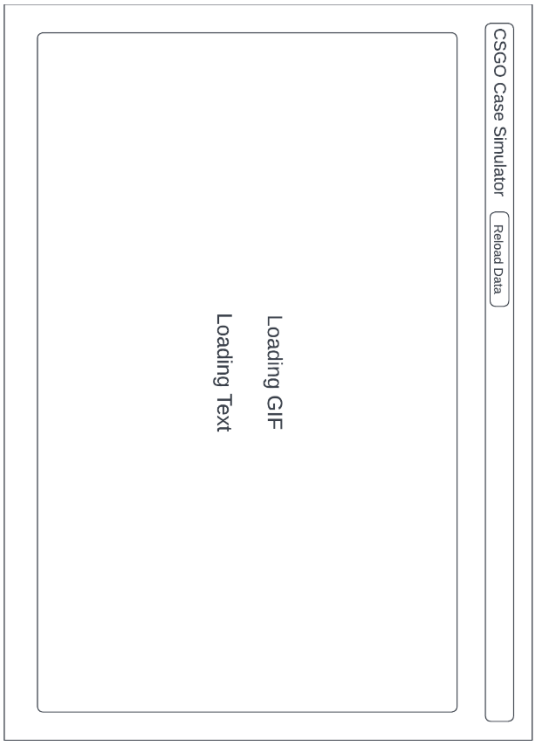
Storyboard

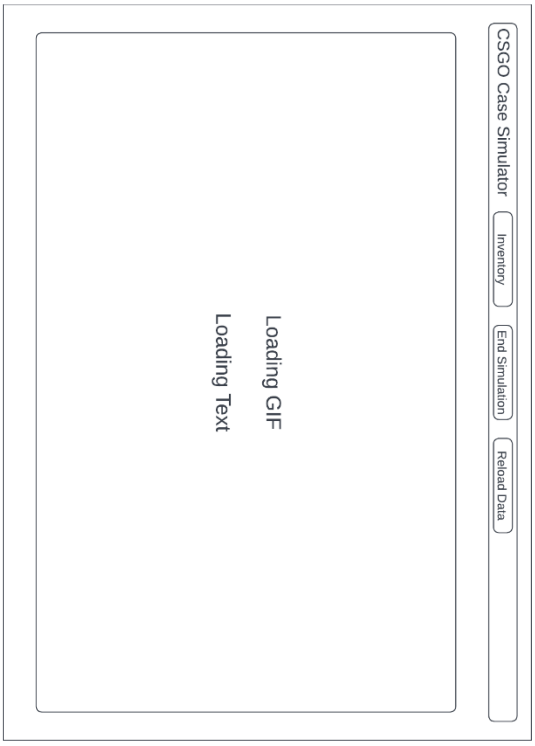

Home Menu
Inventory Screen
Case Selection Menu
Case Opening Screen
Simulation End and Results Screen

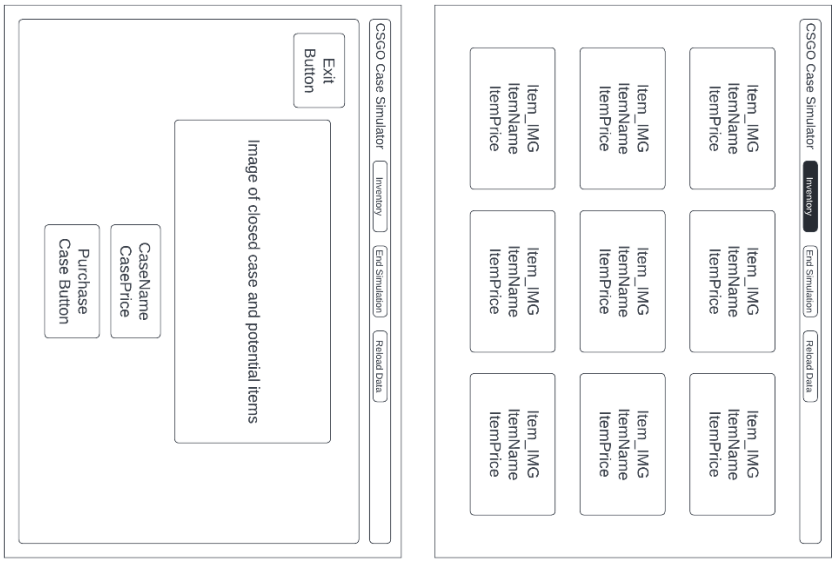
Screen Designs



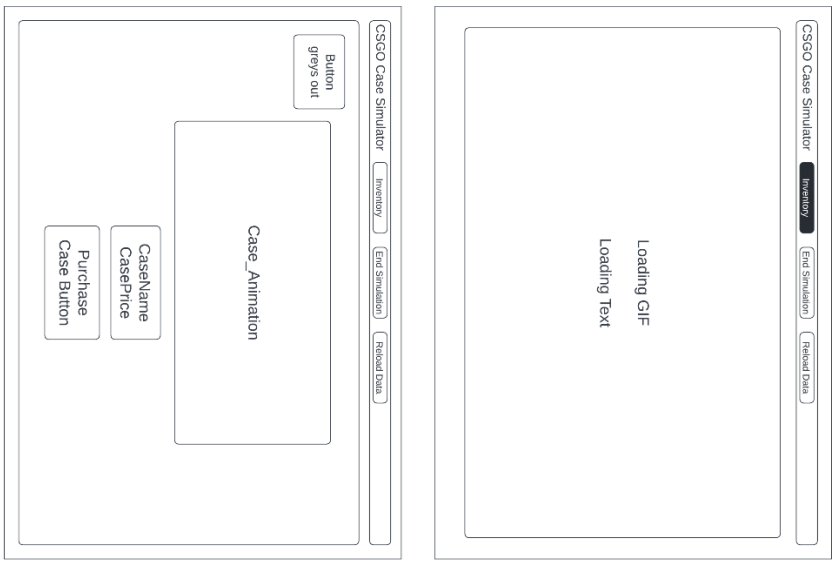






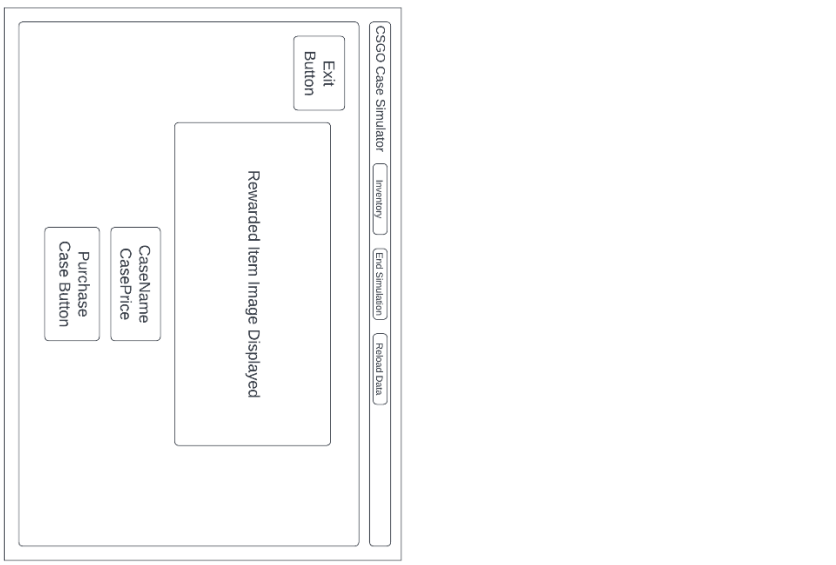

CSGO Case Simulator
Inventory
End Simulation
Reload Data
Item_IMG
ItemName
ItemPrice

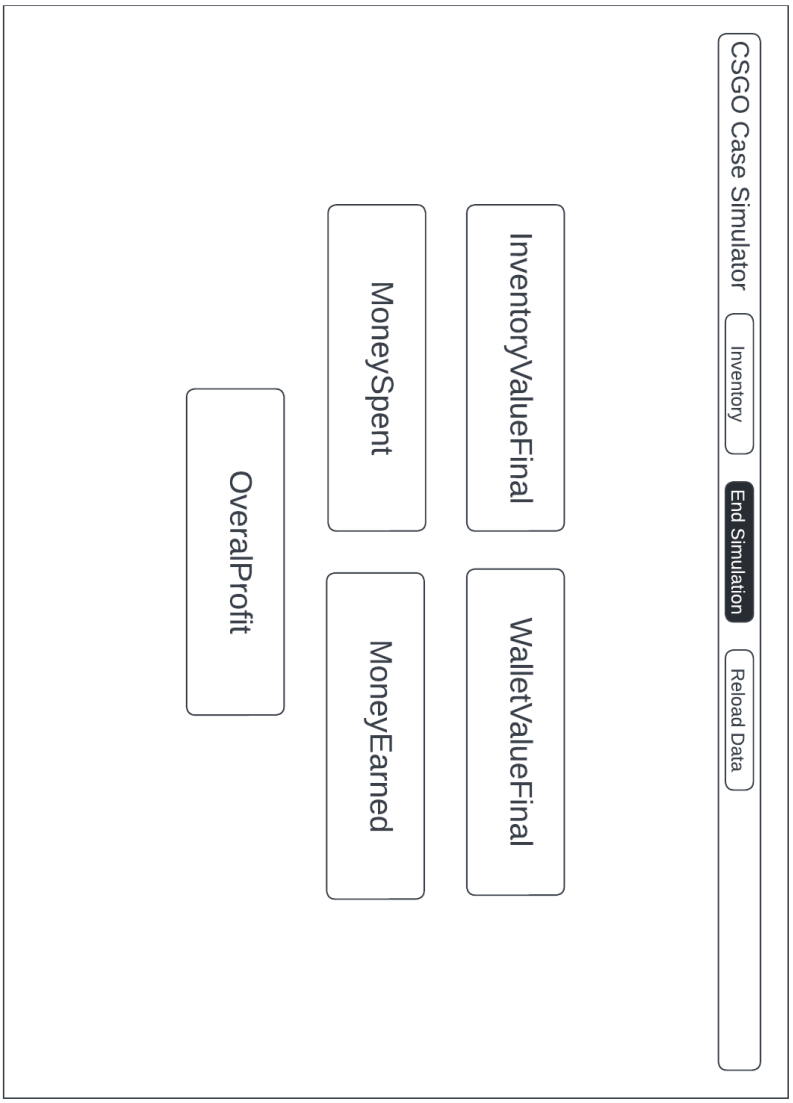
CSGO Case Simulator
Inventory
End Simulation
Reload Data
Item_IMG
ItemName
ItemPrice


CSGO Case Simulator
Inventory
End Simulation
Reload Data
Loading GIF
Loading Text

CSGO Case Simulator
Inventory
End Simulation
Reload Data
Exit Button
Image of closed case and potential items
CaseName
CasePrice
Purchase Case Button

CSGO Case Simulator
Inventory
End Simulation
Reload Data
Button greys out
Case_Animation
CaseName
CasePrice
Purchase Case Button


CSGO Case Simulator
Inventory
End Simulation
Reload Data
Exit Button
Rewarded Item Image Displayed
CaseName
CasePrice
Purchase Case Button


CSGO Case Simulator
Inventory
End Simulation
Reload Data
InventoryValueFinal
WalletValueFinal
MoneySpent
MoneyEarned
OveralProfit

Data Dictionary

Attribute Name	Data Format	Scope	Description
imgHashdata	Object	Global	JSON file retrieved from CSGO:Backpack that is converted into an object within the JS code. Contains the image hashes for every item in Counter Strike Global Offensive
itemData	Object	Global	JSON file retrieved from a sorted mirror of the CSGO:Backpack object. Is updated regularly by a GitHub bot, contains the price data and probability odds for each case and their items variants.
siteActive	Boolean	Global	Stored in local storage. Records if the simulation has begun or not.
inventoryData	Object Array	Global	Stored in local storage. Holds the data of items won from opened cases.
homeDiv	HTML Element	Global	Allows manipulation of homepage Div
mainDiv	HTML Element	Global	Allows manipulation of main case screen Div
simBarDiv	HTML Element	Global	Allows manipulation of header bar Div
loadingDiv	HTML Element	Global	Allows manipulation of the loading screen Div
inventoryDiv	HTML Element	Global	Allows manipulation of inventory Div
inventoryValue	Integer	Global	Stored in local storage. Holds current value of inventory.
totalSpend	Integer	Global	Stored in local storage. Holds how much money has been spent
totalSold	Integer	Global	Stored in local storage. Holds how much money has been made from sales.
totalProfit	Integer	Global	Calculated when simulation is finished, combines the value of sold item, the value of current inventory and how much money was spent to calculate the overall profit of the simulation
startValue	Integer	Global	Holds the initial starting value once selected by user.
myBalance	Integer	Global	Stored in local storage. Holds user's current balance.
lenCase	Integer	Local	Length of the nameArray used within the populateCases function
nameArray	Object Array	Local	Object array created from a select part of the itemData object
imgHash	String	Local	URL string that is created using the current case image hash data.

IPO Charts

Case Search

Input	Process	Output
• Name of Desired case	• Binary search of an array containing the case names. • Hide DIVs of cases which names do not match the desired case name.	• Case matching the input name is shown to the user

Case Roll

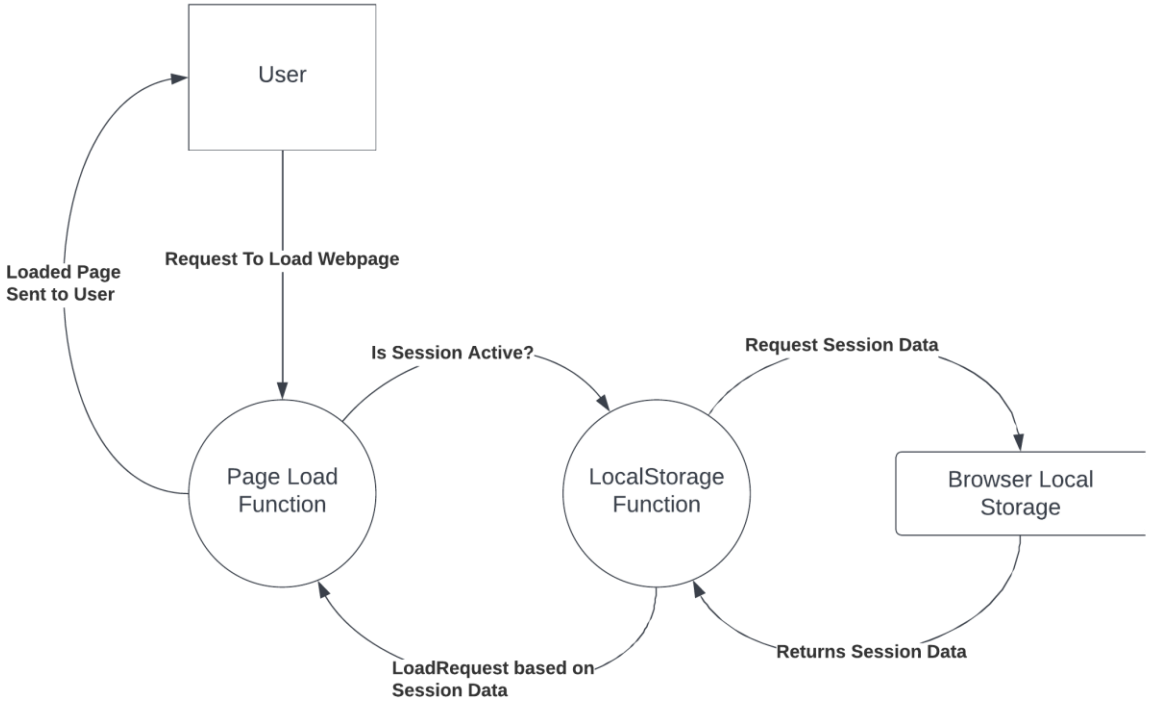
Input	Process	Output
• User Balance • Case Data	• Deduct case price from user balance • Retrieve case odds from case data • Retrieve item list • Randomise an item based upon case odds • Store won item in local storage	• Display won item to user

Case Page Loading

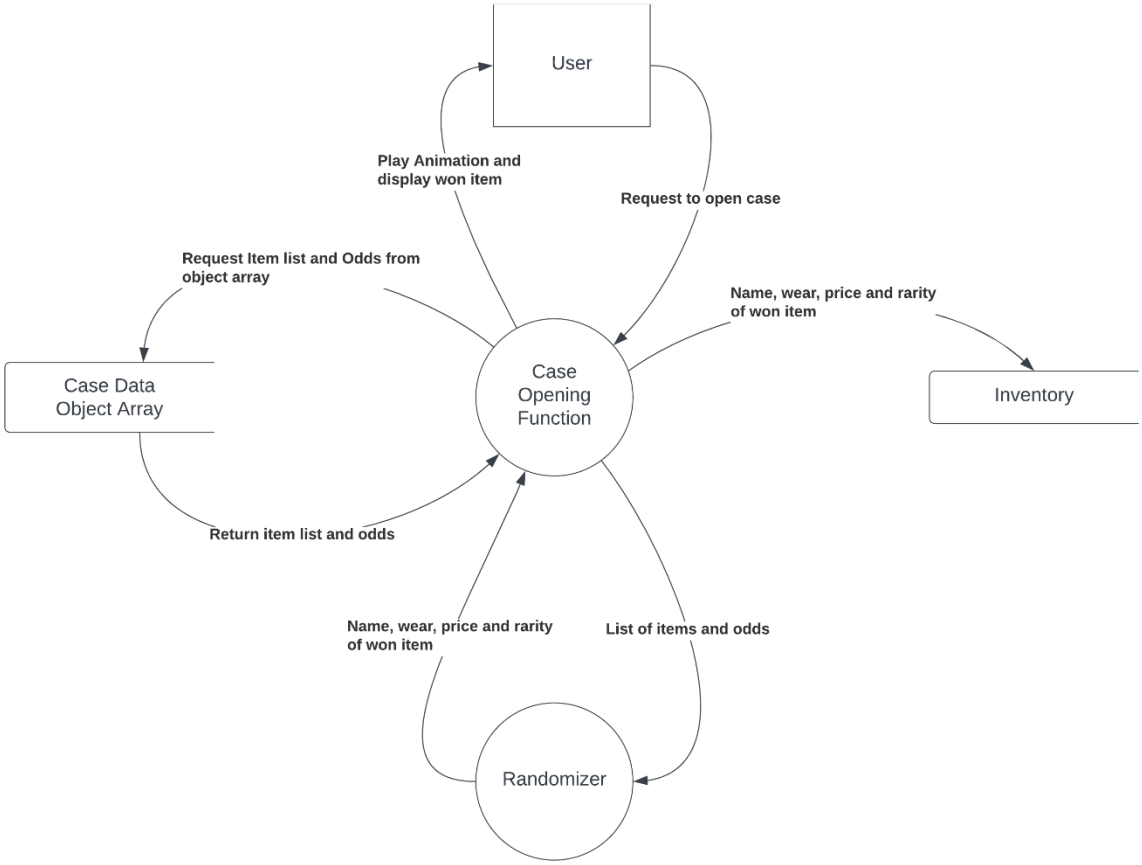
Input	Process	Output
• Image Hash Data • Case Data	• Toggle loading screen div while populating • Determine number of cases from data • Read name of case from data and populate HTML element • Read image hash from data and populate HTML IMG source • Read price data of case from data and populate HTML element	• Loading screen shown while cases populate the website • Once loaded, a grid of each case, their price and image is shown to user.

Data Flow Diagram

Page Loading

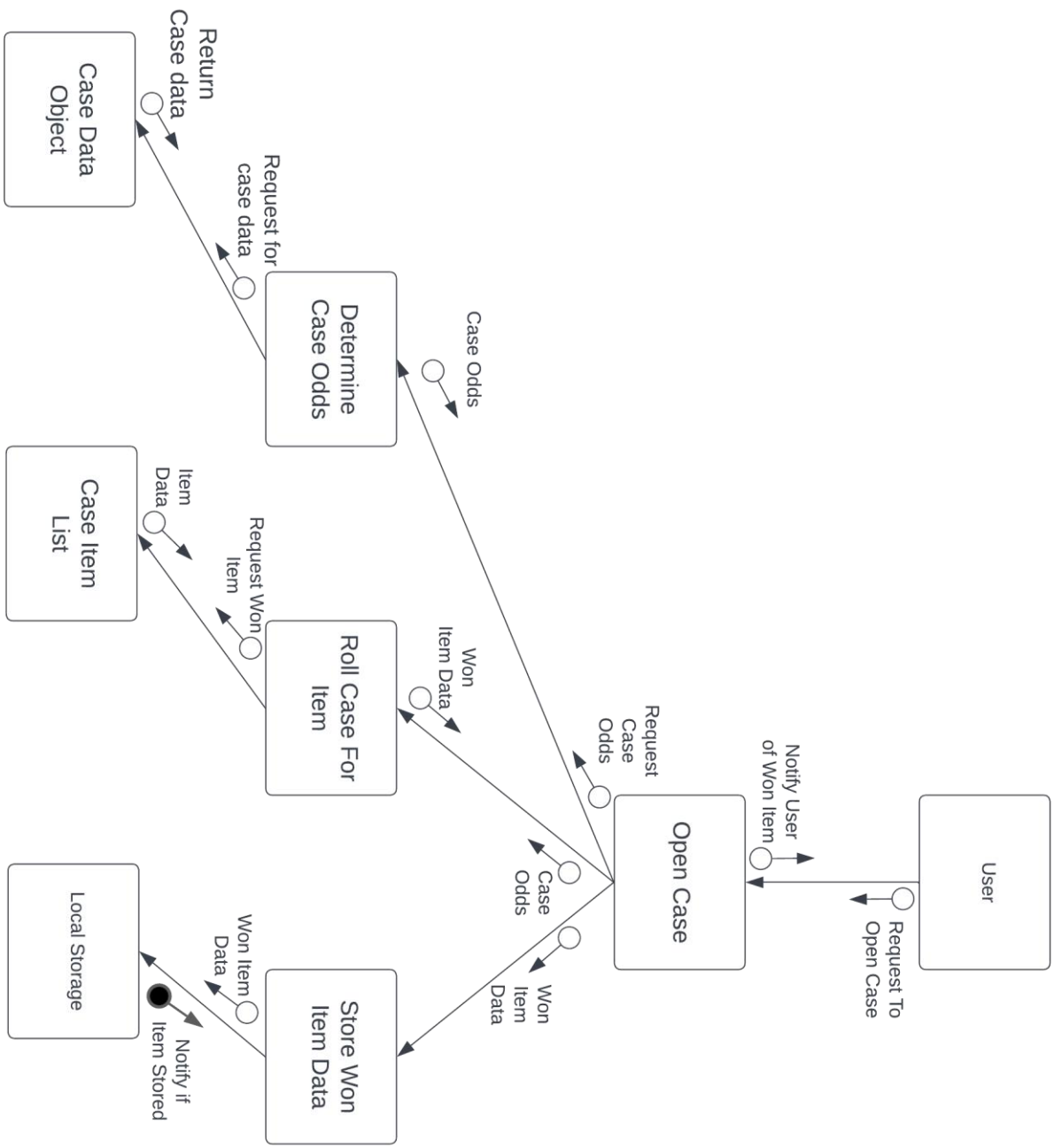


Case Opening



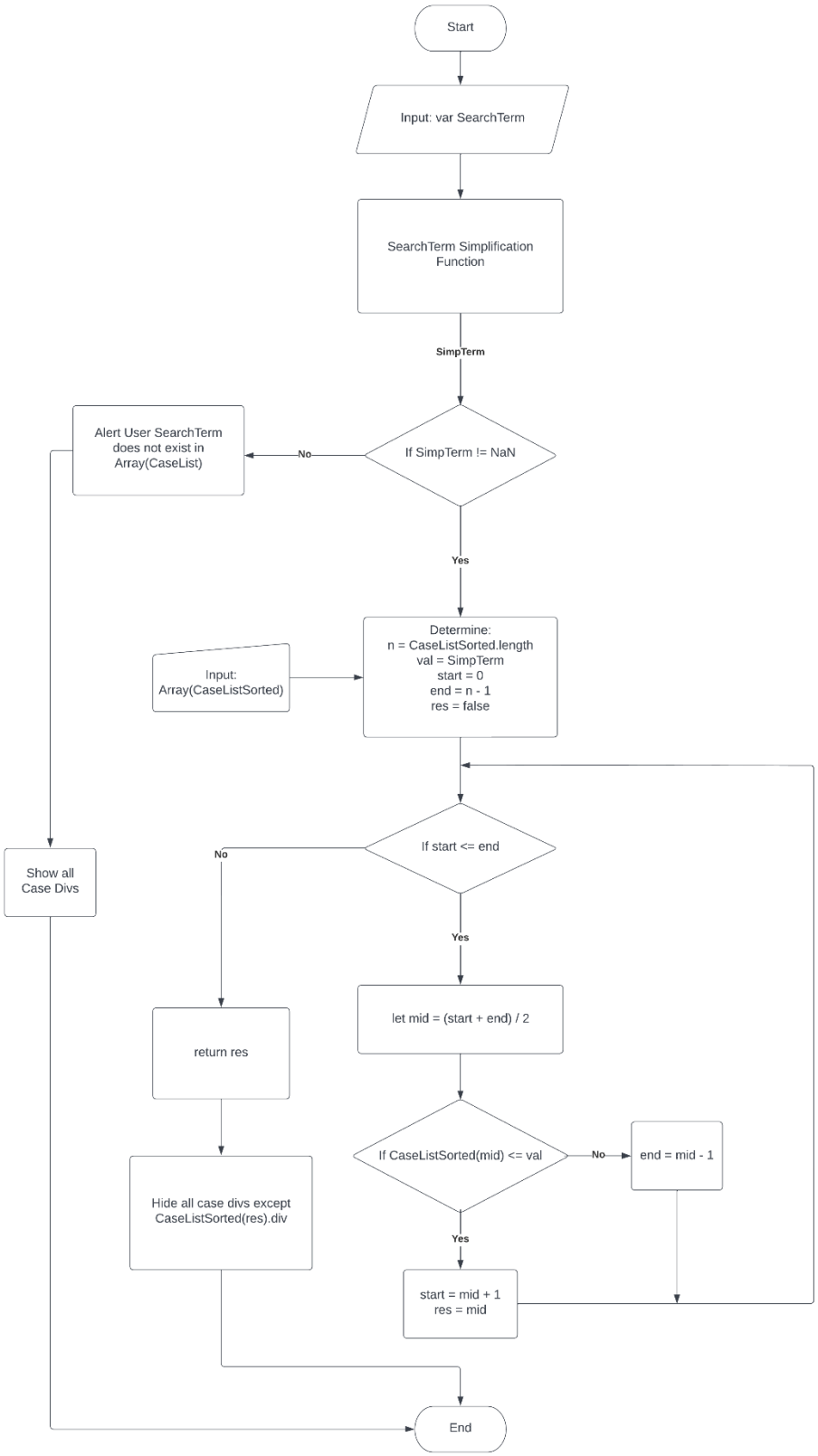
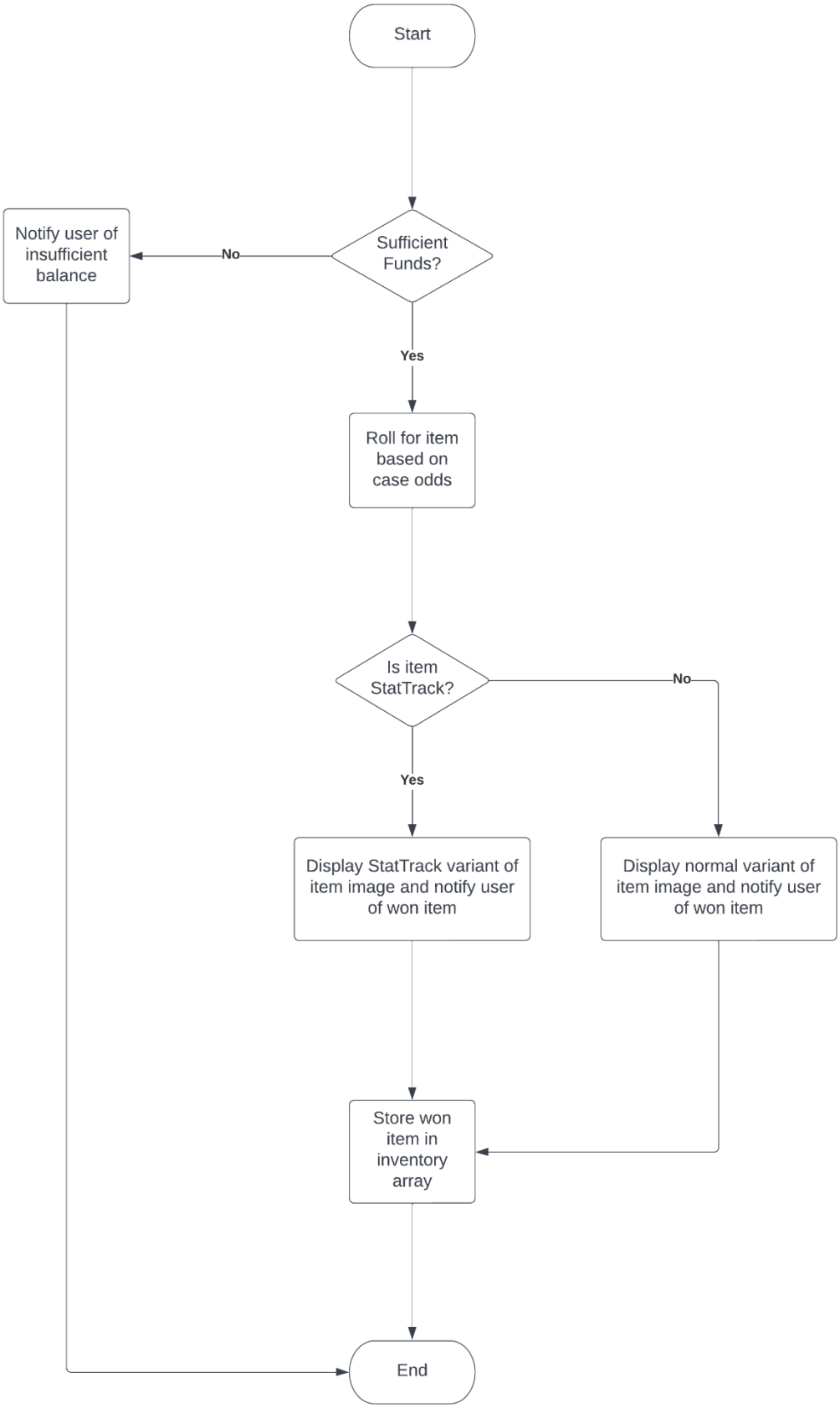
Structure Diagram

Case Opening



System Flowcharts

Case Search



Case Opening