

Diagramma UML per il gioco di carte "The Settlers of Catan".

**Classi e Strutture:**

- Region**: Contiene **Council**, **City**, **Emporium**, **PermitTile**, **PermitTileDeck**, **RegionBonusTile**, **RegionName**, **CityColors**, **ColorBonusTile**, **Tile**, **RewardToken**, **NobilityTrack**, **NobilityCell**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- Council**: Contiene **CouncillorsPool**, **KingCouncil**, **RegionCouncil**, **Councillor**.
- City**: Contiene **CityColors**, **ColorBonusTile**, **Tile**, **RewardToken**, **NobilityTrack**, **NobilityCell**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- Emporium**: Contiene **Point**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- PermitTile**: Contiene **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- PermitTileType**: Contiene **TileFactory**, **ConcreteTileFactory**.
- TileFactory**: Contiene **ConcreteTileFactory**.
- ConcreteTileFactory**: Contiene **TileFactory**.
- Tile**: Contiene **RewardToken**, **NobilityTrack**, **NobilityCell**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- RewardToken**: Contiene **NobilityTrack**, **NobilityCell**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- NobilityTrack**: Contiene **NobilityCell**, **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- NobilityCell**: Contiene **PermitTile**, **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- PermitTile**: Contiene **PermitTileType**, **TileFactory**, **ConcreteTileFactory**.
- PermitTileType**: Contiene **TileFactory**, **ConcreteTileFactory**.
- TileFactory**: Contiene **ConcreteTileFactory**.
- ConcreteTileFactory**: Contiene **TileFactory**.

**Relazioni e Associazioni:**

- Region** ha **Council** (1 a 1).
- Region** ha **City** (1 a 1).
- Region** ha **Emporium** (1 a 1).
- Region** ha **PermitTile** (1 a 1).
- Region** ha **PermitTileDeck** (1 a 1).
- Region** ha **RegionBonusTile** (1 a 1).
- Region** ha **RegionName** (1 a 1).
- Region** ha **CityColors** (1 a 1).
- Region** ha **ColorBonusTile** (1 a 1).
- Region** ha **Tile** (1 a 1).
- Region** ha **RewardToken** (1 a 1).
- Region** ha **NobilityTrack** (1 a 1).
- Region** ha **NobilityCell** (1 a 1).
- Region** ha **PermitTile** (1 a 1).
- Region** ha **PermitTileType** (1 a 1).
- Region** ha **TileFactory** (1 a 1).
- Region** ha **ConcreteTileFactory** (1 a 1).
- Council** ha **RegionCouncil** (1 a 1).
- Council** ha **Councillor** (1 a 1).
- City** ha **CityColors** (1 a 1).
- City** ha **ColorBonusTile** (1 a 1).
- City** ha **Tile** (1 a 1).
- City** ha **RewardToken** (1 a 1).
- City** ha **NobilityTrack** (1 a 1).
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**Diagrammi di Sequenza:**

- Region** ha **City** (1 a 1).
- Region** ha **Emporium** (1 a 1).
- Region** ha **PermitTile** (1 a 1).
- Region** ha **PermitTileDeck** (1 a 1).
- Region** ha **RegionBonusTile** (1 a 1).
- Region** ha **RegionName** (1 a 1).
- Region** ha **CityColors** (1 a 1).
- Region** ha **ColorBonusTile** (1 a 1).
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- Region** ha **RewardToken** (1 a 1).
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- Council** ha **RegionCouncil** (1 a 1).
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**Diagrammi di Classe:**

- Region**: -name: String, -council: Council, -cities: ArrayList<City>, -deck: PermitTileDeck, -regionBonus: Tile, +selectCouncilor(color: String): void, +checkCouncilSatisfaction(pollticCards: ArrayList<PoliticCard>): int, +isEligibleForRegionBonus(owner: Player): boolean, +winRegionBonus(owner: Player): Tile, +getCities(): ArrayList<City>, +addCities(cities: ArrayList<City>): void, +toString(): String.
- Council**: -councillors: Queue<Councillor>, -COUNCILLORS\_PER\_COUNCIL: int, +removeCouncilor(): void, +addCouncilor(): void, +getCouncillors(): Queue<Councillor>, +addCouncilor(color: String): void.
- City**: -name: String, -color: String, -emporia: ArrayList<Emporium>, -region: Region, -coordinate: Point,