# **Game Design Document: Snow Boarder**

## **1. Overview**

**Snow Boarder** is a 2D terrain-based snowboarding game where players navigate challenging slopes, balance their board, and collect stars to earn points. The game features two levels, with increasing difficulty.

## **2. Gameplay Mechanics**

* **Controls:**
  + A: Lean left
  + D: Lean right
  + W: Accelerate
* **Objectives:**
  + Maintain balance while navigating the slopes.
  + Collect stars to gain points.
  + Complete the track without falling.

## **3. Levels**

### **Level 1**

* Gentle slopes and obstacles.
* Moderate star placement.
* Player has a higher tolerance for balance errors.

### **Level 2**

* Steeper slopes and more obstacles.
* More dynamic terrain changes.
* Tighter balance control required.
* Stars placed in more challenging positions.

## **4. Scoring System**

* Each collected star: **10 points**
* Completing: **40 points**

## **5. Game Elements**

* **Player Character:** Snowboarder with animations for movement and balance.
* **Terrain:** Varying slopes with physics-based movement.
* **Stars:** Collectible objects for scoring.
* **Obstacles:** Rocks, trees, and jumps adding difficulty.
* **Background:** Snowy mountains and dynamic weather effects.

## **6. Win/Loss Conditions**

* **Win:** Successfully completes the level while collecting stars.
* **Loss:** Falls off the snowboard due to loss of balance or hits the ground head-first.

## **7. Additional Features**

* **Physics-based movement** for realistic snowboarding.
* **Dynamic difficulty adjustment** based on player performance.
* **Sound effects** for environment and actions.
* **Time challenge mode** for speed-based gameplay.