Graph

- graph : QVector<Vertex>
- dfsDistance: int
- mstDistance: int

+ Graph()
+ ~Graph()
+ empty() : bool
+ size() : int
+ initializeGraph() : void
+ insertVertex(stadium: QString) : void
+ findVertex(stadium: QString) : int
+ insertEdge(u: QString, v: QString, weight: int) : void
+ vertices() : QVector<QString>
+ edges() : QVector<QString>
+ DFS(startingStadium: QString, dfs: QVector<QString>) : int
+ BFS(startingStadium: QString, bfs: QVector<QString>) : int
+ primJarnikMST(startingStadium: QStirng, mst QVector<QString>) :
- smallestEdgeDFS(currVertex: int, dfs: QVector<QString>) : int
- BFSRecur(bfs: QVector<QString>, previousLevel: QVector<int>): in
- otherVertex(currEdge : edge, startingStadium: QString) : QString
- distance(v1: Vertex*, v2: Vertex*) : int
- smallestEdgeMST(mst: QVector<QString>) : int
- smallestEdge(vertex: int) : int
- distanceBetween(v1: int, v2: int) : int
- verticesVisited() : int
- edgesDiscovered(currVertex: int) : int

Database

- instance : Database*

- Database()
+ getInstance() : Database*
+ returnTeamList() : UnsortedMap
+ returnSouvenirList() : QVector<Souvenir>
+ returnSouvenirList(stadium: Team) : QVector<Souvenir>
+ returnGraphEdges() : QVector<Edge>
+ returnNewStadiums() : QVector<Team>
+ returnNewSouvenirs() : QVector<Souvenir>
+ returnNewEdges() : QVector<Edge>
+ stadiumExists(stadium: Team) : bool
+ souvenirExists(souvenir: Souvenir) : bool
+ addStadium(stadium: Team) : void
+ addSouvenir(souvenir: Souvenir) : void
+ addDistances(stadium: Edge) : void
+ removeStadium(stadium: Team) : void
+ removeSouvenir(souvenir: Souvenir) : void
+ removeDistances(Edge stadium): void
+ editSouvenirPrice(souvenir: Souvenir, newPrice: double) : void
+ editStadium(team: QString, field: QString, newValue: QString) : v

<< struct >> Vertex

+ stadium : QString
+ visited : bool
+ edgeList : QVector<Edge

+ Vertex()

<< struct >> Edge

+ u : QString
+ v : QString
+ discoveryEdge : bool
+ weight : int

+ Edge()

Souvenir

- name : QString
- teamName : QString
- price : double

+ Souvenir()
+ setName(sName: QString) : void
+ setTeamName(sTeamName: QString) : void
+ setPrice(sPrice: double) : void
+ getName() : QString
+ getTeamName() : QString
+ getPrice() : double

UnsortedMap

- map : QVector<Team>

+ UnsortedMap()
+ size() : int
+ empty() : bool
+ find(key: QString) : QVector<Team>::iterator
+ insert(key: QString, value: Team) : QVector<Team>::iterat
+ operator[](index: const int) : Team
+ begin() : QVector<Team>::iterator
+ end() : QVector<Team>::iterator
+ calculateTotalSeatingCapacity() : long

Team

- name : QString
- stadiumName : QString
- seatingCapacity : QString
- location : QString
- conference : QString
- surfaceType : QString
- stadiumRoofType : QString
- starPlayer: QString

+ Team()
+ setName(tName: QString) : void
+ setStadiumName(tStadiumName: QString) : void
+ setSeatingCapacity(tSeatingCapacity: QString) : void
+ setLocation(tLocation: QString) : void
+ setConference(tConference: QString) : void
+ setSurfaceType(tSurfaceType: QString) : void
+ setStadiumRoofType(tStadiumRoofType: QString) : void
+ setStarPlayer(tStarPlayer: QString) : void
+ getName() : QString
+ getStadiumName() : QString
+ getSeatingCapacity() : QString
+ getLocation() : QString
+ getConference() : QString
+ getSurfaceType() : QString
+ getStadiumRoofType() : QString
+ getStarPlayer() : QString