

CARD

```

classDiagram
    class GoalCard {
        <<abstract>>
        -Points: int
        -IsResourceGoal: boolean
        +GetPoints: int
        +GetIsResourceGoal: boolean
    }
    class GameCard {
        <<abstract>>
        -Kingdom: Kingdom
        -IsFront: boolean
        -Corners: Resource
        +GetKingdom: Kingdom
        +GetIsFront: boolean
        +Flip: boolean
        +GetCorner: int
        +GetCorner: Resource
        +CoverCorner: int
    }
    class ResourceGoalCard {
        -Requirements: Resource
        +GetRequirements: Resource
    }
    class PositionGoalCard {
        -PositionsFromBase: Direction
        -ResourceFromBase: Kingdom
        +GetPositionsFromBase: Direction
        +GetResourceFromBase: Kingdom
    }
    class Kingdom {
        <<enumeration>>
        PLANT
        ANIMAL
        INSECT
        FUNGI
        STARTING
    }
    class Direction {
        <<enumeration>>
        TOP_LEFT
        TOP_RIGHT
        TOP
    }
    class Resource {
        <<enumeration>>
        PLANT
        ANIMAL
        INSECT
        FUNGI
        FEATHER
        POTION
        SCROLL
        BLANK
        HIDDEN
        COVERED
    }
    class StartingCard {
        -BackCorners: Resource
        -PermanentResources: Resource
        +GetCorner: int
        +GetCorner: Resource
        +GetPermanentResources: Resource
    }
    class ResourceCard {
        -Points: int
        -IsGold: boolean
        +GetPoints: int
        +GetIsGold: boolean
    }
    class GoldCard {
        -PointCondition: PointCondition
        -PointCondition
        -PlayableCondition: Resource
        +GetPointCondition: PointCondition
        +GetPointCondition
        +GetPlayableCondition: Resource
    }
    class PointCondition {
        <<enumeration>>
        NORMAL
        CORNER
        FEATHER
        POTION
        SCROLL
    }

    GoalCard <|-- ResourceGoalCard
    GoalCard <|-- PositionGoalCard
    GameCard <|-- ResourceCard
    GameCard <|-- GoldCard
    Kingdom "1" -- "1..4" GameCard : Belongs
    Kingdom "1" -- "1..1" PositionGoalCard : FromBase
    Direction "1..3" -- "1" PositionGoalCard : FromBase
    Resource "1..1" -- "1..1" PositionGoalCard : FromBase
    Resource "1..1" -- "1..1" StartingCard : InCorner
    Resource "1..1" -- "1..1" ResourceCard : InCorner
    Resource "1..1" -- "1..1" GoldCard : CanPlay
    Resource "1..1" -- "1..1" GoldCard : IsInHand
    Resource "1..1" -- "1..1" GoldCard : ArePlayed
    StartingCard "1" -- "1..1" GameCard
    ResourceCard "0..40" -- "1..1" GameCard
    GoldCard "3..5" -- "1..1" ResourceCard : Extends
    PointCondition "1" -- "1" GoldCard : CanScore
    GoalCard "2" -- "0..1" GameCard : HasPermanent
    ResourceGoalCard "2,3" -- "1..1" GameCard : Requirements
    PositionGoalCard "1" -- "1..1" GameCard : Requirements
    
```

The diagram illustrates the structure of a card game system. It features several classes and enumerations:

- GoalCard** (abstract): Base class for goal cards. Attributes: `-Points: int`, `-IsResourceGoal: boolean`. Operations: `+GetPoints: int`, `+GetIsResourceGoal: boolean`.
- GameCard** (abstract): Base class for game cards. Attributes: `-Kingdom: Kingdom`, `-IsFront: boolean`, `-Corners: Resource`. Operations: `+GetKingdom: Kingdom`, `+GetIsFront: boolean`, `+Flip: boolean`, `+GetCorner: int`, `+GetCorner: Resource`, `+CoverCorner: int`.
- ResourceGoalCard**: Inherits from **GoalCard**. Attributes: `-Requirements: Resource`. Operation: `+GetRequirements: Resource`.
- PositionGoalCard**: Inherits from **GoalCard**. Attributes: `-PositionsFromBase: Direction`, `-ResourceFromBase: Kingdom`. Operations: `+GetPositionsFromBase: Direction`, `+GetResourceFromBase: Kingdom`.
- Kingdom** (enumeration): `PLANT`, `ANIMAL`, `INSECT`, `FUNGI`, `STARTING`.
- Direction** (enumeration): `TOP_LEFT`, `TOP_RIGHT`, `TOP`.
- Resource** (enumeration): `PLANT`, `ANIMAL`, `INSECT`, `FUNGI`, `FEATHER`, `POTION`, `SCROLL`, `BLANK`, `HIDDEN`, `COVERED`.
- StartingCard**: Attributes: `-BackCorners: Resource`, `-PermanentResources: Resource`. Operations: `+GetCorner: int`, `+GetCorner: Resource`, `+GetPermanentResources: Resource`.
- ResourceCard**: Inherits from **GameCard**. Attributes: `-Points: int`, `-IsGold: boolean`. Operations: `+GetPoints: int`, `+GetIsGold: boolean`.
- GoldCard**: Inherits from **ResourceCard**. Attributes: `-PointCondition: PointCondition`, `-PointCondition`, `-PlayableCondition: Resource`. Operations: `+GetPointCondition: PointCondition`, `+GetPointCondition`, `+GetPlayableCondition: Resource`.
- PointCondition** (enumeration): `NORMAL`, `CORNER`, `FEATHER`, `POTION`, `SCROLL`.

Key relationships include:

- Kingdom** (1) **Belongs** to **GameCard** (1..4).
- Kingdom** (1) **FromBase** to **PositionGoalCard** (1..1).
- Direction** (1..3) **FromBase** to **PositionGoalCard** (1).
- Resource** (1..1) **FromBase** to **PositionGoalCard** (1).
- Resource** (1..1) **InCorner** to **StartingCard** (1..1).
- Resource** (1..1) **InCorner** to **ResourceCard** (1..1).
- Resource** (1..1) **CanPlay** to **GoldCard** (1..1).
- Resource** (1..1) **IsInHand** to **GoldCard** (1..1).
- Resource** (1..1) **ArePlayed** to **GoldCard** (1..1).
- StartingCard** (1) **Belongs** to **GameCard** (1..1).
- ResourceCard** (0..40) **Belongs** to **GameCard** (1..1).
- GoldCard** (3..5) **Extends** to **ResourceCard** (1..1).
- PointCondition** (1) **CanScore** to **GoldCard** (1).
- GoalCard** (2) **HasPermanent** to **GameCard** (0..1).
- ResourceGoalCard** (2,3) **Requirements** to **GameCard** (1..1).
- PositionGoalCard** (1) **Requirements** to **GameCard** (1..1).

