

CURRENCY BUYER USER MANUAL

MUKURU TECHNICAL TEST

JACQUES ARTGRAVEN

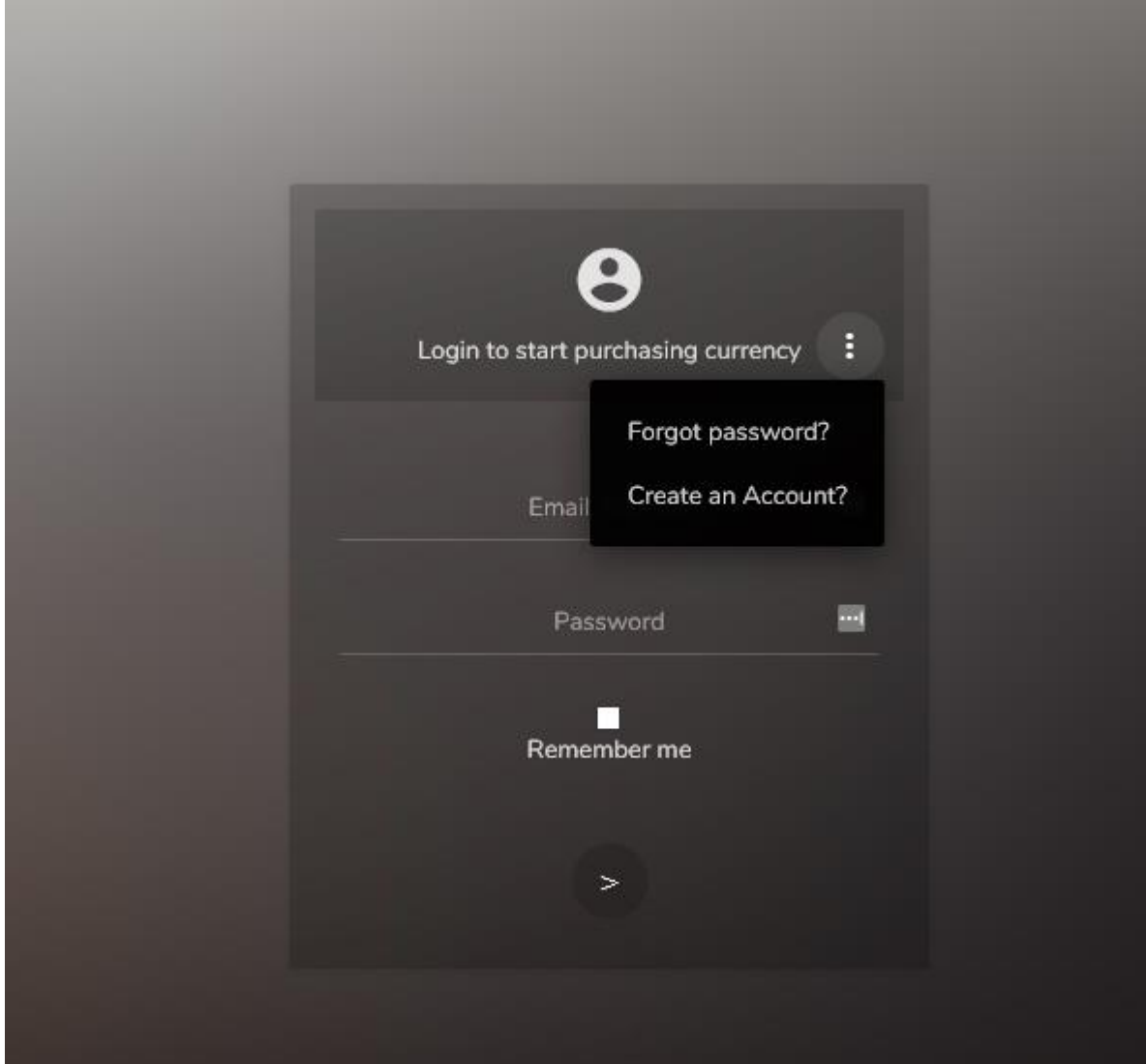
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Login and registration

The public is able to register or login if they already have an account. But a user must be registered before they can login and purchase any currency.

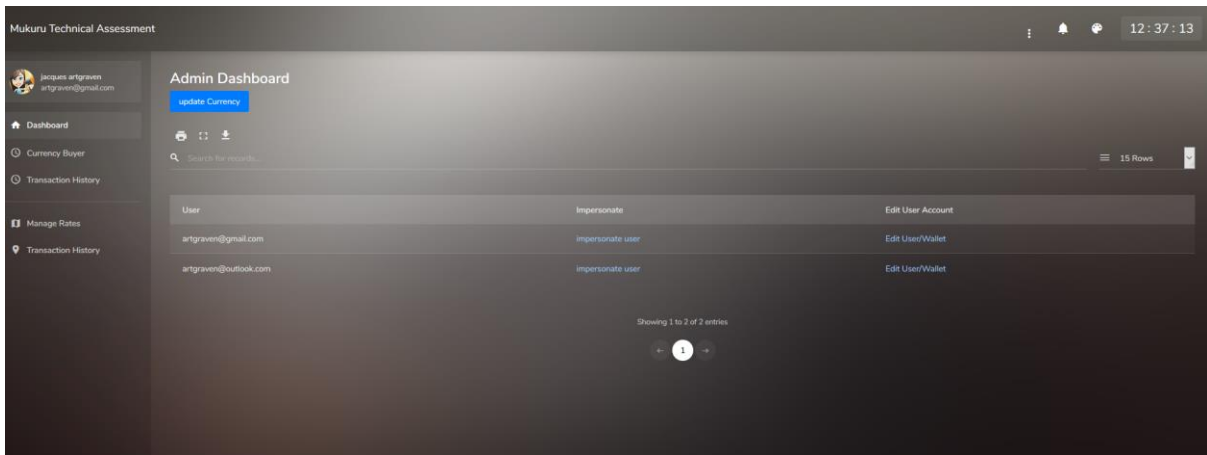
We automatically award a new user with 100 credits in usd



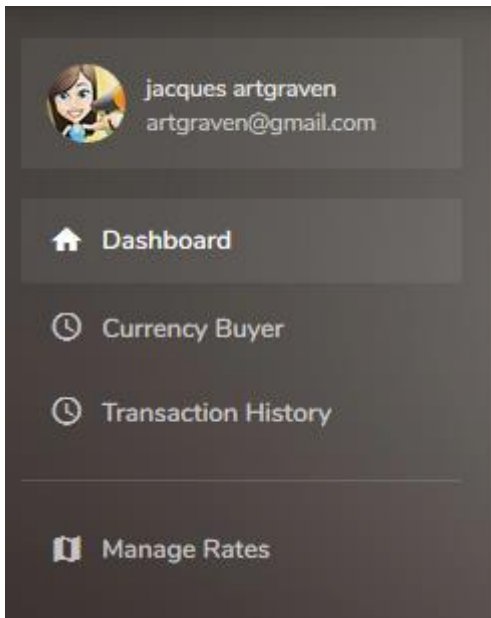
In our first screen we can either login or we can recover our password or create a new account

When registering you will automatically be logged in

Navigation

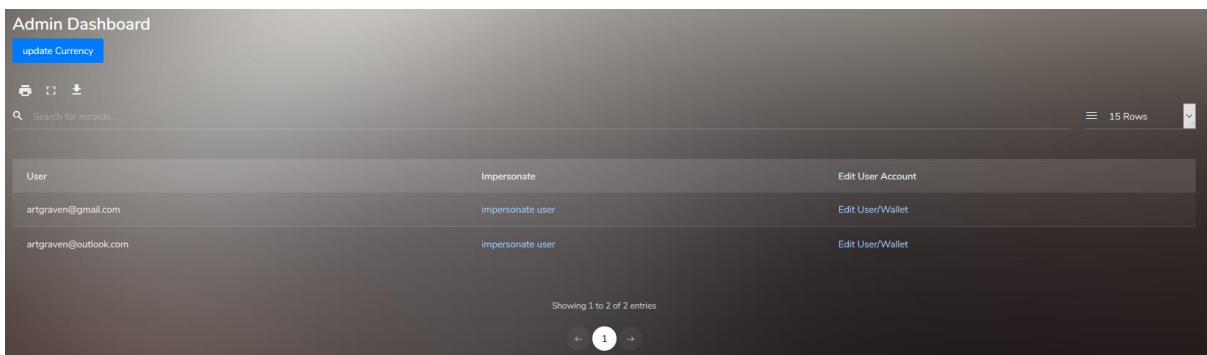


When logged in as an admin I see a number of additional options not seen by normal users



Currency Buyer and Transaction history is the same for both user levels but the difference being Transaction History for a normal user shows only his or her transaction history and for admin will show all

Dashboard



The admin dashboard has 2 key features

Update Currency

This will do a run to the jsonrates api and get the current rates. It will either insert ones that don't exist or update existing ones.

User management table

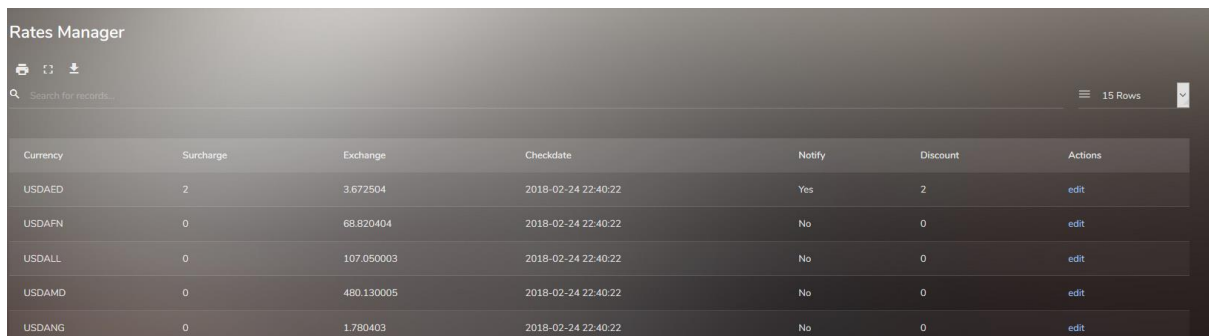
Note that all tables in the system has the ability to filter as well as export or print.

There are 2 essential features here

- Impersonate
 - The ability to impersonate the user and act on their behalf
 - Remember to exit impersonation when done
- Edit User/Wallet
 - The ability to modify funds in the users wallet as well as update details to their profile such as name, surname and so on

Manage Rates – admin only

This is a screen that shows all the current rates pulled from the api but allows us to update them with their rules



The screenshot shows a web interface titled "Rates Manager". At the top left, there are icons for refresh, search, and download. Below these is a search bar with the placeholder text "Search for records...". On the top right, there is a menu icon and a dropdown showing "15 Rows". The main content is a table with the following columns: Currency, Surcharge, Exchange, Checkdate, Notify, Discount, and Actions. The table contains five rows of data:

Currency	Surcharge	Exchange	Checkdate	Notify	Discount	Actions
USDAED	2	3.672504	2018-02-24 22:40:22	Yes	2	edit
USDAFN	0	68.820404	2018-02-24 22:40:22	No	0	edit
USDALL	0	107.050003	2018-02-24 22:40:22	No	0	edit
USDAMD	0	480.130005	2018-02-24 22:40:22	No	0	edit
USDANG	0	1.780403	2018-02-24 22:40:22	No	0	edit

In the edit form for rates we can

Rate edit

[update](#)

Currency
USDAFN

Surcharge
0

Exchange
68.820404

Notify

Discount
0

[Back to the list](#)

Over write and update

- Surcharge
- Exchange rate
- Notify – whether a mail gets sent out as confirmation or not
- And the discount rate

Buyer Dashboard

the buyers dashboard allows the same data table we are already familiar with but now has the features of getting a quote for the currency to usd and currency for usd

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Buyer Dashboard

Search for records... 15 Rows

Currency	Exchange Rate	Discount	Quote TO usd	Quote FOR usd
USDAED	3.672504	2	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDAFN	68.820404	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDALL	107.050003	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDAMD	480.130005	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDANG	1.780403	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDAOA	212.809998	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDARS	19.948999	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>
USDAUD	1.274304	0	enter the amount of currency to purchase <input type="text"/> <input type="button" value="get quote"/>	enter the amount of usd you wish to quote for <input type="text"/> <input type="button" value="get quote"/>

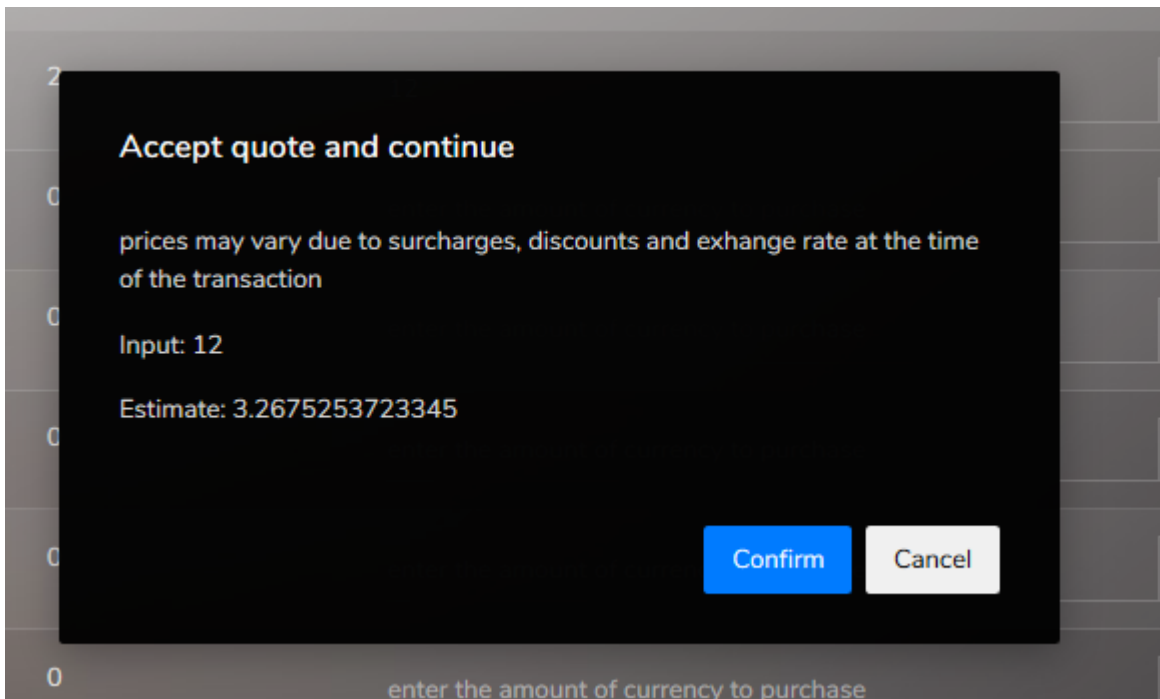
Once I enter a value in either field

Quote TO usd

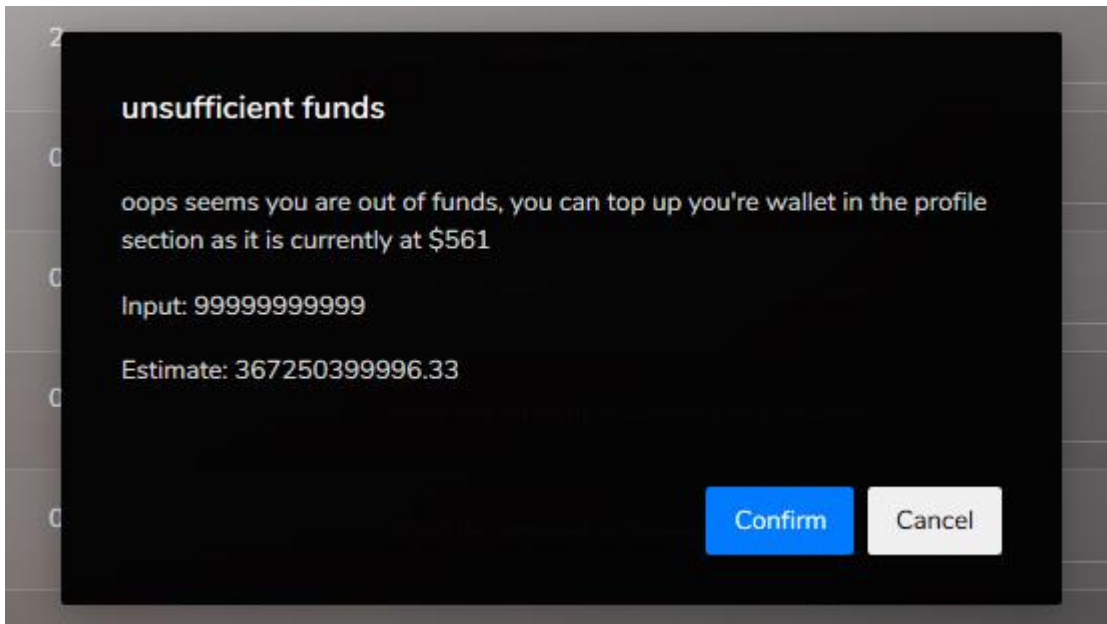
Quote FOR usd

I press get quote for the quote

Which will create a modal popup with the option to cancel or confirm the transaction



Please note you must have enough funds in your wallet or it wont let you proceed



if I have enough funds and I press the confirm we will pass this to the transaction controller

and if all is well there we will be redirected to our confirmation page

please note the quote generated at first is based on the exchange rate

but the invoice following is the final amount after discounts and surcharges have been applied as it will be outlined in the table.

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TAX INVOICE

Invoice from Artgraven Interactive LLC 33, Homestead Rivonia, Gauteng South Africa 083386859 artgraven@gmail.com	Invoice to admin 89 Garsfontein Mukuru Offices, Pretoria South Africa. artgraven@gmail.com
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Invoice# 12	Date 25-02-2018	Paid \$ 10	Purchased 37
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ITEM DESCRIPTION	VALUE
Currency	USDAED
Exchange rate at the time of purchase	3.672504
The surcharge at the time of transaction	2
The amount of currency Purchased	37
The time of the transaction	February 25, 2018 12:51
Transaction Complete Status	1
Total	\$ 10

LEGAL NOTICE
Ornare non tortor. Nam quis ipsum vitae dolor porttitor interdum. Curabitur faucibus erat vel ante fermentum lacinia. Integer porttitor laoreet suscipit. Sed cursus cursus massa ut pellentesque. Phasellus vehicula dictum arcu, eu interdum massa bibendum.

THANK YOU FOR YOUR BUSINESS
Proin ac iaculis metus. Etiam nisi nulla, fermentum blandit consectetur sed, ornare non tortor. Nam quis ipsum vitae dolor porttitor interdum. Curabitur faucibus erat vel ante fermentum lacinia. Integer porttitor laoreet suscipit. Sed cursus cursus massa ut pellentesque. Phasellus vehicula dictum arcu, eu interdum massa bibendum sit amet.

support@mukuru.co.za 00971 452 9900 www.mukuru.co.za

Transaction History

This is a table view of all my transactions in the past. Each one with a link to the original invoice

Transaction History

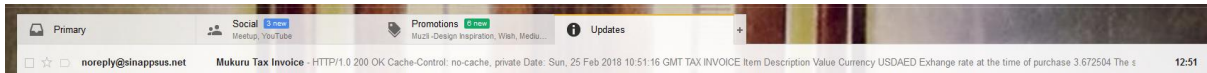
Search for records... 15 Rows

Invoice#	Purchased	Currency	Surplus	Date	Invoice
1	10	USDAED	2	February 24, 2018 20:26	Invoice
2	6	USDAED	2	February 24, 2018 20:31	Invoice
3	15	USDZAR	0	February 24, 2018 21:26	Invoice

Mail Confirmation

Note that if the currency had a yes for notify then I will receive a mail

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Which looks like this



Closing Notes

Unfortunately due to limited time I was unable to get to some of the components.

The calculations on surcharge isnt right yet

I would have loved to do a lot more testing

As to the api part. I didn't write a full fledged api but simply used serialization to output json and used ajax calls to run to process that in the front.

Ideally I would have added an authentication key based on the user id and salt and written a method to verify this then added a page outlining the calls and their paramaters. I would however have used a library to help read my comments or fosRestBundle to help me do this and deal with cross site scripting issues

I added simple rules for methods such as post delete and get but these can be much more refined.

Given the simplicity of the application I didn't do a database diagram and instead used an orm that makes the logic pretty readable but a visual view would be useful if I had to share this with a team

More commenting. I had added some good commenting but I would have liked to do more

I would have used googles location api and added the address as part of the registration and used that to determine the currency based on the address

I would have added more validation, such as forcing numbers only where needed and handling transactions notifications when we the wallet goes into arrears.

Next I started writing a console application to run the currency update in doing this I would have converted the current call out of the controller and into a service object that I could call from there.

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It has been added and you can see it if you run: bin/console currency:update

Right now it will log out that it worked but it wont actually do anything as I didn't have time to implement the service object.

When deploying it I would have implemented a better deployment strategy and I would have locked down the javascript and css files permissions from writing to avoid js/agent attacks