"Solution for Data Science Assignment".

In [1]:
```python
from selenium import webdriver
from selenium.webdriver.common.keys import Keys
import time
```

In [2]:
```python
PATH = '/Users/ziiv/Desktop/chromedriver'
```

In [3]:
```python
driver = webdriver.Chrome(PATH)
```

In [4]:
```python
driver.get('https://novelfull.com/warriors-promise/chapter-1.html')
```

In [5]:
```python
print(driver.title)
```

Read Warrior's Promise - Chapter 1 online free - Novel Full

In [6]:
```python
print(driver.page_source)
```

a></h2><hr class="chapter-start"><button type="button" class="bt
n btn-responsive btn-success toggle-nav-open "><span class="glyp
hicon glyphicon-menu-up"></button><div class="chapter-nav
" id="chapter-nav-top"><div class="btn-group"><a class="btn btn-
success" disabled="" id="prev_chap"><span class="glyphicon glyph
icon-chevron-left">Prev Chapter</
span><button type="button" class="btn btn-success chapter_ju
mp"></button><
a class="btn btn-success" href="/warriors-promise/chapter-2.html
" title="Chapter 2" id="next_chap">Next
Chapter<span class="glyphicon glyphicon-chevron-right"></
span></div></div><hr class="chapter-end"><div id="chapter-co
ntent" class="chapter-c" style="font-family: Arial, sans-serif,
serif; font-size: 18px; line-height: 160%; height: auto !importa
nt;"><script async="" src="https://pagead2.googlesyndication.com
/pagead/js/adsbygoogle.js"></script><!-- full thich ung --><ins
class="adsbygoogle" style="display: block; height: 280px;" data-
ad-client="ca-pub-2371791870283090" data-ad-slot="2009706278" da
ta-ad-format="auto" data-full-width-responsive="true" data-adsby
google-status="done"><ins id="aswift_0_expand" style="display:in
line-table:border:none:height:280px:margin:0:padding:0:position:

In [7]:
```python
#finding the contents of a chapters on a webpage written under the
chapter = driver.find_element_by_id('chapter-content')
print(chapter.text)
```

```
All the spectators were talking about the matter, and all the el
ders and inferiors of the Sus changed their view of Su Mo.
They used to look at him with respect and admiration, but now, t
hey were looking at him with disappointment and contempt.
On the altar, Su Mo managed to slowly stand up with his fists cl
enched.
He looked around and saw their expressions. "What snobbish peopl
e they are!" Su Mo smiled satirically in his heart.
Previously, when he was considered to be highly talented, all of
them showed their respect to him. Wherever he went, they all swa
rmed to him and kissed his ass.
Now, after he awakened a useless Martial Soul, they all instantl
y looked at him with contempt.
After a while, Su Mo took a deep breath and strode off the altar
.
"Next one, Su Yu!" exclaimed the hosting elder.
Glancing at Su Mo, he shook his head secretly. The former genius
was a genius no more!
Upon hearing this, Su Yu walked toward the altar with a prideful
look.
When he passed by Su Mo, he coldly laughed and disdainfully said
```

In [8]:
```python
#clicks the button to move forward to another webpage

link = driver.find_element_by_id('next_chap')
link.click()
```

In [9]:
```python
#going back to the chapter 1 webpage
driver.back()
```

In [10]:
```python
chapter2 = driver.find_element_by_id('chapter-content')
print(chapter2.text)
```
All the spectators were talking about the matter, and all the el
ders and inferiors of the Sus changed their view of Su Mo.
They used to look at him with respect and admiration, but now, t
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On the altar, Su Mo managed to slowly stand up with his fists cl
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He looked around and saw their expressions. "What snobbish peopl
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was a genius no more!
Upon hearing this, Su Yu walked toward the altar with a prideful
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When he passed by Su Mo, he coldly laughed and disdainfully said

In [11]:
```python
#for loop to extract the contents of 30 chapters

first_30_chapters = {}

for i in range(30):
    chapter = driver.find_element_by_id('chapter-content')
#    print(chapter)
#    appending into the dictionary
    first_30_chapters[i] = chapter.text
    link = driver.find_element_by_id('next_chap')
    link.click()
```

In [12]:
```python
print(first_30_chapters)
```

old man as he looked at Su Mo and abruptly grabbed his hands.\n"
Sir, don't worry! Just tell me what happened," Su Mo asked.\n"Th
e Bloody Blade Stockade looted our village and slaughtered all o
f us."\nThe old man was in grief, yet his eyes were filled with
resentment.\n"The Bloody Blade Stockade?"\nSu Mo's eyes narrowed
, for he had heard of the Bloody Blade Stockade.\nIt was said th
at the Bloody Blade Stockade was a bunch of bandits stationed 10
0 kilometers from Sunnywood City who often committed cruel crime
s like this.\nThey were evil in every way, but they were very sm
art to not attack powerful groups and only targeted the weak.\nT
herefore, the Bloody Blade Stockade had always gotten their way
for years instead of being uprooted.\n"How many were there? What
's their strength?"\nSu Mo's eyes were cold, and he felt a ragin
g desire to kill them.\n"It was a small team with about 20 peopl
e, but they all were powerful martial artists above Lv 3 Qi Cult
ivation Realm."\nThe old man had lost too much blood, and his vo
ice trailed off. "Our village had only five martial artists of t
he Qi Cultivation Realm, and none of them could rival them, so t
hey were all killed in a short time!"\n"Young man, please save m
y granddaughter. She was abducted, and as long as you can save h

In [13]:
```python
# saving the extracted content into json format

import json

with open('first_30_chapters.json', 'w') as jsonfile:
    json.dump(first_30_chapters, jsonfile)
```

In [14]:
```python
first_30_chapters[0]
```

Out[14]: 'Chapter 1: The Awakening of Martial Souls\nTranslator: Transn Ed
itor: Transn\nThe story started in Sunnywood City, Skymoon Country
.\nIn the mansion of the Sus, a ceremony of Martial Soul awakening
was being held in a huge martial practice field.\nAn altar stood i
n the center of the martial practice field.\nMany elders and disci
ples of the Sus were clustered in the field, watching the ceremony
.\n"Rank 2 Human Class Martial Soul!"\n"Rank 3 Human Class Martial
Soul!"\n"Rank 3 Human Class Martial Soul!"\nThe elder hosting the
ceremony continuously announced the ranks of the Su disciples' awa
kened Martial Souls.\nThe level of the Martial Soul indicated the
cultivating talent of martial artists. Both Rank 2 and Rank 3 Huma
n Class Martial Soul were common Martial Souls and were considered
mediocre.\nMany people in the martial practice field fixed their e
yes on two young men who were standing in the front row.\nOne was
dressed in teal clothes, and the other one was wearing purple clot
hes. They were both quite handsome.\nThe young man in teal was cal
led Su Mo, the young master of the Sus and the son of the Master o
f the Sus.\nThe young man in purple was the son of the First Elder
of the Sus.\nThey both were seeded disciples with great talents am
ong all inferiors, especially Su Mo.\nThe young master had accompl
ished Lv 9 Body Tempering Realm at the age of 15, and he was endow

ed with the highest talent among all inferiors.\nTherefore, everyo
ne looked forward to seeing what levels of Martial Souls they woul
d awaken.\nIn the first row, Su Yu, dressed in purple clothes, gla
nced at Su Mo, who was next to him. He sneered and said, "You're c
alled the top genius of the entire Su clan. I hope that you can aw
aken a Martial Soul that is well worthy of your identity."\nThe ey
es of Su Yu were full of sarcasm. He had an extremely high talent,
but Su Mo was spoken more highly of than him in the Su clan.\nThe
so-called nickname of top genius made Su Mo so famous that he stol
e Su Yu's honors.\nAs a result, Su Yu could only be second to him
every time.\nSu Yu was so furious, because even the lady he liked
had a crush on Su Mo.\nNow, his opportunity had finally arrived. A
s long as he could awaken a Martial Soul with a higher level than
that of Su Mo, he would claim the title of first genius among the
Sus.\nHowever, Su Mo was unprovoked. He did not say anything, beca
use he clearly knew Su Yu's hostility toward him.\nThen, the hosti
ng elder exclaimed,\n"Next up, Su Mo!"\nSu Mo instantly strode ont
o the altar.\nRight at this moment, all people fixed their eyes on
him and the entire martial practice field immediately quietened. T
hey were wondering what the level of Martial Soul Su Mo, the first
genius of the Su clan, could awaken.\nAfter entering the altar, Su
Mo sat cross-legged with his eyes tightly closed.\nGlowing runes e
merged consecutively beneath the altar and entered into Su Mo's bo
dy.\nThe surrounding disciples of the Sus started to whisper after
Su Mo entered the altar.\n"Can you guess which level of Martial So
ul brother Su Mo can awaken?"\n"As the young master, the level of
his Martial Soul must be very high."\n"You're right. He has accomp
lished Lv 9 Body Tempering Realm at less than 15 years old, so he'
ll awaken a Martial Soul with an extremely high level."\nAmidst th
e disciples' heated discussion, more and more sparkling runes floa
ted above the altar and enveloped Su Mo's body.\nWith his legs cro
ssed and eyes closed, Su Mo started to breathe quickly, and roarin
g sounds gradually arose.\nEveryone stopped breathing and stared c
losely at the altar.\nBoom!\nFinally, with a mighty booming sound,
a dark shadow abruptly rose from his body.\nThis dark shadow was a
huge vortex, inside which was a bottomless black hole, making peop
le feel a chill.\nAt the same time, a yellow halo appeared above t
he shadow.\nAh!\nAll the Sus were instantly glassy-eyed.\n"Why is
there only one halo?"\n"His Martial Soul is Rank 1 Human Class?"\n
"How is this possible?"\nEveryone was stunned, and even Su Yu felt
startled with his mouth agape.\nHe had not expected that Su Mo wou
ld only awaken a Rank 1 Human Class Martial Soul.\nThe Rank 1 Huma
n Class Martial Soul was the lowest one and totally useless.\nSeat
ed on the altar with his legs crossed, Su Mo slowly opened his eye
s. He was also dumbfounded when he saw his Martial Soul.\n"Rank 1
Human Class Martial Soul…" Su Mo murmured with a bitter smile on h
is lips. He had never thought that he would awaken a lowest rank M
artial Soul.\nAfter a while, everyone regained consciousness, and
the martial practice field was suddenly in an uproar.\n"Oh my, my
eyes must be playing tricks on me. It's a Rank 1 Human Class Marti
al Soul, the totally useless one?"\n"He awakened a useless Martial
Soul. Crap, I can't believe I anticipated for so long!"\n"He isn't
a genius, but the most useless person in our clan!"\n"…"\nAll the

spectators were talking about the matter, and all the elders and inferiors of the Sus changed their view of Su Mo.\nThey used to look at him with respect and admiration, but now, they were looking at him with disappointment and contempt.\nOn the altar, Su Mo managed to slowly stand up with his fists clenched.\nHe looked around and saw their expressions. "What snobbish people they are!" Su Mo smiled satirically in his heart.\nPreviously, when he was considered to be highly talented, all of them showed their respect to him. Wherever he went, they all swarmed to him and kissed his ass.\nNow, after he awakened a useless Martial Soul, they all instantly looked at him with contempt.\nAfter a while, Su Mo took a deep breath and strode off the altar.\n"Next one, Su Yu!" exclaimed the hosting elder.\nGlancing at Su Mo, he shook his head secretly. The former genius was a genius no more!\nUpon hearing this, Su Yu walked toward the altar with a prideful look.\nWhen he passed by Su Mo, he coldly laughed and disdainfully said, "I used to regard you as my rival. But from now on, the rivalry is gone, and I'll tread you under my foot forever!"\nSu Yu felt extremely happy. Now that Su Mo had awakened the lowest rank Martial Soul, Su Mo would not even be eligible to lick his shoes.\nEven if he awakened a bad Martial Soul, it would still be higher than Su Mo's.\nSu Yu strode onto the altar after saying these words.\nWithout responding to his provocation, Su Mo returned to the martial practice field and calmly observed the ceremony.\nStanding in the martial practice field, he felt some disparaging eyes fixed upon him and saw the disdainful expressions of disciples around him.\nSu Mo's heart could not stop twitching. After all, the feeling of falling from heaven to hell was indeed torture.\nNow, Su Yu sat on the altar cross-legged. The glowing runes emerged from the black alter and all entered his body.\nThe martial practice field quieted down again, and everyone looked forward to seeing his Martial Soul.\nSu Mo had awakened a useless Martial Soul, so it was impossible that Su Yu would awaken another useless one.\nOtherwise, the Sus would become a joke in Sunnywood City.\nHowl!\nAs everyone was anticipating, a beast's roar abruptly came out from Su Yu's body.\nA giant virtual shadow of a snake rose above the head of him, triumphantly.\nThere were five dazzling yellow halos around the python's shadow.\nThe hosting elder was stunned at the sight of his Martial Soul. Then, he shouted excitedly, "Five halos! It's a Rank 5 Human Class Martial Soul —Iron-scaled Python."\nThe Rank 5 Human Class Martial Soul was the highest one in all of Sunnywood City. Finally, another genius had appeared in the Sus.\nThe entire martial practice field fell into silence at the sight of Su Yu's Martial Soul.\nThen, it was in an uproar again.\n"Rank 5 Human Class Martial Soul!"\n"Haha! The top genius appeared in the Su clan."\n"Brother Su Yu turned out to be the first genius of our Su clan. Su Mo is nothing!"\n"You're right! Su Mo only has a useless Martial Soul. He can't be compared with Su Yu!"\nAll disciples of the Sus looked at Su Yu with admiration.\nOn the altar, Su Yu saw that he awakened a Rank 5 Human Class Martial Soul and heard the surprise and admiration from the crowd.\nA thick of pride arose in his heart and felt that everything was beautiful. He was full of high spirits and thought that no one could rival him.\nHe arrogantly turned to Su Mo and looked at him with eyes full of

sarcasm, as if to say, "I will always tread you under my foot from now on."\nAfter seeing Su Yu's proud look and hearing the praise from the crowd, Su Mo sighed in his heart and left the martial practice field.\nIf you find any errors (broken links, non-standard content, etc..), Please let us know < report chapter > so we can fix it as soon as possible.'

In [15]:
```python
#validating

with open('first_30_chapters.json') as json_file:
    data = json.load(json_file)
```

In [16]:
```python
data
```

hich was a sign of the Completion Realm.\nWith his strength and physical force nowadays, Su Mo was not afraid of martial artists at Lv 4 Qi Cultivation Realm at all.\nHe did not rush to cultivate the scrolls in the storage ring, because it was more urgent to improve his cultivation.\n"I have to find a way to increase the rank of my Martial Soul," Su Mo murmured to himself.\nHe was now performing both Qi Cultivation and Body Refining at the same time. He needed a great amount of Spiritual Qi for Elephants Strength Skill, but his Rank 3 Human Class Martial Soul did not absorb Spiritual Qi quickly enough.\nThe only way to improve the rank of a Martial Soul was to devour Beast Souls and other Martial Souls.\nDevouring Martial Souls was not practical for now, since he could not kill people in the city, so he had to devour Beast Souls.\nIn addition to hunting for Beast Souls, he could also buy them with gold from any big shop in Sunnywood City.\nHowever, they were not cheap. The higher the rank of demonic beast, the pricier its Beast Soul was.\nAs far as Su Mo knew, the Beast Soul of a demonic beast with Lv 3 or 4 Qi Cultivation Realm usually cost over one kilogram of gold each.\nAfter pondering for a while , he had an idea and walked to the Master Mansion.\n"Haha! Mo'er

In [ ]: