In [2]:
```
import numpy as np
import matplotlib.pylab as plt
from wordcloud import WordCloud
from PIL import Image
```

In [3]:
```
pip install wordcloud
```

```
Requirement already satisfied: wordcloud in c:\users\hi\anaconda3\lib\site-pa
ckages (1.9.2)
Requirement already satisfied: matplotlib in c:\users\hi\anaconda3\lib\site-p
ackages (from wordcloud) (3.7.0)
Requirement already satisfied: numpy>=1.6.1 in c:\users\hi\anaconda3\lib\site
-packages (from wordcloud) (1.23.5)
Requirement already satisfied: pillow in c:\users\hi\anaconda3\lib\site-packa
ges (from wordcloud) (9.4.0)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\hi\anaconda3
\lib\site-packages (from matplotlib->wordcloud) (2.8.2)
Requirement already satisfied: packaging>=20.0 in c:\users\hi\anaconda3\lib\s
ite-packages (from matplotlib->wordcloud) (22.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\hi\anaconda3\lib
\site-packages (from matplotlib->wordcloud) (4.25.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\hi\anaconda3\lib
\site-packages (from matplotlib->wordcloud) (3.0.9)
Requirement already satisfied: cycler>=0.10 in c:\users\hi\anaconda3\lib\site
-packages (from matplotlib->wordcloud) (0.11.0)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\hi\anaconda3\lib
\site-packages (from matplotlib->wordcloud) (1.0.5)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\hi\anaconda3\lib
\site-packages (from matplotlib->wordcloud) (1.4.4)
Requirement already satisfied: six>=1.5 in c:\users\hi\anaconda3\lib\site-pac
kages (from python-dateutil>=2.7->matplotlib->wordcloud) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

In [4]:
```
import numpy as np
import pandas as pd
import matplotlib.pylab as plt
from wordcloud import WordCloud
from PIL import Image
from os import path
```

In [5]:
```
text='Time'
x,y=np.ogrid[:300,:250]
mask=(x-120)**2+(y-120)**2>130**2
mask=200*mask.astype(int)
wc=WordCloud(background_color="Green",repeat=True,mask=mask)
wc.generate(text)
plt.axis("off")
plt.imshow(wc,interpolation="bilinear")
plt.title("square of worldcloud")
plt.show()
```

In [6]:
```
text='Time'
x,y=np.ogrid[:300,:300]
mask=(x-120)**2+(y-120)**2>130**2
mask=255*mask.astype(int)
wc=WordCloud(background_color="white",repeat=True,mask=mask)
wc.generate(text)
plt.axis("off")
plt.imshow(wc,interpolation="bilinear")
plt.title("circle of worldcloud")
plt.show()
```

In [7]:
```
mask=np.array(Image.open("girl.png"))
```

In [8]:
```
df = pd.read_csv("wines_SPA.csv")
df
```

Out[8]:

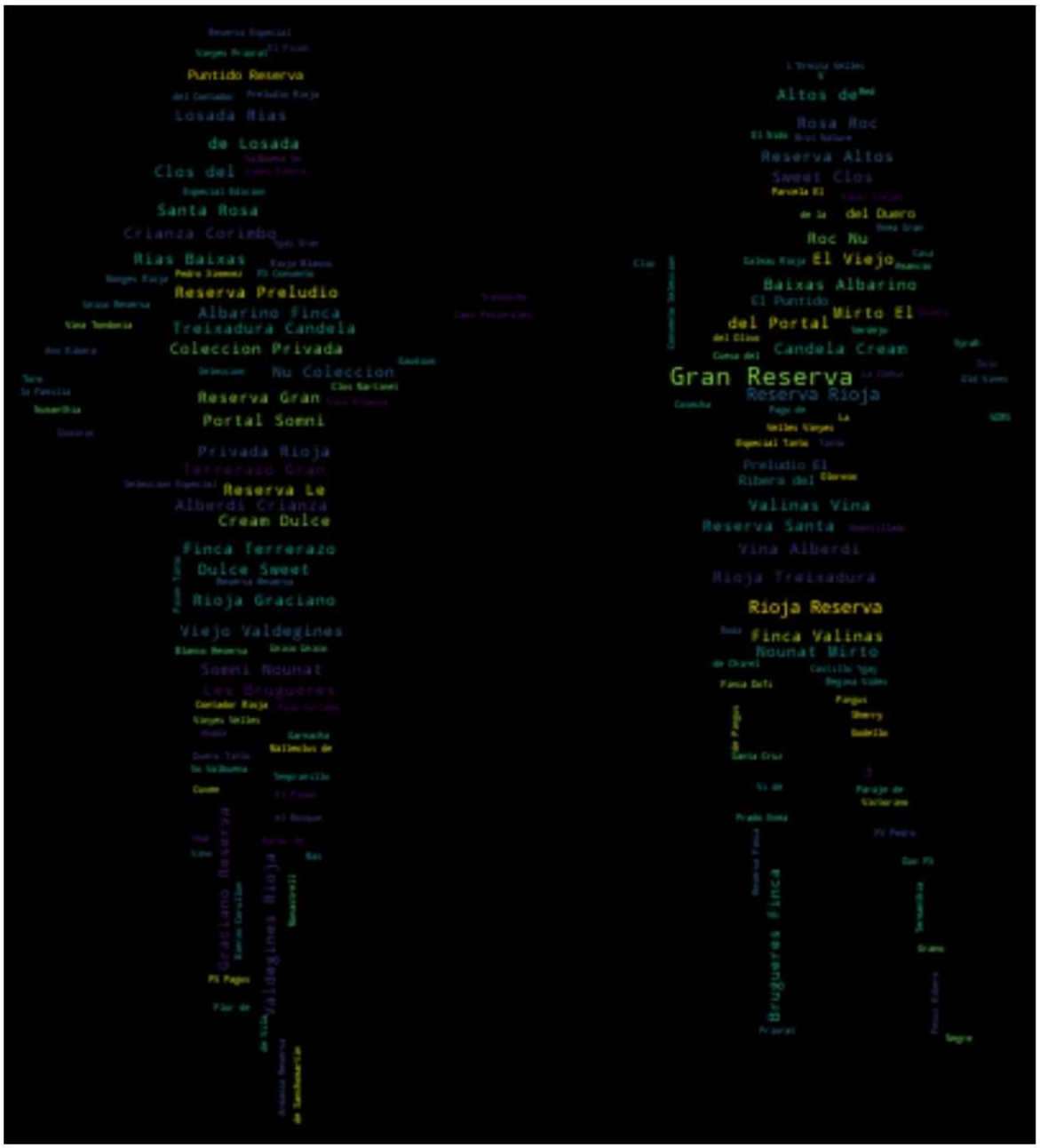
	winery	wine	year	rating	num_reviews	country	region	price	type
0	Teso La Monja	Tinto	2013	4.9	58	Espana	Toro	995.00	Toro Red
1	Artadi	Vina El Pison	2018	4.9	31	Espana	Vino de Espana	313.50	Tempranillo
2	Vega Sicilia	Unico	2009	4.8	1793	Espana	Ribera del Duero	324.95	Ribera Del Duero Red
3	Vega Sicilia	Unico	1999	4.8	1705	Espana	Ribera del Duero	692.96	Ribera Del Duero Red
4	Vega Sicilia	Unico	1996	4.8	1309	Espana	Ribera del Duero	778.06	Ribera Del Duero Red
...	...	...	...	...	...	...	...	...	...
7495	Contino	Reserva	2016	4.2	392	Espana	Rioja	19.98	Rioja Red
7496	Conreria d'Scala Dei	Les Brugueres	2018	4.2	390	Espana	Priorato	16.76	Priorat Red
7497	Mustiguillo	Finca Terrerazo	2017	4.2	390	Espana	El Terrerazo	24.45	Red
7498	Matarromera	Gran Reserva	2011	4.2	389	Espana	Ribera del Duero	64.50	Ribera Del Duero Red
7499	Sei Solo	Preludio	2016	4.2	388	Espana	Ribera del Duero	31.63	Ribera Del Duero Red

7500 rows × 11 columns

In [9]:
```
text = " ".join(review for review in df.wine)
print ("There are {} words in the combination of all review.".format(len(text)
```

```
There are 113871 words in the combination of all review.
```

In [12]:
```
wc = WordCloud(background_color='black', mask=mask, mode='RGB',
               width=1000, max_words=200, height=1000,random_state=10)
wc.generate(text)
plt.figure(figsize=(10, 10))
plt.imshow(wc, interpolation='bilinear')
plt.tight_layout(pad=0)
plt.axis('off')
plt.show()
```



In [11]:
```
wc = WordCloud(background_color='white', mask=mask, mode='RGB',
               width=1000, max_words=1000, height=1000,
               random_state=1, contour_width=1, contour_color='steelblue')
wc.generate(text)
plt.figure(figsize=(10, 10))
plt.imshow(wc, interpolation='bilinear')
plt.tight_layout(pad=0)
plt.axis('off')
plt.show()
```

In [ ]:
```
```

In [ ]:

In [ ]:

In [ ]: