Algorithm 1 Exploration Model

```
procedure EXPLORATION(G, D, Q)
 2:
            \mathbf{while} \; \mathtt{Q} \; \; \mathsf{is} \; \; \mathsf{not} \; \; \mathsf{empty} \; \mathbf{do}
                  \mathbf{if}\ D.label = queue.metadata\ \mathbf{then}
                        node \leftarrow \text{Q.dequeue}()
 4:
                        G(u) \leftarrow \mathtt{name}
                        G(v) \leftarrow \texttt{score}
 6:
            \mathbf{while}\; \mathtt{G}\; \mathtt{is}\; \mathtt{not}\; \mathtt{empty}\; \mathbf{do}
                  u = G.removeMin()
 8:
                  {\bf for}\;{\bf each}\;{\bf vertex}\;{\bf z}\;{\bf adjacent}\;{\bf to}\;{\bf u}\;{\bf and}\;{\bf in}\;{\bf G}\;{\bf do}
                       if D(u) + w((u, z)) < D(z) then
10:
                              D(z) \leftarrow D(u) + w((u, z))
                              update z in G
12:
             return G
```