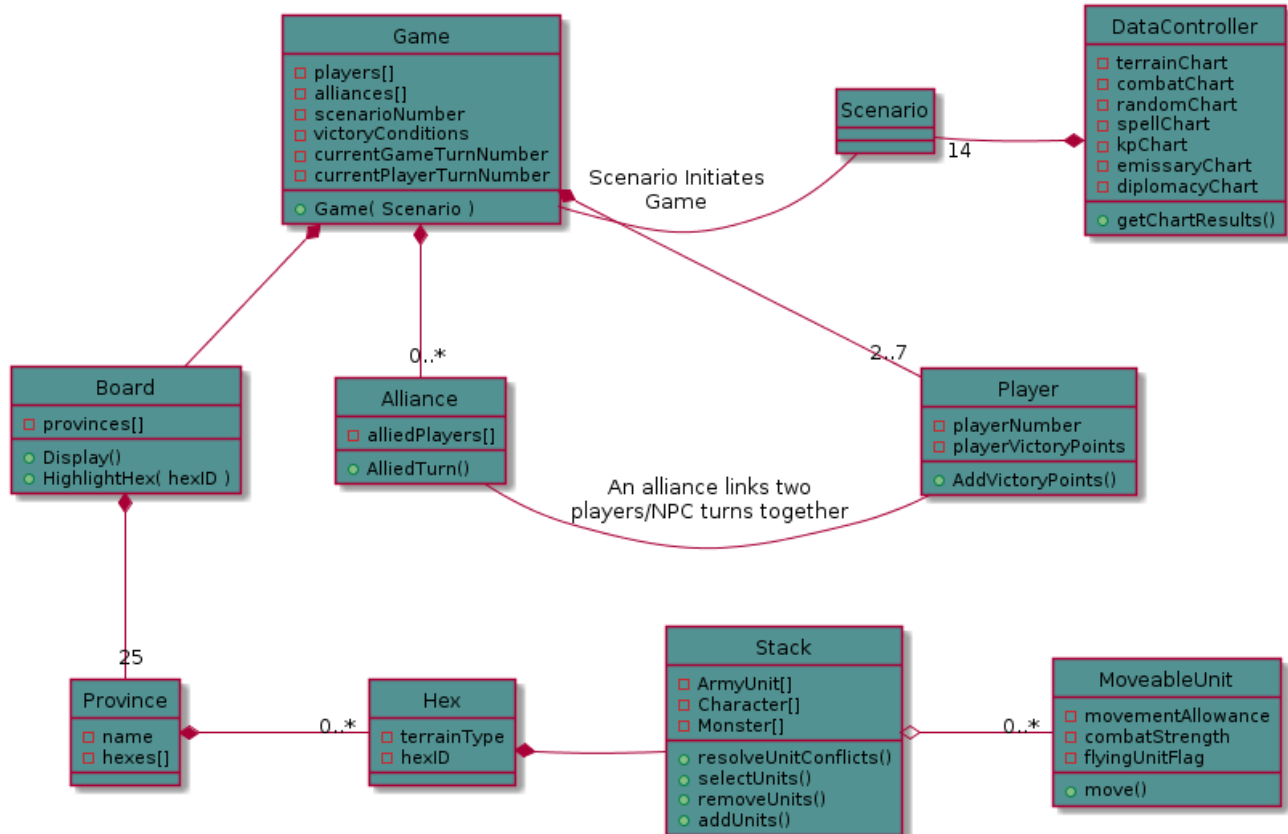


# Master Class Diagram

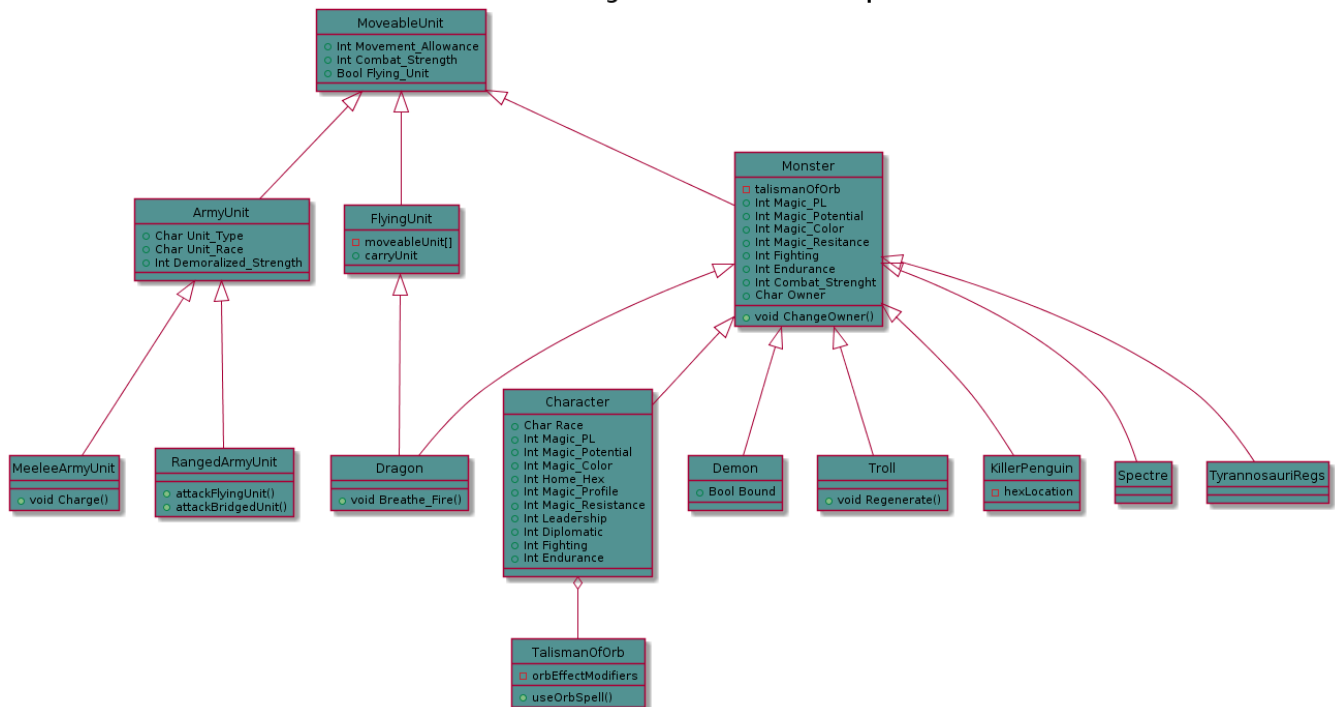
Ian Westrope, Keith Drew

2014-02-27 Thur

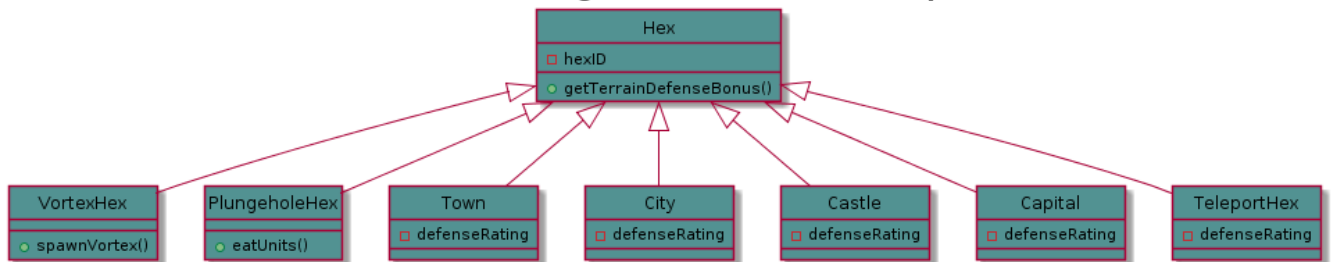
## Overview Class Diagram Author: Keith Drew



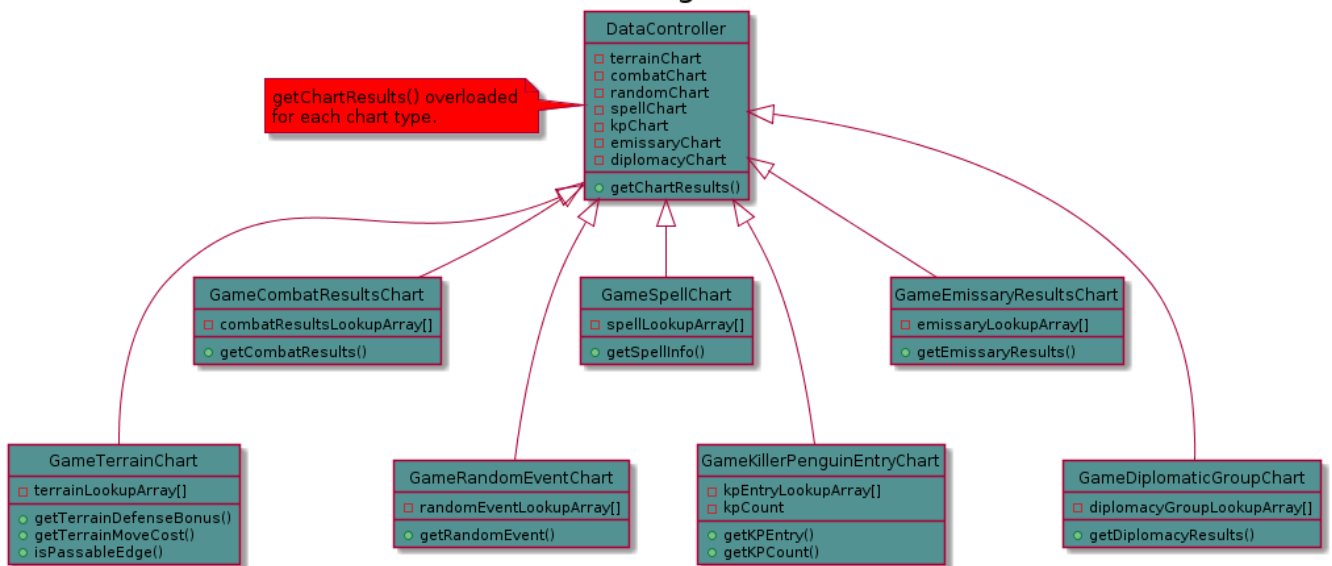
Unit Class Diagram Author: Ian Westrope



Hex Class Diagram Author: Ian Westrope



Data Structures Class Diagram Author: Keith Drew



## 1 Class Dictionary

**Game:** An instance of the game, Swords and Sorcery

**Board:** The Board class is an aggregate class, made up of Provinces.

**Player:** An programming construct that represents a player at the “board”. This includes factions, victory points, etc.

**Alliance:** The Alliance class is a that links two Players or NPCs together for a turn.

**Province:** The Province class is an aggregate class, made up of Hexes. It represents the different provinces found on the game map.

**Hex:** The Hex class is an aggregate class, made up of a Stack class. It represents the individual hexes found on the game map.

**Stack:** The Stack class is an aggregate class, made up of zero or more MoveableUnits.

**Moveable Unit:** MoveableUnit is the superclass for any object that can move in S&S.

**Army Unit:** Simple units used for combat, limited to 2 per Stack object.

**Melee Army Unit:** Melee Army Unit inherits from Army Unit. Melee Army Unit represents both horsed and foot units from the game.

**Ranged Army Unit:** Ranged Army Unit inherits from Army Unit. Ranged Army Unit represents the units with bows from the game.

**Monster:** The Monster class inherits from MoveableUnit. It represents the monster units from the game.

**Character:** Character inherits from Monster and is also an aggregate class possibly made of Talisman-OfOrb.

**Caster Character:** The class of characters that can use magic. This class includes methods for actually casting a given spell, made through a call to the appropriate data structure class.

**Fighter Character:** The class of characters that cannot use magic.

**Talisman Of Orb:** The class of magical items. This are held by certain characters and include methods that apply stat bonuses and methods that invoke certain spells.

**Scenario:** A premade instance of a game. The scenario both initializes a game and dictates any win conditions, number of players, and other meta-details about the game.

**DataController:** The class that holds all data chart classes. Through this class all data charts should be accessed.

**Game Combat Results Chart:** This chart class holds the data indicating combat results, as well as necessary methods that are intuitive to hold here.

**Game Terrain Chart:** This chart class holds necessary data and methods for determining terrain effects for defense bonuses and movement costs. This class also contains methods for altering hex types.

**Game Random Event Chart:** This chart class holds methods and data for determining random events for each game turn. The class includes methods to apply random event effects where needed.

**Game Spell Chart:** This chart class contains spell descriptions, spell casting charts, and the methods that are used to cast each spell. Casting a spell involves asking this class to execute a method.

**Game Killer Penguin Entry Chart:** This chart class determines how many (if any) Killer Penguins enter the field in given circumstances, and includes methods for adding the KPs to the field of play.

**Game Emissary Results Chart:** This chart includes the methods and data necessary to determine the results of an emissary's attempt to conduct diplomacy.

**Game Diplomatic Group Chart:** This chart class helps determine bonuses for diplomacy rolls, in conjunction with the emissary results table. It includes methods for returning the appropriate bonuses.