Crash Bandicoot Remake/Willy the Wombat

Design Document

This the design document for the Crash Bandicoot remake which outline each area of design and code within the game we'll be making, what we'll be using to create/develop it and how much we how much we hope to have completed within the 12 Weeks of finishing this project.

As for why we choose Crash Bandicoot we choose with a 3 to 1 vote what game to develop and we all agreed that it was possibly to challenge ourselves to complete the entire Crash Bandicoot game in the time allotted to this project for the next 12 weeks.

But a key reason for creating Crash is that it is an instantly recognisable game to most people on the planet, and with Yooka Laylee bringing back the spirit of the Banjo Kazooie games we thought it a good time to show off what a Crash Bandicoot remake can look like on today's systems.

Design

The design of this crash remake will be inspired by Naughty Dogs original game and concept art, however details will be added to make it look more vibrant in the new engines and design applications we'll be using like MayaLT and MudBox.

**Concept Art**

Concept art will be drawn to add more depth and detail from the original game into the new remake.

It will be based on the original games design and sketched on A4 paper, then scanned, possibly coloured in Photoshop and put on to git.

**Level design**

Level design will consist of playing the level getting a feel for it, the scope of it then sketching the length in terms of of Crashs footsteps and then sketching the top down layout on to a page. From there we will use Maya to create the base layout of a level(linear), then add more detail if necessary possibly through other applications like MudBox and add designed in-game objects that aren't animated and then put those assets into the scene in unity and set up a scene which will then be posted up on to GitHub.

**Levels**

**Placement of obstacles and items will be detailed in relation to the amount of Crashs steps to get there.**

**Sections will be how long before crash reaches a checkpoint.**

**Reused levels will cut from this project to save time.**

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| Island 1 |
| **N. Sanity Beach** |
| X 49  Start of game 3d level level moving up along the Z-axis. After crash jumps of of the laboratory, wakes up at the start of N Sanity Beach Level with objects like Wrecked Ships and Palm trees in front of him. |
| **Section 1**  Falls: 14-15 steps, 19 – 20 steps, 23-24 steps, 25-26 step, 35-36 steps, 39 steps.  Enemies: 10 steps crabs, 23 steps crab, 45 Crab.  Obstructions: Pillar 19-20 steps.  **Section 2**  Music change  Falls: 8-9 steps, 15-16 steps, 23-24 steps, 29-30 steps, Right Path of split 42- 43 steps, 45-50 steps(10 crate bridge).  Enemy: Turtle 5-8 steps, Turtle 12-15 steps, Turtle 26- 29 steps, Left path of split Turtle 45-51 steps.  Obstructions: Pillar 2-3 steps, Pillar 34-35 steps, Left path of split Pillar 52-53. |
| **The Great Gate** |
| X 26  Level is 2d level that moves along the X-axis, Crash goes right at beginning it's a gate with various platforms and 4 types of enemies going up. |
| Falls: 11-12 steps, 22-23 steps, 29-30steps, 36-37 steps, 43-44 steps, 53-54 steps, 53-52 steps, 47-46 steps, 44-43 steps, 37 -36 steps, 14 fall, 8-7 steps, 3-2 steps, -3- -4 steps, -6- -7 steps, -13- -14 steps, -20 steps, -26- -27 steps, 39- -40 steps, -52- -53 steps -56- -55 steps, -62- -60 fall, -54- -54 steps, -46- -45 steps, -42- -40 steps, -31- -30 steps, -25- -24 steps, -22- -21 steps, -15- -14 steps, -12- -11 steps, 2-4 steps, 6-7 steps, 9-10 steps 12-14 steps, 19-20 steps, 22-23 steps, 26-27 steps, 29-30 steps, 35-36 steps, 43-45 steps, 50-51 steps, 54-53 steps, 56-57 steps.  Enemies: 8-9 steps turtle, 11- 12 steps turtle, 14-15 steps, 31-35 steps monkey, 39-40 steps turtle, 41 steps venus fly trap, 45-40 steps monkey, 35 steps venus fly trap, 12-9 steps tribesman with shield, -19- -15 steps monkey, -22- -25 steps tribesman with shield. -45- -46 steps turtle, -59- -55 steps monkey, -49 steps venus fly trap, -34 steps venus fly trap, -29- 26 steps tribesman with shield, -23 steps venus fly trap, -10- -29 tribesman with shield,-3- 1 steps monkey, 46-49 steps tribesman with shield  Obstructions: 3 steps box crate up 10, 1sst level ends at 60 steps right, 61-63 platform high jump up, 58 steps spins platform 2 up from first platform, platform 56-55 steps 3 up from base. Box creates up, 2nd level 58-54 steps platform up 13 from 1st level, checkpoint.  Section 2  56 steps, 29-30 steps spike up, 25 steps spike down, 21-22 steps spike up,  6-5 steps slippery slope down, 1- -2 steps slope down, -8- -11 slope down, -28- -29 steps slope up, 30- -31 steps up spike, -33 steps fire spout, -36 down spike, -38 down spike, -42 checkpoint.  Section 3  -44 down spike, - 47 down spike, -48-49 up spike, -54 steps first teleporter, -52+-53-+-54 steps Yellow gems medium jumps up, -55+-56 yellow gems medium jump down. -67 steps end of 2nd level platform, -68- -70 steps platform high jump up, -66 steps spin platform 2 up from 2nd level, -63- -64 steps platform 3 up -66 steps spin platform 4 up, -66 steps 13 up platform 3rd level. - 61 steps spike up, -44- -43 steps slippery slope down, -41 steps spike up, -39- -38 steps slope up, -37 steps up spike, -36- -33 slope up, -13 steps fire spout medium jump up -6- -4 steps 2 up spikes, 5 steps fire spout, 8 steps fire spout, 15-16 steps slope down, 17-18 steps slippery slope down medium jump up, 21 steps fire spout, 24-25 steps slope up, 31-34 steps slope down, 37-38 steps up slope, 39-40 steps up spike, 41-42 steps slope up, 53 steps fire spout, 62 steps end of 3rd level platform, 63-64 steps platform high jump, 61 steps spin platforms 2 up,4 up + 6 up, 58-59 steps platform high jump up 3 up, 63-64 steps platform high jump 5 up, 61 steps 18/19 up 2nd teleporter. |
| **Boulders** |
| x 16  3d level that moves down the Z-axis the player must run through to avoid boulder chasing him it's mostly linear with a few twists in the path and obstacles to stop Crash. |
| Falls: 24-25 steps,30-32 steps, 43-46 steps, 50-51 steps,59 -60 steps, 62-64 steps, Section 2 5-6 steps, 8-9 steps, 15-16 steps, 18-19 steps, 22-23 steps, 24-25 steps, 54-55steps, 57-58 steps, 60-61 steps, 64-65- steps, 67-68 steps, 70-71 steps, 73-74 steps  Enemies: None.  Obstructions: 5-8 steps first boulder entrance 3 steps wide, 32 steps 1st boulder stops, 33-36 steps 2nd boulder entrance, 67-70 steps tunnel, 72 + 76 + 80 + 82 + 84 steps 5 fences 85 2nd boulder stops, 86-89 3rd boulder entrance, 89 checkpoint, section 2 7 steps pillar, 17 steps pillar, 24 steps pillar, 28-30 steps small tunnel, 31 right fence, 35 steps middle fence, 40 steps middle fence, 42 left fence, 48-52 steps tunnel 56 steps platform, 59 steps platform, 66 steps platform, 69 steps platform, 72 steps platform, 76 steps right teleporter, 77 steps level end. |
| **Upstream** |
| x 14  River level 3d but moves up linear Z-axis. Where crash has to use nature as platforms and avoid it's more dangerous clutches |
| Falls: 5-6 steps,8-9 steps, 11-12 steps, 14-15 steps, 17-18 steps, 20-21 steps, 30-31 steps, 33-34 steps, 36-37 steps, 39 -40 steps, 65-66 steps, 67-68 steps, 73-74 steps, 78-79 steps, 83-83 steps, 86-87 steps, 89-90 steps, 91-92 steps, 94-95 steps, 97-98 steps, 100-101 steps, 103-104 steps, 116-117 steps, 119 -120 steps, 122-123 steps, 127-128 steps, 130-131 steps, 135 steps, 137-138 steps, 140-141 steps, 148-149 steps, 154 steps, 156-157 steps, 159-160 steps, 162-163 steps, 165-166 steps, 168-169 steps, 173-174 steps, 176-177 steps,179-180 steps.  Enemies:14-15 steps flying fish, 42-43 steps flying fish, 46-47 steps flying fish, 146-147 steps flying fish, 59 -60 steps flying fish, 66 steps venus fly trap green, 70-71 steps flying fish, 93 steps venus fly trap green, 97-98 steps flying fish, 99 steps venus fly trap black, 118 steps venus fly trap black, 121 steps venus fly trap green, 136 steps venus fly trap black, 154 steps flying fish, 155 steps venus fly trap black, 167 steps venus fly trap black, 178 steps venus fly trap,  Obstructions: 1-4 steps log, 7 steps dirt platform, 10 steps lily pad, 19 steps pillar, 22-24 steps moving leaf, 25-29 steps log, 32 steps lily pad, 35 steps lily pad, 38 steps rock 2 wide middle, 41 steps lily pad, 44-48 steps stone pillar, 49-57 steps log slope up, 58 steps checkpoint/rock platform 2 wide,  Section 2 61-63 steps moving leaf, 64 steps rock 2 wide, 69-72 steps stone pillar, 75-77 steps moving leaf, 80 -82 steps moving leaf, 85 steps lily pad, 88 steps lily pad, steps lily pad, 96 steps rock 2 wide, 102 steps pillar, 105-113 steps log slope up 106+109+112 steps left of log orange gem, 112 steps 5 gems 2 left and right of log and 1 under, 114 steps rock 2 wide, 115 steps checkpoint  Section 3 124 steps checkpoint/rock platform 2 wide,  Section 4 124-126 steps moving leaf, 129 steps lily pad, 132 steps dirt platform, 132-134 steps moving leaf to right, 139 steps lily pad, 142 steps stone pillar, 145 steps 1st teleporter, 142-144 steps orange gem to right, 145- 147 steps orange gem to right, 149-151 moving leaf, 1551-153 moving leaf to the left,169 steps lily pad, 172 rock platform 2 wide, 161 steps lily pad, 164 steps rock pillar 2 wide, 170-172 steps moving leaf, 175 steps lily pad, 181 teleporter, 182 end level with waterfall. |
| **Papu Papu** |
| First boss of the game based in a circular hut where Crash can stand on Papu Papus chair to avoid his circular move attack. |
| **Hog Wild** |
| X 24  Crash boards a wild hog for some reason and rides through a 3d level that moves up the Z-axis surrounded by huts with spikes, tribesmen, spinning hogs and falls trying to stop him form reaching the teleporter. |
| Falls: 7-9 steps, 14-16 steps, 22-26 steps, 76-79 steps, 98-101 steps, 106-109 steps, 117-130 steps.  Enemies: 83 steps moving tribesman, 91 steps moving tribesman, 103 steps moving tribesman, 126 steps moving tribesman, 129 steps moving tribesman, 146 steps moving tribesman, 185 steps moving tribesman.  Obstructions: 27-29 steps slope up, 30-33 steps hut, 42 steps side spike, 48 steps side spike, 52 standing side spike right, 54 steps standing spike middle, 56 steps standing spike left, 58 steps standing spike, 58-61 steps slope up, 60 steps standing spike right, 62 steps standing spike left, 66-69 steps logs up, 70-73 steps hut, 71 steps checkpoint,  86 steps standing spike right, 88 steps standing spike left, 89 steps standing spike left, 95-96 steps gate, 97 steps drum, 102-104 steps slope up, 105 steps drum, 114 steps side spike, 116-117 steps logs up, 117-120 hut, 118 steps checkpoint, 123 steps standing spike left, 125 steps standing spike left, 142 steps standing spike, 144 steps standing spike right, 145-146 steps gate, 150-151 steps spinning hog, 151-154 steps slope up, 155 steps standing spike left, 157 steps standing spike right, 160-161 steps spinning hog, 162-164 steps slope up, 165 steps standing spike right, 167 standing spike right steps, 172-174 steps gate, 173-174 steps spinning hog, 178-179 steps side spike, 187-189 slope up, 190 teleporter. |
| Island 2 |
| **Ripper Roo** |
| Boss level shaped like Ripper Roo's face, 9 platforms to jump on with water in between with Big TNT floating down the water fall to hurt Ripper Roo with. |
| **The Lost City** |
| X 25  2d level based on Aztec ruins where Crash moves long the X-axis goes right on the bottom level and left on the top level. |
| Falls: 10-11 steps, 14-15 steps,32-33 steps, 37-38 steps, 40-41 steps, 65-66 steps, 73 steps, 75-76 steps, 78-79 steps, 86 steps, 88 steps, 99-101 fall, 126-127 steps, 131-132 steps, 122-121 steps, 119-118 steps, 116-115 steps,112-111 steps, 106-107 steps, 67-68 steps, 64-63 steps, 57-56 steps, 53-52 steps 48-47 steps,45-44 steps, 40 steps, 35-34 steps, 25-24 steps, 21-20 steps, 10-9 steps. -4- -5 steps, -8- -10 steps, -14- -15 steps.  Enemies: 23-25 steps lizard, 43 steps bat, 53 steps bat, 82 steps bat, 95 steps bat, 111 steps bat, 117-119 steps lizard, 124 steps bat, 135-137 green lizard, 139-145 steps red lizard,  117-125 steps red lizard, 111 steps bat, 95 steps bat, 62-60-58 green steps lizard, 49 steps bat, 46 steps lizard, 42-41 steps lizard, 39 steps bat, 6-3-1 steps green lizard, -7- -9- -11 steps green lizard.  Obstructions: 4 steps small mouth cave small jump up 3 deep, 12-13 steps pillar, 19-20 steps in out pillar, 22-25 steps high jump down and up, 23-24 steps cave high jump 4 wide 2 deep, 27-28 steps in out pillar, 34-36 pillar, 39 steps floating pillar, 46- 49 steps high jump down, 47-48 steps cave 4 wide 2 length,49 steps pillar high jump down, 50-52 steps down pillar, 54 steps mouth cave 3 deep, 57-58+59-60 steps push pillars,62 steps checkpoint,  Section 2 67 steps stump high jump down, 70-72 steps pillar, 74 steps floating pillar, 77 steps floating pillar, 83-85 steps high jump down, 87 pillar, 92 high jump up, 98 steps platform, 96- 100 steps circling platforms, 98 steps platform, 104-105+106-107+108-109 in out pillars, 110-111 steps high jump down, 112-114 steps platform high jump up, 115-116 steps high jump down, 117 steps mouth cave 3 deep, 120-121 steps high jump down, 122 high jump up, 129 checkpoint.  Section 3 137-138+139-140+141-142+143-144 steps in out platforms, 150 steps end platform, 150-151 steps high jump platform, 148 in out platforms 2 up, 4 up, 6 up, 144-146 steps platform 3 up, 149-150 steps platform 5 up, 150-151 steps platform 7 up,146-149 steps spinning platforms 8-10 up, 148 steps platform/checkpoint.  Section 4 150-151 steps platform 11 up, 146-149 steps spinning platforms 12 -12 up, 147 steps platform 15 up, 149 steps in out platform 16 up, 147 steps in out platform 17 up, 149 steps in out platform 18 up, 147 steps in out platform19 up, 149 steps in out platform 20 up, 147 steps in out platform 21 up, 149 steps in out platforms, 147 steps high jump platform to top of level, 146 steps small jump platform up, 140-142 steps building entrance 2 length, 143-146 steps path to building 1 length, 147-150 steps building, 137- 129 steps pressure platform, 120 steps pillar, 117 steps pillar, 108-109 pillar high down,104-105 pillar high jump up,103-102+101-100+99-97+96-95 steps in out pillars, 92 steps checkpoint  Section 5 89-88+87-86+83-82+81-80 steps in out pillars 77-76 steps high jump down, 75 steps high jump up, 75-74+73-72 steps in out pillar, 66-65 steps pillar high jump down to next platform, 55-54 steps pillar high jump up, 46 steps platform high jump down, 41-43 steps platform, 39 steps high jump up, 37 steps checkpoint  Section 6 34-26 steps pressure platforms, 23-22 steps pillar, 19-11 steps pressure platforms, 5-4+0-1 steps in out pillars, -7-8 steps platform in back 2 wide and 2 length, -12- -11 steps platform in back 2 wide and 2 length, -16 steps pillar/teleporter small jump up. |
| **Temple Ruins** |
| x 67  Aztec temple which is the only non linear level in the game where it sticks along the X+ Y axis crash has to make his way through narrow platform to the end level through a dark temple lit by far and a multitude of sneaky enemies. |
| Falls: Row 4 steps up 6-7 steps, 9-10 steps, 12-13 steps,  Column 17 steps left 7+8 steps up, 10-11 steps up,13-14 steps up,  Row 15 steps up 18-19 steps, 21-22 steps, 24-25 steps,  Column 29 steps left 16 -17 steps up, 19-20 steps up, 22-23 steps up, 25-26 steps up,  28-29 steps up, 40-41 steps up, 43-44 steps up,  Row 45 steps up 17-16 steps,14-13 steps, 11-10 steps,  Column 8 steps right 48-49 steps up, 51-52 steps up, 54-55 steps, 57-58 steps up, 60-61 steps up, 63-64 steps up, 66-67 steps up, 78-79 steps steps high jump, 82-83 steps up, 85-86 steps up,  Row 89 steps up 7-6 steps, 4-3 steps, 1-0 steps, -2- -3 steps, -5- -6 steps, -8- -9 steps  Column -10 steps right, 88-87 steps down, 85-84 steps down,  Column -19 steps up 84-85 steps up, 87-88 steps up, 90-91 steps up, 94-95 steps up, 97-98 steps up, 100-101 steps up, 103-104 steps up, 106-107 steps up, 109-110 steps up, 113-114 steps up, 116-117 steps up, 119-120 steps up, 130-131 steps up.  Enemies: Row 4 steps up, 17 steps cobra,  Column 29 steps left 15 steps up cobra, 46 steps up Spider  Column 8 steps right 47 steps up cobra  Column -10 right 80 steps down spider  Obstructions: Row 3 up 3 steps spike pillars  Row 4 steps up 8 steps pillar, 11 steps floating pillar,  Column 17 steps left, 5 steps up spike pillar, 9 steps up floating pillar, 12 steps up floating pillar  Row 15 steps up 20 steps up and down pillar, 23 steps floating stone, 27 steps Checkpoint  Section 2 Column 29 18 steps up and down pillar, 21 steps up and down pillar, 24 steps up and down pillar, 27 steps up pillar, 30-39 steps Mouth cave tunnel, 37 steps smash fists, 48 spike pillar  Row 45 steps up 18 steps pillar, 15 steps fire dish, 12 steps floating pillar  Column 8 steps right 46 steps up spike pillar, 50 steps up fire dish, 53 steps up pillar, 56-61 steps up circular moving up timed up down pillars, 59 steps up checkpoint, 64 steps up floating pillar, 67-77 steps up mouth cave, 80 steps up floating stone, 83 steps up up/down pillar, 88 steps up spike pillar,  Row 89 steps up, 5 steps up/down pillar, 2 steps fire dish, -1 steps floating stone, -4 steps pillar, -7- -13 steps circular moving pillars up/down pillars  Column -10 right 82 steps down checkpoint,  Section 3  Column -19 right 83 steps up pillar, 86 steps up floating pillar, 89 steps up fire dish, 92-93 steps up platform, 96-108 steps up 2 rows of circular moving up and down pillars, 115 steps up up/down pillar, 118 steps up up/down pillar, 121-129 steps up mouth cave, 132 steps up teleporter. |
| **Road to Nowhere** |
| X 33  Linear level moving up along the Z-axis where Crash has to make it across a narrow bridge with plenty of missing /broken planks and a couple of enemies. |
| Falls: 6-8 steps, 11-12 steps, 24-25 steps, 29 steps, 39 steps, 42-43 steps, 47-48 steps, 53-54 steps, 58-59 steps, 61-62 steps, 64-65 steps, 71-72 steps, 75 steps, 81 steps, 83 steps, 88steps, 93 steps, 95-96 steps, 98 steps, 100 steps 1st half,102-103 steps, 105 steps, 105 steps, 109 steps, 113 steps 2nd half, 120 steps, 1322-123 steps, 124 steps, 126 steps, 128 steps, 130 steps, 132-133 steps, 135-136 steps, 138-139 steps, 141 steps, 147 steps, 149-150 steps, 152-153 steps, 155-156 steps, 158 steps, 160-161 steps, 163 steps, 165 steps, 168-69 steps, 170 steps, 172-173 steps, 175 steps, 178 steps, 181-182 steps, 185 steps, 188 steps, 192-193 steps, 196 steps, 199 steps, 202-203 steps, 211- 213 steps, 216 steps 2nd half, 219-222 steps, 224 steps, 227-228 steps, 230 steps, 262 steps, 238-240 steps, 242-243 steps, 246-248 steps, 250-252 steps, 254-256 steps  Enemies: 35-41 boar, 195-203 steps boar, 208-210 steps turtle, 218 steps turtle on back for jump,  Planks only take half a step  obstructions: 5 steps Wobbly Plank, 10 steps 2 wobbly planks, 13-14 steps 4 wobbly planks, 18 steps broke plank, 20 steps broke plank, 22 steps 2 woolly planks, 23 steps broke plank, 26 steps broke plank, 27 steps 2 wobbly planks, 28 steps broke plank, 30 steps 2 broke planks, 31 steps wobbly plank then broke plank, 32-34 steps pillar, 33 steps checkpoint  Section 2 36-37 steps 4 wobbly planks, 40 steps broke plank then wobbly plank, 44 wobbly planks, 46 steps ice plank, 50-51 steps dirt pillar, 52 steps ice planks, 55 steps broke plank then wobbly plank, 57 steps ice plank, 60 steps wobbly plank, 63 2 steps wobbly planks, 66 steps wobbly plank, 67-69 steps dirt pillar, 68 checkpoint steps checkpoint  Section 3 70 steps wobbly plank, 74 steps 2 wobbly planks, 76 steps broke plank then wobbly plank, 77 2 wobbly planks, 79 steps wobbly plank, 80 steps broke plank and wobbly plank, 82 steps wobbly plank, 84 steps wobbly plank, 86 steps broke plank then wobbly plank, 87 steps wobbly plank, 89-92 steps stone pillar, 92 steps 2 wobbly planks, 94 steps 2 wobbly planks, 97 steps 2 wobbly planks, 100 steps 2nd half wobbly plank, 101 steps 2 wobbly planks, 104 steps wobbly plank, 106 steps broke plank then wobbly plank, 107 steps 2 broke planks, 108 steps normal plank 1st half then wobbly plank 2nd half, 110-112 steps stone pillar, 111 steps checkpoint  Section 4 111 steps red gem to left on stone pillar moves 9 right, 113 steps wobbly plank 1st half, 114 steps 2 wobbly planks, 116 steps ice planks, 121 steps 1st half wobbly plank then 2nd half normal plank, 123 steps wobbly plank, 125 steps 1st half normal plank then 2nd half steps wobbly plank, 127 steps wobbly plank, 129 steps 2 wobbly planks, 131 steps wobbly plank, 134 steps wobbly plank, 137 steps wobbly plank, 140 steps wobbly plank, 142 steps 2 wobbly planks, 143 steps 1st half normal plank 2nd half wobbly plank, 174-176 dirt pillar, 175 steps checkpoint  Section 5 148 steps broke plank, 151 steps wobbly plank, 154 steps wobbly plank, 157 steps 1st half broke plank 2nd half wobbly plank, 159 steps 2 wobbly planks, 162 steps broke plank, 164 steps wobbly plank, 166-167 steps 1st half wobbly plank then 2 normal planks then 2nd half wobbly plank, 169 steps 1st half wobbly plank then 2nd half broke plank, 171 steps wobbly plank, 174 steps wobbly planks, 176-178 dirt pillar, 177 steps broke pillar, 179 steps broke pillar, 180 steps ice plank down, 183 steps ice plank up, 184 steps wobbly plank, 186 1st half broke pillar then 2nd half normal plank, 187 steps ice plank down, 189 steps ice plank down, 191 steps ice plank, 195 steps ice plank, 197-198 steps 1st half broke plank then 2nd half ice plank up then 1st half ice plank up then 2nd half ice plank down, 200-201 steps 1st half broke plank then 2nd half ice plank then 1st half broke plank then 2nd half ice plank down, 203 steps broke plank, 204 steps ice plank, 205-207 steps stone pillar, 206 steps checkpoint  Section 6 216 steps 1st half wobbly plank, 217-218 steps 3 wobbly planks, 223 steps wobbly plank, 229 steps ice plank down, 231 steps 2 broke planks, 233 steps ice plank up, 234 steps red gem take crash over teleporter to 236, 235 steps teleporter 237 steps invisible plank, 241 steps 2 invisible planks, 245 steps 2 invisible planks, 249 steps 2 invisible planks, 253 steps 2 invisible planks, 257 invisible plank, 258-260 steps stone pillar  Extra section to the right from 111 steps red gem, goes 9 right from 110-114 steps  Falls: 10-11 steps, 13-14 steps, 16-17 steps  Enemies: None  Obstructions: 9 steps pillar 1 up/ red gem to go back 2 up, 12 steps right pillar, 15 steps right pillar, 18 -34 steps building, 29-31 steps building entrance 1 length, 26-34 steps 3 length |
| **Koala Kong**  Based in a purple cave with crystals and mine carts moving on a rail left along the X-axis in front of the boss supplying him with rock with Crash on the other side and lava in between them. |
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| Island 3 |
| **Heavy Machinery** |
| X 33  This level is a factory based level that moves mainly along the X-axis populated with ice cold and steaming hot pies with various robots to prevent Crash from reaching the goal. |
| Falls: 2-4 steps, 6-8 steps, 10-12 steps, 18-19 steps, 21-22 steps, 31-32 steps, 46 steps platform 3 down through 46 (43-42 steps,) 50 steps, 53 steps, 56 steps, 58-60 steps, 64 steps, 73-74 steps, 76-77 steps, 84-85 steps, 96-97 steps, 97 steps, 92-90 steps, 81-80 steps, 78-77 steps, 75-74 steps, 72-71 steps, 68-67 steps, 65 steps, 58-57 steps, 42 v, 36 steps, 19 steps, 37 steps  Enemies: 7 steps holo projector, 11-12 steps holo projector, 14-16 robot, 15-17 steps robot, 25 steps robot, 32 steps spiked enemy saucer, 45+47 steps 2 saucer enemies, platform 3 down through 46, (42-43 steps holo projector,) 50 steps spiked saucer, 56 steps spiked saucer, 73-74 steps spiked saucer, 77 steps holo projector, 83 steps 2nd half holo projector, 89 steps 2nd half holo projector, 91-92 steps robot, 93 steps piked saucer, 91 steps spiked saucer, 85 steps piked saucer, 75-74 steps spiked saucer, 64 steps holo projector, 63-60 steps robot, 62-59 steps robot, 48 steps holo projector, 20-21 steps robot, 23-24 steps robot, 33-35 steps robot, 47-49 steps robot, 89-91 steps robot, 92-94 steps robot  Obstructions: 5 steps platform, 9 steps platform, 20 steps unstable platform, 24 steps 1st half ice pipe, 26 steps 2 ice pipes, 28 steps 2nd half hot pipe, 35 steps 2 hot pipes, 38 steps 1st half hot pipe then 2nd half ice pipe, 39 steps 1st half hot pipe, 42 steps 2 hot pipes, 43 steps 2 ice pipes, platform 3 down through 46 (44-48 steps platform, 48 steps 2nd half hot pipe, 41-33 steps platform, 33 steps 1 out transport up 3,) 49 steps 2nd half ice pipe, 52 steps 2nd half hot pipe, 57 steps 1st half ice pipe, 60 steps 2nd half ice pipe small jump down, 63 steps 1st half ice pipe, 64 steps 2nd half ice pipe, 67-70 steps conveyor belt going right, 78-80 steps conveyor belt going right, 80 steps 2nd half ice pipe, 81 1st half ice pipe, 81-83 steps conveyor belt going left, 86-94 steps conveyor belt going right, 87 steps 2nd half ice pipe, 90 2nd half, 91 steps hot pipe, 93 steps1st half hot pipe, 93 1st half hot pipe, 98 steps transport 4 down, 96+95+94+93 small jump down platforms, 88-82 steps conveyor belt going left, 89 steps high jump down platform, 87 steps ice pipes, 86 steps 2nd half hot pipe, 83 2nd half hot pipe, 79 steps unstable platforms, 76 steps unstable platform, 73 steps unstable platform, 66 steps platform, 56 steps checkpoint,  Section 2 54 steps air vent, 52 steps air vent, 51 platform small jump down, 50 air vent small jump up, 48 steps 1st half hot pipe, 46 steps 1st half hot pipe, 45 steps air vent, 41 steps transport 5 left small jump down, 31 checkpoint  Section 3 33-34 steps platform 1 out, 32+31+30+29+28 steps small jump down at 28 go in 1, 26 steps 2nd half hot pipe, 25 1st half hot pipe, 24-19 steps conveyor belt going left, 23 steps 2nd half hot pipe, 20 steps 2nd half got pie, 19 steps air vents, 18 steps transport goes down 4, 20-21 conveyor belt going right, 22 steps air vent, 23-24 steps conveyor belt going left 25 steps air vent, 27 1 out, 28+29+30+31+32+33 steps small jump platforms down go in 1 at 33, 38 steps transport goes down 7, 42+43 steps unstable platforms, 45 steps spring 50+51 unstable platforms, 57-62 steps conveyor belt going right, 58 steps 2nd half, hot pipe, 59 steps 2 ice pipes, 61 steps 1st half hot pipe, 63+64+65 steps air vents, 66 steps 2 hot pipes, 67+68 steps 2 air vents, 69 steps transport goes 4 up, 71 steps transport goes right, 73 steps 1st half ice pipe, 76 steps 1st half ice pipe, 77 steps transport right, 79 steps 1st half hot pipe, 82 steps platform, 85-83 steps moving transport, 87-88 steps platform high jump down, 86 steps moving transport down 2 from platform, 85 steps transport 4 down, 95 steps springs ground 10 up+ 35 up(push Crash up 6), 96 steps end of platform, 93 steps springs 5 up+ 15 up, 94 steps 20up+30 up, 98 steps springs 5 up+15 up+ 25 up, 95 steps platform 35 up, 96 steps platform high jump up, 97-98 steps teleporter, 99 steps end of section |
| **Cortex Power** |
| X 41  Plant 3d level that moves up along the Z-Axis and splits into multiple paths that join up together again where Crash has to dodge electricity, machines and gangsters surrounded by narrow hallways and toxic waste to reach the goal. |
| Paths: 25 steps 1st paths split, 6 steps2 2nd paths split, 74 steps 1st paths come together, 112 steps 2nd left path and 1st paths come together  Falls: 21 steps,  1st right path 33-34 steps, 39 steps, 41 steps, 1st Left path 59 steps,  2nd right path 64 steps, 1st left path 68 steps, 72-73 steps,  1st left path, 67-69 steps, 73 steps,  2nd left path 63-66 steps, 69-70 steps, 71 steps, 76-77 steps, 79 steps, 85-89 steps, 96-97 steps, 99-100 steps, 103 steps,  At 74 steps 1st left + right path join 77-78 steps, 81-82 steps, 84-87 steps, 111-112 steps,  Joined path at 112 114-115 steps, 117-119 steps, 121-127 steps  Enemies: 8-9 steps robot, 11 steps robot, 19 steps robot,  1st right path 35 steps spiked saucer, 68+69 steps 2 spiked saucers,  At 74 steps 1st left + right path join 80+87 steps 2 spiked saucers, 90-91 steps robot, 107-109 steps robot 2nd right path 79 steps machine gunner,  1st left path 44 steps machine gunner 67+69 steps 2 spiked saucers,  2nd left path 70 steps spiked saucer, 75 steps spiked saucer, 84 steps 2 spiked saucers, 95 steps spiked saucer, 97 steps spiked saucer,  At 74 steps 1st left + right path join 87+88 steps spiked saucer, 97 steps spiked saucer  Obstructions: 13 steps 2nd half high electric pipe, 14 steps door, 15 steps 1st half high electricity ice pipe, 17 steps door, 18 2nd half high electric hot pipe, steps 19 steps bent electric ice pipe,  1st right path 44 steps bent electric hot pipe, 45 steps 1st high electric ice pipe, 46 steps door, 49-51 steps electric hot pipe 3 length(electricity moves up left to down right), 67 steps platform in the middle, 69 steps platforms left to right,  2nd right path 66+67+68+69+70+71 steps small jump platforms, 75 steps container to left, 77 steps container to left, 80 steps end of path,  1st left path 30 bent electric hot pipe, 31 2 high electric high pipe,45 steps door, 40 steps container to right, 42 steps container to left, 58-60 steps 2 bent electric hot pipes(square between pipes), 54 steps hole to right, 55-57 steps twisted electric hot pipes(electricity moves up right to down left), 59 2 high electric hot pipe, 67 steps platform in middle, 69 steps platform to left + right,  2nd left path 63-66 steps Blue Gem transport, 68 steps platform in middle, 71 steps platform in middle, 72-74 steps moving transport, 76 steps unstable platform, 77 steps door, 78+80 steps high electric hot pipes, 81 steps door, 82 steps platform in the middle, 83-86 steps 8 crates for bridge, 87 steps platform middle, 88 steps door, 89-91 steps electric twisted hot pipes(electricity moves up right to down left), 93 steps platform in middle, 98 steps unstable platform to right,  106-108 steps electric hot pipe 3 length(electricity moving up left to down right),  109 steps 1st half ice pipe, 110-112 steps Blue Gem transport.  At 74 steps 1st left + right path join 74-76 steps pipe in middle between paths to 1st half of 76, 79 steps checkpoint 83 steps platform, 84-86 steps transport, 88 steps unstable platform in middle, 89+92 steps 2 doors, 94-95 steps 2 sets of electric slow hot pipes, 97-99 steps electric low hot pipes, 100 steps door, 101-103 steps twisted electric hot pipes(electricity moves up right to down left), 105 steps electric small hot pipes, 106 steps high hot pipes, 110 steps platform in the middle,  Joined path at 112-113 pipe in middle middle to 1st half of 113, 116 steps door, 117-119 steps platforms in middle, 120 v door, 121-123 steps platforms in middle,124-127 crates for bridge, 128 steps door, 130-131 steps teleporter, 132 steps end of level. |
| **Toxic Waste** |
| X  3d level where Crash must dodge barrels being thrown by Barrel Thrower moving up along the Z-axis he level is 1 wide beside a few platforms for boxes and checkpoints, |
| Falls: 2 steps, 8 steps, 12 steps, 46 steps, 52 steps, 84 steps, 90 steps, 110 steps, 116 steps, 129 steps, 131 steps, 136 steps, 142 steps, 145 steps, 148 steps, 154 steps, 155 steps, 157 steps, 164 steps,  Enemies: 6 steps Barrel Thrower, 44 steps Barrel Thrower, 82 steps Barrel Thrower, 120 steps Barrel Thrower  6 spaces between normal sliding barrels + 3 between bouncing barrells  Obstructions: 1 steps 3 platform, 2 Barrels fall from 1st Barrel Thrower fall, 3 steps 3 platform, 12 steps Barrels from 2nd Barrel Thrower fall, 21-24 section goes up 35 degrees, 27 steps 3 platform, 40 steps platform to right, 46-49 steps section goes up 30 degrees, 50 steps Checkpoint,  Section 2 51 Barrels from 3rd Barrel Thrower fall here, 52 platform to the left, 62-59 section goes up 35 degrees, 65 steps platform left, 72-75 steps section goes up 35 degrees, 77 steps platform to left, 85-88 steps section goes up 35 degrees, 90 steps Barrels from 4th barrel Thrower fall here, 91 steps platform to the left, 98-101 steps section goes up 35 degrees, 104 steps platform to the left, 111-115 steps section goes up by 35 degrees, 123 steps platforms both sides, 124-127 steps section goes up 35 degrees, 130 steps platform to the left/ checkpoint steps  Section 3 131 steps barrels fall from Fifth Barrel Thrower, 143 platform to right, 146 steps platform to to right, 161-164 room that has 1 step of toxic waste around it, 162-163 steps teleporter |
| **Pinstripe Potoroo** |
| Boss is in an executive room with paints and fancy furniture with what looks a generator behind the glass Crash must hide behind the furniture in order to get hit by Pinstripes attacks. |
| **Slippery Climb** |
| X 31  2D Level that moves along the X-axis and up the Y-axis and is on the side of the castle, many regard this level as the most difficult in the game for the timing and accuracy required to complete it. |
| 2nd level is 56 up  Falls: 10 steps, 14 steps, 16 steps,19 steps, 21+24 steps, 26 steps, 29 steps, 31 steps, 39 steps, 44 steps, 47 steps,54 steps, 65-66 steps, 73 steps, 88 steps, 90 steps, 93-94 steps, 96-97 steps, 99-100 steps, 104 steps, 107 steps(2 up), 107 steps (6 up) 107 steps(4 up), 107 steps(20 up), 104 steps(24 up), 95 steps(60 up), 2nd level 91 steps, 79-78 steps, 47 steps fall, 43 steps, 40 steps, 22 steps, 12 steps, 7-6 steps, 4-3 steps, 1-0 steps, -10 steps  Enemies: 33 steps evil hand, 53 steps bird, 60 steps bird, 86+87 steps evil hands, 89 steps bird, 95 steps bird, 98 steps bird, 106 steps bird(10 up), 2nd level 99 steps Beaker lab assistant, 78 steps bird, 70 steps bird, 60 steps bird, 50+48+46 evil hands, 41-42 steps bird, 27-28 steps bird,21 steps bird, 11 steps bird, 5 steps bird, 2 steps bird, -1 steps bird, -9 steps beaker lab assistant,  Obstructions: 2-3 steps door way, 5-6 steps doorway, 8 steps 2 fold in steps small jumps up, 10 steps small spike, 12-15 steps moving platform, 15 small spike, 17-20 steps moving platform, 17-18 steps large spike, 20 steps small spike, 19-20 steps doorway small jump up, 22-23 steps large spike, 25 small spike, 27-30 steps moving platform, 27-28 steps large spike, 30 steps small spike, 32-34 steps platform, 35 steps small spike, 36 steps 2 fold in platform small jumps up, 37-38 steps large spike, 38 steps fold in platform high jump down, 40 small spike, 41-43 platform small jump up, 42 steps doorway, 43 steps small spike, 45-46 steps large spike, 46 steps in out platform, 48-51 steps circling platforms, 52-53 steps large spike, 55-58 steps circling moving platform, 59-60 steps large spike, 62-65 steps circling moving platforms, 63-64 steps doorway, 68 steps small spike, 69-72 steps platform, 72 steps small spike, 74-75 steps large spike, 74 steps in out platform small jump up, 76 steps in out platform high jump down, 77 small spike, 78 steps in out small jump down, 79-80 steps large spike, 81-87 steps platform, 82 steps 2 steps down small jumps down, 83 steps 2 steps only 1st step is small jump down, 84 steps 2nd step is small jump up, 85 steps 2 small steps small jumps up, 91-93 steps platform, 92 steps doorway, 101-102 steps platform,  102 doorway, 105- 106 fold in steps(2 up), 108 steps moving up platform moves up 4, 105-106 steps steps small jump up(6 up), 104 steps small spike(5 up), 103 steps steps(8 up), 102 steps platform/doorway high jump up(9 up), 104 steps in out platform small jump up (10 up), 107 steps small spike(9 up), 108 steps moving platform (10 up), 107 steps platform high jump up (14 up), 105-104 steps large spike, 105 steps in out platform high jump up(15 up), 104-103 steps fold in steps small jump up(16 up), 102 platform small jump up(18 up), 104 steps in out platform(19 up), 105-106 steps large spike, 106 steps in out platform high jump up(20 up), 108 steps small spike, 108 steps in out platform high jump up(21 up), 109 steps platform in out platform high jump up(22 up), 107 steps platform high jump up(23 up), 105 steps steps(23 up), 103-102 steps large spike, 103 steps platform only starts to moves up and down when crash is on it (24 up), 104-105 steps 4 small jump up steps(28 up), 106-107 large spike, 108 steps platform(30 up), 109 steps high jump up 2 small steps(31 up), 105-108 steps platform(32 up), 108 steps doorway, 107 steps checkpoint(32 up),  Section 2 103-104 large spike, 104 steps moving platform small jump up moves up 3(33 up), 106-108 steps moving circling platform(40 up), 108-109 steps large spike, 104-107 steps moving circling platform, (44 up), 106-108 steps moving circular platform (50 up), 109 steps moving transport up 3(51 up), 107 steps 2 steps small jumps(54 up), 106 steps 2 small jump fold in platforms(56 up),  2nd level 101 steps beaker from beaker lab assistant drops, 104-105 steps large spike, 103-99 platform, 97-96 steps fold in small jump down, 94-92 steps moving circling platforms, 90-90 steps large spike, 88 steps small spike, 87 steps platform, 84-81 steps moving circling platforms, 78-77 steps large spike, 75-73 steps moving circular platform, 71-70 steps large spike, 68-65 steps platform, 68 steps small spike, 66 steps doorway, 63-64 steps large spike, 62 steps in out platform, 61 steps small spike, 59-58 steps large spike, 57-48 steps platform, 56 steps doorway, 53-52 steps small spike, 54 steps 2 steps small jumps down, 53 steps 2 small steps only 1st step is small jump down, 52 steps 2 steps only 2nd step is small jump up, 51 steps 2 steps small jumps up, 46-44 steps platform, 45-44 steps large spike 4 up, 42-41+39-38 steps 2 large spikes, 37-35 steps platform, 36 steps doorway, 35 small spike 4 up, 33-34 steps large spike, 30-32 steps moving circling platform, 28+26 steps small spike, 26-23 steps circling platforms, 19-20 steps large spike, 19-17 steps moving circling platforms, 18 steps doorway, 10-8 steps platform, 10 steps small spike, 9 steps doorway, -5+-8 steps 2 doorways, -6 steps beaker from beaker lab assistant drops, -11 small jump up teleporter |
| **Lights Out** |
| X 15  Level based inside of Cortexs Castle where the player moves up along the Z-axis,  only source of light is from opening a Aku Aku crate |
| Level is 5 wide with space at 1 + 5 steps of each small room, while the hall rooms are 9 wide  Falls: 4-5 steps, 7-8 steps, 12-13 steps, 15-16 steps, 19-20steps, 22-24 steps, 26-27 steps, 31-32 steps, 34-35, 37-41 steps, 43-50 steps, 52-65 steps, 70-71 steps, 73-80 steps, 85-94 steps, 97-118 steps, 123 steps, 129-133 steps, 140-144 steps,147-148 steps, 155-162 steps, 168 steps, 174-175 steps, 181-182 steps, 184-185 steps, 189-192 steps, 200-207 steps, 211-212 steps, 216-217 steps, 219-220 steps, 223 steps, 229-236 steps, 238-239 steps  Enemies: Rats 128-124 steps, 139-134 steps, 154-149 steps, 168-163 steps, 4+10+23+39+44+49+53+61+64+83+88+92+97+113+117+124+134+138+142+146+150+155+179+185+190+203+209+214+20+223+237 steps,  Obstructions:  Checkpoints: 68 steps checkpoint 1, 145 steps checkpoint 2,  Masks: 3 steps to right, 31 steps to left, 68 steps, 96 steps to right, 120 to right, 146 steps to to right, 171 steps to right, 198 steps to right,  Unstable platforms: 39+45+48+54+57+6)+63+92+103+112+115+131+142+190+ 220+231+234 steps,  Moving Platforms(all move up 3 spaces): 75-78 steps,87-90 steps,99-102 steps, 106-109 steps,158-161 steps, 202-205 steps,,  Saws(swing side to side and stay hidden for 2 sec before swinging to the other side): 178+195+197+210+213+219+222+233+236+239 steps,  Walls: Tight 1 width walls, 18+33+72+78+102+108+146+160+174 steps,  Thick Walls 3 width 4+10+23+39+44+49+53+61+64+83+88+92+97+113+117+ 124 +134+138+142+146+150+155+179+185+190+203+209+214+20+223+237  steps  Yellow Gem: 188 steps takes you 9 then swirls around 15 left to a 3D platform 6 steps wide and 2 steps length,  Teleporter:242-243 steps teleporter, Yellow gem area teleporter is to left on 1+2 steps of 6 width steps  Level Curves: 29-30 steps curves to the right, 67-68 steps curve right 2, 120-121 steps curves to the left, 152-153 steps curve right 1, 163-166 steps curve left 2, 170-173 steps curve left 1, 225-228 steps curves to the left, |
| **Dr. Nitrus Brio** |
| Nitrius Brio boss fight is set in one of the labs inside of the castle, 5 wide 9 length, Crash has to stay away from Brio until he has a weakness to exploit |
| **The Lab** |
| X 21  Final level of the game it's 3D and moves up the Z-Axis where Crash has to use switches to and defeat difficult enemies to progress through the level |
| Falls: 33-34 steps, 41-42 steps, 45-47 steps, 61-62 steps, 67-68 steps, 71-72 steps, 100-101 steps, 110-111 steps, 141-142 steps, 155-56 steps, 162-163 steps, 175-180 steps  Enemies: 40-36 steps yellow blob(yellow blob spawns when Crash is at 36/Blobs will disappear if Crash goes back to 35 steps or further), 74 steps electricity lab assistant(when Crash hits him when non electrified he hits him back 2 spaces, 99-94 steps yellow blob(Generates when Crash is at 94 steps), 117 steps beaker lab assistant(hits Crash whether he is in the room), 136 steps electricity lab assistant, 154-148 steps yellow blob(yellow blob generates 148),  Floor switch brings floor together for 3 seconds  Obstructions:  Switches: #1 Door box 3 steps to right, 5 steps door, 2# Floor box 8 to left, 10-12 steps floor, #3 Floor box 18 to the right, 20-22 steps floor, #4 Door box 19 steps to right, 22 steps door, #5 Floor box 26 to left, 27-29 steps floor, #6 Door box 44 steps to the right, 46 steps door, #7 Door box 50 to the left, 55 steps door, #8 Door box 65 to the left, 68 steps Door, #9 Floor box 81 steps to the left, 83-86 steps floor, #10 Door box 82 steps to the left, 85 steps door, #11 Floor box 89 steps to the right, 91-93 steps floor, #12 Door box 94 steps to the left, 99 steps door, #13 Floor box 102 steps to the right,105-107 steps floor, #14 Door box 103 steps to the left, 105-107 steps door, #15 Door box 119 steps to the right,120 steps door, #16 Door box 127 steps to the left,128 steps door, #17 Floor box 131 to the left, 132-134 steps, #18 Floor box 143 steps to the left, 145-147 steps, #19 Door box 143 steps to the right, 144 steps door, #20 Door box 152 steps to the left, 156 steps door, #21 Door box 159 steps to the right, 160 steps door, #22 Door box 170 steps to the right, 171 steps door,  Electric pipes(shift left to right every 2 seconds for 2 seconds), 16+30+44+45+ 104+134+150+153+162+174 steps,  Walls: Tight walls 1 width 31+60+70+90+109+120+144+158+182 steps,  Thick walls 3 width 5+12+22+43+46+54+68+83+85+99+107+112+128+130+135 +156+160+166+171 steps,  Floor: 123-125 steps, 164-166 steps,  Curves: 38-40 steps curve right 1 step, 63-66 steps curve left 2 step, 95-98 steps curve right 1 step, 114-117 steps curve right 2, 136-138 steps curve left 1,  Checkpoints: 63 steps, 118 steps  177-178 steps 3 TNT crates to get to the other side of the room,  Teleporter:183-184 steps |
| **The Great Hall**  The hall between the Final Cortex boss on the blimp and the gem path on the right to the secret ending, Crash moves up the Z-axis and right along the X-axis |
| Falls: Everywhere excluding the few platforms and Gems potions,  Enemies: None,  Platforms are 2 wide and 2 length excluding 1  Obstructions: Gems 3 steps up 4-5 steps moves to steps, 9+13+16+20 steps (3 steps up), 6+10+14+18+22 steps up(24-25 steps right), 30+34+38+42+46 steps(26 steps up), 31+35+39+43+47 steps up(50 steps right)  Platforms: 4-5 steps(1-2 up), 4-5 steps(4-5 up), 4-5 steps(6-7 up), 23-26 steps(3 up), 26-27 steps up, 50-51 steps(26 up 2 length), 51-52 steps up(4 wide), 53-56 steps up platform/balcony to secret ending,  Teleporter: 6-7 steps up |
| **Dr. Neo Cortex** |
| This is the final level in the game this boss is based around the final section of the 3rd island where Cortex's blimp rotates around his destroyed and burning castle. |

**Main Menu**

The main menu for the game will be a simple 2D menu but will have 3D objects for the animation. The animation will have Crash running towards the screen and ducking when the title “Willy the Wombat” goes across the top of the screen. There will be sound effects for when the letters come in and the theme song will play on till you select start which will bring you the start of the level. The menu will have “Start, Load Game, Options. To select one from the menu you will just move your cursor over one and select it. The menu script will be responsible for its animator by setting a boolean inside of it to indicate if the menu is open and the canvasgroup will make the elements in the children none click-able.



Hopefully in the end it will look something like this or at least as close to it as possible.

**Objects**

**Collectables:**

Wumpa Fruit; Found all over the game, these fruits are satisfying to pick up, and getting 100 of them will grant you an extra life! Wumpa fruit are scattered away from Crash when they are spin-attacked, whereupon they are lost forever. Be careful!

Gems; Collectables gotten by completing a level without losing a life and breaking every single crate. Getting all of them gets you bragging rights, with six of them having special colours which unlock corresponding special platforms.

Keys; Collectables gotten by beating Cortex Bonus Stages. There are two total, and they grant access to Secret Stages. Whether the Keys, and by extension the secret Levels, will be included in Willie The Wombat remains to be seen.

**Crates:**

Crates are found everywhere in Crash Bandicoot. They serve as platforms, obstacles, hazards and stress relievers (When you plow through them with spin-attacks to get at that sweet-sweet Wumpa Fruit). Unless specified otherwise, all crates can be broken by jumping on them and with spin attacks.

Regular Crates; Made of wood. Shaped like a cube. May contain wumpa fruit within.

Crash Crates; Like a regular crate, but has Crash's grinning face on the side. Contains an extra life.

? Crates; Like a regular crate, but has an enigmatic “?” On the side. May contain large amounts of wumpa fruit, or perhaps an extra life!

Aku Aku Crates; Like a regular crate, but has a picture of Aku Aku on the side. Grants crash an Aku Aku mask, which allows him to take an extra hit. Getting two gives him two hits. Three makes him invincible and increases his speed, but after a while it drops back down to giving an extra two hits.

Checkpoint Crate; Like a regular crate, but has a “C” written on the side. Touching it triggers a checkpoint, allowing Crash to restart the level from there if he dies.

Bounce Crate; Like a regular crate, except it is made of thinner wood panelling. Bounces Crash up into the air when he jumps on it, granting a wumpa fruit each bounce. On the tenth bounce it breaks. Also gives fruit when jumped at from underneath. Only gives one if spin-attacked.

Iron Crates; Like a regular crate, except made of metal. Unbreakable.

Arrow Crates: Like a regular crate, but has an arrow pointing upwards on its side. Jumping on it causes crash to jump extra high. Can be made of Iron, too!

! Crates; Like an iron crate, but has a mysterious “!” on the side. Spin attacking it causes Outline Crates to become regular crates.

Outline Crates; Like a regular crate, except it's only a white outline! Crash cannot interact with them and will pass straight through. Hit a ! Crate to turn them into regular crates.

TNT Crates; Like a regular crate, but red, and has the letters “TNT” written on the side in yellow. Touching it or jumping on it starts a countdown, the number 3 replacing TNT, which counts down to 1, then explodes. Explodes immediately if spin-attacked. The explosion damages Crash.

Nitro Crates; Like a TNT Crate, but green, and has “Nitro” written on the side. Explodes on contact. The explosion damages Crash.

**Miscellaneous Traps/Obstacles:**

These are Items in the game that Crash can interact with, but are not simple platforms. Most of them are hazards of one kind or another, which hurt Crash when he comes into contact with them. These include:

Ground spikes, Swinging pendulums, Bottomless Pitfalls(which result in instant death regardless of Aku Aku masks), Torches, and various other objects that Crash can fatally mutilate himself with. They all behave in simple manners, in most cases not moving at all, and many are copies of the others.

There are some entries in the Enemies section which one may argue actually fall under this heading, such as the Rolling Stone, or the Boulder. Their behaviour is a bit more complex than the traps listed above, and thus require having their patterns elaborated on, which is what the Enemy section is for.

**Enemies**

Several enemies appear in the first Crash Bandicoot. They are listed below, by name, followed by a description of their movements and/or patterns. Note that, unless specified otherwise, all enemies can be defeated by jumping on them or with the spin attack.

- **Crab**; Appear in N Sanity Beach. Patrols Left to right across paths. Damages Crash on contact. This enemy does not pursue the player.

- **Turtle**; First appear in N Sanity Beach. Patrols forward and back along paths. Damages Crash on contact. This enemy does not pursue the player.

- **Rolling Stones**; First appear in Jungle Rollers. Roll left to right along a stone ramp. Damages Crash upon rolling over him. This enemy does not pursue the player.

- **Skunks**; First appear in Jungle Rollers. Marches forward along paths. Damages Crash on contact. This enemy does not pursue the player.

- **Venus Fly Traps**; First appear in Jungle Rollers. Stationary. Damages Crash when he walks over them. Three types, one on land (standard behaviour), one water (standard behaviour), and another water(snaps shut every three seconds, regardless of player interaction). This enemy does not pursue the player.

- **Monkey**; First appear in The Great Gate. Roll one direction, causing damage. Pauses. Rolls the other direction, causing damage. Repeat. While rolling, repels spinning Crash in the opposite direction. Damages Crash on contact. This enemy does not pursue the player.

- **Shield Tribesman**; First appear in The Great Gate. Hold shields. Immune to spin attack while shield in front. Immune to jump while shield on head. Damages Crash on contact. Patrol-type. This enemy reacts to the player's movements, raising and lowering the shield as required, but otherwise does not pursue the player.

- **Boulder**; Appears in Boulders. Rolls down the level at a constant rate. The player must run from it. Kills Crash on contact. This enemy is invincible. This enemy pursues the player, but does not track their movements.

- **Flying Fish**; First appear in Upstream. Leap up out of the water at an angle, before descending back in. Makes an arc shape, and thus fits the rotates about a fixed point movement type. Damages Crash on contact. This enemy does not pursue the player.

- **Bats**; First appear in Lost City. There are two bats on the ceiling, spread apart. More bats attack in swarms, flying between the two stationary bats. Once both stationary bats are defeated the swarm stops passing through. Damages Crash on contact. Cannot be damaged by jumping. This enemy does not pursue the player.

- **Lizard**; First appear in Lost City. Patrol-type enemy. Damages Crash on contact. This enemy does not pursue the player.

-**Lizardman**; First appear in Lost City. Move exclusively by jumping. Damages Crash on contact. This enemy does not pursue the player.

- **Cobra**; First appear in Temple Ruin. Behave like Venus Fly Traps, attack Crash as he walks close to them. Damages Crash upon attack. This enemy reacts to player movement, but does not pursue the player.

- **Spider**; First appear in Temple Ruin. Located on ceiling, descend as Crash approaches. Damages Crash on contact. This enemy reacts to player movements, but does not pursue the player.

- **Hog**; First appear in Road To Nowhere. Patrol-type (Crab). Damages Crash on contact. This enemy is invincible. This enemy does not pursue the player.

- **Robot**; First appear in Cortex Power. Patrol-type (Turtle). Damages Crash on contact. This enemy does not pursue the player.

- **Holo projector**; First appears in Heavy Machinery. Hover up and down between gaps. Damages Crash on contact. Can Rotate about a fixed point. Immune to jump.

- **Spiked Saucers**; First appear in Cortex Power. Stationary, or float up and down, or float side to side. Invincible. Damages Crash on contact.

- **Machine Gunner**; Appears in Cortex Power. Emerge from the ground when the room is entered. Fires two guns at Crash. Stops to laugh. This enemy tracks the player's movement, but does not pursue the player.

- **Barrel Thrower**; Appears in Cortex Power. Throw barrels in Crash's path, but do not specifically aim at him. Thrown barrels can be of bounce-type or roll-type. This enemy does not pursue the player.

- **Bird**; First appears in Slippery Climb. Either flies straight up and down or hovers in place. Damages Crash on contact. This enemy does not pursue the player.

- **Evil hand**; Appears in Slippery Climb. This enemy is stationary. Damages Crash on contact. This enemy does not pursue the player.

- **Beaker Lab Assistant**; First appear in Slippery Climb. Throws beakers at Crash, which damage him. This enemy does not pursue the player.

- **Electricty Lab Assistant**; First appears in Lab. Creates an electric barrier in front of himself at regular intervals and approaches Crash with it. While it is active it will damage spin attacking Crash. This enemy is invincible, but can be knocked back with a spin attack when the barrier is lowered and thus can be defeated by knocking him off a ledge. This enemy pursues the player, but cannot jump.

- **Rats**; First appear in Lights Out. Behave like Skunks. Will continue marching forward until they fall into a pit. Damages Crash on contact. This enemy does not pursue the player.

- **Blob**; First appear in The Lab. Moves towards Crash by jumping at him. This enemy cannot be killed with spin-attacks. This enemy pursues the player while they are within range.

**Bosses**

Throughout the original Crash Bandicoot, the player had to confront Boss enemies, which were generally challenging one-on-one fights that were their own level. Each boss level is named after the boss. They each took more than one hit to kill, with each hit being represented as a Hit Point. All bosses have three or more hitpoints.

- **Papu Papu**; First Boss, appears in the 6th Level. 3 Hit Points.

Location: Papu Papu's hut. Small, circular. Has his throne at the end furthest from the camera.

Pattern: Walks towards the centre of the room, slams his staff down in an overhead swing. After this animation he is vulnerable to attack. He then swings his staff around in a circle, which, due to the size of the room, can only be dodged by jumping. He can be damaged by jumping on his head from behind. When damaged, he staggers for a second, then resumes the spin attack. Upon the third hit he collapses. Crash wins. Coming into contact with the swinging staff damages Crash.

- **Ripper Roo**; Second Boss, appears in the 11th level. 3 Hit Points.

Location: Waterfall. 3X3 rows of platforms on the river for Crash and Ripper Roo to jump around on.

Pattern: Bounces between the middle, lower-left, and lower-right platforms. TNT Crates begin falling down the waterfall, between the platforms. The player must make the TNT explode near Ripper Roo, damaging him. He will then laugh and begin bouncing around the right, middle, left, and bottom platforms. TNT once again must be used to damage him. He will then begin bouncing around the top, right, bottom, and left platforms. Hit him with TNT once again and Ripper Roo will collapse on the bottom tile. Crash wins. Invincible against jumping and spin attacks. Damages Crash on contact.

- **Koala Kong**; Third Boss, appears in the 17th level. 4 Hit Points.

Location: Volcanic Mine. Lava moat separates the player from Koala Kong. Mine carts on Koala Kongs' side consistently drive past, blocking him occasionally.

Pattern: Jumps to the left, starts throwing rocks at Crash. The fourth rock is carried very slowly forward before being thrown. This rock lands in front of crash if dodged and can be spin-attacked to send it back at Koala Kong, damaging him. As Koala Kong loses health, TNT starts dropping from the ceiling and mine carts drive by more frequently. Once Koala has been hit with the rock four times he will collapse. Crash wins. Out of range of conventional attacks. Damages Crash with projectiles.

- **Pinstripe Potoroo**; Fourth Boss, appears in the 22nd level. 6 Hit Points.

Location: Pinstripe's office. Small, cuboid. His desk is toppled over, and is in the centre of the room, facing towards the camera. In the corners close to the camera there are two arm chairs, which Crash can duck behind to avoid damage.

Pattern: From the top of his toppled desk, he leaps to the left side of the room and begins spraying bullets in front of him, angled so as to hit a wide area. He then hops over to the right hand side of the room, shooting the occasional bullet. Once he reaches the other side He will do the same spread-shot. He will then hop back over to the left, and perform the spread shot. He then hops to the right, but this time jumps on top of his desk to spray bullets. He jumps back to the left, does one more bullet spray, then halts to reload. Pinstripe is vulnerable to attack whilst moving from left to right and right to left, assuming the player attacks him early, and when reloading. The player can avoid damage by having Crash crouch behind the convenient arm-chairs. Once he has been hit six times, Pinstripe collapses. Crash wins. Damages Crash with projectiles.

- **Dr. Nitrus Brio**; Fifth Boss, appears in the 28th level. 9 Hit Points.

Location: N. Brio's Lab. Square. His work station is at the far end. Otherwise clear of obstacles and cover.

Pattern: Begins mixing liquids. If he is approached by the player he smashes the two beakers together, creating an explosion which damages Crash. After he mixes uninterrupted for a few seconds he throws a green potion at Crash. Creates a blob when it smashes. Blobs are immune to spinning, and must be jumped on. Jumping on them damages N. Brio. N. Brio then throws a red potion, which explodes on contact. He then throws two green potions, creating two more Blobs. Killing both rewards another two points of damage on N. Brio. He then throws three red and three green. Jumping on the resulting blobs deals 3 total points of damage. N. Brio now has three Hit Points remaining. He will throw six red potions, then drink an additional red potion. He transforms into a monster form, and pounds the ground, causing rocks to fall from the ceiling. Using these rocks to gain the necessary height, the player can jump on N. Brio's head, damaging him. Do this three times and N. Brio collapses. Crash wins. Blobs, Red Potions, falling rocks, and N. Brio's monster form all damage Crash.

- **Dr. Neo Cortex;** 6th and final Boss, appears in the 31st level. 5 Hit Points.

Location: The Top of Cortex's Air Ship. No obstacles. Cortex flies around on open air the background while Crash remains standing on the airship in the foreground.

Pattern: Shoots at Crash with his blaster. Pink has a homing effect. Blue goes up, and across the top, or down, and across the bottom. Green is like pink, but can be spin-attacked to send it back at Cortex. Cortex cannot be jumped on or attacked directly. The number of greens needed to be sent back increases by one every hit point until it reaches three, then the number decreases, with the fourth Hit Point needing two and the last Hit Point needing only one again.

To begin with, he shoots two pinks and one green. If the green is sent back, it will damage him, removing 1 Hit Point. Following this he will fire in the following order: pink, blue, pink, 2 blues, 2 greens. Hitting the two greens will take 1 hit point from Cortex. Next he will fire Pink, 2 Blues, Pink, Green, Pink, 2 Blues, 2 Greens. Hitting all the Greens will take another hit point. Next he shoots a row of five pinks, then 1 Green. He does this until you hit two greens back at him, taking another Hit Point. Lastly he will fire a single Green. Hit it back, and Cortex's last hit point is taken. Crash wins. Damages Crash with projectiles.

Our goal is to recreate all of these enemies and bosses for Willie The Wombat.

**Other things to code**

Save System: A save system will be added which will keep track of how many levels are completed in the game. The system will place the file within the game project.