

OctoPuss Proudly Presents:



# 'MONSKEY SKATE'

## Game Design Document V1.4

Monskey Skate is a 3D 3rd person mobile skateboard game where players perform tricks using alternative controls during ramped jump events.



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## 1 DOCUMENT HISTORY

### 1.1 VERSION 0.1

Week 1: We created a coherent concept after a brainstorming session when we received the Monskey IP concept: Monskey Skate. The Monskey Skate concept caters to seven to nine year olds and requires skateboard stunt mechanics and in addition, a personalised skateboard feature.

### 1.2 VERSION 0.2

Week 2: A few small additions and iterations:

1. Feedback from the teachers caused us to iterate on the jump and slow motion mechanic.
2. A mini game is added during air time moments.
3. Gyroscopic mechanics combined with swipe (touchscreen) mechanics have been removed. Instead, touch screen and gyroscope mechanics are now separate.

Week 3: No mentionable changes occurred as of yet, scheduled milestone presentation at 14:00.

### 1.3 VERSION 1.0

Week 5: "Completed" document with full scope for week 7 release.

### 1.4 VERSION 1.1

Updated:

- Rewards
- Points
- Unlockables
- Mini Games

Added:

- Removed Features section

Removed:

- Character progress
- Removed Unused Mini Games

### 1.5 VERSION 1.2

Updated:

- Design approach
- Game objective
- Unlockables
- HUD

Added:

- Splash screens
- Customization

### 1.6 VERSION 1.3

Updated:

- Entire document adding new features and removing old

Added:

- Post-Mortem

1.7 VERSION 1.4

Updated:

- Final spell check and QA check of documentation before hand-in delivery.

## 2 GENERAL INFORMATION

### 2.1.1 INTRODUCTION

**Monskey Skate** is a single player twitch action mobile game developed with the Monskey IP and part of a bundled **Monskey Gym** framework.

The player controls a personalized Monskey on a skateboard from the aforementioned IP, in a one directional style, to a predefined destination in a procedurally generated urban world.

### 2.1.2 DESIGN APPROACH

The main approach is developing a prototype over the course of 12 weeks, and then give a final presentation to the client at the end of the 12<sup>th</sup> week. In week 7 the game will be presented to the client as a green-light for further development in week 7. Required is a Monskey IP-themed skateboard game which is part of an overarching 'Monskey Gym' application for mobile devices, fitting for the required target audience. The game will have to feature stunts and personalised skateboards and adhere to mobile application restraints.

### 2.1.3 SIMILAR GAMES & INSPIRATION

Inspirational games are: **Jetpack Joyride**, **Fruit Ninja**, **Time Tangle**, and **Subway Surfer**.

### 2.1.4 TARGET AUDIENCE

The target audience is set at seven to nine year old children. Children of this age should not be asked to multitask, mechanics should be easy and not overwhelming. Additionally, as the game is designed for tablets the smaller hands of our target audience should be considered within the design approach. More so, children of a young age mostly play the game for fun and not win and do not like to be punished, therefore, the fun should outweigh any requirement to win or score points and the player should be rewarded for doing well but not punished for doing bad. See appendix for more information.

### 2.1.5 GENRE

Monskey Skate is a one directional 3D and 3<sup>rd</sup> person tablet/mobile skateboarding game.

### 2.1.6 PLATFORM(S)

Android, Windows.

### 2.1.7 GAME OBJECTIVE

The players' primary objective is to score points by picking up pick-ups and doing mini-games to eventually reach the end of the level and avoid obstacles in the progress.

### 2.1.8 UNIQUE SELLING POINT

Monskey Skate is a 3D 3<sup>rd</sup> person mobile skateboard game where the player can customize their own skateboard and perform tricks using alternative controls within mini-game events.

## 3 CAMERA & INTERFACE

### 3.1.1 CAMERA PERSPECTIVE

The camera is tilted slightly up and focussed on a 3<sup>rd</sup> person view as seen in the picture. The camera follows the player character as it navigates the game world and will tilt sideways to counter the players' movement when steering.



### 3.1.2 HEADS UP DISPLAY (HUD)

During the game the player can at the top left see a pause icon, to pause the game at any time. In the top right the players score is shown and at the centre top the player can track their progress on the current track with a finish icon indicating the end of the track.

### 3.1.3 SPLASH SCREENS

When players start up the game, they will be presented with a splash screen, showing the Monskey, Octopuss team logo, the game log and unity and the NHTV logo.

## 4 GENERAL GAMEPLAY AND MECHANICS

### 4.1.1 NAVIGATION

Monskey Skate features linear progressing gameplay which forces the player to constantly progress through the level. During progression there is no fail state, players can only be held up by crashing into obstacles. The only navigational control the player has is horizontal by using the gyroscope (tilting the mobile device).

### 4.1.2 PROGRESSION

As the player progresses through the game it is made very apparent that he or she needs to avoid obstacles and is travelling linearly from point A to B at a certain speed. It will be clear to the player by use of colour coding which object is an obstacle or, alternatively, a ramp. The distance to the end of the level will also be clear and indicated within the HUD.

### 4.1.3 CONFLICT

Monskey Skate features obstacles which the player has to avoid within the game. There is a soft form of punishment when the player collides with an obstacle. When doing so the player is temporarily slowed down. Other than that there are no traditional enemies in Monskey Skate or health and lives.

### 4.1.4 WIN STATE

A win state is achieved once the player reaches the finish line at a predefined ending location in the linear game world.

### 4.1.5 FAIL STATE

There is no conventional fail state in this game. The player can instead achieve varying (point) scores. The better the player does the higher the score and the player will always at the end be rewarded with some score no matter how bad they did.

### 4.1.6 MINI-GAMES

In the game, players can perform jumps when going on a ramp. When the Monskey hits the ramp trigger; movement will be locked and slow-motion is initiated.

The mini game initiation is signalled by a focus plane that shrinks, focusing down to the centre of the screen. After which a hint circle will pop up prompting the player and informing which action they have to perform in the mini game. The hint will black out and the actual mini game will start. The player is deliberately taken out of the skate game and into a whole different mini game.

The mini game will always end after a predetermined time. The focus circle disappears and the slow-motion is reversed. Reversing the slow-motion is so that the player has time to get their bearings before returning to the skating game. Within the reversed slow-motion the Monskey will do a trick animation.

Movement control is given back to the player once the players' character hits the ground again.

#### SWIPE MINI GAME

Three "paint splashed" Monskeys jump up in the players view. The player will have to swipe the Monskeys that pop up. When successfully swiping a Monskey a random Monskey texture will be assigned and points will be rewarded.

#### TAP MINI GAME

One regularly textured Monskey pops up in the middle of the screen. Five blobs fly towards that Monskey from the side of the screen. The player has to tap the blobs to protect the textured Monskey.



If the player fails to do so: a paint splash effect overlaps the regular Monskey texture, gradually increasing in density with each hit it receives.

## 5 REWARDS, POINTS AND UNLOCKABLES

Our game is designed keeping our target audience in mind and while the game will reward the player for doing well it will never heavily punish the player for doing bad.

### 5.1.1 PICK UPS

Throughout the play session the player will be able to pick up **Spray Cans**. Each of these Spray Cans gives +10 to the players score.

### 5.1.2 RAMPS

Hitting a ramp will reward the player +25 points to the players' current score.

### 5.1.3 MINI GAMES GENERAL SCORE

Swiping a Monkey in the **swipe mini game** will give the player +50 points and tapping a blob in the **tap mini game** will give the player +30 points.

### 5.1.4 MINI GAME SCORE COUNT DOWN

At the start of a mini game a score counter will count down from a predetermined amount. This score count down stops if the player successfully achieves the goal of the set mini-game and the remaining amount is added to the players' total score.

If the player misses either a Monskey (in the swipe game) or a blob (in the tap game) than a set amount is reduced from the score count down. This amount depends on the type of mini game, missing a Monskey equals -50 and missing a blob equals -30.

With this system the player still gets a reward even missing one or two objectives within a mini game. However missing all the objectives will always set the score amount to 0 and the player will only get some points from going over the ramp at the start of the mini-game.

### 5.1.5 LEVEL END REWARD

At the end of each level the player is given **four end rewards**. Each end reward has certain conditions and only the four highest rewards will be given to the player. This end reward is to ensure that the player is always rewarded no matter how good – or bad – they did, receiving a bonus if they did better. The player can get the same end rewards upon each unique playthrough.

The following is a list of end rewards, points given and text that goes with it.

End Rewards			
Condition	Main Text	Sub Text	Points
Not hitting objects	Monskey Skate Master!	Avoided all obstacles	325
Hitting 3 or less objects	Monskey Skater	Only hit 3 or less obstacles	100
Hitting more than 3 objects	Object Tagger	Hit more than 3 obstacles	50
Reaching the end of the level	FINISHED!	You made it to the finish!	100
Going over all the ramps	Monskey Ramp Master!	Jumped all ramps!	325
Going over more than 0 ramps and less than all ramps	Monskey Ramper	Almost jumped all ramps	100
Going over 0 ramps	Ramp Avoider	Try jumping the ramp	50
Successfully completed all mini games	Monskey Stunt Master!	All mini games fully completed	500
Successfully completing 1 or more mini games (but less than total)	Mini Game Starter	1 or more mini games fully completed	100
Successfully completing 0 mini games (initiated 1 or more)	Mini Game Explorer	No mini games fully completed	50
Less than 300 points	Almost	Less than 300 points	150
$([AmountPickupsSet / 2] + [AmountRampsSet / 2])$ Pick ups Obtained	Monskey Spray Can Collector!	Picked up half or more Spray Cans	200

### 5.1.6 UNLOCKABLES

A Monskey Coin is rewarded to the player at the end of a level for every 1000 points gained in a single playthrough. Monskey Coins can be used to unlock stickers for skateboard customization. Stickers have variable prices, ranging from 5 to 25 coins in 5 coin iterations.

## 6 GAME WORLD

### 6.1.1 NARRATIVE/PREMISE

There will be no big story or narrative from our design approach; however, a short premise has been defined. “Monskeys are being splashed with paint and it is up to the player’s Monskey to either remove the paint from the Monskeys or prevent the Monskeys from being splattered by paint.”

There is also a short introduction video when selecting a level to play and its context is slightly altered depending on the theme that is chosen. This video is to increase the connection of the game with the Monskey brand.

### 6.1.2 PLAYER & GAME WORLD REPRESENTATION

#### THE PLAYER









Within the game the player is represented by a Monskey on a skateboard which the player can customize. Currently the texture on the player's Monskey is randomized at the start of each level, this is a placeholder for when the *Twinsprite* technology is integrated within the game and the texture of the Monskey is defined by the player's own scanned-in Monskey.

#### LEVEL THEMES

There are two level themes for the player to choose. An Urban theme and a Space theme which both occur within the Monskey IP. The themes are purely aesthetic and will not affect gameplay.

## 7 SKATEBOARD CUSTOMIZATION

Players are given the option to customise their skateboard in the skateboard customisation menu.

Interface symbol:	Description:
	The paint colour selection tool
	The sticker selection tool
	Back to menu button
	Undo last action
	Reset skateboard back to default
	Save skateboard
	Help
	Flip skateboard (to customise the other side)

### 7.1.1 PAINT BRUSH

In the Skateboard Customizer the players can use a paintbrush to paint their skateboard using touchscreen interaction. The following interactions are possible:

- Colour selection by tapping the screen on the desired colour within the paint colour selection tool.
- Pinch-to-scale controls to resize brushes and stickers.

### 7.1.2 STICKERS

A set amount of stickers is unlocked at the start of the game and more are unlockable by spending Monskey Coins earned during gameplay. Players' can place the stickers on any desired location on their skateboard. Similarly to the Paint Brush, the following interactions are possible:

- Sticker selection by tapping the screen on the desired sticker within the sticker selection tool.
- Colour selection bar to change the colour of the selected sticker\*
- Drag and drop via touch screen to temporarily place a selected sticker.
  - Pinch-to-scale controls to resize the sticker.
  - Pinch and rotate to rotate the sticker.
  - Before the sticker is placed, a confirmation is required.

\*If a sticker is one whole colour than the player can change the colour of the sticker when selecting it. If the sticker already has multiple predefined colours than the colour selected is locked for the sticker.

### 7.1.3 OTHER FUNCTIONS

The player is able to flip the skateboard so they can customize both sides. The player is also able to undo the last action and reset to a default skateboard texture. Lastly the player can discard all changes made and go back to the main menu and save the changes made.

If the changes are saved, the skateboard on which the Player's Monskey rides will be the Skateboard the player created in the customizer.

## 7.2 TECHNOLOGY

### 7.2.1 DEPLOYMENT

The main objective is to design the game for mobile compatibility since controls will be focussed on gyroscope and touch-screen functionality. Windows compatibility is included for grading purposes and while the game can be played, because of time constraints the Skateboard Customizer will not be fully functional when using a mouse instead of a touchpad.

### 7.2.2 ENGINE

The engine used for creating the game is Unity 3D version *4.5.2f1*, and the programming language is C#. The *GUI Master Plug-In* is used to create this game.

### 7.2.3 ADDITIONAL TOOLS/TECHNOLOGY

Houdini, Maya, Photoshop, Illustrator, Google, and Microsoft Office 2007 (and above) is used for creating this project.

Twinsprite technology will eventually be used to integrate the Monskey Gym framework with physical toys from the Monskey IP. However, as this is a proof of concept we is not use it within this scope.

## APPENDIX

### 7.3 TARGET AUDIENCE RESEARCH

1. <http://www.heraldsun.com.au/news/victoria/no-scoreboard-ladder-or-match-results-for-junior-footballers-under-changes-to-be-unveiled-by-afl/story-fni0fit3-1226869120535>
2. <http://tentoed.com/gamedesign/2011/8/31/why-you-should-think-twice-before-putting-a-sticker-page-in.html>

### 7.4 POST MORTEM

#### 7.4.1 MINI GAMES

While we are very happy with the game we were able to produce there are still design issues we are aware of and wanted to solve. These issues are mostly regarding the mini games. We are aware of the issues and know what we want to achieve and in most cases how but were not able to achieve this within the given time and scope of gamelab.

#### MINI GAME INITIATION AND OUTRO

We actively designed the mini games to be very different from the actual skate game, while it still holds true to the Monskey brand and its target audience.

We wanted the player to be taken away and dropped into this new environment. The initiation of this however proved to be very tricky. There was more than one idea as to how we wanted to do the initiation of the mini game. For example the following two examples.

Camera movement: Moving the camera away from the main game and instead more towards the sky was an option. However we feared however that this might be confusing for the player to suddenly move the camera.

Blurring out the screen: Blurring out everything except for the Mini game content was an option. However issues with layers and performance popped up as well as the fact that the blur generates headaches.

In the end we chose the focus effect as seen in the game. This effect not only took the player out of the game but also focused the player towards the middle of the screen where we added the hint button of either swipe or Tap.

However because it took the player completely out of the mini game we needed a way to alert the player of the mini game initiation so that they wouldn't become confused. The decision we made was to have a slow-motion effect so the player had time to adjust when going into the mini game and out of the mini game.

All the variables regarding when the slow-motion and focus effect starts, how slow the slow motion is and how fast the player is again put back into the skate game are all variables that are accessible so that the designers could tweak the initiation and outro of the mini game as well as the mini game itself.

Tweaking the variables just right proved to be a challenge. Having the slow-motion and/or focus too fast and to soon felt like suddenly stopping the player in its tracks while having the slow-motion and/or focus too slow and late made the player (after focus testing) confused as it felt like they were teleported to a different location as the character was already past its highest point within the air.

In the end we did our best to tweak the variables the closest what we wanted, though not perfect it has the best balance we could have achieved within the given scope and time.

### MINI GAME HINT SYSTEM

While there is a hint that tells the player to either swipe or tap this hint is not as clear and prominent as we would have wanted it to be.

A solution would be to make a clear pop up at the start of the mini game. One option would be having the player actively do the type of movement –either swipe or tap- they have to do within either one of the mini games to initiate the actual mini game. This means that before the actual mini game start they have to swipe or tap away a hint button. Another option would be by having a big and clear indicator of what to do with an animated hit which again shows either a swipe or a tap after which the actual mini game would automatically initiate.

The risk of these hints is that they should not be too long or become a chore to do that takes the player out of the actual game.

### MINI GAME REWARD

The reward the player gets from the mini games does not yet have the level of reward we want the player to feel. The better and faster the player does the mini game the more points the player gets which is what we wanted however another reward system in place is the stunt the character does after the mini game. This stunt does not feel a lot as a reward but instead as an action that the character performs. To increase this we added text which changed according to how the player did such as "Awesome!" or "Almost!" (Always a rewarding text in one way or another no matter if the player did really bad). Though this is generally not noticed.

Solutions we had to improve the stunt reward effect where to give the stunt effect a very visible particle effect as well as having the slow-out effect linked to the stunt. Meaning that while the character goes out of slow-motion the stunt starts out slow and increases in speed until there is no more slow-motion. Another solution that can be added is to link the type of stunt to how well the player did in the mini game. The better they did the cooler the stunt.

### MONSKEY PAINT SPLATTER EFFECT

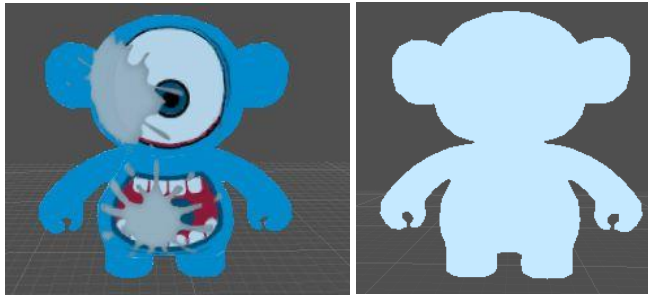
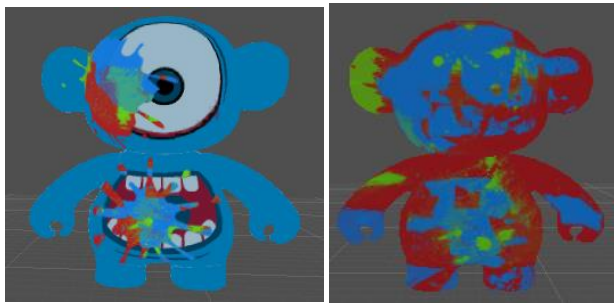
As mentioned before the mini games revolve around either: Recoloring Monskeys correctly by swiping them or preventing the recoloring of the Monskey by tapping paint blobs.

The initial colour of the Monskey that the player had to swipe or what it became when the player was not able to tap the blobs was greyish white. With this we achieved that the player wouldn't want the Monskey to be or become dull greyish white but instead either give the Monskey colour or protect the Monskey from becoming colourless.

However we changed the greyish white colour to a more colourful paint pattern. The reason was that the white paint splatters on the Monskey might be associated in a way that we did not want especially because it is a children's product.

**Old**



**New**

The result of the colour change was that the game became more colourful and thus fitting the Monskey brand as well as the target audience more but it removed some of the urge for the player to prevent the Monskey from being hit by a paint blob or wanting to swipe the Monskey and give them their original colour instead of dull light grey. A fix might be to change the colour pattern of the paint blobs to a more negative and less colourful colour pallet in order to increase the players urge to colour the Monskey or prevent it from being splattered with paint.

**7.4.2 AUDIO**

A lot of time and effort was invested to achieve well integrated sound effects; however, the results have not always been satisfactory. E.g. it was difficult to get the appropriate sound effect when a Monskey is hit by a paint blob (negative feedback).

Audio sources:

- <http://www.pond5.com/>
- <http://www.freesfx.co.uk/>
- <http://soundbible.com/>
- <http://www.newgrounds.com/audio/>
- Various self-recorded sound effects
- Various edited YouTube snippets

**7.4.3 MONSKEY COIN REWARD SYSTEM**

The customisation unlock and Monskey Coin reward System is implemented, the aesthetics when obtaining a coin are not yet finalised.

**7.4.4 KNOWN BUGS**

When going up a ramp and initiating a mini game the slowdown effect does not always work and the player continues going forward even within the mini game. This bug as pops up various times and a lot of time and resources were put into it to fix it. Yet in the end we were unable to find the problem nor fix it as doing so would most likely have meant rewriting part of the code. Something which we could not achieve within the given time.

## 7.5 REMOVED FEATURES

### CHARACTER PROGRESSION

Players will receive experience by playing the game and consequently, improve their Monskey character. Additionally, skateboard colours, patterns and additional aesthetics will be unlocked during gameplay.

### MINI-GAME: PAINT TAP

This mini game is similar to the previous game. 2 to 4 colourless Monskeys' jump up from out of the screen.

This time the player has to wait until the Monskeys' enter a certain *paint* area on the screen. The player will be prompt to tap the colourless Monskey once the Monskey hits the paint.

### MINI-GAME: PAINT GUIDE

A paint bucked will appear on the left side on the screen and a colourless Monskey will appear on the right side. The player has to follow a *line* (which is given to the player) from the paint bucked to the Monskey to guide the paint and colour the Monskey.

### MINI-GAME: PAINT PARTY

Similarly to the previous games, in this mini game an X amount of colourless Monskeys' appear on the lower side of the screen. In the air several, slightly fast moving, paint buckets jump in from the side of the screen. The player has to swipe as quickly as possible. By doing so Paint will fall down on the colourless Monskeys' at the bottom of the screen, giving them a texture.