# InkVerse Game Design Document





# developed by

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# GAME DESIGN DOCUMENT INKVERSE

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# 1. Vision Statement

## 1.1 Gameplay Logline

InkVerse is a colorful 2D Platformer game where you will play as the king of Ink Island, a place powered by colorful inks, but a malevolent Squid took control of your throne and wants to turn the world black! Using your magical brush, you will be able to draw platforms and objects inside the game, use this power to make your way into your castle, up to the throne room and thwart the Squid's plan!

## 1.2 Design Values

Playing as the king of Ink Island, the player will be able to control colorful inks at his will. The main character will travel across the island and up into the castle to defeat the evil Squid in order to restore the island's original splendor, now disrupted byt the dark ink that the Squid spread through the land. Use your brush to draw objects in order to overcome the traps and lackeys the enemy has prepared to stop the king advance.

The game is in 2D, so the player will have a side view over the game world and will be able to guide the King in his adventure choosing the best strategy to face the level design, based on enemies, environment and color availability.

The challenges that the player will have to face are focused on the choice of the best path among the ones offered by the level design, depending on objects, environments and elements, in order to reach the end of the level.

Since the player has the ability to draw at his will, many possible successful paths are available.

## 1.3 Gameplay Synopsis

The game is made unique by its core mechanic, namely the ability to draw inside the level and beat the levels in many possible ways.

#### 1.3.1 Uniqueness

The unique characteristics of the game include:

- 1. The possibility to draw whatever you like inside the level.
- 2. Usage of multiple colors to overcome different situations.
- 3. A mix of action and little puzzles regarding obstacles to overcome.
- 4. The graphic style, thought to be representative of a colorful painting disrupted by black ink.

#### 1.3.2 Setting

The story takes place in the lnk Island, an imaginary place characterized by its vivid colors. The island is now partially disrupted by the black ink that the Squid spread through the island. The player will go through the main places of the island which are mainly the forest and the castle from the drainage system up to the throne room.

#### 1.3.3 Look and Feel

The game's dynamic mixes certain points of medium-speed combat, in which the player should be accurate and pretty fast both in planning its actions and executing them, and puzzle-style obstacles characterized by more relaxed gameplay.

The setting is realized mainly with a technique that resembles the hand drawing.

#### 1.3.4 Game Mechanics

The main mechanic of the game is the utilization of the colored inks that allow the player to draw within the level.

Different powers are available depending on the color utilized:

- White: This chalk-like color is the main drawing color that allows the player to draw open lines on the screen. The log stays still until it is fully drawn and then it becomes subject to gravity.
- Green: This ivy-like color is used to climb walls. It is used by applying it on a vertical surface.
- Red: This fire-like color is used to burn vines and to kill enemies. The projectile is subjected to gravity, so it follows a parabolic trajectory.
- Blue: This water-like color acts as an eraser and it allows the player to cancel previously drawn objects. It is the only color without limited capacity.

# 2. Audience, Platform and Marketing

## 2.1 Target Audience

This game audience will be mainly formed by those players who prefer challenging single player experience rather than role playing game, story driven game or multiplayer competitive game.

The game may interest both by skilled players, which may want to try to gather all the achievement or speed run it, and by new players, since the game can also be experienced in a relaxed way by enjoying the atmosphere.

## 2.2 Platform and System Requirements

The main and first platform the game will be released on will be Windows, following soon after a release on Mac and Linux. The game requires a keyboard and a mouse in order to be used. Because of the drawing mechanic it may not be suitable for a porting on consoles since it is not easy to draw with a classic controller. A porting on mobile devices like smartphones and tablets will be considered in the future.

The game will not be requiring any particular graphic engine since the graphic is 2D, therefore any recent computer will be enough to run it.

# 2.3 Top Performers

The following videogames are the main sources of inspiration and possible competitors of InkVerse:

- Super Marios Bros.: The famous 2D platformer from Nintendo is taken in consideration for the horizontal level design and the enemy design.
- Ori and the Blind Forest: This action platformer by Moon Studios and Microsoft Studios is taken into consideration for the faster game peace and for the colorful atmosphere.
- Celeste: This puzzle-platform game by Matt Makes Games is taken into consideration for the challenging and labyrinthic level design.

## 2.4 Feature Comparisons

Most of the mechanics are the classical "platformer" ones. We will take inspiration from the ones mentioned in the previous paragraph for the puzzles, the atmosphere and the level design.

The main exclusive element is the peculiar drawing mechanic, which is also what should make it shine among the competitors.

# 3. Gameplay

## 3.1 Gameplay Description

#### 3.1.1 Overview

The first version of the game is composed of 4 levels. The first 2 will take place in the forest while the second 2 will take place in the castle.

For the levels in the forest the level progression is structured in such a way that the beginning of the level is placed at the far left of the level, while the end is on the far right. On the other hand the levels in the castle start from the bottom and progresso through the top of the castle, with a clear distinction between each "piece" of level divided by a room. The player's goal is to reach the end of the level and to do so it will also have to overcome various obstacles and defeat enemies which will try to stop him.

#### 3.1.2 Winning condition

As much as regards the single level's win condition, the player will simply have to reach the end of the level itself to complete it.

The entire game instead will be over once the malevolent Squid has been defeated. The player will be able to select the level it wants to face from the main menu of the videogame.

#### 3.2 Rules

#### 3.2.1 Health

- The main character only has one life and no way to get more.
- The protagonist will die if he gets hit by an enemy, if it falls in predetermined pitfalls or if it falls from too high.
- When the main character dies, he will respawn at the start of the level or the last checkpoint reached.

#### 3.2.2 Checkpoints

- The number of checkpoints is high since the main character only has one life.
- Checkpoints are symbolized by a flower and are positioned between sections of the level.

#### 3.2.3 Game Physics, Movements and Jumps

- By default the main character is affected by gravity, while the enemies and the ink are not.
- The main character can move horizontally.
- The player can jump. While jumping he can continue to move horizontally.
- The main character can also wall-jump from surfaces he can stay on (vertical walls where the green ink was used).
- The player can draw while falling.

#### 3.2.4 Camera

- The camera movement is sliding during the levels in the forest, keeping the player in the central area.
- The player can return to previous areas by moving to the left.

#### 3.2.5 Brush, Ink and Colors

• The main character can store a set maximum amount of ink, indicated by a number from 0 to a predetermined value, depending on the color.

- The player will not be able to use a certain ink if the stored amount is under a certain threshold.
- The usage of the ink is limited in range based on the color used.
- The main character can also draw while jumping.
- Pickups are distributed in the map to partially regenerate the amount of ink.
- Some pickups respawns in the case the player runs out of that type of ink.

#### 3.2.6 Enemies

Enemies are distinguished based on the interaction they have with the environment and the main character:

- Type1 (Cuttlefish): it moves and jumps predictably in order to hit the player.
- Type2 (Nautilus): it doesn't move but fires ink bullets to hit the player from a distance.
- Type3 (Ammonite): its sole purpose is to sabotage player-created ink structures destroying them.
- Type4 (Squid): It's able to follow the movement of the player while firing projectiles from a distance.
- Boss (Kraken): It is the final enemy and it can only be defeated in a tough battle (the boss is not present in the beta).

#### 3.2.7 Environment, Obstacles and Objects

The type of terrain affects the main character and the inks behavior:

- Normal Terrain: The Player can freely move on it and draw over it.
- Black Ink Lake: The player dies if he steps on it and every drawing will dissolve if it gets in contact with it.

The obstacles must be overcome or avoided by the player:

- Thorns: They don't allow the player to pass through, they can be burnt with the red ink.
- Fading platforms: They appear and disappear with a precise timing.

#### 3.3 Controls

This game is designed to be played with mouse and keyboard. This allows the player to simply manage both the movement of the character and the utilization of the brush.

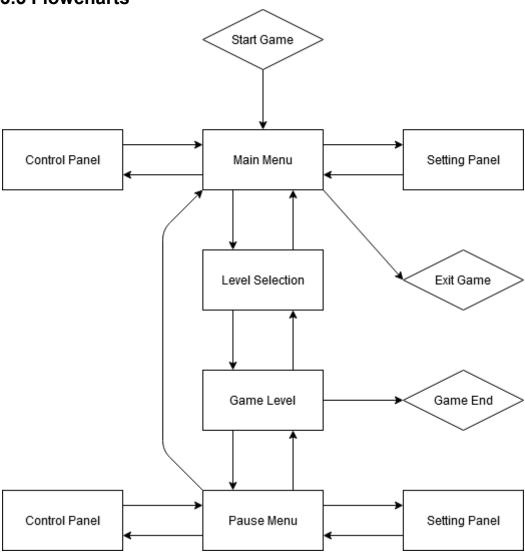
- W, A, S, D: Move the character up, left, down, right respectively.
- Mouse Left Click: Use the brush, depending on the color draw or shoot.
- Mouse Right Click: Select a specific color from a wheel.
- 1, 2, 3, 4: Select a specific color.
- Space: Jump
- K: Restart from last checkpoint.
- Esc: Pause the game.
- Tab: See the list of controls.

#### 3.4 Interfaces

- Main menu: Accessed when the game is launched, from here it is possible to go to the setting panel, controls panel and level selection, it is also possible to exit the game.
- Setting panel: Accessed from the main menu or the pause menu, it allows to modify audio volume and access the controls panel.
- Controls panel: Accessed from the setting menu or the pause menu, it shows all the commands available described in the section 3.3.
- Level selection: Accessed from the main menu, it allows you to select which level to play from the list of unlocked levels.

- Game: Accessed after choosing a level, it is the main playable game.
- Pause menu: Accessed by pressing esc while in the Game screen, it gives access to the setting panel, the control panel and return to the main menu.

# 3.5 Flowcharts



# 4. Story

## 4.1 Synopsis

In the depths of the sea, the land of the starfish is in need of help after an obscure entity took over their castle and started spilling dark ink all over the kingdom. As king of the nearby kingdom it's your duty to help them. Defeat enemies thanks to your masterful drawing skills and stop the black ink from eating the island away.

## 4.2 Complete Story

X: main character, Y: brother

The story begins several years before in the kingdom of the octopus painters, with the crowning of X. His brother Y, envious of him, tried without success to seize the throne and, for this, he was exiled over the borders into the sea of black ink.

During the exile, Y got corrupted by the black ink becoming a Kraken and he managed to reunite all the fishes that can spit ink under his command.

The corruption from the black ink caused in Y a deep hatred for every other color, so he decided to reunite his lackeys in order to attack the castle of the starfishes, one of the main centers for the production of colorful inks.

In a few days, with the help of his followers, he managed to conquer the castle and he started the contamination process of the kingdom with black ink, the only ink able to cover all the others.

In the present, king X receives a letter requesting help from the starfishes kingdom where what has happened is explained. Prompted by his sense of responsibility towards his brother's actions, by altruism and the necessity of avoiding the disappearance of colors, X decides to intervene.

He will infiltrate into the castle already polluted by black ink and he will reach his brother in the throne room, overcoming the various obstacles on the path, among which various invading ink-spitting cephalopods.

At the end of the game, X succeeds in defeating the boss Y and, utilizing the white ink, he manages to erase the black ink that covers him. The hatred, result of the corruption of the black ink, is defeated and the castle restarts to refill with colors.

#### 4.3 Narrative devices

The story is shown through:

- Comics
- Environment

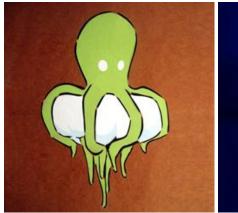
# 5. Game Characters / Characters design

All the characters in the game (good and evil) are based on the cephalopods family, molluscs that are able to produce ink, the game's main topic, our playable character will be an octopus, meanwhile the enemies are divided between other species like cuttlefish, nautilus, ammonite, squid and the boss, the kraken.

### 5.1 Main character

Octopus - The protagonist

Our protagonist is a brave octopus with the duty to defeat the evil cephalopods. The character is provided with different colors of ink with different abilities, giving him the ability to beat every level and defeat every enemy.

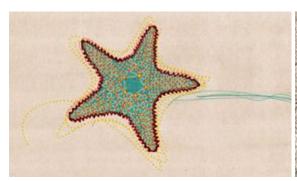




reference: DevianArt.com

#### 5.2 Starfish

Not playable character, each level also features Starfishes. If activated, they give the player special bonuses, new colors or quantities of ink. At the end of the level it is also possible to obtain a score based on the freed starfishes. Based on how many starfishes you free you'll be able to unlock different skins for your character.





reference: DevianArt.com

#### 5.3 Enemies

The enemies are the evil cephalopods, each one of them is a different species with different abilities and objectives, each of them will be messing with our protagonist to not let him finish his mission.

### 5.3.1 Cuttlefish - Jumper

The Cuttlefish is a small enemy that jumps on its spawn, if it lands on our Octopus it will kill us, instead if we manage to hit him with the red ink the Cuttlefish will be defeated.



reference: DevianArt.com

#### 5.3.2 Nautilus - Shooter

The nautilus is a shooter, it stays still on his spawn but it's able to shoot towards our Octopus, being hit by him means death, avoiding the shots or killing it with the red ink is the way to defeat him.



reference: DevianArt.com

#### 5.3.3 Ammonite - Breaker

The Ammonite instead is not interested in killing our Octopus, it will try only to destroy the structures the player will make meanwhile playing.





reference: DevianArt.com

# 5.3.4 Squid - Seeker

The Squid is a bigger enemy, endowed with intelligence, it will seek and try to kill our Octopus.





reference: DevianArt.com

#### 5.3.5 Kraken - Boss

The Kraken is the evil enemy leader that we'll find at the end of the level. Defeating him will require some mechanics, it won't be possible to kill it just like all the other enemies.

The boss is not present in the beta.





reference: DevianArt.com

# 6. The Game World / Level design

The game's environment is developed entirely underwater, starting from the sandy floor, our hero will continue his adventure through the corals and the algae of the coral reef to end up in the Kraken's cove, an underwater castle surrounded by ruins.

Inspiration for the level design



Inspiration game: Super Mario

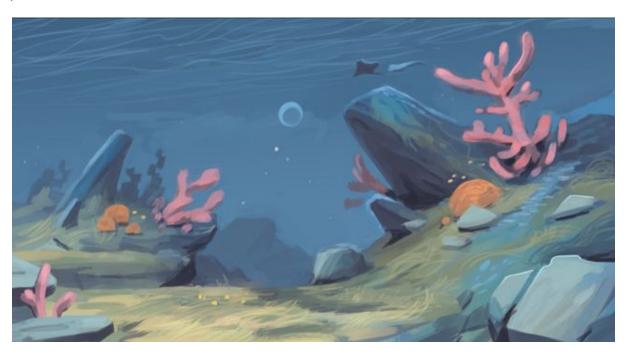
Inspiration for the boss room/encounter



Inspiration game: Cuphead

# 6.1 Sandy Floor

The sandy floor is the starting environment, peaceful and open, but it's already a dangerous place.





reference: DevianArt.com

# 6.2 Coral Reef

The Coral Reef area is the second environment of the game, with more mechanics and more aggressive enemies it's a way to the final stage, the Underwater Castle.





reference: DevianArt.com

# 6.3 Underwater Castle

The Underwater Castle is the final environment of the game, our Octopus will face here the most difficult puzzles with the harder mechanics indeed this environment is full of aggressive enemies than the other two ones and in the end there will be the Kraken boss waiting for the final boss fight.





reference: DevianArt.com

# 7. Media List

# 7.1 Main Character

- Sprites facing the right direction (left is mirrored, up and down are not necessary), and in different colors based on available inks.
- Walking animation to the right, left is mirrored.
- Sound for walking (footsteps).
- Jump and falling animations to the right, left is mirrored.
- Sound for jumping and falling.
- Animation and sound for when the character dies.

#### 7.2 World / Environment

For both the forest and the castle atmosphere:

- Background image.
- Tiles for the platforms.
- Sprites for environmental elements.
- Sprites for the puzzle elements (button/lever, etc...).
- Sprites for collectable ink.

### 7.3 Enemies

- Type1: Single jumping sprite with animation and sound.
- Type2: Standing still sprite with firing animation and sound.
- Type3: Standing still sprite, "spotted" animation and sound (maybe not), building destruction animation and sound.
- Type4: Sprite with "spotted animation and sound (maybe not), moving animation and sound, shooting animation and sound.

# 7.4 UI Interface

- Main menu title.
- Main menu background.
- Main menu buttons.
- Level selection map.
- Game cursor.
- Game ink capacity indicator.

# 7.5 Music

- Soundtrack for main menu and level selection.
- Soundtrack for the levels.

# 7.6 Videos

• Gameplay video.