

Errata for *Real World Python* (updated to 2nd printing)

Page 15: In Listing 1-4, lines 4 and 5 (90 and 91 in code) that read:

```
self.sailor_actual[0] = np.random.choice(self.sa1.shape[1], 1)
self.sailor_actual[1] = np.random.choice(self.sa1.shape[0], 1)
```

should now read:

```
self.sailor_actual[0] = np.random.choice(self.sa1.shape[1])
self.sailor_actual[1] = np.random.choice(self.sa1.shape[0])
```

and in the second-to-last paragraph:

Selecting `[0]` with `random.choice()` means that rows are used, and the final argument, `1`, selects a single element.

should now read:

Selecting `[0]` with `random.choice()` means that rows are used.

Page 54: We added a code comment to the last line of Listing 3-1 that reads:

```
# Use a space to join the paragraph elements.
```

Page 60: In the second paragraph:

Because there are only `7` sentences in the whole speech with 10 or fewer words . . .

should now read:

Because there are only `about a dozen` sentences in the whole speech with 10 or fewer words . . .

Page 61: `gensim` 4.0, released on March 25, 2021, dropped support for the Summarization module. To complete Project #4, install an older version of `gensim`, such as 3.8.3 (see <https://pypi.org/project/gensim/3.8.3/>).

Page 62: We added a code comment to the last line of Listing 3-6 that reads:

```
# Use a space to join the paragraph elements.
```

and Listing 3-7 which reads:

```
print("\nSummary of Make Your Bed speech:")
summary = summarize(speech, word_count=225)
sentences = sent_tokenize(summary)
sents = set(sentences)
```

```
print(' '.join(sents))
```

should now read:

```
print("\nSummary of Make Your Bed speech:")  
print(summarize(speech, word_count=225))
```

and in the paragraph following Listing 3-7:

Then, call the `gensim summarize()` function to summarize the speech in 225 words. This word count will produce about 15 sentences, assuming the average sentence has 15 words.

should now read:

Then, summarize the speech and print the result in one step by calling the `gensim summarize()` function within the `print()` function. Set the `word_count` argument to 225. In theory, this will produce a summary of 15 sentences, assuming the average sentence contains 15 words.

and we deleted the last sentence and code block on the page that read:

Ideally, you could summarize the speech and print the summary in one step.

```
print(summarize(speech, word_count=225))
```

Page 63: The first sentence on the page which reads:

Unfortunately, `gensim` sometimes duplicates sentences in summaries, and that occurs here:

should now read:

After running the program, you should get the following output:

and the first code block showing the “Make Your Bed” speech should now read:

```
Summary of Make Your Bed speech:
```

```
“What starts here changes the world.” Tonight there are almost 8,000 students  
graduating from UT. Basic SEAL training is six months of long torturous runs  
in the soft sand, midnight swims in the cold water off San Diego, obstacle  
courses, unending calisthenics, days without sleep and always being cold, wet  
and miserable. So, here are the 10 lessons I learned from basic SEAL training  
that hopefully will be of value to you as you move forward in life. Every  
morning in basic SEAL training, my instructors, who at the time were all  
Vietnam veterans, would show up in my barracks room and the first thing they  
would inspect was your bed. If you want to change the world, start off by  
making your bed. During SEAL training the students are broken down into boat  
crews. Over a few weeks of difficult training my SEAL class, which started  
with 150 men, was down to just 35. Every day during training you were  
challenged with multiple physical events – long runs, long swims, obstacle
```

courses, hours of calisthenics – something designed to test your mettle. So, if you want to change the world, start singing when you're up to your neck in mud. If you want to change the world don't ever, ever ring the bell. Moments away from starting to change the world – for the better.

and the two paragraphs that follows should now read:

If you increase the word count parameter to 450, the “make your bed” aspects of the speech are stressed even more (I’ve shortened the output for brevity).

and the second code block showing the “Make Your Bed” speech should now read:

Summary of Make Your Bed speech:

The University's slogan is, “What starts here changes the world.” I have to admit – I kinda like it. “What starts here changes the world.” Tonight there are almost 8,000 students graduating from UT. And while these lessons were learned during my time in the military, I can assure you that it matters not whether you ever served a day in uniform. Basic SEAL training is six months of long torturous runs in the soft sand, midnight swims in the cold water off San Diego, obstacles courses, unending calisthenics, days without sleep and always being cold, wet and miserable. So, here are the 10 lessons I learned from basic SEAL training that hopefully will be of value to you as you move forward in life. Every morning in basic SEAL training, my instructors, who at the time were all Vietnam veterans, would show up in my barracks room and the first thing they would inspect was your bed. Making your bed will also reinforce the fact that little things in life matter. If you want to change the world, start off by making your bed. During SEAL training the students are broken down into boat crews. If you want to change the world, find someone to help you paddle. Over a few weeks of difficult training my SEAL class, which started with 150 men, was down to just 35.

--snip--

Page 64: The second sentence that reads:

Although these two results are different, both extracted the key points of the speech . . .

should now read:

It extracted many of the key points of the speech . . .

Page 169: In the Note:

```
interpolation = cv.INTER_AREA)
```

should now read:

```
interpolation=cv.INTER_AREA)
```

Page 179: Before Project #11:

We'll look at this case in "Experimenting with Transit Photometry" on page 182.

should now read:

We'll look at this case in "Experimenting with Transit Photometry" on page 186.