C++ Graph Library Design Report

April 25, 2018

1 Introduction

2 Node

User can define the node type they want to use. A node type must supports:

3 Edge

User can define the edge type they choose to use. An edge type must supports:

4 Graph Declarations

4.1 General Design

4.2 Dense Graph with Fixed number of Nodes

4.3 Sparse Graph with Fixed number of Nodes

4.4 Dense Graph with Variable number of Nodes

4.5 Sparse Graph with Variable number of Nodes

5 Path Functions

5.1 Generic Path Exists Function

5.2 Generic Path Finding Function

6 For Developers