

Welcome to...

# The Jeweller's Assistant



Spot Prices,  
Gallery of Work,  
Stone Collections,  
Calculate Costs and Selling Prices.

*Getting the price right!*  
*Getting the right price!*

The Jeweller's Assistant App was developed out of need. Being a Silver Jewellery hobbyist since 1984, most of my items and pieces have been the result of an "I wonder whether I can..." scenario, so the cost and sale of the items was never really seriously considered - also, they were mostly made as gifts and pretty trinkets - often to impress a girl, occasionally as a request from somebody, and every now and then - a repair.

I love the art of making jewellery. I love the way my stumpy little fingers somehow manage to interpret or translate a thought into something that actually exists.

Creativity is medicine for the soul, and that is all good and well, but as we all know, things can get expensive and if one can at best, sustain a hobby or a workshop, then at least, it makes it all the more worthwhile.

I belong to a number of jewellery making, social-media forums and channels, and quite often, a question pops up about how one costs the items created for re-sale. Good question! A lot of us creative types, know how to solder intricate bezel settings, or how to perfectly pierce a pendant, but we have no accurate idea of how much our talent, time and imagination are worth, so...

The Jeweller's Assistant is designed to help in this regard. It calculates the (current) price of various alloys (Gold, Silver and other metals), it caters for Stones, Findings, Mark-ups, Labour and VAT and generates a recommended Selling Price to assist with the business aspect in which we are all obliged to participate.

I sincerely hope you find this little App helpful (for the hobbyist and professional alike).

Enjoy.

Jonathan

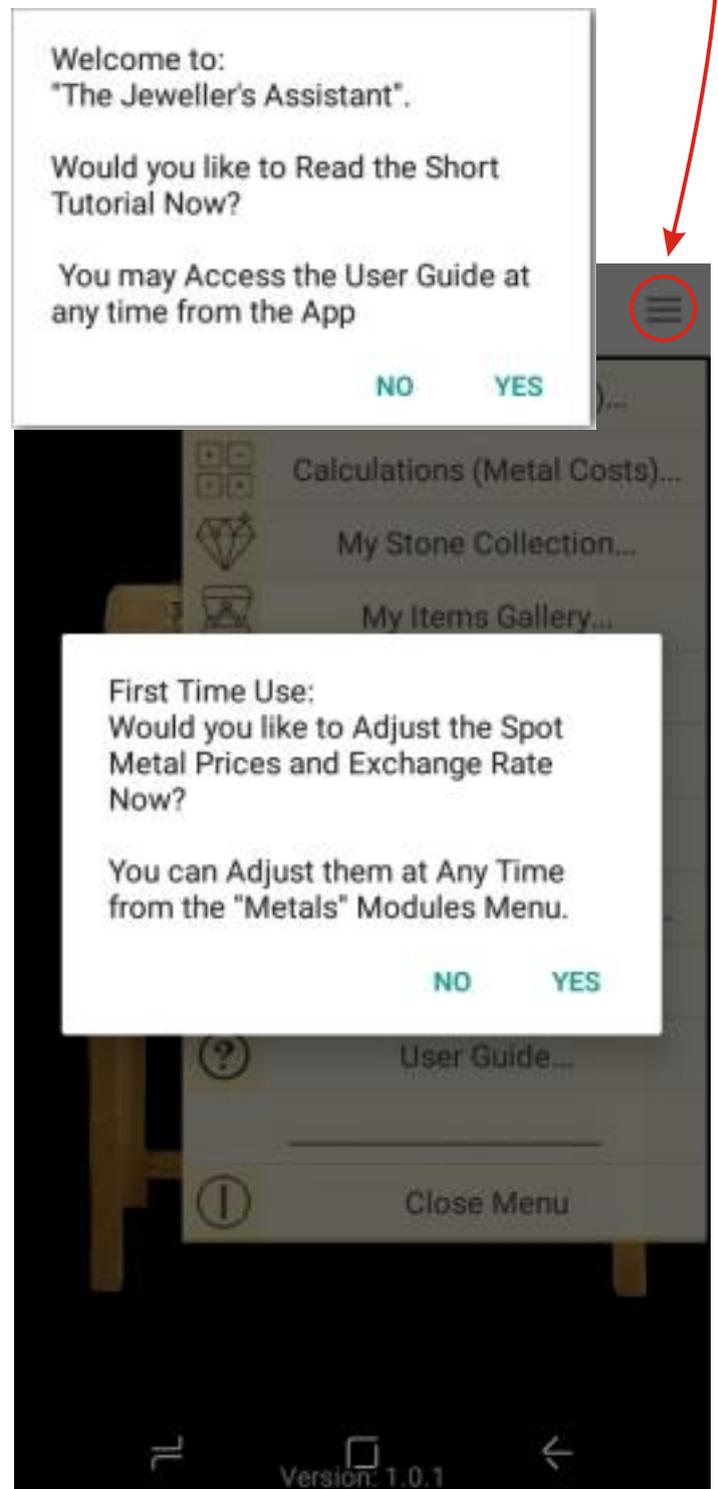
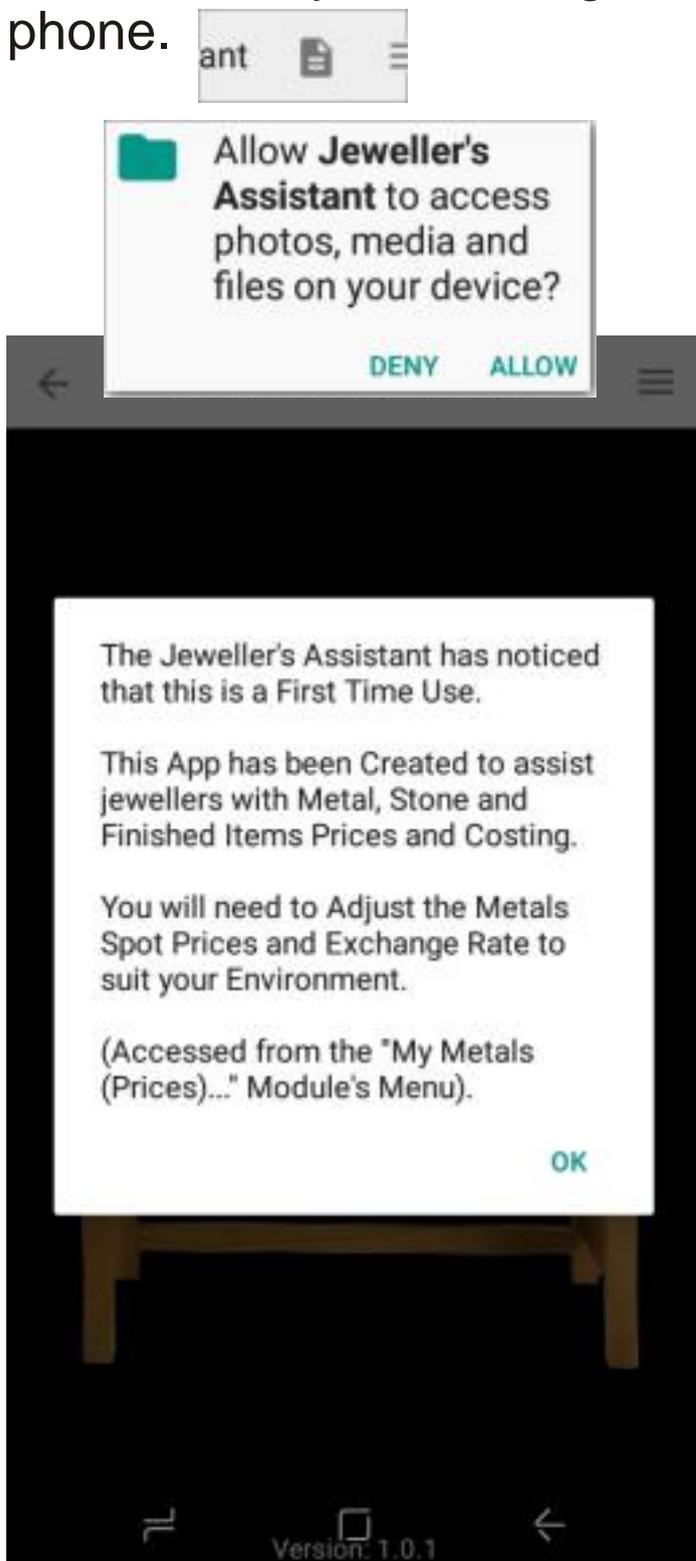
*Please Note: This App was developed in South Africa, so the pre-defined values are representative of the South African environment and should be adjusted to suit your location and exchange rate.*

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The very first time The Jeweller's Assistant is launched, a number of messages and prompts will be displayed. The App needs access to media and files in order to load and save pictures of your Stones and Items.

The first time (ever) the Menu Button is tapped, you will be asked whether you would like to set the Exchange Rate (as this will be relative to your Country), and Spot prices fluctuate all the time.

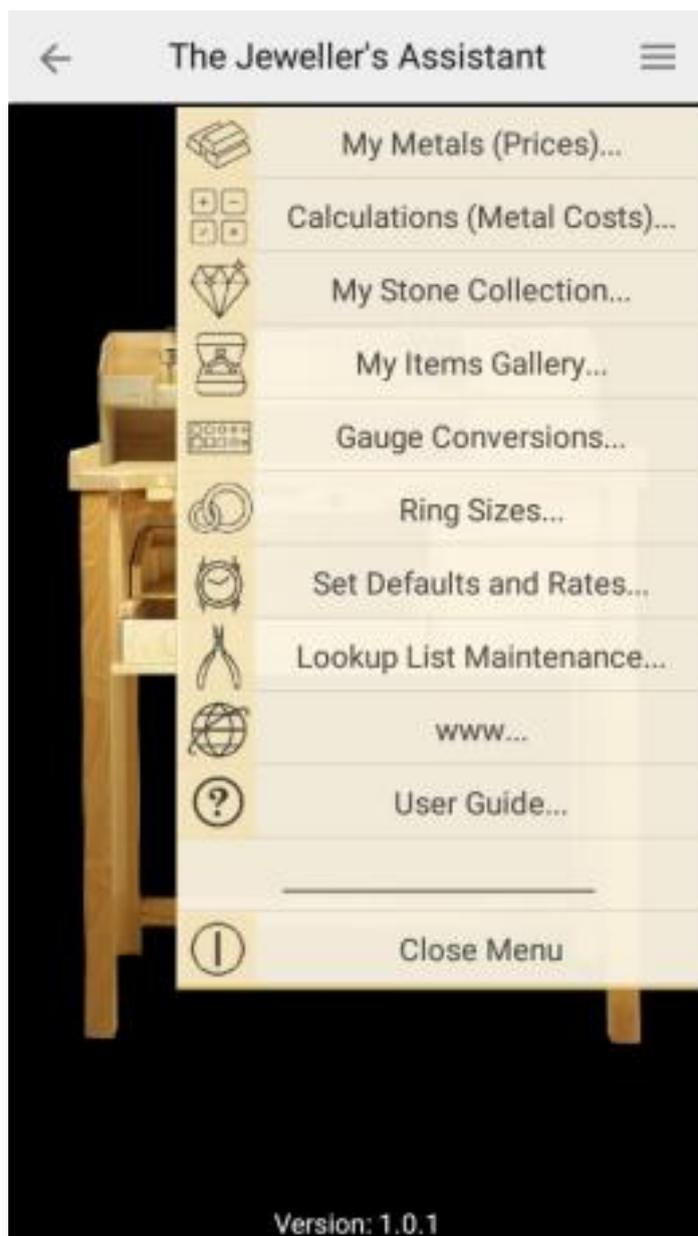
As an Afterthought, a little "Full Screen" Button was added to the Title Bar (Top), next to the Menu Button. This will Hide the bottom System Navigation Bar at the bottom of your phone.



The Jeweller's Assistant App Navigation is Menu driven. A Tap on one of the Menu Items will open a Module related to that Menu Item's Caption.

Each Module has its own Menu which accesses sub-modules for editing or updating etc.

As different jewellers use different metals, different stones, and so on, the "My Metals" and "My Stones" modules are customisable to suit the individual jeweller and need only contain specific alloys / base metals and the specific stones favoured and collected by the individual crafter.



Quick access to the Metal Types most used.

Calculates Costs of Plate, Wire, and of Total Grams.

Keeps a collection of your Stones, Costs, Type & Pics.

Keeps a collection of Items you've made with Pics and a breakdown of Costs and Selling Price.

Gauge Conversion Table (Gauge/ inch / mm).

Ring Size Conversion Table (Letter / Diameter / Circum.)

Hourly Rate, Markups, VAT.

Maintain Look-up Lists of Metal alloys, Stone types, and other Info.

Common URLs (Spot Prices, Exchange Rate, Suppliers... (User Choice).

Access to This User Guide.

The “My Metals (Prices)” Module is just a fingertip access to the User Customised List of the most commonly used metals in your studio or workshop. The list is Editable as one could pay more per gram for the pre-manufactured metals supplied. One would expect to pay more for Plate or Wire purchased from a supplier than for the granules of the same type, and more from the Supplier than the actual Spot Price

There is a field “Supp. MU%” for entering the Suppliers Markup to bring the actual Purchase Price (vs. The Spot Price) in line with what you actually pay. (See Inset Left) \*

Select the type of metal from the Drop-down Pop-up list and the specs for that choice will be displayed.

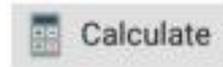
Quick access to the Spot Prices Module is also available from the Menu Items Drop-down.

(See Pg. 8)

The image shows a composite screenshot of the 'My Metals' app interface. At the top, a menu is open with options: 'Edit Metal Specs...' (marked with a red asterisk), 'Spot Prices Module...', and 'Close Menu'. Below the menu, a list of metal types is shown with radio buttons: 925 Plate, 925 Wire, Gold 22K, Gold 18K, Gold 14K, Gold 9K (selected), Gold Rose, Platinum, Silver 925, Silver 999, and Gold 24K. The main screen displays 'My Metals' with a dropdown menu set to 'Gold 9K' and a price of 367,66. Below this, it shows 'Density: 11,30', 'Metal%: 37,50', 'Supp. MU%: 6,00', and 'Your Price/gm: 389,72'. A note at the bottom states: 'NB: The Density Value is used in Volume Calculations (Plate & Wire only) in order to Calculate the Grams (Please Research)'. A red asterisk is placed next to the 'Price/gm' field in the inset. A red arrow points from the text '(See Pg. 8)' to the 'Spot Prices Module...' option in the menu.

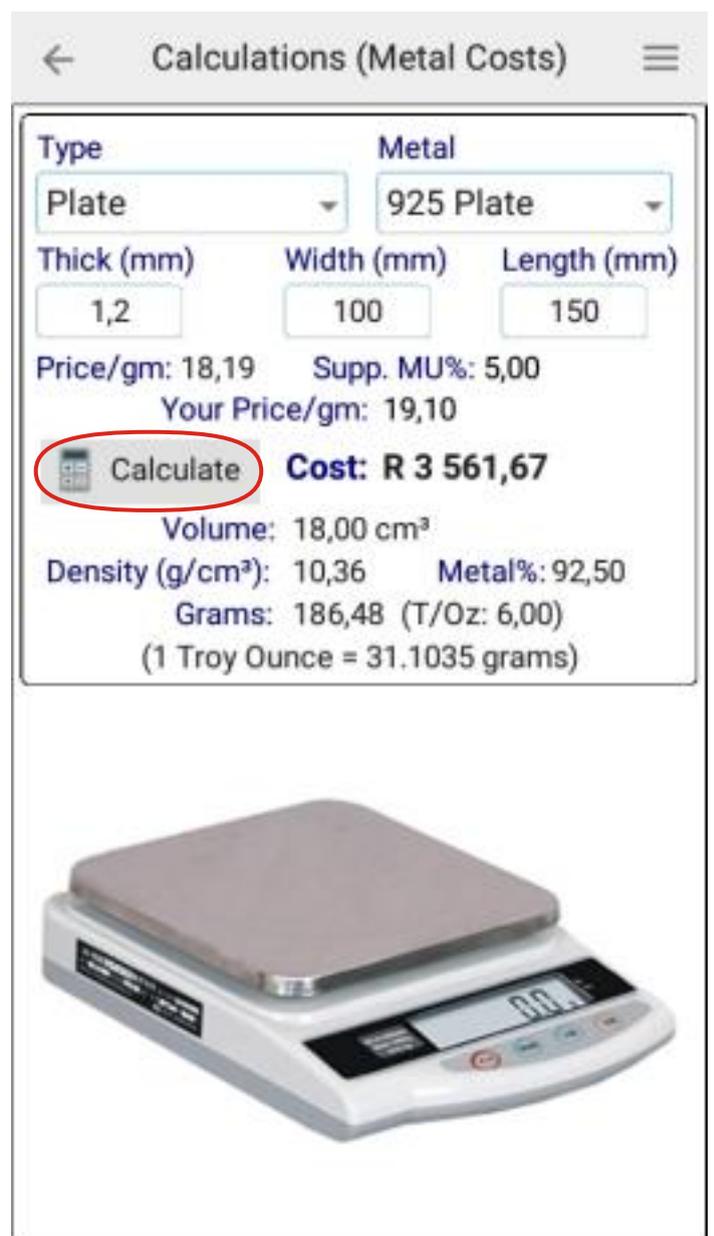
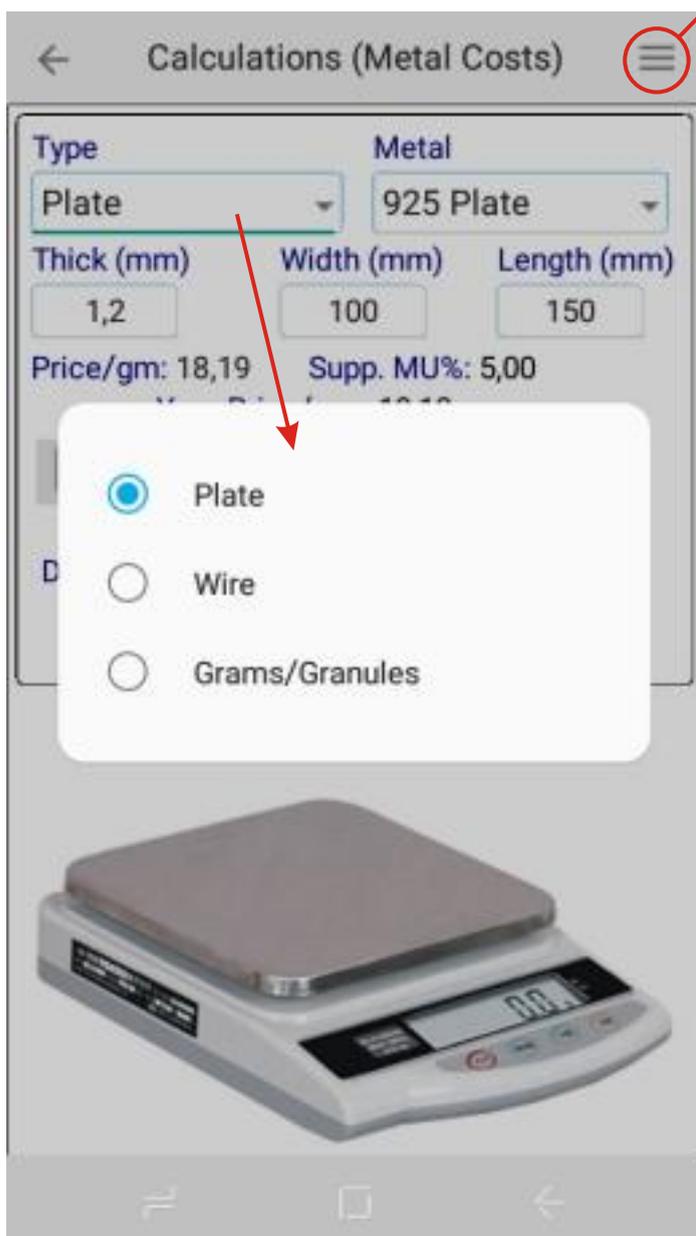
The “Calculations (Metal Costs)” Module make it much easier to quickly calculate - say an 18k Gold ring (or any other metal used) having a Size Y1/2 (about 68mm).

Select the types of metals from the Drop-down Pop-ups and all the specs and the cost for the choices will be displayed. Enter the other values and Tap the “Calculate” Button.



Quick access to the Spot Prices Module is also available from the Menu Items Drop-down.

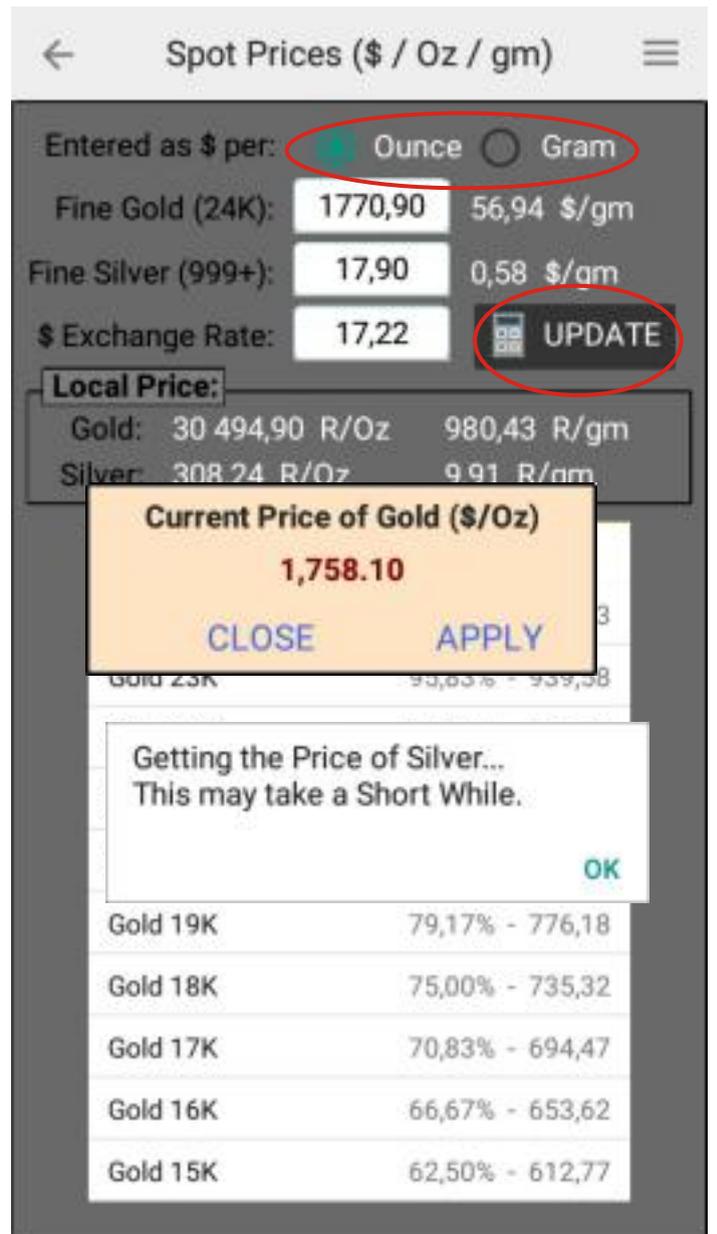
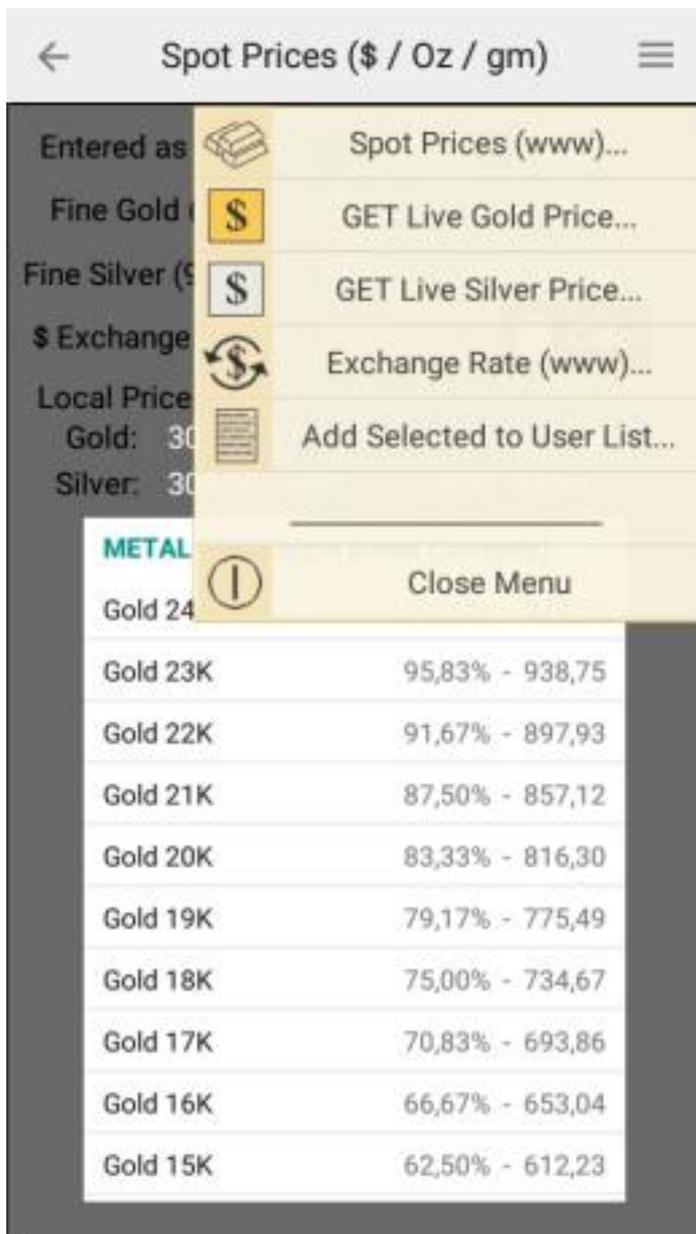
(See Following Page)



The “Spot Prices” Module is accessible from both the “My Metals (Prices)” and the “Calculations (Metal Costs)” Modules Menu Drop-downs. The “Live Spot Price” attempts to retrieve Values without manually going to the Web (Does it in the Background).

A Tap on the one of this Modules Menu Items will take you to the Internal Web Browser’s Website (User Customisable to the preferred) for either the Current Exchange Rate and / or the Current Metal Spt Prices (See Following Page)...

These are then adjusted on this page and a tap on the “UPDATE” Button will update the prices for all the Metals and update the User’s Metals List as well, so as to ensure accurate costing of metals and Items. The Spot Prices can be entered as either \$ per Ounce or Gram and all the conversions will be automatically done.

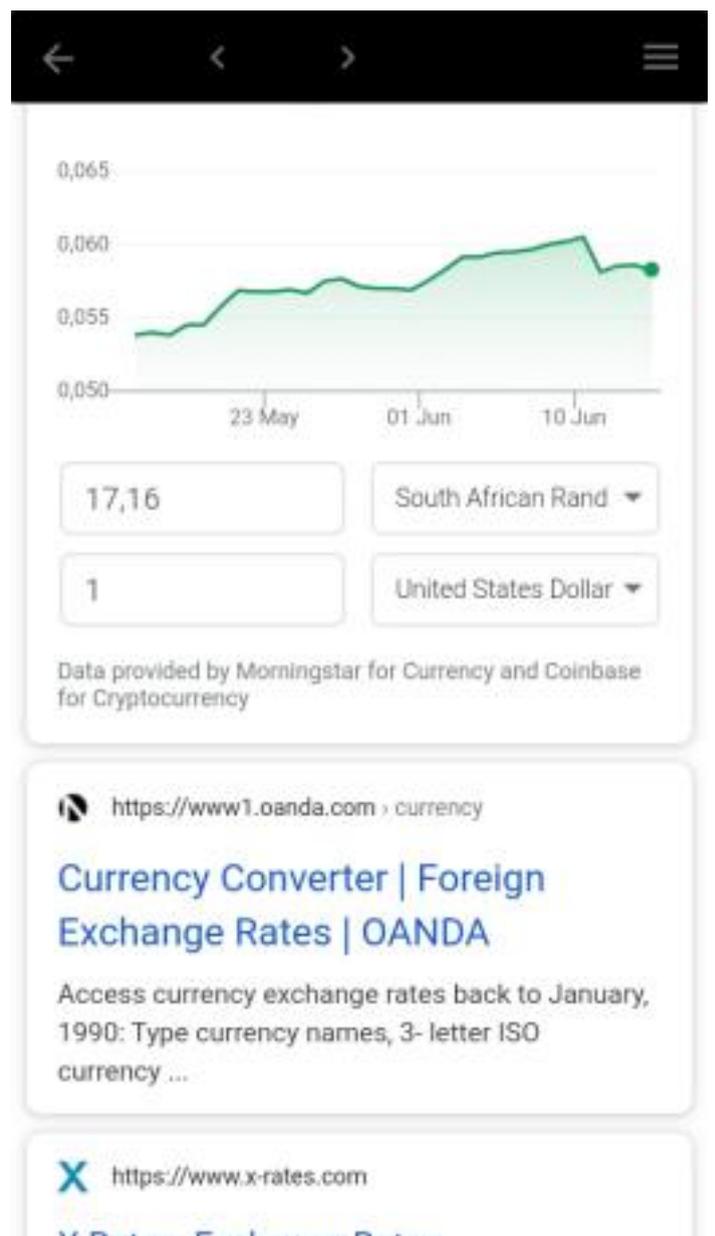


The Jeweller's Assistant App has a dedicated built-in web Browser for accessing specific sites necessary to maintain the ever fluctuating Spot Prices and Exchange Rates.

Both these websites are user customisable to save the users preferred sites as default and thereby instantly accessible from a single tap on a menu item.

Please note: These URLs have been pre-defined during The Jeweller's Assistant App's development, but can be overwritten by the user

(See Pg. 17 "Set Defaults", or Pg. 20 "www").



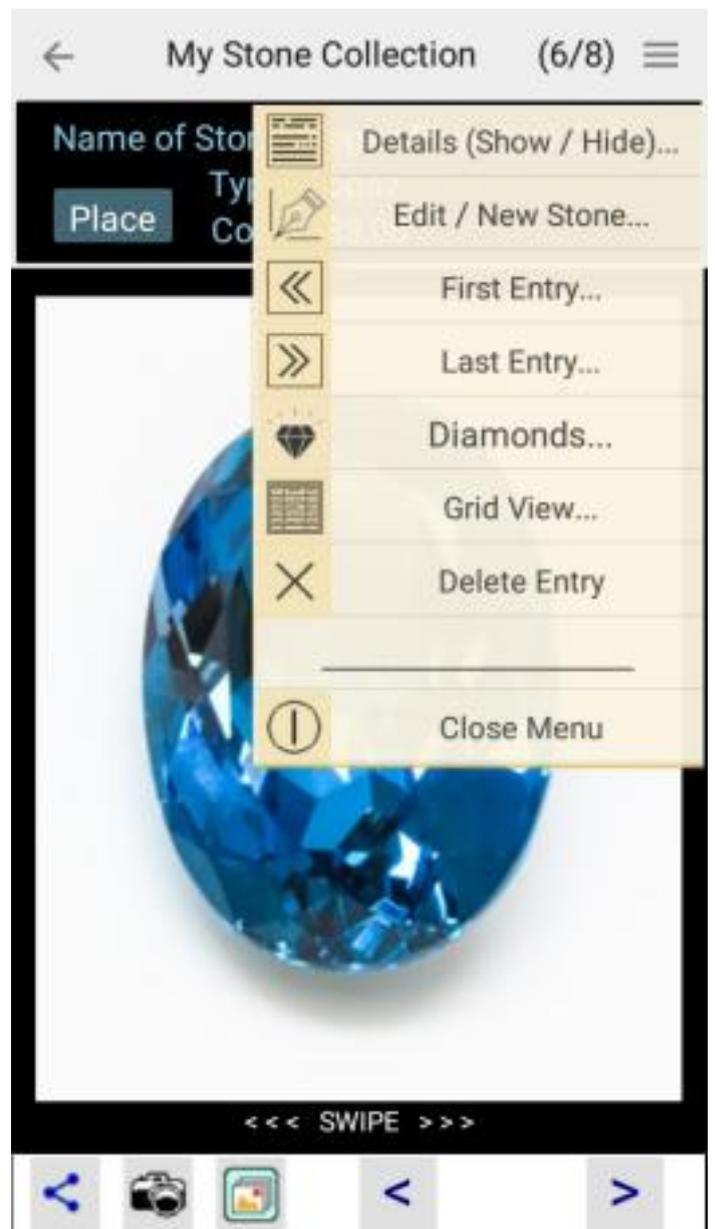
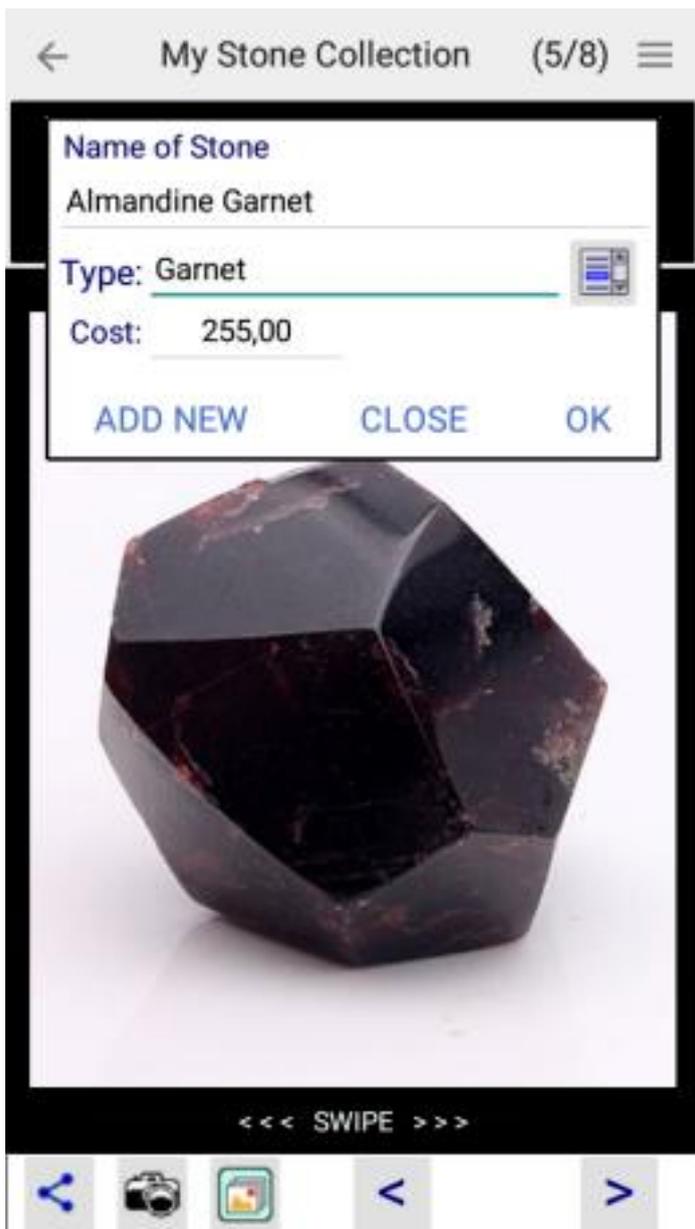
This Module Keeps an Inventory of the Stones in your collection.

Your description, the Type of mineral, and what it cost you to purchase.

Once you have captured the details, you can add a picture of the stone by either loading it from the Phone's Picture Gallery, or by taking a Snap-shot of the stone itself.  

The Details and Image can be shared via e-mail or WhatsApp or other means, depending on your phone's capabilities. (Share Button). 

The Menu also allows for Editing, Navigation and a Grid View of the Inventory, and access to a Diamond site.



The “My Items Gallery” Module is what The Jewellers Assistant App is really all about, Including “All Items” Money Breakdown...

This is where one works out the costing and the Selling Price of your creations to ensure a realistic market value.

The following pages cover the steps of how the calculations work.

There are 6 sections to the Editing (Capturing) mini-module, and are as follows:

(Detailed on the following Pages...)

1. The Item's Details.
2. The Metal's Details.
3. The Stone's Details (If Used).
4. Extras (Findings etc.).
5. Labour (Time Spent).
6. The Picture.



To Create a New Item, tap the “ADD NEW” Action Label (Editing Sub-module), and this will create a new Blank Entry in the “My Items” Inventory.

The following Images are self explanatory, however, one must Tap the little Calc. Button in order to complete the Step.

**1: NEW ITEM**

Date Mnf.:

Item Name:

Item Type:

ITEM METAL STONE EXTRAS LABOUR+

ADD NEW CLOSE OK

Date Mnf.: 2020/06/15

Item Name:

Item Type:

ITEM METAL STONE EXTRAS LABOUR+

ADD NEW CLOSE OK

Date Mnf.

Year: < 2020 >

Month: < 6 >

Day: < 15 >

CANCEL OK

Accompanying Look-up Lists are accessible for easy insertion

**2: METAL**

Metal Used:

Grams:

Metal Cost:  x % MMU: 10

+ Markup:  = Total:

ITEM METAL STONE EXTRAS LABOUR+

ADD NEW CLOSE OK

Metal Used: 925 Wire

Grams: 5

Metal Cost: 95,50 x % MMU: 10

+ Markup: 9,55 = Total: 105,05

ITEM METAL STONE EXTRAS LABOUR+

ADD NEW CLOSE OK

Select Metal Type and...

- 925 Plate
- 925 Wire
- Gold 22K
- Gold 18K
- Gold 14K
- Gold 9K
- Gold Rose
- Platinum
- Silver 925
- Silver 999
- Gold 24K
- Copper

Select Item Type and Tap "OK"

- Bangle OK
- Bracelet OK
- Brooch OK
- Chain OK
- Cufflinks OK
- Earrings OK
- Nose-ring OK
- Pendant OK
- Ring OK

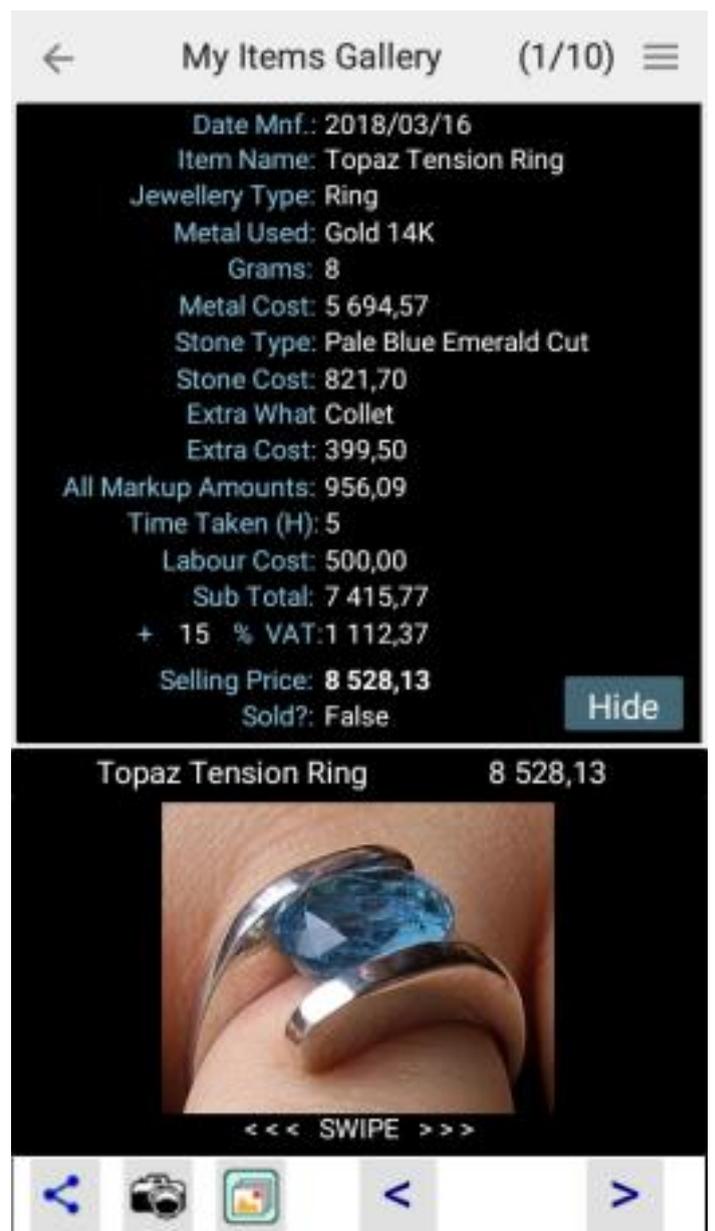
CANCEL



A Picture of your Creation is easily assigned to the Items Gallery Inventory, by either loading from the Phone's Picture Gallery, or by taking a Snap-shot of the Item itself. You will be prompted for Save Confirmation.  

The Details and Image can be shared via e-mail, or WhatsApp, or other means depending on your phone's capabilities. (Share Button). 

The Menu also allows for Editing, Navigation and a Grid View of the Items Inventory.



The Gauge system of measuring the thickness of a piece of wire goes back a few centuries and probably originates from the number of times a standard rod of iron was drawn, thereby getting thinner as the number of draws increased.

The “Gauge Conversions” module is just a tabular cross-reference of the different measuring standards in use today.

However, British and American systems were standardised independently, so some adjustments may need to be made to suit your personal preference.

Adjustments are implemented from the Editing sub-module, accessible from the Drop-down Menu.

The screenshot shows the 'Gauges Conversions' app interface. At the top, there is a title bar with a back arrow, the text 'Gauges Conversions', and a hamburger menu icon. Below the title bar is a table with columns: GAU..., INCH, MM, and a fourth column for editing actions. Row 19 is highlighted in blue. A yellow editing menu is open over row 19, containing options: 'Edit Gauge Specs...', 'First Entry...', 'Last Entry...', 'Delete Entry', and 'Close Menu'.

GAU...	INCH	MM	
12	0,104		
13	0,092		
14	0,080		
15	0,072		
16	0,064		
17	0,056		
18	0,048	1,219	
19	0,040	1,016	0.004*/gauge
20	0,036	0,914	
21	0,032	0,813	
22	0,028	0,711	
23	0,024	0,610	0.002*/gauge
24	0,022	0,559	
25	0,020	0,508	
26	0,018	0,457	0.0016*/gauge
27	0,016	0,417	

The screenshot shows the same 'Gauges Conversions' app interface, but with a dialog box open for editing gauge 19. The dialog box contains the following fields: 'GAUGE: 19', 'INCH: 0,040', 'MM: 1,016', and 'STEP: 0.004\*/gauge'. An 'OK' button is located at the bottom right of the dialog box. The table in the background is the same as in the previous screenshot, with row 19 highlighted.

GAU...	INCH	MM	STEP
12			
13			
14			
15			
16			
17			
18	0,048	1,219	
19	0,040	1,016	0.004*/gauge
20	0,036	0,914	
21	0,032	0,813	
22	0,028	0,711	
23	0,024	0,610	0.002*/gauge
24	0,022	0,559	
25	0,020	0,508	
26	0,018	0,457	0.0016*/gauge
27	0,016	0,417	

The Ring Size system of measuring also differs according to the Country. In some countries it is denoted by a Letter (and a ½) and in others by either inch fractions or millimetres.

Once again, the “Ring Sizes” module is just a tabular cross-reference of the different measuring standards in use today.

One needs to remember that the circumference of a ring will be smaller than the linear measurement of a flat piece of metal and this should be taken into consideration - generally, by adding the thickness of the flat piece to the circumference will give one the correct size, but it is best determined by trial and error.

Adjustments are implemented from the Editing sub-module, accessible from the Drop-down Menu.

Size (Letter)	Circumference	Diameter (Int.)
K1/2	50,27	16,00
L	50,58	16,10
L1/4	51,21	16,30
L1/2	51,55	16,41
M	51,87	16,51
M1/2	52,50	16,71
N	53,16	16,92
N1/2	53,82	17,13
O	54,51	17,35
O1/2	54,82	17,45
P	55,76	17,75
P1/2	56,45	17,97
Q	57,15	18,19
Q1/2	57,65	18,35
Q3/4	58,21	18,53
R	58,47	18,61
R1/4	58,72	18,69

Size (Letter)	Circu		
A			
A1/2			
B			
B1/2			
C			
C1/2			
D	41,50		13,21
D1/2	42,13		13,41
E	42,76		13,61
E1/2	43,45		13,83
F	44,14		14,05
F1/2	44,45		14,15
F3/4	44,77		14,25
G	45,11		14,36
G1/4	45,40		14,45
G1/2	45,74		14,56
...	.....		.....

This Module really deals with Mark-up for the different aspects of jewellery making - and, of course, one's hourly rate for the labour.

The contact information is not actually used for any purpose and can be left as is. It was implemented for future features if need be.

The URLs (website addresses) are also pre-populated and should be recaptured to suit your preferences - this can be done from this module or from the built-in browser (covered on Pg. 20)

The information and values were pre-populated during the App development, so that the App has something to reference, and are by no means applicable to your own working environment, and should be one of the first adjustments made.

There are Three Mark-up values, one for the Metal used, one for the Stone (if used) and one for any Extras such as a purchased chain or the use of findings such as pre-manufactured - shepherd-hooks, clasps, collets, etc. (Again - if used in the Item's manufacture).

The Rate per Hour for Labour is for you to decide

Name of Workshop / Studio:		
My Jewellery Studio		
Contact Name:		
My Name		
Contact Tel.: +27 66 555 4444		
Email Address:		
my.name@address.com		
CONTACT	WWW / @	R/H + MARKUP
CANCEL		OK

how much your time is worth.

If VAT is applicable, then adjust the VAT Rate accordingly, else just give it a value of Zero.

Search Engine Website:		
<a href="https://www.google.com/">https://www.google.com/</a>		
Supplier Website:		
<a href="https://www.riogrande.com/">https://www.riogrande.com/</a>		
Personal (Default) Website:		
<a href="https://www.lalisilver.co.za/">https://www.lalisilver.co.za/</a>		
Diamond Prices Website:		
<a href="https://www.diamonds.pro/education/diamond">https://www.diamonds.pro/education/diamond</a>		
CONTACT	WWW	R/H + MARKUP
CANCEL		OK

Rate per Hour:	100	
Metal Markup %:	10	
Stone Markup %:	50	
Extras Markup %:	70	
VAT Rate %:	15	
CONTACT	WWW / @	R/H + MARKUP
CANCEL		OK

The Jeweller's Assistant App's various Modules make use of Look-up Lists to ensure conformity throughout the information capturing processes.

The primary list is the "My Metals" list which is a simple collection of the Metals most often used by you, your studio, or workshop.

These Metals can be Sorted to appear in an order of your choice and will be such, whenever the list is accessed.

Metals can be added and removed, so as not to clutter the list with obscure alloys and maintain those most used.

A Tap on the "Edit / New..." Menu Item will open an Editing Module similar to the one found on the "My Metals" page. Again, there is a field "Supp. MU%" for entering the Suppliers Markup to bring the actual price (vs. The Spot Price) in line with what you actually pay. (See Inset)\*

The image displays two screenshots of the 'Look-up List Maintenance' app interface. The left screenshot shows a table of metal types with an 'Edit / New' menu open. The right screenshot shows a 'Sort' menu over the same table. An inset form shows the 'Edit / New' form for Silver 925 with fields for Price/gm, Supp. MU%, Density, and Metal%.

**Table 1: My List of Metal Types (Left Screenshot)**

Type	g/cm <sup>3</sup>	%	
Gold 9K	11,30		
Gold 18K	15,60		
925 Plate	10,36		
925 Wire	10,36		
Gold 22K			
Gold 14K			
Rose Gold			
Rose Gold			
Silver 925			
Silver 999			
Gold 24K	19,30	100,00	980,43
Platinum	21,45	100,00	516,26
Copper	8,96	100,00	1,00

**Table 2: My List of Metal Types (Right Screenshot)**

Item	P/Gram
Gold 14K (6)	735,32
Gold 9K	18,19
Gold 18K	19,10
925 Plate	898,73
925 Wire	571,92
Gold 22K	647,11
Gold 14K	647,11
Rose Gold 14K	9,17
Rose Gold 9K	9,91
Silver 925	980,43
Silver 999	516,26
Gold 24K	1,00
Brass	8,73 / 10,00

**Inset Form: Edit / New**

Type of Metal: Silver 925

Price/gm: 9,17    Supp. MU%: 5,00

Density (g/cm<sup>3</sup>): 10,36    Metal%: 92,50

Your Price/gm: 9,63

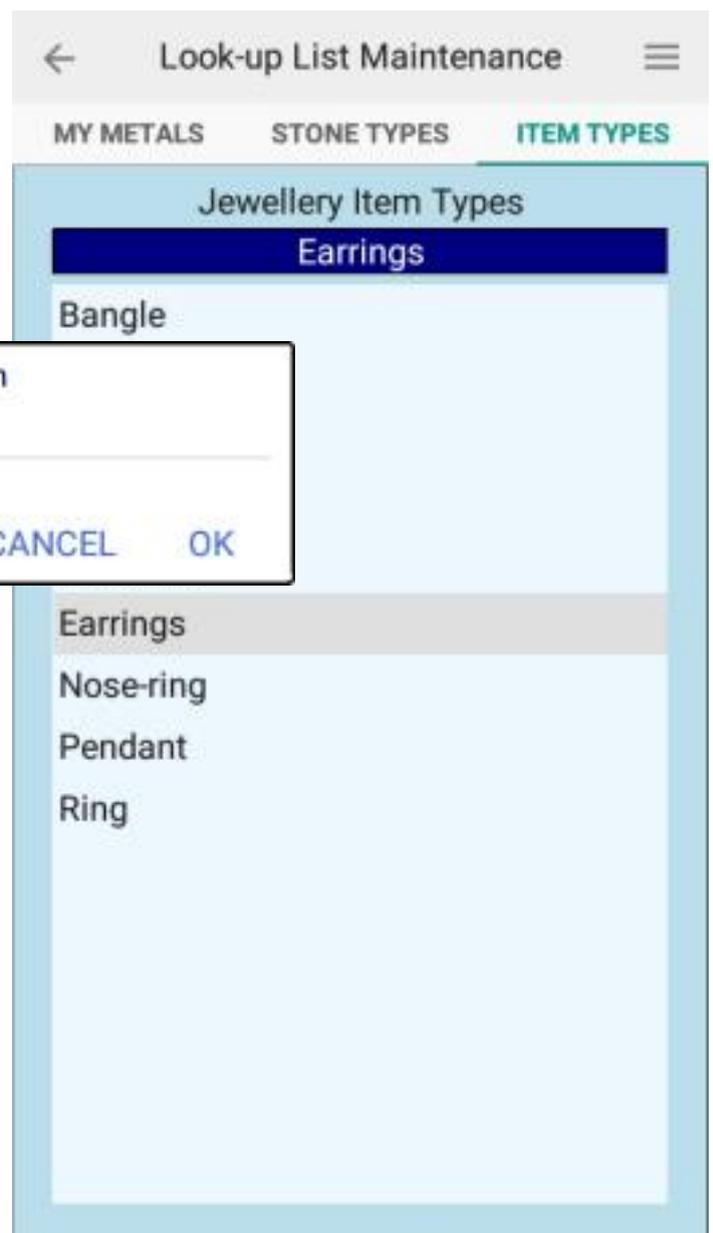
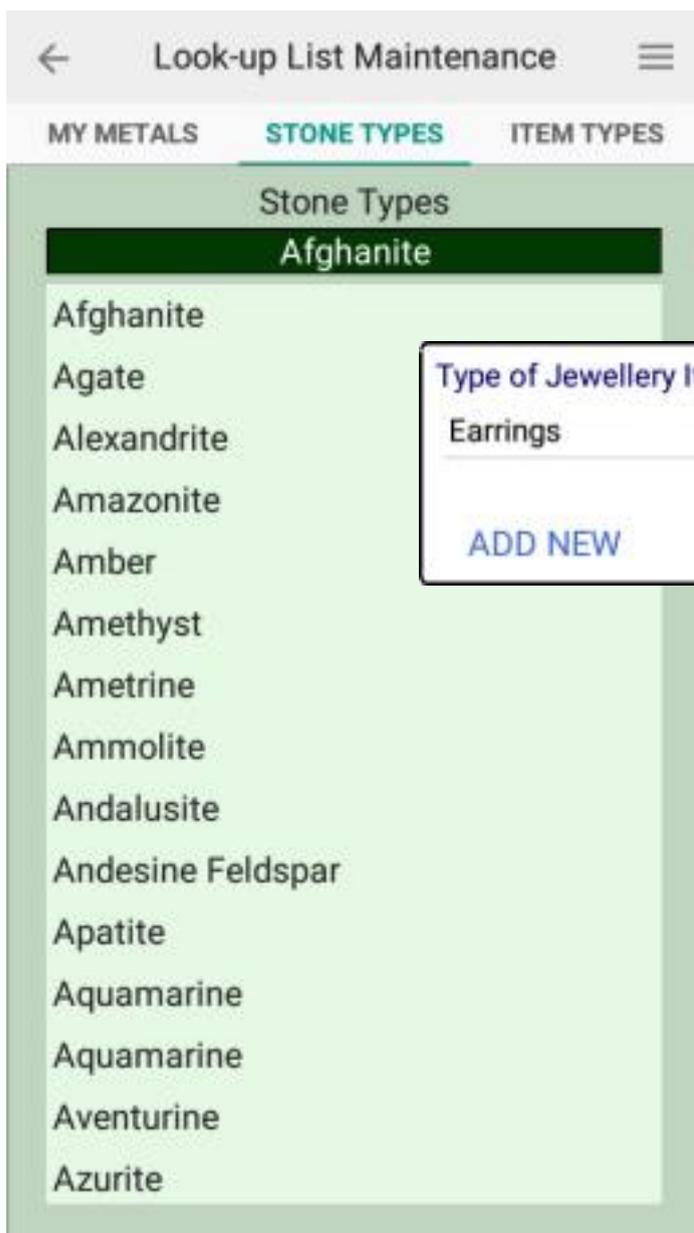
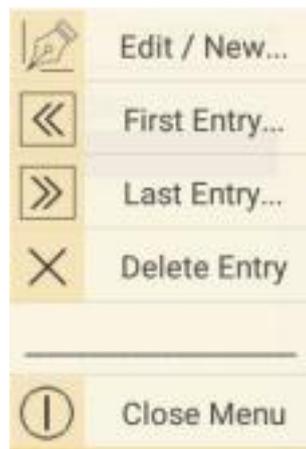
NB: The Density Value is used in Volume Calculations (Plate & Wire only) in order to Calculate the Grams (Please Research)

ADD NEW    CANCEL    OK

The other two Look-up Lists are for Stones and Item Types.

Again, List-items can be added and removed to suit your specific forte or environment.

Editing, Adding and Deleting - and some navigation is accessed from the Drop-down Menu.

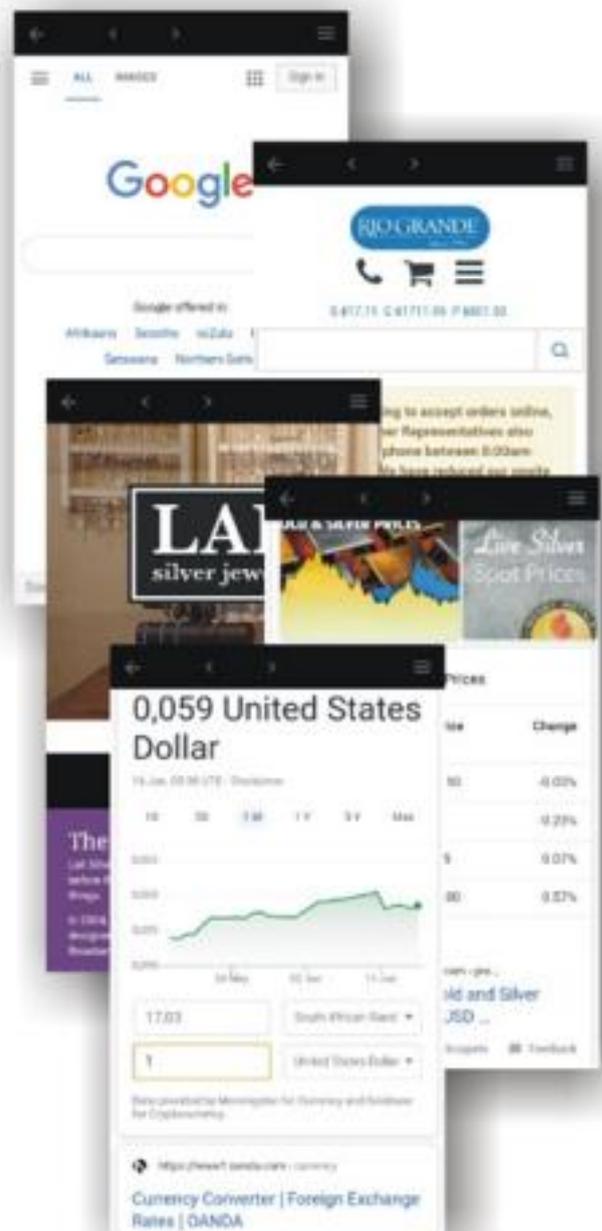
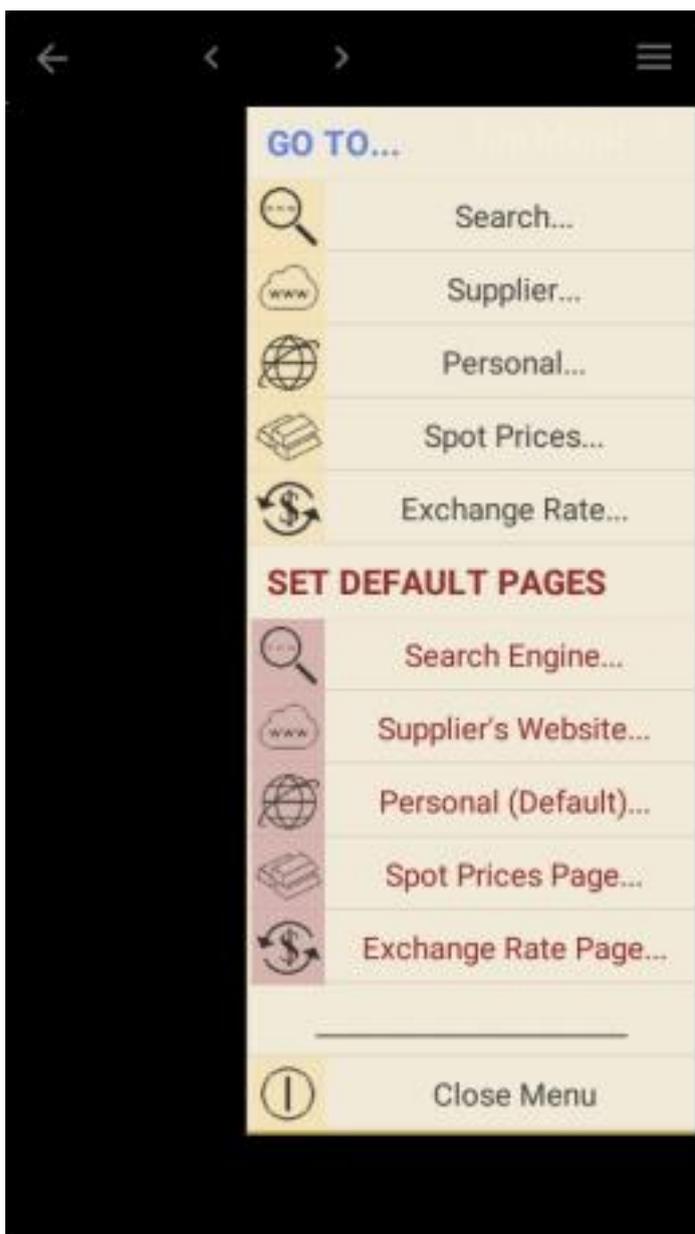


The Jeweller's Assistant App has a built-in Web Browser, dedicated to websites most pertinent to the jewellery manufacturer.

This is so that one does not have to exit the App and use a conventional browser to navigate to one's preferred Spot Price or Exchange Rate or Suppliers website.

There is also a "Personal" page which can be used as one wishes - for your own website if you have one - or for any other website you would like to have fingertip access to.

If one uses the Search Page to navigate to a site, and wishes to save that site as the preferred page, say for your favourite Supplier, then Tapping the bottom section Button will make it the default.



I am not a professional jeweller, I have however been making Silver Jewellery as a pastime and hobby since the early 1980's

Jewellery is a strange thing, it seems to have been around since mankind first noticed a pretty shell, an attractive stone, an animals tooth or an unusual little bone and decided to adorn themselves, a loved one, a chief, king, queen or even a statue of a deity.

It matters not how valuable the items are deemed to be, be it crafted from the metallic elements, crystalised carbon, aluminium oxide, impure silica, or concentric deposits of nacre... It cannot improve the value of the one being adorned.

Apparently, the oldest item of jewellery discovered by archaeologists, dates back more than 100 000 years - made from the shells of mud-snails.

Almost always, when I share with people what I have created, they inevitably ask "How much does it cost?", Or, "Are you going to sell it?"

To be honest, I have usually been so engrossed in the creative aspect, that the monetary value didn't cross my mind, until their question!

I believe I am not alone!

The Jeweller's Assistant was designed and developed in order to overcome the invisible roadblocks of value apportionment that many creative souls seem to endure. It may also be useful to those who don't share in this shortfall - it just makes it so much easier.

A special thanks to Anthony Napolitano (Goldsmith & Jewellery Supplies). Deon Denysschen and Wayne Smith (Varga Jewellers), and Alan Hardwick (GETi and Guild of Jewellery Designers), for their advice and input.



The Jeweller's Assistant team.