

Diagram Assembly Document

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- Board: The game board, this holds nearly all visual information about the game and state. The class holds random event flags, which will become more specific, that indicate global events.
- Province: A province is a group of hexes that are related by controlling faction. Essentially like the United States of Hexes.
- Hex: A discrete location on the board. Hexes are represented by a unique ID, terrain, and a stack of units that can be empty.
- Stack: A collection of units and characters, bound by the rules of the game. Ie, 0 or more characters, and 0-2 units. Also, special considerations for movement phase, flying units, and monsters.
- Special Hex: The special hex can be any of the residential hexes (city/capital/town/castle), or it can be one of the several unique hex types, such as a teleport hex or vortex hex, or the terrifying Bottomless Plungehole.
- Vortex: A vortex is a moveable unit, from the system's point of view. A character can control vortices under certain conditions. Otherwise movement, creation, and destruction of vortices is automated.

```
@startuml
```

```
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```

```
hide circle
```

```
class Board #529292 {  
    List Provinces  
    RandomEventFlags (misc)  
    int gameTurn  
    int gameTurnLimit  
}
```

```
class Province #529292 {  
    String provinceName  
    String GetName()  
    List Allies  
    HexContainer Hexes  
}
```

```
note right of Province #red  
    Provinces may only have one Capitol  
    type hex in it's composition.  
end note
```

```
class Hex #529292 {  
    int hexID  
    double moveCost  
    double terrainID  
    UnitStack units  
    double GetTerrainID()  
    int GetHexID()  
    void ChangeTerrainType()  
}
```

```
class Stack #529292 {  
    List Units  
    List Characters  
    Stack SelectSubStack()  
    void RemoveExcessUnits()
```

```

}
class SpecialHex #529292 {
    String name
    String hexType
    String GetHexType()
    String GetName()
}
class ResidentialHex #529292 {
    int leadershipRating
    double initialDefenseRating
    double defenseRating
    double GetDefenseRating()
}
class BottomlessPlungeHole #529292 {
    void DestroyStack()
}
note left of BottomlessPlungeHole #red
    If any units move here,
    they are destroyed.
end note

class VortexHex #529292 {
    void SpawnVortex()
}
class TeleportHex #529292 {
    void TeleportUnits()
    int teleportID
}
class Vortex #529292 {
    double moveableUnitID
    void RandomMovement()
    void DamageUnits()
    void Move()
}

Board *-right- "22" Province : Provinces build\nboard
Province *-down- "1..*" Hex : Hexes build\nProvinces
Hex <|-down- SpecialHex : Extends
Vortex .up. VortexHex : Spawns
note right on link #red
    This is where vortices come
    from, other than spells.
end note

TeleportHex --up|> SpecialHex : Extends
VortexHex --left|> SpecialHex : Extends
BottomlessPlungeHole --right|> SpecialHex : Extends
ResidentialHex --up|> SpecialHex : Extends
Stack -lefto Hex : Aggregation
@enduml

```

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