CSc 110
Lists

Benjamin Dicken

Announcements

- Exam
  - Next week!
  - Study guide will be available on piazza by the end of the day
  - Review Session Tuesday 5-7pm
  - Cumulative
  - For the group exam
    - let me know of any group issues by Friday
    - You can strategize with your teammates in advance
- 1D Chess
- Feedback

Flash Cards

- An app for quizzing someone with simple, text-based "flash cards"
- User provides a number of cards to create, and then the word + definition for each card
- Then, quiz the user!

Flash Cards

```
Enter number of flashcards to create: 3
Word for card 1: Grace
Definition for card 1: Favor; good will; kindness
Word for card 2: Faith
Definition for card 2: The assent of the mind to the truth
of a proposition advanced by another
Word for card 3: Peace
Definition for card 3: In a general sense, a state of quiet
or tranquillity
```

```
. . .
+---------+
|  Faith  |
+---------+
Press enter to continue
+-------------------------------------------------------------------------+
|  The assent of the mind to the truth of a proposition advanced by another  |
+-------------------------------------------------------------------------+
Press enter to continue
+---------+
|  Peace  |
+---------+
Press enter to continue
+-----------------------------------------------------+
|  In a general sense, a state of quiet or tranquillity  |
+-----------------------------------------------------+
. . .
```

```
import random

def print_card(content):
    ''' Print a card with the provided content '''

def quiz(words, definitions):
    ''' Quiz the user on a single random flashcard '''

def get_card(words, definitions, card_num):
    ''' Get a card from the user '''

def main():
    ''' What goes here? '''

main()
```

```
def main():
    words = []
    definitions = []
    num_cards = int(input('Enter number of flashcards to create: '))

    i = 1
    while i <= num_cards:
        get_card(words, definitions, i)
        i += 1

    while True:
        quiz(words, definitions)
```

Implement get_card

```
def get_card(words, definitions, card_num):
    '''
    This function should ask the user for two inputs:
    a word and the definition for that word.
    Then, it should add the word to the words
    list and the definition to the definitions
    list.

    Can be done in 4 lines of code!
    '''
```

Implement get_card

```
def get_card(words, definitions, card_num):
    word = input('Word for card ' + str(card_num) + ': ')
    definition = input('Definition for card ' + str(card_num) + ': ')
    words.append(word)
    definitions.append(definition)
```

```
def get_card(words, definitions, card_num):
    word = input('Word for card ' + str(card_num) + ': ')
    definition = input('Definition for card ' + str(card_num) + ': ')
    words.append(word)
    definitions.append(definition)

def main():
    words = []
    definitions = []
    num_cards = int(input('Enter number of flashcards to create: '))
    i = 1
    while i <= num_cards:
        get_card(words, definitions, i)
        i += 1
    while True:
        quiz(words, definitions)

main()
```

Implement print_card

```
def print_card(content):
    '''
    The function should print out a text card, with
    the provided content as the text on the card.
    For example, if content = "Hi There", then this
    function should print out:
    +------------+
    |  Hi There  |
    +------------+
   '''
```

Implement print_card

```
def print_card(content):
    length = len(content)
    print('+--' + '-' * length + '--+')
    print('|  ' + content + '  |')
    print('+--' + '-' * length + '--+')
```

Implement quiz

```
def quiz(words, definitions):
    '''
    This function should select a random word form the
    list to quiz the user about.
    Once a random index has been generated, use the
    print_card function to display the word, then the
    definition.
    Use the random module!
    '''
```

Implement quiz

```
def quiz(words, definitions):
    random_index = random.randint(0, len(words) - 1)
    word = words[random_index]
    definition = definitions[random_index]
    print_card(word)
    print_card(definition)
```

Implement quiz

```
def quiz(words, definitions):
    random_index = random.randint(0, len(words) - 1)
    word = words[random_index]
    definition = definitions[random_index]
    print_card(word)
    input('Press enter to continue ')
    print_card(definition)
    input('Press enter to continue ')
```

```python
import random

def print_card(content):
    length = len(content)
    print('+--' + '-' * length + '--+')
    print('|  ' + content + '  |')
    print('+--' + '-' * length + '--+')

def quiz(words, definitions):
    random_index = random.randint(0, len(words) - 1)
    word = words[random_index]
    definition = definitions[random_index]
    print_card(word)
    input('Press enter to continue ')
    print_card(definition)
    input('Press enter to continue ')

def get_card(words, definitions, card_num):
    word = input('Word for card ' + str(card_num) + ': ')
    definition = input('Definition for card ' + str(card_num) + ': ')
    words.append(word)
    definitions.append(definition)

def main():
    words = []
    definitions = []
    num_cards = int(input('Enter number of flashcards to create: '))

    i = 1
    while i <= num_cards:
        get_card(words, definitions, i)
        i += 1

    while True:
        quiz(words, definitions)

main()
```