Project Idea: Doodle Jump

By: Viraj Goyal, Ria Rajan, Brian Yang, and Aaryan Jain

Game Final Idea: Doodle Jump is a platforming game in which the user must have their character jump as high as possible without falling. Our game is unique from the original Doodle Jump because there is a separate finite Bubba boss level where the Doodle Jump character will be able to shoot ink at Bubba and defeat him. In addition, our Doodle Jump game has moving enemies, new powerups, and novel character skins.

Features:

(5-Point)

-Create username: 1/4 - 1/8 (40 minutes)

* Dependency: backend saving function, textures and dynamic user interface for all screens.

-Create textures for platforms, character, background: 1/4- 1/11 (10 hours)

* Dependency: None; Just need to do some more research about the Doodle Jump game itself.

-Have a high score leaderboard (personal): 1/4 - 1/28 (3.5 hours)

* Dependency: Scoring system needs to be in place. Playable version of game needs to be ready.

-Emergency button (pause): 1/11-1/15 (3.5 hours)

* Dependency: Pause screen; Textures must be created; Dynamic user interface.

-Game has a hit-testing (object intersection) algorithm: 1/11-1/15 (3 hours)

* Dependency: Game objects must be created; textures needed to determine where objects are.

-Player can jump realistically (instead of teleporting instantly to the peak of their jump): 1/15 - 1/18 (4 hours)

* Dependency: Basic physics for the game need to be implemented.

(10-Point)

-Implement enemies/hazards (stationary): 1/15-1/22 (5 hours)

* Dependency: Create textures for enemies, along with hit-testing algorithm for hazards.

-Custom character color (pick from file): 1/22 - 1/28 (3 hours)

* Dependency: Saving mechanism; dynamic user interface; character that moves (jumps).

-Add a finite gameplay map: 1/22 - 1/28 (4 hours)

* Dependency: Must have scrolling screen, playable character, platform collision.

-Allow player to fire ink projectiles: 1/15 - 1/28 (8 hours)

* Dependency: Textures, Sounds effects, dynamic user interface, animations, hitboxes (collisions).

(15-Point)

-Global high scores saved in the cloud: 2/1 - 2/14 (5 hours)

* Dependency: High score storing system.

-Gameplay is synchronized to the beat of music: 2/1 - 2/14 (5 hours)

* Dependency: Playable game with sound effects.

-Randomly generated platforms: 1/28 - 2/7 (8 hours)

* Dependency: Character jumping, textures, hitboxes, infinite world and scoring.

-Different Powerups: 1/28 - 2/7 (8 hours)

* Dependency: Need hitboxes and textures for powerups, along with code for what each power-up does; physics engine; character jumping; platforms.

-Add an infinite gameplay map that keeps going until the player gets eliminated: 1/28 - 2/10 (6 hours)

* Dependency: Random platform/hazard generation that’s still possible for the player to overcome (besides a playable game), along with scoring system based on jump height.

-Implement enemies/hazards (moving): 1/15 - 2/1 (10 hours)

* Dependency: Platforms; hitboxes; shooting ink projectiles; character movement; textures.

-Have a separate finite map with Bubba boss fight (a fight with Bubba the cat who shoots projectiles): 1/28 - 2/19 (15 hours)

– Don’t worry, Bubba will not get hurt, and will only get “soaked” by the toxic ink fired by the player

-Bubba will also retreat out of fear upon getting defeated, going to a place that’s safe from the player’s reach

* Dependency: Playable game (everything except for infinite world).

Timeline:

* January 4th – Game Design and Feature List
* January 29th - Playable version synced to main branch
* February 1-5th - 30-minute appointment meeting with mentor and Mrs. Kankelborg
* February 22nd - Final version finished and submitted to GitHub
* \*Testing will constantly be done throughout the development of our game\*