VENDA: Requirements Document

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This document includes the Detailed Design documents for Milestone #2

Requirements

Legend

Priority	**Code**
Must Have	MH
Should Have	SH
Nice to Have	NH

Requirements Document			
Electronic Asset Trading Platform			
Category	Requirement	Acceptance Criteria	Priority
Functionality	Distribute and share resources across the organisation	**Given** that I am part of an organisational unit, **When** I use the Asset Trading Platform, **Then** I can distribute and share resources across the organisation	MH
	Process orders within a credit balance	**Given** that I am part of an organisational unit, **When** I make an order, **Then** a credit balance of the unit the user belongs to would be used	MH
	Enables users to buy and sell assets virtually	**Given** that I am looking to make a trade on the 'Order' page of the virtual platform, **When** I make an order on a particular asset, **Then** I can buy or sell assets within my organisational unit's credit balance	MH
	Users are able to add/remove offers they (or others in their organisational unit) have listed	**Given** that I am on the 'Order' page as a user part of an organisational unit, **When** I am viewing a list of orders from my organisational unit, **Then** I am able to add or remove outstanding orders for/from my organisational unit	SH
	Add new assets to platform	**Given** that I am an IT Admin on the 'Add' page, **When** I select 'Add Asset', **Then** I should be able to add a new asset on to the marketplace for organisational units to trade	MH
	Trades performed via order system, not synchronously	**Given** that I have made/will make a buy/sell order for an asset, **When** the order executes, **Then** the assets should be facilitated via an order system of existing orders, not synchronously with another organisational unit who agrees to trade	MH
	Periodically check and reconcile all outstanding trades	**Given** every 10 trades made on the platform, **When** the 10th order is executed, **Then** the system will automatically perform a reconciliation of quantities and orders in the system	MH
	Set quantity and price of buy and sell orders	**Given** that I am on the 'Order' page looking to make an order, **When** I am making the buy/sell order, **Then** I should have inputs to set a limit on the volume and price of my trade	MH
	Trades will proceed only if both parties accept the terms	**Given** that I have made an order for an asset, **When** the order executes, **Then** the trade will only proceed if both parties accept the terms of the price and quantity or if bid price is greater than or equal to offer price and bid quantity is less than or equal to offer quantity	MH
	Categorise assets in asset types	**Given** that I am an IT Admin on the 'Add' page, **When** I select 'Add Asset', **Then** I should be able to categorise an asset into a specific asset type	MH
	Platform utilises 1 server	**Given** that I am using the Asset Trading Platform, **When** I connect to the server that stores the data, **Then** I should only need to connect to 1 server	MH
	Record every organisational unit's assets, credit balance and all trades	**Given** that the system is functioning correctly, **When** any new assets, new trades and change of balances occur, **Then** the system should be able to record all this information to ensure everything is reconciling	MH
	Organisational Users must be able to add initial inventory numbers	**Given** that I am on the 'Portfolio' page, **When** I click the '+' button, **Then** I should be able to add initial and additional asset numbers and assets to my portfolio	MH
	Add user into platform	**Given** that I am on the 'Add' page as a IT Admin, **When** I click 'Add User', **Then** I should be able to add a user into the system along with their corresponding mandatory fields	MH

	Add organisational unit into platform	**Given** that I am on the 'Add' page as a IT Admin, **When** I click 'Add organisation', **Then** I should be able to add an organisational unit into the platform	MH
	Assign and edit the number of credits a unit has	**Given** that I have access to the number of credits a unit has, **When** I log into the platform as an IT administrator, **Then** I am able to edit the number of credits a unit has	MH
	Assign and edit the number of assets a unit has	**Given** that I have access to the number of assets a unit has, **When** I log into the platform as an IT administrator, **Then** I am able to edit the number of assets a unit has	MH
	Add new users, assign passwords and organisational unit	**Given** that I am on the 'Add New User' page as an IT Admin, **When** I add a new user, **Then** I should be able to assign a password and organisational unit	SH
	Members of the IT Admin team are given special user accounts to access special (administrative) functions	**Given** that I am authorised as a member of the IT Admin team, **When** I sign into my account with my unique username and password, **Then** I will be given access to administrative functions.	MH
	Authorise users into system via username and password	**Given** that the user enters a unique username and password, **When** the system successfully authorises the user, **Then** access to their account will be granted.	MH
	User can view buy and sell offers for certain asset	**Given** I am on the 'Asset Information' page as a user, **When** I view 'Open Offers', **Then** I should be able to view buy and sell offers for certain asset	SH
	Passwords encrypted before sending. Plaintext passwords not allowed.	**Given** an account is being made, **When** the password is entered, **Then** it should be encrypted before sending	SH
	User can change password	**Given** that I have a password to my account, **When** I forget my password, **Then** I should be able to change it without contacting a member of the IT Admin team.	SH
	Member of a team can make trade for organisational unit	**Given** that I have access to an organisational unit, **When** I access the 'Order' page, **Then** I should be able to make a trade for an organisational unit	MH
	Make request for new team member, asset, organisation unit, asset type	**Given** that I am a Leader of organisational unit, **When** I need to make a request for something new in the system, **Then** I should be able to exclusively have a section where I can do that	SH
	Navigational Search Bar	**Given** that I am a user not too familiar with the platform, **When** I am lost finding a functionality, **Then** I should be able to search for what I want	NH
	Search bar for Orders	**Given** that I want to trade an asset for my organisational unit, **When** I am about to make an order, **Then** I should be able to search for an asset via its name or code to buy it	SH
	Watchlist for assets	**Given** that I want to trade an asset for my organisational unit, **When** I am about to make an order, **Then** I should be able to search for an asset via its name or code to buy it	NH
	View portfolio	**Given** that I am an employee in a organisational unit, **When** I want to see what asset's we do/ don't have, **Then** I should be able to view my portfolio and its current worth	SH
	Historical prices	**Given** that I want to trade an asset for my organisational unit, **When** I am about to make an order, **Then** I should be able to view a history of the course of sales for that asset with past prices	NH
	Add new IT Admin Users	**Given** that I am a IT Admin, **When** I press 'Add New User', **Then** I should be given the option of adding a new IT Admin User	MH
	View assets information (price, quantity, open trades, graphs, course of sales, description)	**Given** that I want to trade an asset for my organisational unit, **When** I am shopping around for different items, **Then** I should be able to click into an asset and view all the relevant information I need to determine whether I should trade	MH
	Add Asset to Customised Watch List	**Given** that I want to keep an eye on a specific asset, **When** I click the 'Add Asset' button on the 'Watch List' page, **Then** the assets should be added to my customised watch list on my dashboard	NH

Design	Simple, user friendly GUI interface	Given that I am using the interface, When I interact with the platform, Then the Platform GUI should be easy to understand and navigate through	SH
	Aesthetically pleasing color palette	Given that I am using the interface, When I interact with the platform, Then the Platform GUI should utilise a consistent color palette	NH
	Consistent styling across the whole interface	Given that I am using the interface, When I am using the site, Then each page within the interface should follow a consistent style guide	SH
	Message display noticeable	Given that I am on the 'Main Page', When a trade from involving my organisation has been reconciled, Then a message display should stand out to inform me of the outcome	NH
	Button for BUY and SELL on 'Asset Information Page'	Given that I am on the 'Asset Information' as a user, When I view different assets, Then different buttons for buy and sell should be displayed	NH
	Graphing for Historic Trade Price	Given that I am an 'Asset Information' Page, When I view the historic trading prices of the asset, Then the interface should present a graph of this information	NH
	Categorize Assets	Given that I am on the 'Portfolio' page, When I view my organisation's assets, Then the assets bought and sold by my organisation should be presented in an effective manner	NH
Usabilility	When a user is buying/selling an asset, current buy and sell offers are listed	Given that I am on the 'Order' page and am a user, When I view the assets buying and selling, Then current buy and sell offers for assets are listed	SH
	Each verified employee has their own unique username and password	Given that I am on the 'Login Page', When I fill in my username and password, Then the inputted details should be verified and the username unique	SH
	Employees are given credit balances based on their organisational unit	Given that I am within an organisational unit, When I interact with the interface, Then I should have access to the credit balance of my organisational unit	MH
	Employees have access to assets based on their organisational unit	Given that I am within an organisational unit, When I am trading assets, Then I should have access to assets based on my organisational unit	MH
	Users able to categorise assets in asset types	Given that I am on the 'Order' or 'Portfolio' pages as a user, When I am viewing the assets, Then I should be able to categorise the assets in asset types	NH
	List of Course of Sales	Given that I am on the 'Asset Information' Page as a user, When I view the sales of the organisational unit, Then a list of the course of sales should be presented	SH
	Graph of Sales and Price (FILTERING)	Given that I am on the 'Asset Information' page, When I am viewing the trade price history of an asset, Then a graph should be displayed to represent the price information	NH
	Be able to view asset name, last price, volume of trade, quantity available	Given that I am searching for an asset, When I view details on a specific asset, Then I can view the asset name, last price, volume of trade and quantity available	SH
	Message user when a trade is executed	Given that I am on the 'Dashboard', When a trade from involving my organisation has been reconciled,	NH

		Then a message should be sent to inform of the outcome	
	I want to be able to see what current BUY and SELL offers are currently listed	Given that I am on the 'Order' page as a user, When I view all the listed assets, Then all of the current buy and sell offers should be presented	SH
	Read from some kind of configuration file to get the server IP address and port to connect to	Given that I am accessing the interface, When I am connecting to the server, Then I should read a configuration file of the server IP address and port	SH
	I want to see a listing of my assets and the quantity I have	Given that I am on the 'Portfolio page' as a member of the organisation, When I am viewing the assets of the unit, Then it should list the assets and quantity the unit has	SH
	Sort Assets by Selected Attributes	Given that I am on the 'Order page' or 'Portfolio' page, When I am viewing the assets, Then I can sort the assets based on Name, Unit Code, Price, Available Quantity, Buy/Sell	NH
	Notification Page to view trades	Given that I click on the 'Notification' button, When I view my notifications for my unit trades, Then I can view new messages regarding trade outcomes	NH
Business Rules	User belongs to organisational unit		MH
	User belongs to organisational unit		MH
	Asset belongs to asset type		MH
	Users are either admin or normal users		MH
	Fields for a Trade: BUY/SELL, Volume, Price, Order_ID, Datetime, Asset_ID, User_ID, Order_Status, Filled		MH
	Field for Asset: Asset_ID, Asset_Name, Asset_Quantity, Asset_Price, Unit_ID		MH
	Field for User: User_ID, User_Name, User_Position, Admin_Flag, Unit_ID, password		MH
	Field for Organisational Unit: Unit_ID, Unit_Name, Credit_Balance, Limit		MH
	Order executes if bid price >= offer price		MH
	User belonging to organisational makes order for organisational unit		MH
	Order does not execute if out of budget		MH