Upstream

Remake of Winterbells

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**Game Overview:**

Upstream is a remake version of the famous and fun game created by Ferry Halim called Winterbells. The original game can be play for free at this website here:

http://www.ferryhalim.com/orisinal/g3/bells.htm

Winterbells is a single player game where the player controls a rabbit movement with a mouse and tries to jump on bells falling from the sky without falling to the ground. The longer the player successfully jumps on each bell, the higher the score will be. The bell will disappear as the rabbit jumps on it. The bell will also reduce in size the longer the player survives without falling, which makes the game more challenging and fun. The goal of the game is to survive the longest and gets the highest score.

We will attempt to make a game similar to Winterbells with added features called Upstream. The basic game concept is the same but our game is about a frog jumping upstream against a flowing river. The river will have Lily pads and logs flowing along it. The objective of the frog is to jump upstream opposite to the current of the river with the help of the lily pads and logs without falling into the river.

**Game Requirements:**

- GitHub
- Framework from rainforest and/or asteroid game
- Inputs:
  - Mouse movements
  - Keyboard
    - Movement with arrow keys
    - Spacebar for jumping
- Additional features added during development

**Game Design:**

- (goal) - 2D single player
- Game menu
- Background dynamically changes as the game progresses
- Sprites for all moving objects
- Implement obstacles
- Implement physics:
  - Gravity
  - Collision detection
  - Random factors
  - Motion generation
- Implement sound using open-al
- Attempt to:
  - Multiplayer
  - Web page for updating high scores/leaderboard