codecademy

Graphs and Graph Search

Implementing a Graph Class

The basis of a `Graph` class in Python is the implementation of two classes, `Graph` and `Vertex`, which establish the essential functionality to create a variety of graphs.

The `Vertex` class allows for storage of connecting vertices with a dictionary and adjustment of their edges as well.

The `Graph` class builds upon the `Vertex` methods and allows addition of vertices and edges, setting the directionality of edges, and determining if a path exists between two vertices.

```
class Vertex:
  """Key methods of Vertex class"""
  def __init__(self, value):
  def add_edge(self, vertex, weight = 0):
  def get_edges(self):

class Graph:
  """Key methods of Graph class"""
  def __init__(self, directed = False):
  def add_vertex(self, vertex):
  def add_edge(self, from_vertex, to_vertex, weight = 0):
  def find_path(self, start_vertex, end_vertex):
```