Sprint 3 Class-Responsibility-Collaboration Cards

This document provides an overview of the 6 key classes used in the design of our game as CRC (Class-Responsibility-Collaboration) cards. These outline the responsibilities of each of the selected classes and how they interact with one another. Each card will contain the class' responsibilities on the left, and the classes it collaborates with on the right. Below each card is a brief justification of its purpose.

The 6 key classes selected are **Cave**, **DragonCard**, **Player**, **Board**, **VolcanoCard** and **Game**.

Cave	
• Starting point for player and their respective token • Has an animal type assigned	• Baby Dragon • Bat • Salamander • Spider

Caves are one of the main components of the game. They provide a starting point for the players' tokens, and contain the players' respective animals. This will work together with the dragon card, and the player will have to flip the card with the animal respective to theirs.

Dragon Card	
• Positioned in the center of the board • Contains an animal type • Contains the number of steps to move a player if correct card is flipped	• Baby Dragon • Bat • Salamander • Spider

Dragon cards are one of the main components of the game, as they require players to flip the right cards (animal on card must match the animal on the tile the player is on) in order to move along the board. It must properly store the correct animal type and number of steps to ensure game progression in a way where players will have to flip the right card and move the right number of steps.

Player	
• Take turns • Flips dragon card during respective turn • Moves along the board	• Token • Board

Players are needed in a game. This class is crucial for player-related mechanics, such as tracking player information, and progress. In addition to that , it is also responsible for handling interactons and states and managing their respective token, and ensuring smooth gameplay.

Board	
• Initializes game board • Handles player movement • Tracks player positions on the tiles	• Volcano Card • Token • Cave

The board is the primary interface for the game, and is where the game elements are contained and where the gameplay takes place. It is important to properly build and manage the board class to ensure the game is able to played properly.

Volcano Card	
• Contains 3 tiles per card • Contains an animal type on each tile • 4 volcano cards will have a cave for players to start on	• Tile • Cave

Volcano cards are components that make up the board, hence they are also essential for player movement. They contain three tiles, with one animal on each and they provide a platform for players to move on.

Game	
• Initializes and generates all game components • Handles game rules and state transitions (e.g. end game)	• Board • Player • Dragon Card

The Game class is the central controller of the entire game, and it is responsible for intializing and generating all the game components on screen, containing the game logic and flow, and also managing states.