CIS 1250 PYTHON FINAL

For Ed Fong

# Data Structures:

The data structures for the dice game consists of a list and a dictionary.

### Dice List

The dice list consist of Unicode characters that represent the dice images from 1 – 6

self.dice = ['\u2680', '\u2681', '\u2682', '\u2683', '\u2684', '\u2685']

### Dice Dictionary

The dice dictionary consists of the Unicode character names as the key and the corresponding number to the character as the values.

self.d = {'\u2680':1, '\u2681':2, '\u2682':3, '\u2683':4, '\u2684':5, '\u2685':6}

### How the structures interact with the program:

The value of the dice list corresponds with the key in the dictionary. The values of the dice dictionary is used to add the two dice values together to calculate the total from the two dice rolled.

## Help(DiceGame)

Help on class DiceGame in module \_\_main\_\_:

class DiceGame(builtins.object)

| Methods defined here:

|

| \_\_init\_\_(self)

| Initilizer(constructor) Sets up the window, canvas, window sizes and centers the startup in the center of the screen.

|

| addDiceTogether(self)

| Method that adds the two dice togetether to get the score of the round for user and computer.

|

| buttons\_labels(self)

| The buttons\_lables method creates all of the buttons and lables in one place.

|

| dice\_objects(self)

| Uses the library unicode characters to display the dice

| on the screen. The dice dictionary is used to correspond to the

| number correlating to the unicode character so the dice values

| can be calculated. Then calls the addDiceTogether() method

| to get the value of both dice rolled.

|

| gameWinLose(self)

| Checks who wins game, displays if user wins or loses and displays graphics and sounds accordlingly.

|

| labels(self)

| Labels for win and game plays along with button clicks counter(increment).

|

| restart(self)

| The restart method is the action handler to the Start/restart button.

|

| roll\_dice(self)

| The roll\_dice method is the action handler for the roll button.

|

| roundCheck(self)

| Check to see who wins the round displays if player won or lost the round.

|

| ----------------------------------------------------------------------

| Data descriptors defined here:

|

| \_\_dict\_\_

| dictionary for instance variables (if defined)

|

| \_\_weakref\_\_

| list of weak references to the object (if defined)