

Learn Graphs

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):
```

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